

Department of Human Resources

Division of Public Health

Office of Emergency Medical Services/Trauma

Procedure Manual 2100



Stuart Brown, M.D., Division Director

J. Patrick O'Neal, M.D., State EMS Medical Director

William M. Billings, State EMS Director



January 2007

EMS Procedures, Forms and Resource Documents

The Department of Human Resources (DHR) establishes the authority in policy that grants the Office of Emergency Medical Services (OEMS) to create procedures that follows and interprets state statutes and Rules and Regulations. OEMS procedures are issued by an appropriate official in the department, usually the Director of the State Office of EMS. Consequently, due to the ever changing system of emergency services, procedures must be easily changed, unlike statutes or Rules and Regulations, which require action by the General Assembly or the Board of Human Resources. For the reason procedures can be adjusted quickly to reflect changes or advances in emergency medical services.

Special effort on your part will be required to adhere to the most current publication of procedures from the OEMS. As necessary, the OEMS will maintain updates to procedures through this procedure registry.

For information regarding EMS Procedures, Forms and Resource Documents contact the State Office of EMS at (404) 679-0547 or your local Regional EMS Office.

✱ EMS Procedure Manual 2100 v1-2007 (complete document)

PROCEDURES

LICENSING OF PERSONNEL

- C-01 Biennial License Renewal v1-2006
- C-02 EMS Initial License Examinations *Revised January 2007*
- C-04 CPR and ACLS Requirements v5-2006
- C-05 Suspension of License of EMS Personnel for Default of Payment v1-2006
- C-06 Reinstatement of Georgia EMS Personnel License v1-2006
- C-07 Initial Licensing, License Renewal, License Revocation of Convicted Felons v1-2006
- C-08 Licensing of EMS Personnel *Revised January 2007*
- C-09 Voluntary Surrender of an EMS License v6-2006
- C-10 Reciprocity for Out-of-State EMS Instructors v1-2006
- C-11 EMS Instructors *Revised January 2007*
- C-12 Audits of Licensed EMS personnel v7-2006

PHARMACEUTICALS

- D-01 Procurement, Control, Handling and Accountability of Pharmaceuticals Related to Emergency Medical Services v1-2006

EQUIPMENT

- E-01 Approved Equipment for Licensed EMS Providers v1-2006

LICENSING OF EMS PROVIDERS

- L-01 EMS Vehicles Additions and Deletions v1-2006
- L-02 Filing a Complaint v1-2006
- L-03 EMS Provider License Procedure v6-2006
- L-04 AED Program License Application Procedure v7-2006
- L-06 Records Required During Inspection of Licensed EMS Providers v1-2006
- L-07 Trauma Center Designation, Redesignation and Dedsignation *Under Review*
- L-08 Base Station Designation v5-2006
- L-09 Disciplinary Action v6-2006
- L-10 Waivers and Variances *New January 2007*
- L-11 Georgia Patient Care Report Data Conformity Process *New January 2007*

PRACTICE

- P-01 Scope of Practice for Licensed EMS Personnel v8-2006

TRAINING

- T-02 Clinical Preceptors for EMT and Paramedic Students in a Pre-hospital Clinical Setting *Revised January 2007*
T-04 Course Approval – Initial Education for Licensure *Revised January 2007*
T-05 Course Approval – Continuing Education *Revised January 2007*
T-06 Request for EMS Program Site Code *New January 2007*

PROCEDURE FORMS

- C-02-A Student File Review – EMT Basic *New January 2007*
C-02-B Student File Review – Intermediate *New January 2007*
C-02-C Student File Review – Paramedic *New January 2007*
C-02-D Student File Review – EMT Basic/Intermediate (combined course) *New January 2007*
C-08-A In-State License Request *New January 2007*
C-08-B Reciprocity License Request Form *New January 2007*
C-09-A Voluntary Surrender Form
C-11-A EMS Instructor Application *Revised January 2007*
C-11-B EMS Instructor License Renewal Form *New January 2007*
C-11-C Emergency Medical Service Level I Instructor Application Check-off Sheet
C-11-D Emergency Medical Service Level II Instructor Application Check-off Sheet
C-11-E Emergency Medical Service Level III Instructor Application Check-off Sheet
L-03-A Application for an Emergency Medical Service License (GA EMS 1000)
 - GA EMS 1000 Supplemental Form
 - Schedule A: Personnel Information
 - Schedule B: Vehicle Information
 - Schedule C: Insurance Information
 - Schedule D: Medical Director Agreement
 - Schedule E: Pharmaceutical Agreement
L-04-A AED Program License Application
L-04-B AED Patient Care Reporting Form
L-10-A Waivers and Variances Request Form *New January 2007*
T-02-A Clinical Preceptor Training Course Guidelines *Revised January 2007*
T-02-B Clinical Preceptor Training Record *New January 2007*
T-04-A Application for Course Approval – Initial Education *Revised January 2007*
T-04-B FERPA Release Form *Revised January 2007*
T-05-A Application for Course Approval – Continuing Education *New January 2007*
T-06-A Program Site Code Request *New January 2007*

PROCEDURE RESOURCE DOCUMENTS

- R-01 Regional EMS Offices *Revised January 2007*
R-C-02-A EMT Basic Skills Verification and Examinations *New January 2007*
R-E-01-A Required Equipment for Licensed EMS Providers-Ambulance
R-E-01-A(1) Safe Transport for Pediatric Patients
R-E-01-B Required Equipment for Licensed EMS Providers-Neonatal Unit
R-E-01-C Required Equipment for Licensed EMS Providers-Medical First Responder Unit
R-L-11-A Georgia Patient Care Report Data Conformity Process *New January 2007*
R-P-01-A Scope of Practice for Emergency Medical Services Personnel
R-T-02-A Clinical Preceptor Training Packet *New January 2007*
R-T-04-B Minimal Equipment List for EMS Programs
R-T-04-C EMS Curricula Standards for EMS Programs *Revised January 2007*
R-T-05-A Continuing Education Approval Request Outline
R-T-05-B Assignment of Continuing Education for Distributive Education
R-T-05-C EMS Curricula Standards for Refresher Courses

 <p>DHR GEORGIA DEPARTMENT OF HUMAN RESOURCES</p>	<p>Department of Human Resources Division of Public Health Office of Emergency Medical Services</p>	<p>Index: PRO-C-01 Effective: 01/11/2006 Review: 01/11/2007 Page: 1 of 2</p>
---	--	---

SUBJECT: Biennial License Renewal for Emergency Medical Technicians-Basic, Emergency Medical Technicians–Intermediate, Cardiac Technicians, and Emergency Medical Technicians-Paramedic.

I. PROCEDURE

This procedure is designed to guide individuals licensed as an Emergency Medical Technician-Basic, Emergency Medical Technician-Intermediate, Cardiac Technician, or Emergency Medical Technician-Paramedic in the completion of the biennial license renewal process as required by the Georgia Office of Emergency Medical Services (OEMS).

II. During the License Renewal Period:

- A. All EMS Personnel must obtain a current relicensure renewal form from any Regional EMS Office. A complete listing of the Regional EMS Offices is located in the EMS Procedure Manual, Section VIII: Resource Documents, R-01: Regional EMS Offices.
- B. The completed form must be postmarked or received at the State Office of EMS by the close of business on June 30 of each license renewal period.
- C. The form must be accompanied by a money order, certified check, or company check in United States funds made payable to the “Department of Human Resources” in the amount appropriate for the level of licensure of the applicant.
 - 1. EMT-Basic \$25.00
 - 2. EMT- Intermediate \$50.00
 - 3. Cardiac Technician \$75.00
 - 4. EMT-Paramedic \$75.00
- D. Incomplete applications will be returned to the applicant unprocessed.
- E. It is the sole responsibility of the licensed individual to ensure that the application is postmarked or received at the State Office of EMS by the close of business on June 30 of each license renewal period.

III. Late License Renewal:

- A. All license renewal applications postmarked or received after June 30 and by close of business on December 31 of the license renewal period are considered late and are subject to a monetary penalty.
- B. All EMS personnel must obtain a current SCANTRON Form F-3446 from any State or Regional EMS Office.
- C. The form must be accompanied by a money order, certified check, or company check in United States funds made payable to the “Department of

Human Resources” in the amount appropriate for the level of licensure of the applicant:

1. EMT-Basic \$100
 2. EMT- Intermediate \$100
 3. Cardiac Technician \$150
 4. EMT-Paramedic \$150
- D. The completed form must be postmarked or received at any of the Regional Offices of EMS by the close of business on December 31 of each license renewal period.
- E. Incomplete applications will be returned to the applicant unprocessed.
- F. It is the sole responsibility of the licensed individual to file their license renewal forms.
- G. EMS personnel failing to submit required license renewal documents by June 30 will not be permitted to perform the duties of a licensed individual.
- H. All EMS personnel who submit license renewal packets after December 31 of the license renewal period will be revoked and will be required to adhere to the reinstatement process to regain their license.

IV. Audit of License Renewal Documents after December 31 of Even Numbered Years

- A. The OEMS will perform random audits of EMS personnel for compliance to DHR Rules and Regulations for Emergency Medical Services Chapter 290-5-30-.13 (3).
- B. All EMS personnel are required to provide documentation, upon request, of current license renewal as outlined in DHR Rules and Regulations for Emergency Medical Services Chapter 290-5-30-.13 (1), Chapter 290-5-30-.13 (4), and Chapter 290-5-30-.13 (6).



Department of Human Resources
Division of Public Health
Office of Emergency Medical Services

Index: PRO-C-02
Effective: 01/01/2007
Review: 01/01/2008
Page: 1 of 1

SUBJECT: Emergency Medical Services (EMS) Initial License Examinations

I. Procedure

This procedure defines the proper steps for the administration of the practical examinations for the initial licensure of Emergency Medical Technician-Basic (EMT-B), Emergency Medical Technician-Intermediate/85 (EMT-I), and Emergency Medical Technician-Paramedic (EMT-P).

II. General Provisions

- A. *Regional EMS Program Officials* are defined as the Regional EMS Program Director and/or the Regional EMS Training Specialist.
- B. The Regional EMS Program Officials are responsible for ensuring compliance with any statute, rule, regulation, policy, and / or procedure regulating the examination process. A complete listing of the Regional EMS Offices is located in the EMS Procedure Manual, Section VIII: Resource Documents, R-01: Regional EMS Offices.
- C. The National Registry of EMT's (NREMT) certification examination will be utilized for licensure or reinstatement of licensure for the EMT-B, EMT-I/85, and EMT-P levels.

III. EMS Examination Scheduling

- A. The Office of EMS (OEMS) has final approval on all EMS Examinations required for licensure or reinstatement of licensure.
- B. Prior to the student taking a NREMT examination, the Course Coordinator must schedule and complete a final individual student file review with the approving Regional EMS Office. When the student file is deemed complete by the Regional EMS Office, the student will then be authorized to take the NREMT examination. Refer to Forms C-02A, B, C, or D for the required documentation for the student file review.
- C. Examination Coordinators are required to schedule EMT-I/85 and EMT-P Practical Exams on-line with the NREMT at www.NREMT.org. A published schedule of approved examinations is maintained on the NREMT web site.
- D. Examination Coordinators are required to submit a final exam roster to OEMS on EMT-B candidates scheduled at an Advanced Level Practical Examination Site by the approved deadline.
- E. All EMT-B candidates from non-Georgia approved courses seeking eligibility for testing must refer to Resource Document R-C02A for required documentation to be submitted for consideration of approval.



Department of Human Resources
Division of Public Health
Office of Emergency Medical Services

Index: PRO-C-04
Effective: 05/11/2006
Review: 05/11/2007
Page: 1 of 1

SUBJECT: Cardiopulmonary Resuscitation (CPR) and Advanced Cardiac Life Support (ACLS) Requirements

I. PROCEDURE

This procedure identifies approved CPR and ACLS courses for licensed EMS personnel.

II. GENERAL PROVISIONS:

- A. EMS personnel must maintain CPR and ACLS certifications during the license period.
- B. EMS personnel who have allowed their CPR and/or ACLS certifications to expire during the license period are not permitted to work on a registered EMS vehicle.

III. COURSES APPROVED BY THE OFFICE OF EMS (OEMS):

- A. American Heart Association
 - 1. Basic Life Support (BLS) Health Care Provider or Instructor
 - 2. Advanced Cardiac Life Support or Instructor
- B. American Red Cross
 - 1. CPR for Healthcare Professionals or Instructor
- C. Emergency Care and Safety Institute
 - 1. Professional Rescuer CPR or Instructor
- D. American College of Emergency Physicians
 - 1. eACLS Provider (license renewal only)
- E. American Safety & Health Institute
 - 1. ASHI CPR Pro – For the Professional Rescuer or Instructor Development
 - 2. ASHI ACLS – For Healthcare Professionals or Instructor Development
- F. Other courses approved by OEMS may be substituted for those listed above.

IV. ACCEPTABLE DOCUMENTATION:

- A. Copy of CPR or ACLS card with appropriate signature and date;
- B. Copy of class roster with instructor signature; or
- C. Copy of certificate signed by the course instructor.

 <p>DHR GEORGIA DEPARTMENT OF HUMAN RESOURCES</p>	<p>Department of Human Resources Division of Public Health Office of Emergency Medical Services</p>	<p>Index: PRO-C-05 Effective: 01/11/2006 Review: 01/11/2007 Page: 1 of 1</p>
---	--	---

SUBJECT: Suspension of the License of Emergency Medical Service (EMS) Personnel for Default of Payment

I. PROCEDURE

The purpose of this procedure is to define the process to be used by the Office of Emergency Medical Services (OEMS) when suspending an EMS license as required by law for failure to pay a lawful debt as defined in O.C.G.A. 19-11-9.3 and O.C.G.A. 20-3-295.

II. GENERAL PROVISIONS:

- A. The General Assembly of Georgia has passed laws requiring suspension of EMS licenses for default of certain debts.
- B. Any Emergency Medical Technician-Basic (EMT-B), Emergency Medical Technician-Intermediate (EMT-I), Cardiac Technician, or Emergency Medical Technician-Paramedic (EMT-P) who holds a current license in Georgia is subject to suspension under these laws, when proper documentation is received from the appropriate source.
- C. The OEMS must receive a default notice in writing from an appropriate authority before any action will be taken against an EMS license.
- D. The appropriate law requiring suspension of a license will be cited in the letter to EMS personnel when their EMS license is being suspended.
- E. If the individual continues to practice in violation of the law, they may be subject to further disciplinary action.
- F. Upon receipt of evidence that the individual has satisfied the obligation or entered satisfactory repayment status, the OEMS may reinstate the individual's license, provided the individual meets all other license requirements.

	<p>Department of Human Resources Division of Public Health Office of Emergency Medical Services</p>	<p>Index: PRO-C-06 Effective: 01/11/2006 Review: 01/11/2007 Page: 1 of 1</p>
---	--	---

SUBJECT: Reinstatement of Georgia Emergency Medical Services Personnel Licenses

I. PURPOSE

This procedure defines the steps necessary for reinstating the license of Emergency Medical Services (EMS) Personnel who have failed to comply with license renewal requirements or who voluntarily surrendered their EMS license.

II. GENERAL PROVISIONS

A. EMS Personnel whose license has been revoked or surrendered for a period not greater than four (4) years may be reinstated upon completion of the following requirements:

1. Evidence of completion of continuing education for the current license renewal period;
2. Evidence of completion of a department approved refresher course appropriate to the license level as outlined in R-T-05C: EMS Curricula Standards for Refresher Courses;
3. Successful completion of the required examination approved by the department or current National Registry of EMTs (NREMT) certification; and,
4. Payment of the applicable penalty fee for each expired license renewal period and payment of the license fee for the current license renewal period.

B. Individuals must forward the required proof of completion of the course to the Regional EMS Office. A complete listing of the Regional EMS Offices is located in the EMS Procedure Manual, Section VIII: Resource Documents, R-01: Regional EMS Offices.

1. A certificate of completion of the required training program with number of hours documented and signed by a currently licensed EMS Instructor at the appropriate level;
2. Once the training has been verified, the Regional EMS Program Director will notify the OEMS that the individual is eligible for the NREMT Examination at the appropriate level;
3. No individual will be considered eligible for an NREMT Examination without written approval from the OEMS; and,
4. It is the responsibility of the individual seeking reinstatement to make application for the appropriate level examination to the NREMT.

C. An individual, whose license has been revoked for failure to meet the mandated continuing education requirements or who voluntarily surrendered their EMS license for a period greater than four (4) years, may be reinstated upon the holder completing the initial licensure process beginning with the emergency medical technician training course.

 <p>DHR GEORGIA DEPARTMENT OF HUMAN RESOURCES</p>	<p>Department of Human Resources Division of Public Health Office of Emergency Medical Services</p>	<p>Index: PRO-C-07 Effective: 01/11/2006 Review: 01/11/2007 Page: 1 of 2</p>
---	--	---

SUBJECT: Initial Licensing, License Renewal, License Revocation and License Suspension of Convicted Felons

I. PROCEDURE

This procedure is established to define the process to be used when considering the initial licensing, license renewal, license revocation, and license suspension of convicted felons as Emergency Medical Services (EMS) Personnel. The provisions of this procedure apply to each separate and/or subsequent felony conviction and will be judged in accordance with the seriousness of the case as listed.

II. INITIAL LICENSING / LICENSE RENEWAL OF CONVICTED FELONS

- A. Any applicant requesting initial licensing or license renewal who has a felony criminal record must submit the following documentation through the Regional EMS Program Director to the Office of EMS (OEMS):
 - 1. A certified copy of the final disposition of the court case;
 - 2. A certified copy of a National Crime Information Center (NCIC) Report issued within the last (30) thirty business days;
 - 3. A letter from the parole officer (if applicable) stating that the applicant has met all the requirements of probation and/or parole;
 - 4. A minimum of three (3) letters of recommendation from individuals who know the applicant; and
 - 5. A letter of intent to hire from a licensed ambulance service (if possible).
- B. A complete listing of the Regional EMS Offices is located in the EMS Procedure Manual, Section VIII: Resource Documents, R-01: EMS Regional Offices.
- C. The final decision to issue or renew a license to the applicant will be made by the Director of the OEMS.

III. CATEGORIES OF DENIAL

- A. General Denial - Licensing or Renewal of individuals convicted of certain crimes present an unreasonable risk to public health and safety. Thus, applications for an initial license or license renewal by individuals convicted of the following crimes will be denied in all cases:
 - 1. Felonies involving sexual misconduct where the victim's failure to affirmatively consent is an element of the crime. These felonies include forcible rape.
 - 2. Felonies involving the sexual or physical abuse of children, the elderly or infirm. These felonies include sexual misconduct with a child, making

- or distributing child pornography or using a child in a sexual display, incest involving a child or assault on an elderly or infirm person.
3. Any crime in which the victim is an out-of-hospital patient, or a patient or resident of a health care facility. These crimes include abuse, neglect, theft from or financial exploitation of a person entrusted to the care or protection of the applicant.
- B. Presumptive Denial - Applications for license or renewal by individuals in the following categories listed below will be denied, except in extraordinary circumstances. In these circumstances, applications will be granted only if the applicant establishes by clear and convincing evidence that licensing will not jeopardize public health and safety.
1. Applications for licensing by individuals who have been convicted of any crime and who are currently incarcerated, on work release, on probation or on parole.
 2. Applications for licensing by individuals convicted of crimes in the following categories, unless five (5) years have passed since the conviction OR five (5) years have passed since release from custodial confinement, whichever occurs later:
 - a. Serious crimes of violence against a person. These crimes include assault or battery with a dangerous weapon, aggravated assault and battery, murder or attempted murder, manslaughter (except involuntary manslaughter), kidnapping, robbery of any degree or arson.
 - b. Crimes involving controlled substances or synthetics. These crimes include unlawful possession, distribution or intent to distribute unlawfully, Schedule I through V drugs as defined by the Uniform Controlled Dangerous Substances Act.
 - c. Serious crimes against property. These crimes include grand larceny, burglary, embezzlement or insurance fraud.
 - d. Any other crime involving sexual misconduct.
- C. Discretionary Denial - Applications for license or renewal by individuals convicted of any crimes including DUI, but not including minor traffic violations, may be denied after consideration of the following factors:
1. The seriousness of the crime;
 2. Whether the crime relates directly to the skills of pre-hospital care service and delivery of patient care;
 3. How much time has elapsed since the crime was committed;
 4. Whether the crime involved violence to or abuse of another person;
 5. Whether the crime involved a minor or a person of diminished capacity; and
 6. Whether the applicant's actions and conduct since the crime was committed are consistent with holding a position of public trust.



**Department of Human Resources
Division of Public Health
Office of Emergency Medical Services**

**Index: PRO-C-08
Effective: 01/01/2007
Review: 01/01/2008
Page: 1 of 2**

SUBJECT: Licensing of EMS Personnel

I. Procedure

This procedure is to be used when licensing Emergency Medical Technician-Basics (EMT-B), Emergency Medical Technician-Intermediates (EMT-I), and Emergency Medical Technician-Paramedics (EMT-P).

II. General Provisions

- A. The individual requesting licensure after successful completion of a Georgia approved licensing examination, or reciprocity from other state, must submit the required documentation to the Office of EMS (OEMS).
 - 1. Applications that are incomplete will be returned to the applicant.
 - 2. Completed applications are to be submitted to:
Georgia Office of Emergency Medical Services
The Skyland Center - Lower Level
2600 Skyland Drive
Atlanta, Georgia 30319
- B. Individuals seeking licensure in Georgia must be currently registered by the National Registry of Emergency Medical Technicians (NREMT) at the level for which licensure is sought.
- C. The levels of NREMT Registration accepted by the OEMS are:
 - 1. NREMT-Basic;
 - 2. NREMT-Intermediate/85;
 - 3. NREMT-Intermediate/99;
 - a. Scope of Practice will be limited to that of the Georgia EMT-I
 - 4. NREMT-Paramedic.

III. In - State Personnel Licensing

- A. Required documentation for Georgia EMS Program graduates seeking initial licensure for any level includes:
 - 1. Completed application card, Form C-08A: In - State License Request;
 - 2. Current national criminal record history report generated no earlier than twelve (12) months prior to submitting an application for licensure for individuals whose course began after January 1, 2007;
 - 3. Passport - style photo; and,
 - 4. Cashier's check, money order, or company check, in the amount of \$25.00 for EMT-B, \$50.00 for EMT-I, or \$75.00 for EMT-P, drawn on a United States bank, made payable to the "Georgia Department of Human Resources." Personal checks will not be accepted.

IV. Out-of-State Reciprocity

- A. Required documentation for Out-of-State EMS Program graduates seeking initial licensure for any level includes:
1. Completed reciprocity application, Form C-08B: Out-of-State Application for Licensure;
 2. Current national criminal record history report generated no earlier than twelve (12) months prior to submitting an application for licensure;
 3. Passport-style photo;
 4. Documentation attesting to the successful completion of an approved EMT-B, EMT-I, or EMT-P course;
 5. Copy of appropriate level and current NREMT level wallet card;
 6. Documentation attesting to current CPR certification, as well as ACLS certification for paramedics, as listed in PRO-C-04;
 7. Acceptable documents attesting to appropriate age include:
 - a. Original birth certificate issued by the state in which the birth occurred;
 - b. Certified copy of birth certificate issued by Vital Statistics with seal affixed;
 - c. Certified copy of court records (adoption, name changes, or sex changes);
 - d. Certified naturalization records;
 - e. Current driver's license;
 - f. Immigration identification card from the U. S. Citizenship and Immigration Service; or
 - g. Valid passport
 8. Cashier's check, money order, or company check, in the amount of \$25.00 for EMT-B, \$50.00 for EMT-I, or \$75.00 for EMT-P, drawn on a United States bank, made payable to the "Georgia Department of Human Resources." Personal checks will not be accepted.

 <p>DHR GEORGIA DEPARTMENT OF HUMAN RESOURCES</p>	<p>Department of Human Resources Division of Public Health Office of Emergency Medical Services</p>	<p>Index: PRO-C-09 Effective: 06/13/2006 Review: 06/13/2007 Page: 1 of 1</p>
---	--	---

SUBJECT: Voluntary Surrender of an Individual's Emergency Medical Services License

I. PROCEDURE

The following procedure governs the process to be used by the individual when requesting to voluntarily surrender an Emergency Medical Services License.

II. GENERAL PROVISIONS:

- A. The individual requesting to voluntarily surrender an EMS License must contact the Regional EMS Office. A complete listing of the Regional EMS Offices is located in the EMS Procedure Manual, Section VIII: Resource Documents, R-01: EMS Regional Offices.
 - 1. An individual may surrender a license so that the individual is no longer licensed as an EMT at any level.
 - 2. An individual may surrender a license and request to retain a license at a lower level as long as said individual meets all requirements for licensing at that level
 - a. An EMT-P may request to surrender an EMT-P license and reinstate his previously held EMT-I license.
 - b. An EMT-I or EMT-B may request to surrender his license and will no longer be licensed as an EMT at any level in Georgia.
- B. Upon completion of Form C-09A, the individual will submit it to the OEMS for final action.

 <p>DHR GEORGIA DEPARTMENT OF HUMAN RESOURCES</p>	<p>Department of Human Resources Division of Public Health Office of Emergency Medical Services</p>	<p>Index: PRO-C-10 Effective: 01/11/2006 Review: 01/11/2007 Page: 1 of 2</p>
---	--	---

SUBJECT: Reciprocity for Out-of-State Emergency Medical Service Instructors

I. PROCEDURE

Persons applying for licensure through reciprocity as an Emergency Medical Service Instructor must complete all requirements of this procedure.

II. REQUIREMENTS:

A. Emergency Medical Services Instructor (Level I) candidates will adhere to the following requirements:

1. Possess a current Georgia License as an EMT-I, EMT-P, registered nurse, physicians assistant or physician;
2. Possess current certification as a cardiopulmonary resuscitation instructor; and,
3. Proof of completion of a course equivalent to the 2002 National Guidelines for Educating EMS Instructors.

B. Emergency Medical Service Instructor (Level II) candidates will adhere to the following requirements:

1. Possess a current Georgia License as an EMT-P, registered nurse, physicians assistant or physician; and,
2. Possess current certification as a cardiopulmonary resuscitation instructor.
3. Proof of completion of a course equivalent to the 2002 National Guidelines for Educating EMS Instructors.

C. Emergency Medical Services Instructor (Level III) will adhere to the following requirements:

1. Possess a current Georgia License as an EMT-P, registered nurse, physicians assistant or physician;
2. Have a minimum of an Associates Degree or ninety (90) quarter hours of college credit or semester equivalent from an accredited institution;
3. Possess current certification as a cardiopulmonary resuscitation instructor.
4. Possess current certification as an advanced cardiac life support instructor, pediatric advanced life support instructor, basic trauma life support instructor and geriatric life support instructor, or equivalents as approved by the Office of EMS (OEMS).
5. Proof of completion of a course equivalent to the 2002 National Guidelines for Educating EMS Instructors.

III. APPLICATION PROCEDURE:

- A. All instructor candidates must complete Form C-11A EMS Instructor Application and submit it to OEMS.
- B. All support documentation must be included with the application packet at the time of submission for consideration.
- C. Provide a current, notarized, favorable evaluation and recommendation by the certifying agency of the state or territory that you are currently certified / licensed to teach in.

IV. CANDIDATE TESTING:

- A. Once an application has been approved by OEMS, the candidate must successfully complete a written examination with a minimum score of 80% and practical examination as prescribed by PRO C-11 for EMS Instructors.
- B. Instructor Candidates must also successfully complete a department approved review of current laws, rules and regulations, policies and procedures, curricula, testing and course requirements that are applicable to Georgia's EMS education system.

	<p>Department of Human Resources Division of Public Health Office of Emergency Medical Services</p>	<p>Index: PRO-C-11 Effective: 01/01/2007 Review: 01/01/2008 Page: 1 of 4</p>
---	--	---

SUBJECT: Emergency Medical Service Instructors

I. Procedure

This procedure governs the licensing process and issuance of licenses for all levels of Emergency Medical Service (EMS) Instructors.

II. General Provisions

- A. Instructor Qualification Examinations will be offered based on need, as determined by the Office of EMS (OEMS).
- B. There are no prerequisites for taking the qualification exams, however candidates must complete and submit the required application and fees prior to deadlines for these exams.
- C. Candidates must successfully complete and provide documentation for all requirements when submitting an application for an instructor license.
- D. The application for licensure must be submitted no later than twelve (12) calendar months after the end of the EMS Instructor Course.

III. EMS Instructor Definitions

- A. Emergency Medical Services Instructor - Level I: An individual qualified to teach and coordinate continuing education, community education, and first responder programs and is currently licensed by the department.
- B. Emergency Medical Services Instructor - Level II: An individual qualified to teach and coordinate Emergency Medical Technician-Basic (EMT-B) and Emergency Medical Technician-Intermediate (EMT-I) courses, in addition to the courses taught at Level I, and is currently licensed by the department.
- C. Emergency Medical Services Instructor - Level III: An individual qualified to teach and coordinate Emergency Medical Technician-Paramedic (EMT-P) courses, in addition to the courses taught at Level I and Level II, and is currently licensed by the department.

IV. EMS Instructor License Eligibility

- A. Emergency Medical Services Instructor - Level I:
 - 1. Written recommendation from the local EMS Medical Director;
 - 2. Current Georgia licensure as an EMT-I, Cardiac Technician, EMT-P, Registered Nurse, Physician's Assistant, or Physician;
 - 3. Passport-style photo;
 - 4. Current certification as a CPR Instructor in the approved programs as outlined in PRO-C-04;

5. Current certification as a first responder instructor as obtained through a department approved course; and
 6. The applicant for licensure as an EMS Instructor - Level I is not required to take an EMS Instructor Candidate Qualification Exam.
- B. Emergency Medical Services Instructor - Level II:
1. Current Georgia licensure as a Cardiac Technician, EMT-P, Registered Nurse, Physician's Assistant, or Physician;
 2. Current certification as a CPR instructor in the approved programs as outlined in PRO-C-04;
 3. Successful completion of a department administered course with curriculum specific to Georgia's emergency medical service system; and,
 4. Demonstrate proficiency by the successful completion of practical and written examinations administered or approved by the department.
- C. Emergency Medical Services Instructor - Level III:
1. Current Georgia licensure as an EMT-P, Registered Nurse, Physician's Assistant, or Physician;
 2. Possess an associate degree or higher, or ninety (90) quarter hours (or the semester equivalent) of college credit from a regionally or nationally accredited institution;
 3. Current certification as a CPR instructor in the approved programs as outlined in PRO-C-04;
 4. Current certification as an Advanced Cardiac Life Support (ACLS) Instructor in the approved programs as outlined in PRO-C-04, Pediatric Advanced Life Support (PALS) Instructor, International Trauma Life Support (ITLS) or Prehospital Trauma Life Support (PHTLS) Instructor, and Geriatric Life Support Instructor, or equivalents as approved by the OEMS;
 5. Successful completion of a department administered course with curriculum specific to Georgia's emergency medical service system; and,
 6. Demonstrate proficiency by the successful completion of practical and written examinations administered or approved by the department.

V. EMS Instructor Application Process

- A. Instructor applicants must complete Form C-11A: EMS Instructor Application, in its entirety and submit it to a Regional EMS Office. A complete listing of the Regional EMS Offices is located in the EMS Procedure Manual, Section VIII: Resource Documents, R-01: Regional EMS Offices.
- B. All supporting documentation must be included with the license application packet at the time of submission to be considered for approval.
- C. Instructor ratings in CPR, ACLS, PALS, ITLS / PHTLS, and Geriatric Life Support / GEMS (as well as postsecondary educational requirements for

Level III licensure) applicable to the level of instructor license sought, must be current at the time of the application for licensure. While desirable at the time of the qualification examination, documentation of current certifications and prior education will be required only at the time of application for licensure as an instructor.

1. Incomplete applications will be returned to the applicant.
 2. Failure to meet a deadline due to an incomplete application is solely the responsibility of the applicant.
- D. The complete application, with accompanying documentation, must be submitted no later than twelve (12) calendar months after the ending date of the EMS Instructor Course is successfully completed by the applicant.

VII. EMS Instructor Course Requirements

- A. Emergency Medical Services Instructor Candidates for all levels must successfully complete the department approved course which will include, but not be limited to, information that covers the following:
1. Georgia Department of Human Resources (DHR) EMS Rules and Regulations Chapter 290-5-30;
 2. Official Code of Georgia Annotated (O.C.G.A.) 31-11;
 3. Georgia DHR OEMS Procedures; and,
 4. 2002 National Guidelines for Educating EMS Instructors.

VIII. EMS Instructor License Renewal

- A. EMS Instructors must submit evidence of meeting license renewal requirements to the OEMS prior to December 31 of odd numbered years on Form C-11B: EMS Instructor License Renewal, or in a manner as prescribed by the department. The license period for EMS Instructors shall be for two (2) years.
- B. Emergency Medical Service Instructors - Level I must be able to provide proof of the following:
1. Current Georgia licensure as an EMT-I, Cardiac Technician, EMT-P, Registered Nurse, Physician's Assistant, or Physician;
 2. Current certification as a CPR Instructor in the approved programs as outlined in PRO-C-04;
 3. Proof of participation in a minimum of twenty-four (24) hours of continuing education in instructional techniques per licensure period; and,
 4. Proof of instructing a minimum of forty (40) contact hours per licensure period in a department-approved course.
- C. Emergency Medical Service Instructors - Level II must be able to provide proof of the following:
1. Current Georgia licensure as a Cardiac Technician, EMT-P, Registered Nurse, Physician's Assistant, or Physician. EMT Instructors who were licensed prior to 03/17/2005, who are not an emergency medical technician, cardiac technician, or paramedic are exempt from this requirement as long as they continue to meet

- the instructor license renewal requirements;
 2. Current certification as a CPR Instructor in the approved programs as outlined in PRO-C-04;
 3. Proof of participation in a minimum of twenty-four (24) hours of continuing education in instructional techniques per licensure period; and,
 4. Proof of instructing a minimum of forty (40) contact hours per licensure period in a department-approved course.
- D. Emergency Medical Service Instructors - Level III must be able to provide proof of the following:
1. Current Georgia licensure as an EMT-P, Registered Nurse, Physician's Assistant, or Physician. EMT Instructors who were licensed prior to 03/17/2005, who are not an emergency medical technician, cardiac technician, or paramedic are exempt from this requirement as long as they continue to meet the instructor license renewal requirements;
 2. Current certification as a CPR Instructor in the approved programs as outlined in PRO-C-04;
 3. Current certification as an ACLS Instructor in the approved programs as outlined in PRO-C-04;
 4. Proof of participation in a minimum of twenty-four (24) hours of continuing education in instructional techniques per licensure period; and,
 5. Proof of instructing a minimum of forty (40) contact hours per licensure period in a department-approved course.

 <p>DHR GEORGIA DEPARTMENT OF HUMAN RESOURCES</p>	<p>Department of Human Resources Division of Public Health Office of Emergency Medical Services</p>	<p>Index: PRO-C-12 Effective: 07/06/2006 Review: 07/06/2007 Page: 1 of 1</p>
---	--	---

SUBJECT: Audit of an Individual's Emergency Medical Services License

I. PROCEDURE

The following procedures govern the audit process for an individual's Emergency Medical Service (EMS) license.

II. GENERAL PROVISIONS

- A. The State Office of EMS (SOEMS) will conduct an audit during the first quarter of each appropriate calendar year as specified in Section III.
- B. Approximately ten percent (10%) of licensed individuals will be included in the audit process.

III. AUDIT OF LICENSED EMS PERSONNEL RECORDS

- A. Licensed EMS Personnel
 - 1. Personnel licensed at the Emergency Medical Technician – Basic, Emergency Medical Technician – Intermediate, Cardiac Technician, and Emergency Medical Technician – Paramedic will be selected for a records audit.
 - 2. The SOEMS will initiate the audit process during the first quarter of each odd numbered calendar year (e.g. 2007, 2009, 2011, etc.).
 - 3. The SOEMS will use a computer program to randomly select the license numbers of approximately ten percent (10%) of licensed individuals.
 - 4. The SOEMS will notify each individual via mail of the audit and the process that will be used to conduct it.
- B. Licensed EMS Instructors
 - 1. Personnel licensed as Level I, Level II, and Level III EMS Instructors will be selected for a records audit.
 - 2. The SOEMS will initiate the audit process during the first quarter of each even numbered calendar year (e.g. 2008, 2010, 2012, etc.).
 - 3. The SOEMS will use a computer program to randomly select the license numbers of approximately ten percent (10%) of licensed EMS Instructors.
 - 4. The SOEMS will notify each individual via mail of the audit and the process that will be used to conduct it.

 <p>DHR GEORGIA DEPARTMENT OF HUMAN RESOURCES</p>	<p>Department of Human Resources Division of Public Health Office of Emergency Medical Services</p>	<p>Index: PRO-D-01 Effective: 01/11/2006 Review: 01/11/2007 Page: 1 of 2</p>
---	--	---

**SUBJECT: Procurement, Control, Handling and Accountability of
Pharmaceuticals Related to Emergency Medical Services**

I. PROCEDURE

This procedure provides direction and guidance for licensed ambulance services, medical first responder services and neonatal transport services (hereinafter referred to collectively as emergency medical services or EMS providers) in the procurement, control, handling and accountability of pharmaceuticals as related to emergency services.

II. GENERAL PROVISIONS

- A. The EMS Medical Director and the EMS Director shall adopt the procedure for obtaining pharmaceuticals and intravenous fluids (IVs) from a legal source. The Office of Emergency Medical Services (OEMS) will review the contract to determine if it satisfactorily meets the license requirements. This office strongly recommends consultation with the legal counsel of the service at the local level.
- B. Emergency medical services in counties with a population less than 12,000 and choosing not to have a medical director shall adopt a procedure for obtaining pharmaceuticals and IVs from a legal source. These services without a medical director shall have an IV solution kit containing the total volumes of each of the following: 500 milliliters of D₅W, 2000 milliliters of Ringers Lactate solution, and 1000 milliliters of normal saline solution. The regional EMS medical director shall approve contents of the drug kit as long as it meets the requirements of the Official Code of Georgia Annotated (O.C.G.A.) and DHR Rules and Regulations.

III. PROCUREMENT OF PHARMACEUTICALS

- A. Each emergency medical service will be responsible for negotiating a written agreement with a licensed pharmacy to furnish drugs and controlled substances for the vehicles of their particular services as established by O.C.G.A. §26-4-116.
 - 1. When an emergency medical service has vehicles stationed in multiple counties, it may elect to negotiate additional agreements, not to exceed one per county.
 - 2. A copy of this agreement must be on file at the emergency medical service base location, the OEMS and the designated source of the pharmaceuticals.
- B. There must be an established list of the pharmaceuticals that will be carried on each ambulance and approved by the service medical director.

Emergency medical services without a local service medical director must adhere to the list established in PRO E-01.

IV. CONTROL AND ACCOUNTABILITY

- A. To ensure that the pharmaceuticals are in date and handled appropriately, the EMS Director and EMS Medical Director shall establish a system of accountability and control as established by O.C.G.A. §26-4-116.
- B. All pharmaceuticals shall be stored in a secure and environmentally appropriate manner as established by Rules and Regulations 290-5-30-.10(2) Storage of Pharmaceuticals, Drugs and Biologicals.
 - 1. Location:
 - a. Drugs and biologicals shall be stored in kits.
 - b. Excess drugs and biologicals may be stored in the vehicle in closed compartments or off the vehicle in a secure facility.
 - 2. Drugs and biologicals shall be maintained at a temperature within the range specified by pharmaceutical manufacturers and such vehicles are locked.
- C. An approved prehospital care report and/or supplement shall serve as the certificate of disposition for all pharmaceuticals. Information regarding proof of use in accordance with Georgia Code must appear on the report and include: name of the pharmaceutical, dosage, name of ordering physician, name of patient, date and time of administration and name of EMT-I, Cardiac Technician or Paramedic administering the pharmaceutical(s). The prehospital care report must be signed by the ordering physician within 24 hours unless the order was issued by a designated base station facility, in which case the medical control patient log number will suffice.
- D. Disposition of expired pharmaceuticals must be addressed in the agreement between the ambulance service and the designated source.

 <p>DHR GEORGIA DEPARTMENT OF HUMAN RESOURCES</p>	<p>Department of Human Resources Division of Public Health Office of Emergency Medical Services</p>	<p>Index: PRO-E-01 Effective: 01-06-2006 Review: 01-06-2007 Page: 1 of 1</p>
---	--	---

SUBJECT: Required Equipment for Licensed EMS Providers

I. PURPOSE

The purpose of this procedure is to identify the equipment required on registered EMS vehicles (ambulances, medical first responder units, and neonatal transport units) in Georgia.

II. GENERAL PROVISIONS

- A. The description and items, Resource Section: R-E01A-Required Equipment for Licensed EMS Providers is required and subject to inspection on registered vehicles-Ambulances.
- B. The description and items, Resource Section: R-E01B-Required Equipment for Licensed EMS Providers is required and subject to inspection on registered vehicles-Neonatal Units.
- C. The description and items, Resource Section: R-E01C-Required Equipment for Licensed EMS Providers is required and subject to inspection on registered vehicles-Medical First Responder Units.

III. APPROVED EXCEPTIONS AND SUBSTITUTIONS

- A. To seek an exception or substitution a written request from the local EMS medical director must be sent to the appropriate Regional EMS Office.
- B. Approved exceptions and substitutions will be specified in the EMS Procedure Manual, Section VIII: Resource Documents.



Department of Human Resources
Division of Public Health
Office of Emergency Medical Services

Index: PRO-L-01
Effective: 01/11/2006
Review: 01/11/2007
Page: 1 of 1

SUBJECT: Emergency Medical Service Vehicle – Additions and Deletions

I. PROCEDURE

The following procedure defines the process for adding or deleting vehicles to/on an Emergency Medical Service License.

II. ADDING VEHICLES:

- A. Contact the EMS Program Director of the EMS Region in which the vehicle will operate. A complete listing of the Regional EMS Offices is located in the EMS Procedural Manual, Section VIII: Resource Documents, R-01: Regional EMS Offices.
 - 1. A time will be scheduled for the vehicle to be inspected.
 - 2. The vehicle and insurance forms from the license application must be completed and submitted prior to or at the time the vehicle is inspected.
- B. The vehicle must meet all state requirements for registration.
- C. Following the inspection, the assigned Vehicle Identification (VID) Number will be placed on both sides of the vehicle by the provider in numbers at least three inches high. This must be completed within sixty (60) business days of the inspection.

III. DELETING VEHICLES:

- A. Contact the EMS Program Director in the EMS Region in which the vehicle is currently operating. A time will be scheduled for the DHR inspection decal to be removed.
- B. At the time the DHR inspection decal is removed, operation as a registered emergency vehicle will cease.
- C. The three-inch VID number and the metallic VID plate on the vehicle must remain on the vehicle.
- D. Documentation of such action will be recorded on the Vehicle Information form and signed by the emergency medical service representative and the DHR representative.

 <p>DHR GEORGIA DEPARTMENT OF HUMAN RESOURCES</p>	<p>Department of Human Resources Division of Public Health Office of Emergency Medical Services</p>	<p>Index: PRO-L-02 Effective: 01/11/2006 Review: 01/11/2007 Page: 1 of 1</p>
---	--	---

SUBJECT: Filing a Complaint with the Georgia Office of Emergency Medical Services

- I. **PURPOSE:** The purpose of this procedure is to inform the public on how to file a complaint against any person, agency or facility that is licensed or designated by the department.
- II. **AUTHORITY:**
 - A. The Office of Emergency Medical Services (OEMS) investigates complaints in order to determine whether or not a licensed individual, service or designated facility has violated any section of the Department of Human Resources Emergency Medical Services Rules and Regulations Chapter 290-5-30 and/or the Official Code of Georgia Annotated (O.C.G.A.) §31-11.
 - B. If the OEMS receives allegations of a violation of rule or code, an investigative report will be initiated. Once the investigation is completed, a recommendation is forwarded to the Director of the OEMS for review.
 - C. If it is found that a violation has occurred the Director may initiate action to include suspension, probation, revocation and/or fine. All recommended actions of a punitive nature can be appealed. Details of how to file an appeal will be included in any letter of intent to take corrective action. The Director will determine what actions, if any, should be taken.
- III. **PROCEDURE:**
 - A. A complaint against an individual, service or facility that is licensed or designated by the department should be directed to the State Office of Emergency Medical Services at 404-679-0547 or one of the Region Offices at the following numbers:

Region	Location	Contact Person	Phone Number
One	Rome	David Loftin	706-295-6175
Two	Gainesville	Earl McGrotha	770-535-5743
Three	Atlanta	Marty Billings	404-248-8995
Four	LaGrange	Billy Watson	706-845-4035
Five	Eatonton	Chris Threlkeld	706-484-2991
Six	Augusta	Lawanna Mercer-Cobb	706-667-4336
Seven	Columbus	Sam Cunningham	706-321-6150
Eight	Moultrie	Robert Vick	229-891-7035
Nine	Brunswick	Shirley Starling	912-262-3035
Ten	Athens	Earl McGrotha	706-583-2862

 <p>DHR GEORGIA DEPARTMENT OF HUMAN RESOURCES</p>	<p>Department of Human Resources Division of Public Health Office of Emergency Medical Services</p>	<p>Index: PRO- L-03 Effective: 06/13/2006 Review: 06/13/2007 Page: 1 of 4</p>
---	--	--

SUBJECT: Application for an Emergency Medical Service License (Ambulance Service, First Responder Service, and Neonatal Transport Service)

I. PROCEDURE

The purpose of this document is to define the proper procedure for obtaining, maintaining, and renewing an Emergency Medical Services (EMS) License, and subsequent authorization to operate as an EMS Provider in the State of Georgia.

II. GENERAL PROVISIONS

- A. Definitions of terms used throughout this procedure will be synonymous with the Department of Human Resources (DHR) Rules and Regulations for Emergency Medical Services Chapter 290-5-30.
- B. The Office of EMS (OEMS) is responsible for all initial licensing and license renewals of EMS Providers.
- C. An EMS License will be issued or renewed based on:
 - 1. Receipt of a complete and accurate license application, including all required schedules, attachments, and fees (if applicable);
 - 2. The provider's, or proposed provider's, ability to initially and continually meet the requirements of the Official Code of Georgia Annotated, (O.C.G.A.) Title 31, Chapter 11; DHR Rules and Regulations Chapter 290-5-30; and procedures established by the OEMS.

III. OTHER PROVISIONS

- A. Failure to apply for renewal in a timely manner shall result in expiration of the license. It is the responsibility of the applicant to submit the completed application, schedules, attachments, and fees (if applicable) to the Regional EMS Program Director no sooner than sixty (60) calendar days, or less than thirty (30) calendar days prior to the license expiration date. Failure to comply with this deadline may jeopardize reimbursement and license continuation.
- B. Form L-03A (GA-EMS 1000 and associate schedules) is used to apply for, amend, continue, or renew the license and/or subsequent authorization to operate an emergency medical service in the State of Georgia. Copies of Form L-03A (GA-EMS 1000 and associated schedules) may be obtained through the:
 - 1. Regional EMS Program Director;

2. Office of EMS; or
 3. Internet: <http://www.health.state.ga.us/programs/ems/index.asp>
- C. Only forms approved by DHR can be used to obtain, update, continue, or renew an EMS license unless prior written approval has been obtained from the OEMS.
- D. Information filed with the State and Regional Offices must be kept current. It is the responsibility of the license holder to ensure that current contact and license information is reported to the OEMS.
- E. Applicants must make every effort to file complete applications. Failure to do so can result in a delay, return, or dismissal of the license application.
- F. Failure to apply for renewal by the expiration date shall result in administrative penalties, fines, expiration, revocation, or a combination thereof of the license.
- G. A provider who has a check returned to DHR for "insufficient funds" shall be subject to revocation of the EMS provider license and this may be used as grounds for non-renewal of the EMS provider license.
- H. Government and Governmental Entities:
1. Any government or governmental entity wishing to apply for an initial EMS Provider License shall complete and submit Form L-03A: GA-EMS 1000 to the Regional EMS Program Director for the area in which the proposed service base location is to be established. The license application and associated fee will then be submitted to the Office of EMS by the Regional EMS Program Director.
 2. Pursuant to O.C.G.A. §31-11-32(d), the State EMS License Officer, before issuing a license to a government or governmental agency for a new ambulance service shall establish that, due to inadequate private service, the public's convenience and necessity require the proposed ambulance service.
 3. DHR may request additional information from the applicant.
 4. DHR's investigation will include, but not be limited to, the following information pertaining to any and all entities holding an EMS license within the applicant's proposed service area:
 - a. Verification of compliance with O.C.G.A. §31-11, DHR Rules and Regulations Chapter 290-5-30, and any standards established in the Regional EMS Zoning Plan;
 - b. Examination of complaint files;
 - c. Response times recorded during the twelve (12) months immediately preceding receipt of application;
 - d. Percentage of requests referred to other EMS Providers;
 - e. Number of requests per 10,000 population;
 - f. Number of transport vehicles per 10,000 population; and,
 - g. Number of transport vehicles per 100 square miles.
 5. After completion of the investigation, the State EMS License Officer will render a decision regarding the approval or denial of the EMS license application.

6. Any government or governmental entity aggrieved by the decision of the SOEMS License Officer shall be afforded the opportunity for a hearing.
- I. License Period:
 1. An initial applicant for an EMS provider license who meets the requirements of O.C.G.A. §31-11, DHR Rules and Regulations Chapter 290-5-30, and procedures established by the Office of EMS shall be issued a license valid for a period of two years. An initial license shall be valid upon the date of issuance.
 2. Each renewal application that meets the requirements of O.C.G.A. §31-11, DHR Rules and Regulations Chapter 290-5-30, and policies established by the Office of EMS shall be issued a license valid for a period of two years.
- J. Additional vehicle(s) registered within ninety (90) calendar days of the license anniversary / renewal date require payment in the amount designated per vehicle by the Department. Reimbursement of fees for vehicles removed from service are not given, regardless of the time frame.

IV. LICENSE PROCEDURES FOR INITIAL LICENSURE

- A. Each individual, corporation or agency seeking initial licensure as an EMS Provider must obtain and complete Form L-03A (GA-EMS 1000 and associated schedules). This application, schedules, attachments, and fee (if applicable) must be submitted to the Regional EMS Program Director in the Region where the base location will be, no later than thirty (30) calendar days after being inspected.
- B. New license applications should have service names that are unique. In order to ensure there are not duplicate service names, license applicants should contact the Regional Office where the base location will exist to ensure that a similar named service does not already exist. A complete listing of the Regional EMS Offices is located in the EMS Procedure Manual, Section VIII: Resource Documents, R-01: Regional EMS Offices.
- C. Incomplete applications will be sent back to the applicant for completion and will not be processed.
- D. The following items must be submitted to make application for an EMS Provider License:
 1. Completed form L-03A: GA-EMS 1000;
 2. Current inspection form no more than thirty (30) calendar days old;
 3. Color photograph of one of the vehicles listed on the application;
 4. Completed Personnel Form (L-03A: Schedule A);
 5. Completed Vehicle Form (L-03A: Schedule B);
 6. Completed Insurance Form (L-03A: Schedule C);
 7. Completed Medical Director Form (L-03A: Schedule D);
 8. Completed Pharmacy Contract Form (L-03A: Schedule E);
 9. Copy of current corporation registration documents (if applicable);

10. License fee (if applicable); and,
11. Current dated Drug / IV Formulary signed by the EMS Medical Director.

V. LICENSE ANNIVERSARY DATE PROCEDURES

- E. A. In order to process an EMS Provider's renewal application, the following items must be submitted to the appropriate Regional EMS Program Director no sooner than sixty (60) calendar days, or less than thirty (30) calendar days prior to the license anniversary date. Failure to comply with this deadline may jeopardize reimbursement and license continuation. O.C.G.A. §31-11 requires each licensed provider to submit an annual license fee (if applicable) to the department.
1. Completed form L-03A: GA-EMS 1000;
 2. Current inspection form no more than one-hundred twenty (120) calendar days old;
 3. Completed Personnel Form (L-03A: Schedule A);
 4. Completed Vehicle Form (L-03A: Schedule B);
 5. Completed Insurance Form (L-03A: Schedule C);
 6. Completed Medical Director Form (L-03A: Schedule D);
 7. Completed Pharmacy Contract Form (L-03A: Schedule E);
 8. Copy of current corporation registration documents (if applicable);
 9. License fee (if applicable); and,
 10. Current dated Drug / IV Formulary signed by the EMS Medical Director.

VI. LICENSE PROCEDURES FOR RENEWAL APPLICATIONS

- F. A. In order to process an EMS Provider's renewal application, the following items must be submitted to the appropriate Regional EMS Program Director no sooner than sixty (60) calendar days, or less than thirty (30) calendar days prior to the license renewal date. Failure to comply with this deadline may jeopardize reimbursement and license continuation. O.C.G.A. §31-11 requires each licensed provider to submit an annual license fee (if applicable) to the department.
1. Completed form L-03A: GA-EMS 1000;
 2. Current inspection form no more than one-hundred twenty (120) calendar days old;
 3. Completed Personnel Form (L-03A: Schedule A);
 4. Completed Vehicle Form (L-03A: Schedule B);
 5. Completed Insurance Form (L-03A: Schedule C);
 6. Completed Medical Director Form (L-03A: Schedule D);
 7. Completed Pharmacy Contract Form (L-03A: Schedule E);
 8. Copy of current corporation registration documents (if applicable);
 9. License fee (if applicable); and,
 10. Current dated Drug / IV Formulary signed by the EMS Medical Director.

	<p>Department of Human Resources Division of Public Health Office of Emergency Medical Services</p>	<p>Index: PRO-L-04 Effective: 07/06/2006 Review: 07/06/2007 Page: 1 of 2</p>
---	--	---

SUBJECT: Automated External Defibrillation (AED) Program License Application Procedure

I. PROCEDURE

This procedure clarifies which organizations are required to obtain a license to operate in order to participate as an AED Program and delineates the steps necessary to obtain a license and operate an AED Program.

II. AED PROGRAMS

- A. An organization that responds to a public call for assistance with an AED is required to obtain a license to operate from the Department of Human Resources (DHR). Examples include law enforcement agencies, fire suppression agencies, and first responder agencies.
- B. Organizations that have AEDs at fixed locations within a facility are not required to obtain a license from DHR. Examples include schools, churches, airports, sports facilities and businesses.

III. REQUIREMENTS FOR PARTICIPATION

- A. A completed application (Form L-04A) must be submitted through the appropriate Regional EMS Office. A complete listing of the Regional EMS Offices is located in the EMS Procedure Manual, Section VIII: Resource Documents, R-01: Regional EMS Offices.
 - 1. The Office of EMS (OEMS) must approve the application prior to the agency's initiation of operations.
 - 2. No application is considered as having been received until all components of the application are complete.
 - a. AED License Application with signatures;
 - b. AED Program Maintenance Plan; and,
 - c. Roster of trained personnel.
- B. Each AED Program must have a Medical Director.
- C. Upon approval of the application by the OEMS, an approval letter and AED Program License will be sent to the appropriate Regional EMS Program Director who will forward it to the AED Program applicant.
- D. An AED Program license is issued for a period of five (5) years.
- E. Licensed ambulance services, medical first responder services, neonatal transport services, and air medical transport services do not have to have a separate AED license.

IV. AED PROGRAM PERSONNEL TRAINING REQUIREMENTS

- A. Participants must maintain current certification in CPR / AED in accordance with the requirements of PRO-C-04-0305.
- B. All training must be conducted by a currently certified CPR / AED Instructor.
- C. A list of personnel participating in the AED Program and a record of continuing education must be submitted to the Regional EMS Program Director no less than thirty (30) business days prior to the anniversary date of the AED Program license.

V. RECORD OF AED USAGE

- A. AED Programs will use Form L-04B AED Patient Care Report.
- B. Each time an AED is used on a patient, an "AED Patient Care Report" must be completed and submitted to the Regional EMS Program Director within twenty-four (24) hours.
- C. A review of the defibrillation of a patient will be made by the AED Program Medical Director, emergency response personnel, transport personnel, the receiving physician, and the Regional EMS Medical Director.
- D. A completed review of each AED use must be submitted to the Regional EMS Program Director within thirty (30) business days of each use.
- E. The Regional EMS Program Director will send a copy of the review to the AED Program Director and AED Program Medical Director.

 <p>DHR GEORGIA DEPARTMENT OF HUMAN RESOURCES</p>	<p>Department of Human Resources Division of Public Health Office of Emergency Medical Services</p>	<p>Index: PRO-L-06 Effective: 01/11/2006 Review: 01/11/2007 Page: 1 of 1</p>
---	--	---

SUBJECT: Records Required During Inspections of Licensed EMS Providers

I. PROCEDURE

This procedure provides guidance to licensed emergency medical service providers as to the inspection process utilized by Office of EMS (OEMS) personnel.

II. RECORDS REQUIRED

- A. Upon initial licensing and license renewal as a Georgia emergency medical service by the OEMS, the service will provide the following documents to the department's authorized agent as requested:
 - 1. Employee Training Records;
 - 2. Valid Vehicle Insurance Policy;
 - 3. Vehicle Maintenance Records documenting compliance with manufacturer's suggested maintenance schedule;
 - 4. Exposure Control Plan;
 - 5. Dispatch Records in either printed or electronic format;
 - 6. Medical Protocols, Policies and Procedures;
 - 7. Pharmacy Policy; and,
 - 8. Patient Care Reports in either printed or electronic format.
- B. Upon each inspection of an emergency medical service, the service will provide the following documents to the authorized agent as requested:
 - 1. Employee Training Records;
 - 2. Valid Vehicle Insurance Policy; and,
 - 3. Patient Care Reports in either printed or electronic format.
- C. The findings of the authorized personnel on each license application and EMS inspection will be recorded on forms approved by the OEMS.

 <p>DHR GEORGIA DEPARTMENT OF HUMAN RESOURCES</p>	<p>Department of Human Resources Division of Public Health Office of Emergency Medical Services</p>	<p>Index: PRO-L-08 Effective: 05/04/2006 Review: 05/04/2007 Page: 1 of 2</p>
---	--	---

SUBJECT: Base Station Facility Designation

- I. **PROCEDURE:** This procedure defines the process for Base Station Facility Designation.

- II. **PROCESS:**
 - A. A letter requesting Base Station Facility Designation shall be sent by a representative of the facility to the appropriate Regional EMS Office.
 - B. The request for action will be forwarded to the Regional EMS Council.
 - C. A meeting will be scheduled to provide information regarding the Base Station Facility Designation process.
 - D. A site visit, utilizing a review team, will be scheduled at an appropriate time.
 - E. The review team will make a recommendation to the Regional EMS Council.
 - F. The Regional EMS Council will make a recommendation to the Department of Human Resources (DHR).
 - G. Upon approval, a representative of the facility will accept, by letter, the Base Station Facility Designation.
 - H. Once the letter is received, accepting the designation, the department approval of the designation will be made public by the Regional EMS Council.

- III. Standards for Designated Base Station Facilities:
 - A. All hospitals or facilities designated by the department as a base station facility must provide at a minimum, but not be limited to, the following:
 - 1. Operation within the approved regional communication plan and have the ability to communicate within the regional and state emergency communications plan and have equipment capable of radio contact on the statewide emergency medical frequency with prehospital providers in the field;
 - 2. Staffed 24 hours a day with a medical control physician licensed to practice in Georgia, or direct contact by radio or telephone with a medical control physician for relaying information and orders;
 - 3. Written medical protocols that have been approved by the regional EMS medical director and distributed to emergency medical services in the region;
 - 4. Communication protocols regarding which medical situations require direct voice communication between emergency medical services personnel and a physician, a nurse, a paramedic, or a physician's assistant in direct

- communication with a physician prior to rendering care to a patient not in the hospital;
5. Assurance to the regional medical director that all personnel involved in the operation of providing medical control are appropriately familiar with medical control;
 6. Chronologically numbered patient log of all on-line calls to be maintained to include information on each incident handled by the designated base station facility. The log must include the following: base station, date, time, patient identification number and chief complaint;
 7. Communication records that may be part of the log or may be a separate system but must have the following information:
 - a. Service/unit calling;
 - b. Estimated time of arrival;
 - c. Chief complaint, condition necessitating orders;
 - d. Age and sex of patient;
 - e. Vital signs and mental status of patient;
 - f. Orders given and time of orders;
 - g. Destination;
 - h. Provision for other comments; and,
 - i. Physician's name and signature;
 8. When a designated base station facility is used for medical control, recording the medical control patient log number on the emergency patient care report may substitute for the physician's signature. If a designated base station facility is not used for medical control, the physician providing medical control must sign the pre-hospital patient care report. This applies to all cases where a designated base station facility was not available or when an appropriate alternative is used;
 9. An ongoing quality assurance/risk management program to address and review the quality and appropriateness of medical control operations;
- B. Every designated base facility shall comply with the policies, protocols, requirements, and standards according to the Rules and Regulations for Ambulance Services.
 - C. Review. Each designated base station is subject to periodic site review and may be required to provide certain records or reports as requested by the regional office/department.
 - D. Removal of designation. Any designation may be removed for failure to maintain conformity to these rules but not before an opportunity for a hearing, pursuant to O.C.G.A. §31-5-2.
 - E. Enforcement. The administration and enforcement of these rules shall be prescribed in O.C.G.A. §31-5 entitled "Administration and Enforcement.

 <p>DHR GEORGIA DEPARTMENT OF HUMAN RESOURCES</p>	<p>Department of Human Resources Division of Public Health Office of Emergency Medical Services</p>	<p>Index: PRO-L-09 Effective: 06/13/2006 Review: 06/13/2007 Page: 1 of 2</p>
---	--	---

SUBJECT: Disciplinary Action

- I. **PROCEDURE** – The following procedure governs the process to be used by the OEMS in review of and final recommendations made to DHR Legal Staff regarding disciplinary actions, fines and/or penalties against licensed personnel, licensed ambulance services, first responder services and neonatal services.
 - A. Request for disciplinary action or administrative actions will be forwarded from the Regional EMS Program Director to the State EMS Licensing/Compliance Officer upon completion of any investigation and submission of recommendation.
 1. Request for actions regarding patient care issues will be reviewed by the State EMS Licensing/Compliance Officer and the State EMS Medical Director.
 2. Request for actions regarding compliance under O.C.G.A. 31-11 and DHR Rules and Regulations 290-05-30 will be reviewed by the State EMS Licensing Officer and the DHR Legal Staff.
 3. Final written notification imposing disciplinary or administrative actions from the department to licensed personnel or EMS agencies will be the responsibility of the State EMS Licensing/Compliance Officer of the Director of EMS.
 - B. Schedule of Fines as approved by the Board of Human Resources and effective March 17, 2005.
 1. Violations or deficiencies found during spot checks, audits, unannounced inspections, investigations, or at any other time may result in a civil monetary penalty. See O.C.G.A. §§ 31-11-9, 31-2-6(c).
 2. Under State law, the maximum fine the department may impose is \$1,000.00 per violation, per day, not to exceed a total of \$25,000.00. Persons fined more than \$1,000.00 either committed multiple offenses or a single violation occurred on more than one day. O.C.G.A. §§ 31-11-9, 31-2-6(c)(6).
 3. Monetary fines are not imposed until the violation has been reviewed and approved by the Director of the State Office of EMS.
 - a. In those cases where approval is granted, the State Office of EMS will send a certified letter to the offender detailing the department's authority to impose penalties and outlining the specific violation(s) for which the penalty is levied.

- b. The offender then has thirty (30) calendar days to either pay the fine, or to contest the penalty and request in writing a hearing on the matter.
 - c. Less severe violations may result in a warning letter to the offender.
4. Fines shall be levied based on the degree of severity of the infraction:
- a. Minor Infraction: Any infraction that deviates from the standards, but does not constitute an immediate threat to public health and safety. Fines for minor infractions range from \$100.00 to \$250.00 per violation, per day. Examples include, but are not limited to, the following:
 - 1. Failure to display proper identification including Georgia level of licensure.
 - 2. Tampers with, alters, or changes any license issued by the department.
 - b. Moderate Infraction: Any infraction that deviates from the standards and constitutes a threat to public health and safety, but that does not constitute an immediate threat. Fines for moderate infractions range from \$250.00 to \$750.00 per violation, per day. Examples include, but are not limited to, the following:
 - 1. Unintentional violation of an ambulance zoning plan and failing to report the said violation to the department.
 - 2. Provides false or misleading advertising.
 - c. Major Infraction: Any infraction that deviates from the standards and constitutes an immediate threat to public health and safety. Fines for major infractions range from \$750.00 to \$1,000.00 per violation, per day. Examples include, but are not limited to, the following:
 - 1. Intentional violation of an ambulance zoning plan.
 - 2. Fails to cooperate with the department and/or its authorized agents during the course of an inspection and/or investigation.
 - 3. The use of fewer than two individuals who possess current Georgia licenses as an Emergency Medical Technician - Intermediate, Cardiac Technician, or Paramedic on registered ambulances.

 <p>DHR GEORGIA DEPARTMENT OF HUMAN RESOURCES</p>	<p>Department of Human Resources Division of Public Health Office of Emergency Medical Services</p>	<p>Index: PRO-L-10 Effective: 10-02-2006 Review: 10-02-2007 Page: 1 of 1</p>
---	--	---

SUBJECT: Waivers and Variances

I. PROCEDURE

This procedure is designed to guide individuals in their request for filing a waiver or variance to the Department of Human Resources Rules and Regulations 290-5-30.07, 290-5-30.08, 290-5-30.09 and EMS Procedure E-01 Required Equipment for Licensed EMS Providers as outlined in O.C.G.A §50-13.9.1.

- A. Except as provided in subsection (h) of O.C.G.A. §50-13-9-1, a person who is subject to regulation by an agency rule may file a petition with that agency, requesting a variance or waiver from the agency's rule. In addition to any other requirements that may be imposed by the agency, each petition shall specify:
 - 1. The rule from which a variance or waiver is requested;
 - 2. The type of action requested;
 - 3. The specific facts of substantial hardship that would justify a variance or waiver for the petitioner, including the alternative standards which the person seeking the variance or waiver agrees to meet and showing that such alternative standards will afford adequate protection for the public health, safety, and welfare; and
 - 4. The reason why the variance or waiver requested would serve the purpose of the underlying statute.

- B. The petition will be completed on Form L-10: Petition for Waiver or Variance to the Department of Human Resources Rules and Regulations for Emergency Medical Services 290-5-30 and submitted to their respective Regional EMS Office.

- C. The Regional EMS Program Director, upon review, will forward the petition to the State EMS License and Compliance Officer for processing the petition to the wavier and variance register.

- D. The agency subject to the provisions of subsections (c) and (d) of O.C.G.A. §50-13-9-1 shall grant or deny a petition for variance or waiver in writing no earlier than fifteen (15) (calendar) days after the posting of the petition on the register and no more than sixty (60) calendar days after the receipt of the petition. The agency's decision to grant or deny the petition shall be in writing and shall contain a statement of the relevant facts and the reasons supporting the agency's action.

 <p>DHR GEORGIA DEPARTMENT OF HUMAN RESOURCES</p>	<p>Department of Human Resources Division of Public Health Office of Emergency Medical Services</p>	<p>Index: PRO L-11 Effective: 01/19/2007 Review: 01/19/2008 Page: 1 of 2</p>
---	--	---

SUBJECT: GEORGIA PATIENT CARE REPORT (GAPCR) DATA CONFORMITY PROCESS

I. PURPOSE:

This procedure outlines the uniform process for working with EMS agencies and their software vendors to assure uniform statewide data reporting; validating conformance to the State of Georgia's Patient Care Report (GAPCR) data standards and required data reporting in a standardized format.

(Note: Effective March 17, 2005, changes in EMS rules and regulations require that EMS providers submit GAPCR data to the OEMS.)

II. PROCEDURE FOR PCR DATA CONFORMANCE

- A. The OEMS maintains a data standard for reporting PCR information. This data standard is to be maintained and promulgated by the OEMS.
- B. In order to support statewide operations and meeting operating objectives and expectations, OEMS has instituted a division of labor among the functional and technical positions.
 - 1. In particular, it is intended that the Georgia PCR Data Registrar is responsible for determining the substance and content of the standardized materials, reports, reporting requirements, the need for collecting individual data elements, database management, the definition of the official GAPCR form, grant-related PCR data reporting, strategic goals for statewide data quality assurance and improvement, as well as related items.
 - 2. In general, the Georgia PCR Data Registrar is the designated single point of contact for public inquiries. The PCR Data Registrar is generally responsible for the determination of data policy matters including the content of the standard GA PCR data set.
 - 3. It is intended that OEMS technical support personnel handle detailed technical questions, maintain the hardware, software, systems software, and database administration/development functions necessary to the technical operation all OEMS data processing systems. The technical personnel also support application planning, analysis, programming, testing, deployment, and change management needed to support OEMS operations. The OEMS technical personnel also assist with the identification and resolution of day to day technical and operating problems.
- C. The PCR Data Registrar along with technical support personnel will define and maintain the standard information package, consistent with the above

- division of labor. This will also include the standardized correspondence that can be given to the EMS agencies vendors, which will (1) explain the Georgia PCR data standards; and (2) outline the process(es) for obtaining a letter of conformance.
- D. The OEMS technical support staff will assist, and support the development and maintenance of the information package and provide a location, linkage, website or other mechanisms to insure that this information is readily available.
 - E. In general, the following process flow should be followed for handling EMS agencies and their software vendor evaluations for PCR data conformance:
 - 1. The EMS agencies vendor contacts the OEMS in writing.
 - 2. The Georgia PCR Data Registrar sends the EMS agencies vendor via email a GAPCR Compliance information packet which includes:
 - a. GA EMS Data Exchange format
 - b. GAPCR Data Elements Data Dictionary
 - c. GAPCR Database Lookup codes
 - d. Essential PCR Data fields to be validated
 - F. The EMS agencies vendor then sends a sample test file to OEMS.
 - G. OEMS tests the file and reports results back to the requestor within seven (7) to ten (10) business days.
 - 1. OEMS tests the file to see if it can be imported into the GAPCR Database using the GAPCR Program and/or the OEMS/T State Bridge system.
 - 2. OEMS tests the validity of the various essential data elements.
 - 3. OEMS conducts other technical reviews as may be warranted by the circumstances of the request.
 - 4. Once the tests are completed (7 to 10 business days), based on results, the EMS agencies vendor is then contacted by email (preferred) and a dialogue is established regarding the problems found.
 - 5. EMS agencies vendors are expected to correct all problems found within 30 business days from date of problem notification prior to resubmitting files to the OEMS.
 - 6. Data files which pass the initial test are then tested for their ability to be electronically submitted. Step 4 and 5 above are then repeated.
 - H. Once an EMS agencies data file is found to be in compliance, the EMS agency and their vendor will be sent a letter of compliance from OEMS identifying the software name and version number. Changes or upgrades to the original submission will require section G of this procedure to be followed prior to an EMS agency product upgrade.
 - I. The timeframe for initial testing, problem notification and re-submission for review in order for an EMS agencies vendor to obtain a letter of conformance to the Georgia PCR data standard will be limited to 90 business days.
 - J. OEMS will maintain a listing of the EMS agencies vendors that have complied with the Georgia PCR data standard. This list will be available through posting on the state website.

 <p>DHR GEORGIA DEPARTMENT OF HUMAN RESOURCES</p>	<p>Department of Human Resources Division of Public Health Office of Emergency Medical Services</p>	<p>Index: PRO-P-01 Effective: 08/21/2006 Review: 08/21/2007 Page: 1 of 1</p>
---	--	---

SUBJECT: Scope of Practice for Emergency Medical Technicians-Basic, Emergency Medical Technicians-Intermediate, Cardiac Technicians, and Paramedics

I. PROCEDURE

This procedure identifies the approved scope of practice for Emergency Medical Services (EMS) personnel at each level of EMS licensure as established by the Office of EMS / Trauma (OEMS/T).

II. GENERAL PROVISIONS

- A. Pre-hospital scope of practice, Resource Section: R-P01-Scope of Practice is recommended by the Georgia Emergency Medical Services Medical Directors Advisory Council (EMSMDAC) and the Georgia Emergency Medical Services Advisory Council (EMSAC) for each level of EMT licensure. Approval is granted by the department.
- B. The Scope of Practice for EMS personnel will be reviewed periodically and updated by the OEMS/T.
- C. EMS personnel may perform these procedures after successful completion of training and approved by their service Medical Director.
- D. The Scope of Practice for EMS personnel cannot be expanded by approval of the service Medical Director, Service Director or medic. Additional skills training and verification does NOT allow for expansion of the EMS Scope of Practice.
- E. All licensed EMS personnel must have approval from their Service Medical Director to perform pre-hospital procedures at his/her level of license prior to beginning work for an ambulance service.

	<p>Department of Human Resources Division of Public Health Office of Emergency Medical Services</p>	<p>Index: PRO-T-02 Effective: 01/01/2007 Review: 01/01/2008 Page: 1 of 2</p>
---	--	---

SUBJECT: Clinical Preceptors for Emergency Medical Technician (EMT) and Paramedic Students in a Pre-Hospital Clinical Setting

I. Procedure-General Information

- A. The Office of EMS (OEMS) does not certify or license personnel who complete this training.
- B. Clinical Preceptors must be approved by the Course Coordinator and the Course Medical Director.
- C. Successful completion of a Clinical Preceptor Course does not exempt the individual from additional orientation requirements for the specific program he/she intends to precept.
- D. The Course Coordinator of the approved Emergency Medical Services (EMS) Course is responsible for assuring that all requirements of the Clinical Preceptor Program are met as outlined in Form T-02A.
- E. The Course Coordinator of the approved EMS course will assure that there is appropriate, objective evaluation of student progress in acquiring the desired competencies and that the Clinical Preceptor meets all requirements set forth in this procedure.
- F. Individuals currently licensed as EMS Instructors (Level I, II, or III) may be approved as Clinical Preceptors with written approval of the Course Coordinator and Course Medical Director.
- G. Individuals serving as Clinical Preceptors for students in approved EMS programs that do not meet all of the prerequisites must be approved by the EMS Program Course Coordinator and the Regional EMS Program Director for approval by the department. A complete listing of the Regional EMS Offices is located in the EMS Procedure Manual, Section VIII: Resource Documents, R-01: Regional EMS Offices.
- H. Paramedic Clinical Preceptors can precept EMT-Basic (EMT-B), EMT-Intermediate (EMT-I), and EMT-Paramedic (EMT-P) students.
- I. EMT-I Clinical Preceptors can precept EMT-B and EMT-I students.

II. Prerequisites

- A. Paramedic Clinical Preceptors:
 - 1. Current licensure as a Paramedic with a minimum of two (2) years of advanced life support experience;
 - 2. Written approval of the Course Coordinator and the Course Medical Director of the EMS course; and,
 - 3. Successful completion of an approved preceptor course.
- B. EMT-B and EMT-I Clinical Preceptors:

1. Current licensure as an EMT-I, Cardiac Technician, or EMT-P with a minimum of two (2) years experience;
2. Written approval of the Course Coordinator and the Course Medical Director of the EMS course; and,
3. Successful completion of an approved preceptor course.

III. Course Requirements

- A. All Clinical Preceptor training courses must be taught by an EMS Course Coordinator or EMS Program Clinical Coordinator, licensed as an EMS Instructor.
- B. All Clinical Preceptor training courses must follow the approved guidelines as outlined in Form T-02A.
- C. All Clinical Preceptors successfully completing training courses should receive a copy of the appropriately signed Form T-02B (Clinical Preceptor Training Record).
- D. Clinical Preceptor training courses may be taught in either a standard classroom setting or in a distributed education format, as long as all guidelines for training are met. Course Coordinators seeking continuing education credit approval for a training course must apply to the Regional EMS Office in the Region where the program is being taught, as described in PRO-T-05.

IV. Maintenance of Preceptor Status

- A. In order to maintain Clinical Preceptor status, the preceptor must maintain active EMT-I, Cardiac Technician, or Paramedic licensure.
- B. Clinical Preceptors must complete an orientation by the EMT or Paramedic Course Coordinator for each EMS Program he/she intends to precept.

 <p>DHR GEORGIA DEPARTMENT OF HUMAN RESOURCES</p>	<p>Department of Human Resources Division of Public Health Office of Emergency Medical Services</p>	<p>Index: PRO-T-04 Effective: 01/01/2007 Review: 01/01/2008 Page: 1 of 5</p>
---	--	---

SUBJECT: Course Approval-Initial Education for Licensure

I. Procedure

This procedure identifies the standard for First Responder, Emergency Medical Technician-Basic (EMT-B), Emergency Medical Technician-Intermediate (EMT-I), and Emergency Medical Technician-Paramedic (EMT-P) Training Courses.

II. General Provisions

- A. The sponsoring agency or institution must meet all requirements of the Department of Human Resources (DHR) Rules and Regulations for Emergency Medical Services (EMS), Chapter 290-5-30-.16.
- B. The following definitions shall apply in the interpretation of these procedures:
 - 1. "Course Coordinator" means the instructor responsible for delivery of fifty-one percent (51%) of the hours of the entire approved course. This individual is the recognized person responsible for the course; its delivery, clinical requirements, and student file reviews. This term replaces the term, "lead instructor."
 - 2. "Program Director" means the individual assigned by an institution, college, or agency who oversees the program of EMS education for a specified site. This individual is not recognized as the responsible person for the approved EMS course, unless this individual is also the Course Coordinator.
 - 3. "Adjunct Instructor" means an individual, licensed as an EMS instructor or a non-licensed instructor, who assists the Course Coordinator in some component of the approved course. Adjunct instructor does not imply full or part-time employment status.
 - 4. "Non-licensed Instructor" means an individual, who while being a healthcare professional and may be an instructor in a related area, is not licensed in Georgia as an EMS instructor.
- C. The Course Approval Application, Form T-04A, must be complete prior to submission.
- D. Minimum content and hour requirements must meet or exceed those established by DHR. EMS Curricula Standards are located in the EMS Procedure Manual, Section VIII: Resource Documents, T-04C: EMS Curricula Standards.
- E. An instructor licensed at the appropriate level must serve as the Course Coordinator:
 - 1. First Responder Courses must be taught by a currently licensed

- Level I, Level II, or Level III Instructor;
 - 2. EMT-Basic and EMT-Intermediate courses must be taught by a currently licensed Level II or Level III Instructor; and,
 - 3. Paramedic Courses must be taught by a currently licensed Level III Instructor.
- F. The Course Coordinator must teach at least fifty-one percent (51%) of the approved EMS course.
- G. No more than 25% of the total course hours may be taught by non-licensed instructors, or by EMS instructors licensed at a level below that required for the course. Non-licensed instructors must teach under the supervision of the Course Coordinator.
- H. Courses will not begin until approval is granted by the Regional EMS Program Official. A complete listing of the Regional EMS Offices is located in the EMS Procedure Manual, Section VIII: Resource Documents, R-01: EMS Regional Offices.
- I. The student / instructor ratio for Lab sections is required to be one (1) instructor per six (6) students. A complete listing of the required equipment is located in the EMS Procedure Manual, Section VIII: Resource Documents, R-T04B: EMS Program Equipment.
- J. Delivery of additional modules of instruction that are outside the approved curricula, in any level of EMS licensure, does not entitle EMS personnel to perform skills or procedures that are outside the Scope of Practice for their license level.

III. Course Approval

- A. Approval of First Responder, EMT-B, EMT-I, and EMT-P courses is the responsibility of the Regional EMS Program Official in the EMS Region in which the course will be taught. A complete listing of the Regional EMS Offices is located in the EMS Procedure Manual, Section VIII: Resource Documents, R-01: EMS Regional Offices.
 - 1. An EMS Course Approval Application, Form T-04A, with supporting documentation must be completed and submitted to the Regional EMS Program Official not less than twenty (20) business days prior to the proposed start date.
- B. Supplemental information must be submitted along with the EMS Course Approval Application, Form T-04A. At a minimum, it must consist of:
 - 1. Letter of agreement from the sponsoring agency (hospital or college);
 - 2. Letter of agreement from the Course Medical Director;
 - 3. Current clinical agreements between the sponsoring agency and clinical facility, hospital, and ambulance service. Concurrent or renewal clinical agreements may be submitted in letter format to include current dates and authorized signatures from all parties;
 - 4. Didactic course outline to include dates of classes, projected subject matter, number of class hours per topic, location, and instructors scheduled to present the material;
 - 5. Curriculum vitae on assistant instructors not currently licensed as

- EMS Instructors at the applicable level; and,
- C. Once approved, courses will be monitored as necessary by the Regional EMS Official to assure adherence to standards. Failure to adhere to DHR Rules and Regulations for EMS and OEMS Procedures may result in the denial of approval for students to take the NREMT examination.
 - D. All Course Approval Applications must be complete, without discrepancies, before being considered for approval. Incomplete applications may be returned.
 - E. Additional documentation required for submission to the Regional EMS Office once the course has begun includes:
 - 1. Student registration documentation, including Form 20523, Georgia Student Registration Form, and T-04B, FERPA Release Form, must be submitted for each student to the Regional EMS Office within the first ten (10) business days of the start of the course.
 - a. The Course Coordinator must submit the registration paperwork for students enrolling in the course after the initial student registration documentation has been submitted within ten (10) business days of the student's entry into the course.
 - 2. Each student enrolled in the course must complete a Form T-04B: FERPA Release Form.
 - a. These forms must be submitted at the beginning of the course with the student registration documentation.
 - b. A copy of Form T-04B must be maintained with the program in the students' file.
 - c. If a student refuses to sign Form T-04B, the Course Coordinator is responsible for notifying the Regional EMS Office. The student is to be informed that refusing to sign the FERPA Release Form may result in the student's inability to take the NREMT examination for registration and/or to obtain a license as an EMS provider in Georgia.

IV. Course Requirements

- A. First Responder Course Minimum Requirements:
 - 1. The U. S. Department of Transportation Emergency Medical Technician (EMT): First Responder Training Course Guide, or equivalent, is to be utilized when planning and conducting the course, and include all lessons.
 - 2. The course shall not be instructed in less than forty-four (44) hours.
 - 3. CPR is a prerequisite of the First Responder Course and is not included in the forty-four (44) hours. All graduates must be certified in an approved CPR course, in accordance with OEMS PRO-C-O4.
 - 4. Students who successfully complete the First Responder Course may be allowed to take the NREMT First Responder Exam.
- B. Emergency Medical Technician-Basic (EMT-B) Course Minimum Requirements:
 - 1. This course is based on the U. S. Department of Transportation,

National Highway Traffic Safety Administration 1994, Emergency Medical Technician: Basic Curriculum, with additional topic requirements applicable to Georgia as outlined in the GA EMT-B Curriculum Standard.

2. Specific topics under each module may be found in the Georgia EMT-Basic Curriculum Standard. The EMT-Basic Curriculum Standard is located in the EMS Procedure Manual, Section VIII: Resource Documents, T-04C: EMS Curricula Standards.
3. The course shall not be instructed in less than 124 classroom hours plus eight (8) clinical hours for a total of not less than 132 hours.
4. The minimum clinical requirement includes successful completion of a skill set.
 - a. The skill set is determined by the curriculum.
 - b. Completion of the skill set may require additional clinical hours.

C. EMT-B / Emergency Medical Technician-Intermediate/85 Course Minimum Requirements:

1. This course is based on the U. S. Department of Transportation, National Highway Traffic Safety Administration 1994, Emergency Medical Technician: Basic Curriculum, 1985 Emergency Medical Technician-Intermediate Curriculum, and additional topic requirements applicable to Georgia as outlined in the GA EMT-I/85 Curriculum Standard.
2. Specific topics under each module may be found in the Georgia EMT Curricula Standards. The EMT-Basic/Intermediate Curricula Standards are located in the EMS Procedure Manual, Section VIII: Resource Documents, T-04C: EMS Curricula Standards.
3. Candidates who successfully complete the EMT-B portion of a combined EMT-B/EMT-I Course are eligible to challenge the NREMT-Basic Examination for Registration at the EMT-Basic Level.
 - a. This is an option and is not required.
 - b. A student may choose to continue directly into the EMT-I/85 course.
 - c. If the student chooses to challenge the NREMT-Basic Examination, and fails the examination, the student may continue in the EMT-I/85 course, provided the student is in good standing. However, the student will not be eligible to challenge the NREMT EMT-I/85 Examination until the NREMT-Basic Exam is successfully passed.
4. The course shall not be instructed in less than 176 classroom hours plus twenty-four (24) clinical hours for a total of not less than 200 hours.
5. The minimum clinical requirement includes successful completion of a skill set.
 - a. The skill set is determined by the curricula.
 - b. Completion of the skill set may require additional clinical

hours.

- D. EMT-I/85 Course Minimum Requirements:
1. This course is based on the U. S. Department of Transportation, National Highway Traffic Safety Administration 1985, Emergency Medical Technician-Intermediate Curriculum with additional topic requirements applicable to Georgia as outlined in the GA EMT-I/85 Curriculum Standard.
 2. Specific topics under each module may be found in the Georgia EMT-I/85 Curriculum Standard. The EMT-I Curriculum Standard is located in the EMS Procedure Manual, Section VIII: Resource Documents, T-04C: EMS Curricula Standards.
 3. The EMT-I/85 program has an EMT-B prerequisite. Students must be currently licensed as an EMT-B by Georgia, another state, or the NREMT to enroll in an approved course.
 4. The course shall not be instructed in less than 52 classroom hours plus sixteen (16) clinical hours for a total of not less than 68 hours.
 5. The minimum clinical requirement includes successful completion of a skill set.
 - a. The skill set is determined by the curricula.
 - b. Completion of the skill set may require additional clinical hours.
- E. Paramedic Course Minimum Requirements:
1. This course is based on the U.S. Department of Transportation, National Highway Traffic Safety Administration, 2000 Emergency Medical Technician: Paramedic Curriculum with additional topic requirements applicable to Georgia as outlined in the GA Paramedic Curriculum Standard.
 2. Prerequisites: All individuals entering an approved Paramedic Program must be currently licensed as an EMT-B or EMT-I by Georgia, another state, or the NREMT.
 3. American Heart Association Advanced Cardiac Life Support (ACLS) or an equivalent course approved by the OEMS (may be included in Cardiology).
 4. An anatomy and physiology module taught as a prerequisite or co-requisite to the course.
 5. The course shall not be instructed in less than 504 classroom hours plus 320 clinical hours for a total of not less than 824 hours. The Paramedic Curriculum Standard is located in the EMS Procedure Manual, Section VIII: Resource Documents, T-04C: EMS Curricula Standards.
 6. The minimum clinical requirement includes successful completion of a skill set.
 - a. The skill set is determined by the curricula.
 - b. Completion of the skill set may require additional clinical hours.

	<p>Department of Human Resources Division of Public Health Office of Emergency Medical Services</p>	<p>Index: PRO-T-05 Effective: 01/01/2007 Review: 01/01/2008 Page: 1 of 3</p>
---	--	---

SUBJECT: Continuing Education for License Renewal

I. Procedure

- A. Continuing education that meets the requirements of this section must be approved in writing for content and hours to meet eligibility standards for license renewal as specified in DHR Rules and Regulations, Chapter 290-5-30-.13.
 - 1. The Local or Regional Medical Director should approve curriculum content for personnel affiliated with the service for which he or she is responsible.
 - 2. The State Office of EMS (OEMS) has the responsibility and authority to approve continuing education credit hours.
 - a. "Content" is defined as that body of material that is specific to current curriculum and/or scope of practice.
 - b. "Credit Hours" are defined as those hours that may be included among the biennial license requirement of forty (40) hours for licensure renewal.
 - i. Credit hours are issued on an hour-for-hour basis for applicable didactic and laboratory sessions or courses.
 - ii. Credit hours for distributed learning will be assigned based on the guidelines described in Section IV, Distributed Education, of this procedure.
- B. The Regional EMS Office and/or the OEMS is responsible for reviewing continuing education for curriculum content and credit hour assignment when submitted for approval.
 - 1. Any course/activity that is approved by a Local or Regional EMS Medical Director and the Regional EMS Office and/or the OEMS is eligible for continuing education credit.
 - a. All continuing education hours completed to satisfy continuing education requirements for license renewal must be approved by the Regional EMS Office and/or the OEMS.
 - b. The Regional EMS Office and/or the OEMS will assign each continuing education course/activity an identification number.
 - 2. Requests for approval of continuing education content and credit hour assignment shall be submitted to the Regional EMS Office or the OEMS on Form T-05A prior to the course starting date or the beginning of the distributed education course. Failure to submit the request prior to completion of the course/activity may result in

disapproval of the course/activity. Only approved courses are eligible for continuing education hours.

- C. Approved continuing education must be renewed every three (3) years, unless the content or hours are modified or there is a change in standards of care at which time the course/activity must be resubmitted for approval. It is the responsibility of the instructor and/or agency offering the continuing education to request renewal prior to the renewal date.
 - D. Continuing Education requirements include hours assigned to the following specific content areas: cardiac, pediatric, and trauma care; as outlined in EMS Rules and Regulations, Chapter 290-5-30-.13. A minimum of four (4) hours of continuing education must be completed in each of the three required areas of the forty (40) hours of continuing education required for license renewal.
 - E. Standardized courses such as ACLS, BCLS, PALS, PEPP, GEMS, AMLS, ITLS, PHTLS, etc. do not require submission of the continuing education approval form, however for students to receive CE hours for completion of these courses, instructors/course coordinators must notify the appropriate Regional EMS Office of the course offered to include the date, location, and times. Instructors / Course Coordinators are to maintain on file a course agenda, to include dates and times, as well as an attendance roster, for review if audited.
 - F. Refer to Resource Document R-T-05A for guidelines for submission of review proposal for agencies requesting continuing education approval for more than one course/activity in the initial submission.
- III. Special Provision for EMT License Renewal for EMS Instructors
- A. EMS Instructors can utilize hours that they instruct in approved initial and continuing education courses to satisfy the forty (40) hours necessary for their EMT (EMT-B, EMT-I, CT, or EMT-P) license renewal, but not for instructor license renewal requirements.
 - B. Hours spent teaching Advanced Cardiac or Basic Cardiac Life Support (ACLS / BCLS) courses that are required for licensure, in addition to the forty (40) continuing education hours, may not be used to satisfy any of the forty (40) hours required for license renewal.
 - C. Hours teaching repetitive courses can only be counted one time during the license renewal period. For example, if an instructor teaches four (4) airway modules of continuing education during the license renewal period, the credit hours may only be used one (1) time by the instructor for renewal of their medic license.
 - D. No more than fifty percent (50%) of the continuing education requirements for EMT license renewal may be earned from instructional time in either initial education courses or continuing education courses.
- IV. Distributed Education
- A. Distributed Education may encompass any educational format that is available for EMT completion independent of time and place, such as

- web-based, CD / DVD, videotape, satellite, or print.
- B. There is no limit to the number of distributed education credit hours that can be used for EMT license renewal at the EMT-B, EMT-I, CT, or EMT-P level.
 - C. Credit Hour Assignment for Distributed Education
 1. Courses/Activities currently approved by the Continuing Education Coordinating Board for Emergency Medical Services (CECBEMS) will be assigned the same number of credit hours assigned by CECBEMS.
 2. All other courses/activities will be reviewed by Regional or State EMS Program Staff based on applicant request, length of presentation, and the time required for the reviewer to complete his/her assessment. The OEMS reserves the right to request independent review of submitted materials prior to credit hour assignment. Independent reviewers may be licensed EMS personnel of the same level as the intended audience of the material or a Local, Regional, or State Medical Director.
 3. Refer to Resource Document R-T-O5B for specific credit hour assignment guidelines.
- V. Continuing Education Exemption for Active Duty Military Personnel
- A. The forty (40) hour continuing education requirement may be requested to be waived for military personnel who were on active duty at any time during the licensure renewal period.
 1. It is the responsibility of active duty military personnel to provide appropriate documentation prior to the end of the license renewal period to the OEMS verifying their active duty.
 2. The requirement for current BCLS and ACLS (if applicable) provider status is not waived.
 3. Military personnel on active duty or who have recently returned from active duty are not permitted to work on non-military ambulances without current BCLS and ACLS (if applicable) provider status.
 - B. The continuing education requirement is not waived for military reservist duty that does not involve deployment.
- VI. It is the responsibility of all licensed EMS personnel to retain proof of completion of approved continuing education courses/activities for audit purposes. It is not the responsibility of the Local or Regional Medical Director, Course Coordinator, the OEMS, Regional EMS Offices, or the EMT's employer(s) to maintain such records.

 <p>DHR GEORGIA DEPARTMENT OF HUMAN RESOURCES</p>	<p>Department of Human Resources Division of Public Health Office of Emergency Medical Services</p>	<p>Index: PRO-T-06 Effective: 01/01/2007 Review: 01/01/2008 Page: 1 of 1</p>
---	--	---

SUBJECT: Request for EMS Program Site Code

PURPOSE: This procedure defines the proper steps for requesting an Emergency Medical Services (EMS) Program Site Code.

I. Procedure

- A. An EMS Program Site Code is issued to any agency, or institution that teaches EMT-Basic (EMT-B), EMT-Intermediate (EMT-I), and / or EMT-Paramedic (EMT-P) courses.
- B. Agencies teaching First Responder courses will utilize the established Program Site Code of the approving Regional EMS Office.
- C. One of more EMS courses taught at an agency or institution may maintain the same program site code or may request separate site codes for EMT and Paramedic programs. If the agency or institution already has a site code, the Paramedic program will maintain that site code and a new site code may be issued for the EMT program. Off-campus courses and/or satellite courses taught through an agency or institution will be issued a separate site code. For example: Lanier Technical College - Forsyth Campus would be issued a separate program site code from Lanier Technical College - Main Campus (Oakwood).
- D. The EMS Course Coordinator will submit a written request on Form T-06A to the State Office of EMS (OEMS).
- E. The OEMS will make assignment and notification of the EMS Program Site Code to the requester, Regional EMS Office, Agency or Department Chair, Medical Director, the National Registry of EMTs and if applicable, the sponsoring hospital.
- F. The Regional EMS Program Officials will use the assigned Program Site Code number on any and all course correspondence referencing the program, agency, or institution site.

Regional EMS Offices

Northwest Georgia Region I EMS – Health District 1-1 and 1-2

Program Director: David Loftin
EMS Training Specialist: Jim Cutcher
Mailing Address: 1305 Redmond Circle, Bldg 510-512
Rome, Georgia 30165-1391
Phone: 706-295-6175
Fax: 706-802-5292
E-mail: cdloftin@dhr.state.ga.us
E-mail: jlcutcher@dhr.state.ga.us

North Georgia Region II EMS – Health District 2

Program Director: Earl McGrotha
EMS Training Specialist: Jack Mundy
Mailing Address: 1280 Athens Street
Gainesville, Georgia 30507-7000
Phone: 770-535-5743
Fax: 770-535-5958
E-mail: ehmcgrotha@dhr.state.ga.us
E-mail: bjmundy1@dhr.state.ga.us

Metro Atlanta Region III EMS – Health Districts 3-1 to 3-5

Program Director: Nita Ham
EMS Training Specialist: Vacant
Mailing Address: 2600 Skyland Drive, Upper Level
Atlanta, Georgia 30319
Phone: 404-248-8995
Fax: 404-248-8948
E-mail: njham@dhr.state.ga.us
E-mail:

West Georgia Region IV EMS – Health District 4

Program Director: Bill Watson
EMS Training Specialist: Craig Stubbs
Mailing Address: 122 Gordon Commercial Drive, Suite A
LaGrange, Georgia 30240-5740
Phone: 706-845-4035
Fax: 706-845-4309
E-mail: brwatson@dhr.state.ga.us
E-mail: kcstubbs1@dhr.state.ga.us

Central Georgia Region V EMS – Health District 5-1 and 5-3

Program Director: Chris Threlkeld
EMS Training Specialist: Danny Bessinger
Address: 158-1 Sammons Industrial Parkway
Eatonton, Georgia 31024
Phone: 706-484-2991
Fax: 706-484-2994
E-mail: cwthrelkeld@dhr.state.ga.us
E-mail: dwbessinger@dhr.state.ga.us

East Central Georgia Region VI – Health District 6

Program Director: Lawanna Mercer-Cobb
EMS Training Specialist: Wes Simonds
Address: 1916 North Leg Road
Augusta, Georgia 30909-4402
Phone: 706-667-4336
Fax: 706-667-4594
E-mail: lmcobb@dhr.state.ga.us
E-mail: wgsimonds@dhr.state.ga.us

West Central Georgia Region VII EMS – Health District 7

Program Director: Sam Cunningham
EMS Training Specialist: Darrell Enfinger
Mailing Address: 2100 Comer Avenue, P. O. Box 2299
Columbus, Georgia 31902-2299
Phone: 706-321-6150
Fax: 706-321-6155
E-mail: srcunningham@dhr.state.ga.us
E-mail: drenfinger@dhr.state.ga.us

Southwest Georgia Region VIII EMS – Health District 8-1 and 8-2

Program Director: Robert Vick
EMS Training Specialist: John Vickers
Mailing Address: 319 North Main Street, P. O. Box 3637
Moultrie, Georgia 31776-3637
Phone: 229-891-7034
Fax: 229-891-7031
E-mail: rdvick@dhr.state.ga.us
E-mail: jtvickers@dhr.state.ga.us

Southeast Georgia Region IX EMS – Health District 9-2 and 9-3

Program Director: Shirley Starling, Interim
EMS Training Specialist:
Mailing Address: 150 Scantron Connector
Brunswick, Georgia 31525
Phone: 912-262-3035
Fax: 912-262-3331
E-mail: sdstarling@dhr.state.ga.us

Northeast Georgia Region X EMS – Health District 10

Program Director: Earl McGrotha
EMS Training Specialist: Jack Mundy
Mailing Address: 1551 Jennings Mill Road, Suite 1600-C
Bogart, Georgia 30622-2565
Phone: 706-583-2862
Fax: 706-227-7960
E-mail: ehmcgrotha@dhr.state.ga.us
E-mail: bjmundy1@dhr.state.ga.us



This section explains the requirements for EMT-Basic skills verification prior to candidates seeking NREMT-Basic registration at an approved practical examination site.

All individuals applying for NREMT-Basic registration must meet Georgia specific requirements to be eligible for practical skills testing. The following requirements include:

1. Candidates must be 18 years of age or older at the time of testing;
2. Candidates must have successfully completed, within the last two years, a state approved EMT-Basic training program;
 - a. Candidates from a Georgia approved course must have verification of a student file review from the Regional EMS Official approving the course.
 - b. Candidates from out-of-state training programs must have verification from the State EMS Office approving the course.
3. All candidates are required to have successfully completed, within the last 12 months, all practical skills of a state-approved EMT-Basic training program. Verification that the candidate has physically demonstrated an acceptable level of competency in each of the following skill areas as a result of the training program:
 - Patient Assessment – Trauma
 - Patient Assessment – Medical
 - Cardiac Arrest Management/AED
 - Spiral Immobilization – Seated Patient
 - Spinal Immobilization – Supine Patient
 - Bag-Valve-Mask Apneic Patient with a Pulse
 - Long Bone Fracture Immobilization
 - Joint Dislocation Immobilization
 - Traction Splinting
 - Bleeding Control/Shock Management
 - Upper Airway Adjuncts and Suction
 - Mouth-to-Mask with Supplemental Oxygen
 - a. Candidates from a Georgia approved course must have verification of a student file review from the Regional EMS Official approving the course.
 - b. Candidates from out-of-state training programs must have verification from the State EMS Office approving the course.
4. Verification of current approved CPR credential applicable to the professional rescuer.
 - a. Candidates from a Georgia approved course must have verification of a student file review from the Regional EMS Official approving the course.
 - b. Candidates from out-of-state training programs must have verification in the form of an instructor signature or copies of both sides of a current card which attests to competency over the following skills:
 - Adult
 - One and Two person CPR
 - Child and Infant CPR
 - Adult/Child/Infant Obstructed Airway Maneuver

This section explains the process for EMT-Basic candidates to register and test at an approved practical examination site once course completion has been verified.

Georgia approved practical examination sites coordinate and register candidates to test for the EMT-Basic, EMT-Intermediate/85, and EMT-Paramedic skills.

Candidates from Georgia approved programs:

1. Candidates must submit an on-line application for testing to NREMT under the appropriate program site code prior to registering at a Georgia approved practical test site for NREMT-Basic registration.
2. Candidates must register with the Examination Site Coordinator of an approved examination site.
3. Candidates testing at any Georgia approved examination site must be identified on an official roster from NREMT for Intermediate/85 or Paramedic level skills or an official roster from the State Office of EMS for EMT-Basic level skills prior to being allowed to test.

Candidates from Out-of-State training programs:

1. Candidates must submit the required documents as previously listed for course completion and skills verification to the State Office of EMS.
2. Candidates must submit an on-line application for testing to NREMT under an assigned program site code approved by the State Office of EMS.
3. Candidates must register with an Examination Site Coordinator at an approved examination site.
4. Candidates testing at any Georgia approved examination site must be identified on an official roster from NREMT for Intermediate/85 or Paramedic level skills or an official roster from the State Office of EMS for EMT-Basic level skills prior to being allowed to test.

Examination Site Coordinators:

1. Examination coordinators registering candidates for EMT-Basic practical skills must submit a final testing site roster of EMT-Basic candidates ONLY to the State Office of EMS within two (2) prior to testing.
2. Candidates testing at any Georgia approved examination site must be identified on an official roster from NREMT for Intermediate/85 or Paramedic level skills or an official roster from the State Office of EMS for EMT-Basic level skills prior to being allowed to test.

Georgia-NREMT Representatives:

1. Representatives will receive the required practical examination materials for Intermediate/85 and Paramedic level skills directly from NREMT and are required to follow all administration and security policies and procedures as outlined by NREMT for practical skills testing.
2. Representatives will receive the required practical examination materials for the EMT-Basic level skills directly from the Office of EMS and are required to follow all administration and security policies and procedures as outlined by NREMT for practical skills testing, as well as the following:
 - a. All testing materials relevant to a candidate's performance at an approved test site must be returned to the State Office of EMS in the packaging provided in the materials packet. This includes scenarios, testing roster,

evaluator's examination sheets, and the EMT-Basic practical examination report form.

3. Candidates testing at any Georgia approved examination site must be identified on an official roster from NREMT for Intermediate/85 or Paramedic level skills or an official roster from the State Office of EMS for EMT-Basic level skills prior to being allowed to test.

Required Equipment for Licensed EMS Providers - Ambulance

RESPIRATORY EQUIPMENT		
QTY	UNIT	ITEM / DESCRIPTION
1	Ea	Mounted Electric or Manifold Operation Suction Aspirator
1	Ea	Portable Suction Aspirator – as approved by the Department
4	Ea	Sterile Suction Catheters, assorted sizes
2	Ea	Irrigation Liquids, 1000 ml each or equivalent
2	Ea	Bag-Valve-Mask Resuscitator, disposable, with transparent adult mask. The valve must operate in cold weather, and the unit must be capable of use with an oxygen supply. The unit must be capable of delivering approximately 100% oxygen.
2	Ea	Pediatric Bag-Valve-Mask Resuscitator, disposable, with transparent child and infant mask. The valve must operate in cold weather, and the unit must be capable of use with an oxygen supply. The unit must be capable of delivering approximately 100% oxygen.
4	Ea	Adult Oxygen Mask with Reservoir
2	Ea	Adult Oxygen Mask
3	Ea	Pediatric Oxygen Mask with Reservoir
3	Ea	Pediatric Oxygen Mask
3	Ea	Nasal Cannula
3	Ea	Oxygen Supply Tubing
1	Set	Oropharyngeal Airways, with adult, child and infant sizes
1	Set	Nasopharyngeal Airways, with adult, child and infant sizes
1	Ea	Tracheal / Pharyngeal Airway Adjunct (device not intended to be placed into the trachea)
1	Ea	Oxygen: fixed system with at least two wall-mounted oxygen outlets and one flowmeter. The system shall also include a yoke, pressure reducer gauge and an approved cylinder retaining device that meets DOT standards. The system shall be capable of delivering an oxygen flow of at least 15 liters per minute. If the oxygen source is of a size less than “M” cylinder or equivalent, an additional full spare cylinder for the fixed system shall be carried in the ambulance
1	Ea	Oxygen: portable unit consisting of at least a “D” cylinder or equivalent, yoke, pressure gauge, flowmeter and cylinder wrench or hand wheel. The unit shall be capable of delivering an oxygen flow of at least 15 liters per minute. Cylinder holders with a quick-release fitting shall be furnished to allow the use of the portable unit outside the vehicle. Ambulances manufactured 12 months after adoption of these rules must meet Ambulance Manufacturers Division (AMD) Oxygen Tank Retention Standard 003.

RESPIRATORY EQUIPMENT. . . continued		
QTY	UNIT	ITEM / DESCRIPTION
1	Ea	Oxygen: full spare cylinder for use with the above portable oxygen unit. In all ambulances manufactured 12 months after adoption of these rules, the oxygen unit must be secured in a manner that meets Ambulance Manufacturers Division (AMD) Oxygen Tank Retention Standard 003.

BANDAGES / DRESSINGS		
QTY	UNIT	ITEM / DESCRIPTION
2	Ea	Triangular Bandages
2	Ea	Universal Dressings, approximately 10 inches by 30 inches
12	Ea	Gauze Pads, 4 inches by 4 inches
4	Ea	Bandages, soft roller, self-adhering type, 2 inches to 4 inches by 5 yards
2	Ea	Bandages, soft roller, self-adhering, 6 inches by 5 yards
4	Ea	Bandages, elastic, of assorted sizes
4	Ea	Petroleum gauze pads, sterile, individually wrapped, 4 inches by 3 inches or 9 inches by 3 inches
4	Ea	Rolls of adhesive tape

DIAGNOSTIC EQUIPMENT		
QTY	UNIT	ITEM / DESCRIPTION
1	Ea	Aneroid Sphygmomanometer, with pediatric, adult, and obese size cuffs
1	Ea	Stethoscope
1	Ea	Glucose Monitoring Instrument

IMMOBILIZATION DEVICES		
QTY	UNIT	ITEM / DESCRIPTION
4	Ea	Extremity Immobilization Devices: 2 full arms and 2 full legs, or equivalent
1	Ea	Short Spinal Extrinsic Device (KED or equivalent)
1	Ea	Pediatric Immobilization Device, as approved by the department
2	Ea	Spine Boards, long, at least 16 inches wide by 72 inches in length, with 3 straps for each board or equivalent
2	Ea	Lateral Cervical Immobilization Devices, commercial devices, foam blocks, or sheet / blanket rolls
6	Ea	Cervical Immobilization Collars, hard type, 2 adult, 2 medium, 2 child
1	Ea	Traction Splint, adult, lower extremity, adjustable
1	Ea	Traction Splint, pediatric, lower extremity, adjustable
*	*	Equipment for the safe transport of pediatric patients, as approved by the local EMS medical director with guidelines provided by the department

MISCELLANEOUS EQUIPMENT		
QTY	UNIT	ITEM / DESCRIPTION
1	Ea	External Defibrillator when only EMT-Is and/or EMT-B is on the ambulance or 1 cardiac monitor / defibrillator when Cardiac Technicians and/or EMT-Paramedics are on the unit
1	Ea	Pillow, disposable, or pillow with vinyl cover. Rolled sheets are acceptable substitutes.
1	Ea	Multi-Level Stretcher with at least one pair of shoulder / chest straps and one set of straps for the lower extremities, capable of securing adult and pediatric patients
2	Ea	Blankets
2	Ea	Waterproof Patient Covers (e.g. plastic sheets)
1	Ea	Flashlight
1	Ea	Fire Extinguisher, 10 pound ABC type or functional equivalent, charged
2	Ea	Emesis Basins or Emesis Bags or equivalent
4	Ea	Restraints, 2 ankle and 2 wrist, leather or nylon
1	Ea	Shears
2	Ea	Clean Wrapped Sheets
1	Ea	Nonporous Infant Insulating Device, foil swaddler or equivalent
1	Ea	Obstetrical Kit: Receiving blanket, sterile bulb aspirator, wrapped sanitary napkin, sterile scissors or scalpel blade, 4-inch gauze pads, one pair of sterile gloves, 2 cord clamps and plastic bag for placenta. All items are to be in a container with identifying label showing contents.
1	Ea	IV Solution Kit with the list of contents, to include expiration dates, affixed to the outside of the sealed kit established and approved by the local or regional medical director
1	Ea	Sharps Container
1	Ea	U. S. Department of Transportation Emergency Response Guidebook, current edition
1	Ea	Resource Handbook providing information on chemical, biological, and nuclear agents
1	Ea	Mark I Plus Kit
2	Ea	Escape Hoods
2	Ea	N-95 or > Particulate Mask
20	Pr	Exam Gloves, assorted sizes
2	Ea	Disposable Splash Protection (gowns, EMS turnout gear, etc.)

EXTRICATION EQUIPMENT		
The following extrication equipment is required to be on each vehicle except where the provider has written verification from the Regional EMS Program Director that this equipment is immediately available from sources within the zone.		
QTY	UNIT	ITEM / DESCRIPTION
1	Ea	Spring Loaded Center Punch
1	Ea	Rescue Ax or Halligan Tool, able to pry, cut, remove sheet metal
1	Ea	Flathead Screwdriver, minimum 6 inches
1	Ea	3 Pound Hammer
1	Ea	Hacksaw with extra Bimetal-type Blades
1	RI	Duct Tape
1	Ea	One Ton Come-A-Long and 2 Rescue-Rated Chains or Straps
2	Ea	Helmets with Face Shields
2	Pair	Gloves, work gloves or leather gloves

ADVANCED LIFE SUPPORT (ALS) EQUIPMENT		
The ambulance, staffed by at least one Cardiac Technician or Paramedic, must have all the above required equipment and additional equipment as follows:		
QTY	UNIT	ALS AIRWAY EQUIPMENT
1	Kit	ALS Airway Kit with endotracheal tubes (assorted sizes, adult, child, and infant), 10 ml syringes, stylette, appropriately sized laryngoscope handles, blades (assorted sizes, small, medium, and large) and Magill Forceps
QTY	UNIT	ALS CARDIAC EQUIPMENT
1	Ea	Cardiac Monitor / Defibrillator (with print-out), configuration and supplies such that one is capable of delivering defibrillation to pediatric and adult patients
QTY	UNIT	ALS PHARMACOLOGICAL EQUIPMENT
1	Kit	Drug Kit containing appropriate medications with the list of contents established and approved by the local or regional medical director. The list of contents and earliest expiration dates shall be affixed to the outside of the sealed kit. Drug kits must be maintained in a temperature controlled environment and must not be left unsecured.



Georgia Department of Human Resources • Division of Public Health • Stuart T. Brown, M.D., Director
2 Peachtree Street NW • Suite 15.470 • Atlanta, Georgia 30303-3142
404-657-2700 • FAX: 404-657-2715

September 11, 2005

To: EMS Directors, EMS Medical Directors

From: R. David Bean, EMS Director
James P. O’Neal, M.D., State EMS Medical Director

Subject: Safe Transportation of Pediatric Patients

The Georgia EMS community has struggled for years with how to best establish standards for the safe transportation of pediatric patients. Dr. Jeff Linzer, having repeatedly expressed his concern over how pediatric patients arrived at emergency departments, took the lead to establish some guidance for EMS providers in Georgia. Lacking any national standard or consensus on this issue did not make the task less challenging. After significant research the following standards are adopted for safe transportation of pediatric patients. Service directors and service medical directors should use this guideline when establishing local policy.

1. All pediatric patients should be safely and appropriately transported. Safe and appropriate transport never includes having the child held by another person who is riding or strapped to the gurney. No child or infant should ever be held in the parent, caregiver, or EMTs arms or lap during transport.
2. Available child restraint systems should be used for all pediatric patients. These systems should include those specifically produced for secure transport on an ambulance stretcher that includes an integrated five-point harness system. [Note: please see referenced article by Bull, Weber, Talty and Manary {page 4-6} for helpful recommendations and illustrations].
3. Children who are not patients should not routinely be transported in the ambulance. There may be extenuating circumstances that require such transport. In those cases the child should always be placed in an appropriate child restraint seat in the passenger area of the ambulance.
4. While manufacturers do not recommend using a child’s own car seat for transportation post accident, such may be better than no restraint during transport. Providers should discuss with their medical director and legal staff what would present a reasonable and safe approach to this possibility.

More information may be found at the following sites:

-From Safe Ride News: an interesting review on pediatric transport with commentary about using a car seat that had already been involved in an accident. This review emphasizes not to use the "hold and go" method of transport.

http://www.saferidenews.com/articles_srn/Related/Related.htm

-From Safe Transport of Children in Paramedic TRIPP (Teaching Resource for Instructors in Prehospital Pediatrics for Paramedics) from The Center for Pediatric Emergency Medicine. Top of page 5 and pages 6-7 detail safe pediatric transport.

<http://www.cpem.org/trippals/38TRANSP.PDF>

-From the Idaho EMSC Project: Use information from Dr Bull's paper as well as research from the Indiana University School of Medicine and the University of Michigan Medical School and Transportation Research Institute.

http://www.healthandwelfare.idaho.gov/_Rainbow/Documents/medical/Ped_transport.pdf

-The AAP's position paper on transport of children with special needs.

<http://www.tracheostomy.com/resources/articles/transporting/transporting.htm>

-New Jersey's 2005 ambulance equipment list includes "Federally Approved Child Restraint System" as a "critical" element.

http://www.njsfac.org/forms/2005standards_checklist.pdf

-Tennessee rules require ambulance to have an infant restraint seat (Rule 1200-12-1-.02, 4-h-6-iii) (page 5).

<http://www.state.tn.us/sos/rules/1200/1200-12/1200-12-01.pdf>

-Massachusetts EMS peds transport guide.

<http://www.mass.gov/dph/fch/emsc/emeremt.htm>

-The Province of Ontario's EMS regulations require an "infant restraint device" on all ambulances (page 63). However they state that "Ferno Pedi-Mate currently is the only device which meets this standard."

<http://www.health.gov.on.ca/english/providers/pub/ambul/equipment/standard.pdf>

-Idaho EMS pediatric transport guide.

http://www.healthandwelfare.idaho.gov/_Rainbow/Documents/medical/Ped_transport.pdf

-The EMSC poster

<http://www.miemss.org/EMSCwww/PDFs/EMSCDosDonts.pdf>

Required Equipment for Licensed Neonatal Units

EQUIPMENT		
QTY	UNIT	ITEM / DESCRIPTION
1	Ea	Transport Isolette. The isolette must be portable, with secure mountings that can be released easily, have both AC and DC electrical capacity, and provide visualization of the neonate. The neonate must be secured within the isolette.
1	Ea	Neonatal Ventilator
1	Ea	Oxygen Analyzer
1	Ea	Oxygen fixed system with at least two wall-mounted oxygen outlets and one flowmeter. The system shall also include a yoke, pressure reducer/gauge and an approved cylinder retaining device that meets DOT standards. The system shall be capable of delivering an oxygen flow of at least 15 liters per minute. If the oxygen source is of a size less than "M" cylinder or equivalent, an additional full spare cylinder for the fixed system shall be carried in the unit.
1	ea	Monitor, capable of continuous monitoring of heart rate and temperature, AC and DC powered and have an alarm system.
1	Ea	Fire Extinguisher, 10 pound, A-B-C type or functional equivalent, charged.
1	Ea	Infusion Pump, AC and DC powered.
*	*	The types and quantities of supplies and medications to be carried in the vehicle while being used to transport neonates shall be determined by the medical director of the neonatal transport service in conformance with current medical standards of care in the treatment and transportation of neonates.

Required Equipment for Licensed EMS Providers – First Responder Units

RESPIRATORY EQUIPMENT		
QTY	UNIT	ITEM / DESCRIPTION
1	Ea	Portable Suction Aspirator, Hand Operated or Battery Power
1	Ea	Irrigation Liquids, 1000 ml or equivalent
1	Ea	Bag-Valve-Resuscitator, disposable, with transparent adult mask. The valve must operate in cold weather, and the unit must be capable of use with an oxygen supply. The unit must be capable of delivering approximately 100% oxygen.
1	Ea	Bag-Valve-Resuscitator, disposable, with transparent child and infant mask. The valve must operate in cold weather, and the unit must be capable of use with an oxygen supply. The unit must be capable of delivering approximately 100% oxygen.
1	Ea	Rescue Airway, Tracheal / Pharyngeal Airway Adjunct (device not intended to be placed into the trachea)
2	Ea	Oxygen Mask with Reservoir, Adult
2	Ea	Oxygen Mask with Reservoir, Pediatric
2	Ea	Oxygen Mask, Pediatric
2	Ea	Nasal Cannula, Adult
2	Ea	Oxygen Supply Tubing, may be attached to BVM
1	Set	Oropharyngeal Airways, Assorted Sizes
1	Set	Nasopharyngeal Airways, Assorted Sizes
1	Ea	Oxygen Delivery System with Regulator, "D" Cylinder or Larger
1	Ea	Oxygen Cylinder, Spare, "D" Cylinder or Larger

BANDAGES / DRESSINGS		
QTY	UNIT	ITEM / DESCRIPTION
2	Ea	Triangular Bandages
2	Ea	Universal Dressings, 10" x 30"
12	Ea	Sterile Gauze Pads, 4" x 4"
12	Ea	Non-Sterile (Bulk) Gauze Pads, 4" x 4"
6	Ea	Bandages - Soft Roller, 2" - 4" x 5 yards
2	Ea	Bandages - Soft Roller, 6" x 5 yards
3	Ea	Elastic Bandages, Assorted Sizes
2	Ea	Petroleum Gauze Pads, sterile, individually wrapped, 4 inches by 3 inches or 9 inches by 3 inches
2	Ea	Adhesive Tape – Rolls, Assorted Sizes

DIAGNOSTIC EQUIPMENT		
QTY	UNIT	ITEM / DESCRIPTION
1	Ea	Aneroid Sphygmomanometer, with pediatric, adult and obese size cuffs
1	Ea	Stethoscope
1	Set	Extremity Immobilization Devices, 1 Set: 1 full arm and 1 full leg
1	Ea	Glucometer or Visual Read Strips

IMMOBILIZATION DEVICES		
QTY	UNIT	ITEM / DESCRIPTION
1	Ea	Short Spinal Extrication Device (KED or equivalent)
1	Ea	Long Spine Board, 16" x 72" with 3 straps
1	Ea	Lateral Cervical Immobilization Device, commercially manufactured or equivalent
4	Ea	Cervical Immobilization Collars, hard type, 2 adult, 2 pediatric adjustable
1	Ea	Blanket

MISCELLANEOUS EQUIPMENT		
QTY	UNIT	ITEM / DESCRIPTION
1	Ea	Waterproof Patient Cover, Salvage Tarp / Rolled Plastic
1	Ea	Flashlight
1	Ea	Fire Extinguisher, 10# ABC or functionally equivalent
1	Ea	Shears
2	Ea	Clean Wrapped Sheets
1	Ea	Non-porous Infant Insulating Device, foil swaddler or equivalent
1	Ea	Obstetrical Kit
1	Ea	U. S. Department of Transportation Emergency Response Guidebook, current edition
1	Ea	Spring Loaded Center Punch ^{rr}
1	Ea	Rescue Ax / Halligan Tool ^{rr}
1	Ea	Flathead Screwdriver, 6" or 8" ^{rr}
1	Ea	Hammer, 3 pound ^{rr}
1	Ea	Hacksaw with 2 extra blades or other equivalent "cutting" tool ^{rr}
1	Roll	Duct Tape
1	Ea	1-ton Come-a-long ^{rr} <u>or</u> Hydraulic Rescue Tools
2	Ea	Rescue Rated Chains or Straps ^{rr} , n/a when Hydraulic Tools Present
1	Pair	Safety Goggles or helmet w/shield ^{rr}
1	Ea	Sharp's Container
1	Ea	Defibrillation Capability

MISCELLANEOUS EQUIPMENT - Continued		
QTY	UNIT	ITEM / DESCRIPTION
20	Pair	Exam Gloves, Assorted Sizes
2	Ea	Splash Protection (gowns, EMS turnout gear, etc.), assorted
2	Ea	Goggles
2	Ea	N-95 or > Particulate Mask
1	Ea	Hospital communications capability (If ALS*), Radio or Cell Phone
4	Ea	Mark I Plus Kits
2	Ea	Escape Hoods or SCBA
* as defined by DHR Chapter 290-5-30: Emergency Medical Services		
⌈⌈ Extrication equipment is required to be on each vehicle except where the provider has written verification from the Regional EMS Program Director that this equipment is immediately available from sources within the zone.		

**Georgia Emergency Medical Services
Essential Database Elements
Patient Care Report
*May 12, 2006***

Agency
Call Date
Unit Response Time
County
EMS VID
Driver/Medic State License Number
Medic 1 State License Number
Service Requested
Incident/Patient Disposition

DOB
Gender
Race
Ethnicity
Report 911
Time Unit Notified
Clinical Area
Provider Impressions
Care Rendered
Cause of Injury
Destination (Dest)
Pulse
Respiration
BP Systolic
BP Diastolic
Location Type

PCR data fields to be validated: Validation consists of blank fields or invalid codes only

Georgia EMS Uniform Dataset

Data Exchange Format

Fixed Width ASCII

Name	Type	Length	Position	Format	Regional Extract	State Extract
Incident Address	Text	50		Free	N	N
Incident City	Text	20		Free	N	N
Incident County	Text	3	1	Numeric Only	Y	Y
Incident State	Text	2	4	Standard Abbreviation	Y	Y
EMSVID	Text	5	6	Numeric Only	Y	Y
Location Type	Text	5	11	Alpha Numeric (1 field, single entry) E-Code	Y	Y
Date Reported	Text	8	16	“YYYYMMDD”	Y	Y
Time Reported	Text	5	24	“HH:MM”	Y	Y
Time Dispatch Notified	Text	5	29	“HH:MM”	Y	Y
Time Unit Notified	Text	5	34	“HH:MM”	Y	Y
Time Unit Responded	Text	5	39	“HH:MM”	Y	Y
Time 1 st Arrival	Text	5	44	“HH:MM”	Y	Y
Time At Scene	Text	5	49	“HH:MM”	Y	Y
Time At Patient	Text	5	54	“HH:MM”	Y	Y
Time 1 st Defib	Text	5	59	“HH:MM”	Y	Y
Extri Defib Type	Text	1	64	“E” “D”	Y	Y
Time Unit Left Scene	Text	5	65	“HH:MM”	Y	Y
Time At Destination	Text	5	70	“HH:MM”	Y	Y
Time In Service	Text	5	75	“HH:MM”	Y	Y
Response Out	Text	2	80	Numeric Only	Y	Y
Response In	Text	2	82	Numeric Only	Y	Y
911 Used	Text	1	84	“Y” “N”	Y	Y
Service Requested	Text	2	85	Numeric Only	Y	Y
Response Number	Text	6	87	Numeric Only – Service Assigned	Y	N
Incident Number	Text	14	93	Numeric Only – Last 2 digits of year + 3 digit service + 3 digit unit + 6 digit response number	Y	Y
Agency	Text	3	107	Numeric Only	Y	Y
Unit Number	Text	3	110	Numeric Only	Y	Y
Vehicle Type	Text	2	113	Numeric Only	Y	Y
Drv/Medic Number	Text	3	115	Numeric Only	Y	N
Medic1 Number	Text	3	118	Numeric Only	Y	N
Medic2 Number	Text	3	121	Numeric Only	Y	N

Drv/Medic Type	Text	1	124	"F" "E" "I" "C" "P" "O"	Y	Y
Medic1 Type	Text	1	125	"F" "E" "I" "C" "P" "O"	Y	Y
Medic2 Type	Text	1	126	"F" "E" "I" "C" "P" "O"	Y	Y
Patient Name	Text	30		Last, First, MI	N	N
Patient Address	Text	50		Free	N	N
Patient City	Text	20		Free	N	N
Patient County	Text	3		Numeric Only	N	N
Patient State	Text	2		Standard Abbreviation	N	N
Patient Zip	Text	11		Numeric Only – no formatting	N	N
Patient ID Number	Text	9	127	1 st 2 letters of first name + first2 letters of last name + last 2 letters of last name+ 3 spaces	Y	Y
Patient Phone	Text	10		Numeric Only – no formatting	N	N
Patient DOB	Text	8	136	"YYYYMMDD"	Y	Y
Age	Numeric	3	144		Y	Y
Gender	Text	1	147	"M" "F" "U"	Y	Y
Race	Text	2	148	Numeric Only	Y	Y
Destination	Text	3	150	Numeric Only	Y	Y
Destination Choice	Text	3	153	Numeric Only	Y	Y
Disposition	Text	2	156	Numeric Only	Y	Y
Clinical Course	Text	1	158	Numeric Only	Y	Y
Chief Complaint	Text	255		Alpha Numeric	N	N
Injury Cause	Text	5	159	E-code with decimal without "E"	Y	Y
(Impression)						
Abdominal Pain	Text	1	164	"Y" "N" Default "N"	Y	Y
Airway Obstruction	Text	1	165	"Y" "N" Default "N"	Y	Y
Allergic Reaction	Text	1	166	"Y" "N" Default "N"	Y	Y
Altered LOC	Text	1	167	"Y" "N" Default "N"	Y	Y
Back Pain	Text	1	168	"Y" "N" Default "N"	Y	Y
Bleeding	Text	1	169	"Y" "N" Default "N"	Y	Y
Burn Therm	Text	1	170	"Y" "N" Default "N"	Y	Y
Burn Other	Text	1	171	"Y" "N" Default "N"	Y	Y
Cardiac Arrest	Text	1	172	"Y" "N" Default "N"	Y	Y
Chest Pain	Text	1	173	"Y" "N" Default "N"	Y	Y
Choking	Text	1	174	"Y" "N" Default "N"	Y	Y
Crushing Injury	Text	1	175	"Y" "N" Default "N"	Y	Y
Diarrhea	Text	1	176	"Y" "N" Default "N"	Y	Y
Dizziness	Text	1	177	"Y" "N" Default "N"	Y	Y
Dysrhythmia	Text	1	178	"Y" "N" Default "N"	Y	Y
Ear Pain	Text	1	179	"Y" "N" Default "N"	Y	Y
Eye Pain	Text	1	180	"Y" "N" Default "N"	Y	Y
Fever	Text	1	181	"Y" "N" Default "N"	Y	Y
GI Bleed	Text	1	182	"Y" "N" Default "N"	Y	Y
Headache	Text	1	183	"Y" "N" Default "N"	Y	Y
Hyperglycemia	Text	1	184	"Y" "N" Default "N"	Y	Y
Hypoglycemia	Text	1	185	"Y" "N" Default "N"	Y	Y
Hypertension	Text	1	186	"Y" "N" Default "N"	Y	Y
Hyperthermia	Text	1	187	"Y" "N" Default "N"	Y	Y

Hypothermia	Text	1	188	"Y" "N" Default "N"	Y	Y
Hypovolemia	Text	1	189	"Y" "N" Default "N"	Y	Y
Inhal Injury	Text	1	190	"Y" "N" Default "N"	Y	Y
NauseaVomiting	Text	1	191	"Y" "N" Default "N"	Y	Y
Apparent Death	Text	1	192	"Y" "N" Default "N"	Y	Y
Palpitation	Text	1	193	"Y" "N" Default "N"	Y	Y
Paralysis	Text	1	184	"Y" "N" Default "N"	Y	Y
Poisoning	Text	1	185	"Y" "N" Default "N"	Y	Y
Psychiatric	Text	1	196	"Y" "N" Default "N"	Y	Y
OB Delivery	Text	1	197	"Y" "N" Default "N"	Y	Y
Resp Arrest	Text	1	198	"Y" "N" Default "N"	Y	Y
Resp Distress	Text	1	199	"Y" "N" Default "N"	Y	Y
Seizure	Text	1	200	"Y" "N" Default "N"	Y	Y
Sexual Assault	Text	1	201	"Y" "N" Default "N"	Y	Y
Stroke	Text	1	202	"Y" "N" Default "N"	Y	Y
Syncope	Text	1	203	"Y" "N" Default "N"	Y	Y
Unresponsive	Text	1	204	"Y" "N" Default "N"	Y	Y
Vaginal Bleeding	Text	1	205	"Y" "N" Default "N"	Y	Y
Weakness	Text	1	206	"Y" "N" Default "N"	Y	Y
Not Applicable	Text	1	207	"Y" "N" Default "N"	Y	Y
(End of Impression)						
Asthma	Text	1	208	"Y" "N" Default "N"	Y	Y
Diabetes	Text	1	209	"Y" "N" Default "N"	Y	Y
TB	Text	1	210	"Y" "N" Default "N"	Y	Y
Chronic Resp	Text	1	211	"Y" "N" Default "N"	Y	Y
Chronic Renal	Text	1	212	"Y" "N" Default "N"	Y	Y
HTN	Text	1	213	"Y" "N" Default "N"	Y	Y
Psych	Text	1	214	"Y" "N" Default "N"	Y	Y
Seizure	Text	1	215	"Y" "N" Default "N"	Y	Y
Trach	Text	1	216	"Y" "N" Default "N"	Y	Y
Cardiac	Text	1	217	"Y" "N" Default "N"	Y	Y
Dev/MR	Text	1	218	"Y" "N" Default "N"	Y	Y
Pre-Baby	Text	1	219	"Y" "N" Default "N"	Y	Y
TBI	Text	1	220	"Y" "N" Default "N"	Y	Y
(Injury Site & Type)						
Amputate Head	Text	1	221	"Y" "N" Default "N"	Y	Y
Amputate UpExtrem	Text	1	222	"Y" "N" Default "N"	Y	Y
Amputate LowExtrem	Text	1	223	"Y" "N" Default "N"	Y	Y
Burn Head	Text	1	224	"Y" "N" Default "N"	Y	Y
Burn Face	Text	1	225	"Y" "N" Default "N"	Y	Y
Burn Neck	Text	1	226	"Y" "N" Default "N"	Y	Y
Burn Thorax	Text	1	227	"Y" "N" Default "N"	Y	Y
Burn Abdomen	Text	1	228	"Y" "N" Default "N"	Y	Y
Burn Pelvis	Text	1	229	"Y" "N" Default "N"	Y	Y
Burn Back	Text	1	230	"Y" "N" Default "N"	Y	Y
Burn UpExtrem	Text	1	231	"Y" "N" Default "N"	Y	Y
Burn LowExtrem	Text	1	232	"Y" "N" Default "N"	Y	Y
DFx Head	Text	1	233	"Y" "N" Default "N"	Y	Y

DFx Face	Text	1	234	"Y" "N" Default "N"	Y	Y
DFx Neck	Text	1	235	"Y" "N" Default "N"	Y	Y
DFx Thorax	Text	1	236	"Y" "N" Default "N"	Y	Y
DFx Abdomen	Text	1	237	"Y" "N" Default "N"	Y	Y
DFx Pelvis	Text	1	238	"Y" "N" Default "N"	Y	Y
DFx Back	Text	1	239	"Y" "N" Default "N"	Y	Y
DFx UpExtrem	Text	1	240	"Y" "N" Default "N"	Y	Y
DFx LowExtrem	Text	1	241	"Y" "N" Default "N"	Y	Y
GSW Head	Text	1	242	"Y" "N" Default "N"	Y	Y
GSW Face	Text	1	243	"Y" "N" Default "N"	Y	Y
GSW Neck	Text	1	244	"Y" "N" Default "N"	Y	Y
GSW Thorax	Text	1	245	"Y" "N" Default "N"	Y	Y
GSW Abdomen	Text	1	246	"Y" "N" Default "N"	Y	Y
GSW Pelvis	Text	1	247	"Y" "N" Default "N"	Y	Y
GSW Back	Text	1	248	"Y" "N" Default "N"	Y	Y
GSW UpExtrem	Text	1	249	"Y" "N" Default "N"	Y	Y
GSW LowExtrem	Text	1	250	"Y" "N" Default "N"	Y	Y
Lac Head	Text	1	251	"Y" "N" Default "N"	Y	Y
Lac Face	Text	1	252	"Y" "N" Default "N"	Y	Y
Lac Neck	Text	1	253	"Y" "N" Default "N"	Y	Y
Lac Thorax	Text	1	254	"Y" "N" Default "N"	Y	Y
Lac Abdomen	Text	1	255	"Y" "N" Default "N"	Y	Y
Lac Pelvis	Text	1	256	"Y" "N" Default "N"	Y	Y
Lac Back	Text	1	257	"Y" "N" Default "N"	Y	Y
Lac UpExtrem	Text	1	258	"Y" "N" Default "N"	Y	Y
Lac LowExtrem	Text	1	259	"Y" "N" Default "N"	Y	Y
Pain Head	Text	1	260	"Y" "N" Default "N"	Y	Y
Pain Face	Text	1	261	"Y" "N" Default "N"	Y	Y
Pain Neck	Text	1	262	"Y" "N" Default "N"	Y	Y
Pain Thorax	Text	1	263	"Y" "N" Default "N"	Y	Y
Pain Abdomen	Text	1	264	"Y" "N" Default "N"	Y	Y
Pain Pelvis	Text	1	265	"Y" "N" Default "N"	Y	Y
Pain Back	Text	1	266	"Y" "N" Default "N"	Y	Y
Pain UpExtrem	Text	1	267	"Y" "N" Default "N"	Y	Y
Pain LowExtrem	Text	1	268	"Y" "N" Default "N"	Y	Y
Puncture Head	Text	1	269	"Y" "N" Default "N"	Y	Y
Puncture Face	Text	1	270	"Y" "N" Default "N"	Y	Y
Puncture Neck	Text	1	271	"Y" "N" Default "N"	Y	Y
Puncture Thorax	Text	1	272	"Y" "N" Default "N"	Y	Y
Puncture Abdomen	Text	1	273	"Y" "N" Default "N"	Y	Y
Puncture Pelvis	Text	1	274	"Y" "N" Default "N"	Y	Y
Puncture Back	Text	1	275	"Y" "N" Default "N"	Y	Y
Puncture UpExtrem	Text	1	276	"Y" "N" Default "N"	Y	Y
Puncture LowExtrem	Text	1	277	"Y" "N" Default "N"	Y	Y
Soft Head	Text	1	278	"Y" "N" Default "N"	Y	Y
Soft Face	Text	1	279	"Y" "N" Default "N"	Y	Y
Soft Neck	Text	1	280	"Y" "N" Default "N"	Y	Y
Soft Thorax	Text	1	281	"Y" "N" Default "N"	Y	Y
Soft Abdomen	Text	1	282	"Y" "N" Default "N"	Y	Y
Soft Pelvis	Text	1	283	"Y" "N" Default "N"	Y	Y
Soft Back	Text	1	284	"Y" "N" Default "N"	Y	Y

Soft UpExtrem	Text	1	285	“Y” “N” Default “N”	Y	Y
Soft LowExtrem	Text	1	286	“Y” “N” Default “N”	Y	Y
<u>(End Injury Site &Type)</u>						
Injury Intent	Text	1	287	Numeric Only	Y	Y
<u>(Safety Equipment)</u>						
Not Used	Text	1	288	“Y” “N” Default “N”	Y	Y
Shoulder Belt	Text	1	289	“Y” “N” Default “N”	Y	Y
Lap Only	Text	1	290	“Y” “N” Default “N”	Y	Y
LapShoulder	Text	1	291	“Y” “N” Default “N”	Y	Y
Child Seat	Text	1	292	“Y” “N” Default “N”	Y	Y
Airbag Deployment	Text	1	293	“Y” “N” Default “N”	Y	Y
Helmet	Text	1	294	“Y” “N” Default “N”	Y	Y
Eye Protection	Text	1	295	“Y” “N” Default “N”	Y	Y
Float Device	Text	1	296	“Y” “N” Default “N”	Y	Y
Protect Clothing	Text	1	297	“Y” “N” Default “N”	Y	Y
Unknown	Text	1	298	“Y” “N” Default “N”	Y	Y
<u>(End Safety Equipment)</u>						
<u>(Begin Factors)</u>						
Weather	Text	1	299	“Y” “N” Default “N”	Y	Y
Road Cond	Text	1	300	“Y” “N” Default “N”	Y	Y
Veh Problem	Text	1	301	“Y” “N” Default “N”	Y	Y
Unsafe	Text	1	302	“Y” “N” Default “N”	Y	Y
Language	Text	1	303	“Y” “N” Default “N”	Y	Y
Extric>20	Text	1	304	“Y” “N” Default “N”	Y	Y
HazMat	Text	1	305	“Y” “N” Default “N”	Y	Y
Crowd	Text	1	306	“Y” “N” Default “N”	Y	Y
Other	Text	1	307	“Y” “N” Default “N”	Y	Y
NA	Text	1	308	“Y” “N” Default “N”	Y	Y
<u>(End Factors)</u>						
<u>(Begin Env Cause)</u>						
Abuse	Text	1	309	“Y” “N” Default “N”	Y	Y
Alcohol	Text	1	310	“Y” “N” Default “N”	Y	Y
Housing	Text	1	311	“Y” “N” Default “N”	Y	Y
Neglect	Text	1	312	“Y” “N” Default “N”	Y	Y
Nutrition	Text	1	313	“Y” “N” Default “N”	Y	Y
Substance	Text	1	314	“Y” “N” Default “N”	Y	Y
NA	Text	1	315	“Y” “N” Default “N”	Y	Y
<u>(End Env Cause)</u>						
1 st CPR Provider	Text	2		Numeric Only	N	N
Time CPR Discon	Text	5		“HH:MM”	N	N
Time Witnessed	Text	5		“HH:MM”	N	N
Witness Of Arrest	Text	2		Numeric Only	N	N
ROSC	Text	2	316	Numeric Only	Y	Y
Clinical Area	Text	1	318	“C” “M” “N” “O” “P” “T” only	Y	Y
Pulse Rate	Numeric	3	319		Y	Y

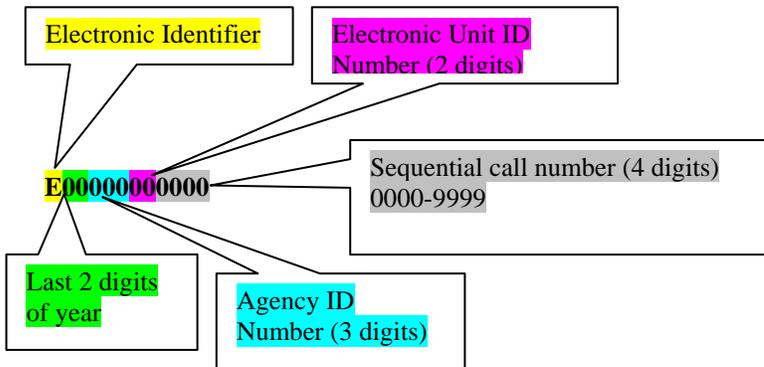
Initial Rhythm	Text	2	322	Numeric Only	Y	Y
Rhythm Destination	Text	2	324	Numeric Only	Y	Y
Resp Rate	Numeric	2	326		Y	Y
Resp Effort	Text	1	328	“N” “L” “S” “A” only	Y	Y
Systolic BP	Numeric	3	329		Y	Y
Palp	Text	1	332	“Y” “N” Default “N”	Y	Y
Diastolic BP	Numeric	3	333		Y	Y
Pulse Ox	Numeric	3	336		Y	Y
Room Air	Text	1	339	“Y” “N” Default “N”	Y	Y
Skin Perfusion	Text	1	340	“N” “D” only	Y	Y
GCS Eye	Numeric	1	341		Y	Y
GCS Verbal	Numeric	1	342		Y	Y
GCS Motor	Numeric	1	343		Y	Y
GCS Total	Numeric	2	344	Calculated	Y	Y
Trauma Triage Criteria	Text	1	346	“P” “A” “M”	Y	Y
(Care Rendered)						
Assist Delivery	Numeric	1	347	Summation 1 thru 7	Y	Y
Auto Ventilation	Numeric	1	348	Summation 1 thru 7	Y	Y
BagValveMask	Numeric	1	349	Summation 1 thru 7	Y	Y
Bleeding Controlled	Numeric	1	350	Summation 1 thru 7	Y	Y
Cardiac Monitor	Numeric	1	351	Summation 1 thru 7	Y	Y
CPR	Numeric	1	352	Summation 1 thru 7	Y	Y
C Spine Managed	Numeric	1	353	Summation 1 thru 7	Y	Y
Glucose Monitor	Numeric	1	354	Summation 1 thru 7	Y	Y
MAST	Numeric	1	355	Summation 1 thru 7	Y	Y
Oxygen	Numeric	1	356	Summation 1 thru 7	Y	Y
Splints	Numeric	1	357	Summation 1 thru 7	Y	Y
Suction	Numeric	1	358	Summation 1 thru 7	Y	Y
Traction Splint	Numeric	1	359	Summation 1 thru 7	Y	Y
12 Lead EKG	Numeric	1	360	Summation 1 thru 7	Y	Y
(Begin Procedures)						
AED Medic	Text	1	361	“D” “1” “2”	Y	N
AED Attempts	Numeric	1	362		Y	Y
AED Success	Text	1	363	“Y” “N”	Y	Y
SynCard Medic	Text	1	364	“D” “1” “2”	Y	N
SynCard Attempts	Numeric	1	365		Y	Y
SynCard Success	Text	1	366	“Y” “N”	Y	Y
ManDefib Medic	Text	1	367	“D” “1” “2”	Y	N
ManDefib Attempts	Numeric	1	368		Y	Y
ManDefib Success	Text	1	369	“Y” “N”	Y	Y
Chest Medic	Text	1	370	“D” “1” “2”	Y	N
Chest Attempts	Numeric	1	371		Y	Y
Chest Success	Text	1	372	“Y” “N”	Y	Y
Airway Medic	Text	1	373	“D” “1” “2”	Y	N
Airway Attempts	Numeric	1	374		Y	Y
Airway Success	Text	1	375	“Y” “N”	Y	Y
Combi Medic	Text	1	376	“D” “1” “2”	Y	N
Combi Attempts	Numeric	1	377		Y	Y

Combi Success	Text	1	378	“Y” “N”	Y	Y
ETNT Medic	Text	1	379	“D” “1” “2”	Y	N
ETNT Attempts	Numeric	1	380		Y	Y
ETNT Success	Text	1	381	“Y” “N”	Y	Y
IntraOs Medic	Text	1	382	“D” “1” “2”	Y	N
IntraOs Attempts	Numeric	1	383		Y	Y
IntraOs Success	Text	1	384	“Y” “N”	Y	Y
IV1 Medic	Text	1	385	“D” “1” “2”	Y	N
IV1 Attempts	Numeric	1	386		Y	Y
IV1 Success	Text	1	387	“Y” “N”	Y	Y
IV2 Medic	Text	1	388	“D” “1” “2”	Y	N
IV2 Attempts	Numeric	1	389		Y	Y
IV2 Success	Text	1	390	“Y” “N”	Y	Y
IV3 Medic	Text	1	391	“D” “1” “2”	Y	N
IV3 Attempts	Numeric	1	392		Y	Y
IV3 Success	Text	1	393	“Y” “N”	Y	Y
Needle Medic	Text	1	394	“D” “1” “2”	Y	N
Needle Attempts	Numeric	1	395		Y	Y
Needle Success	Text	1	396	“Y” “N”	Y	Y
Pacing Medic	Text	1	397	“D” “1” “2”	Y	N
Pacing Attempts	Numeric	1	398		Y	Y
Pacing Success	Text	1	399	“Y” “N”	Y	Y
Vagal Medic	Text	1	400	“D” “1” “2”	Y	N
Vagal Attempts	Numeric	1	401		Y	Y
Vagal Success	Text	1	402	“Y” “N”	Y	Y
(End Procedures)						
Medication1	Text	2	403	Numeric	Y	N
Medication2	Text	2	405	Numeric	Y	N
Medication3	Text	2	407	Numeric	Y	N
Medication4	Text	2	409	Numeric	Y	N
Medication5	Text	2	411	Numeric	Y	N
Medication6	Text	2	413	Numeric	Y	N
Medication7	Text	2	415	Numeric	Y	N
Treatment Auth	Text	2	417	Numeric	Y	Y
Miscellaneous	Text	7		Numeric	N	N
Study1	Text	3	419	Numeric	Y	Y
Study2	Text	3	422	Numeric	Y	Y
(Begin Tech Assist)						
Home Vent	Text	1	425	“Y” “N” Default “N”	Y	Y
CPAP	Text	1	426	“Y” “N” Default “N”	Y	Y
Cent IV	Text	1	427	“Y” “N” Default “N”	Y	Y
Pacemaker	Text	1	428	“Y” “N” Default “N”	Y	Y
Feeding Cath	Text	1	429	“Y” “N” Default “N”	Y	Y
CSF Shunt	Text	1	430	“Y” “N” Default “N”	Y	Y
Colostomies	Text	1	431	“Y” “N” Default “N”	Y	Y
PCRNumber***	Text	12	432	Alphanumeric	Y	Y
Miles Out	Text	3	444	Numeric	Y	Y

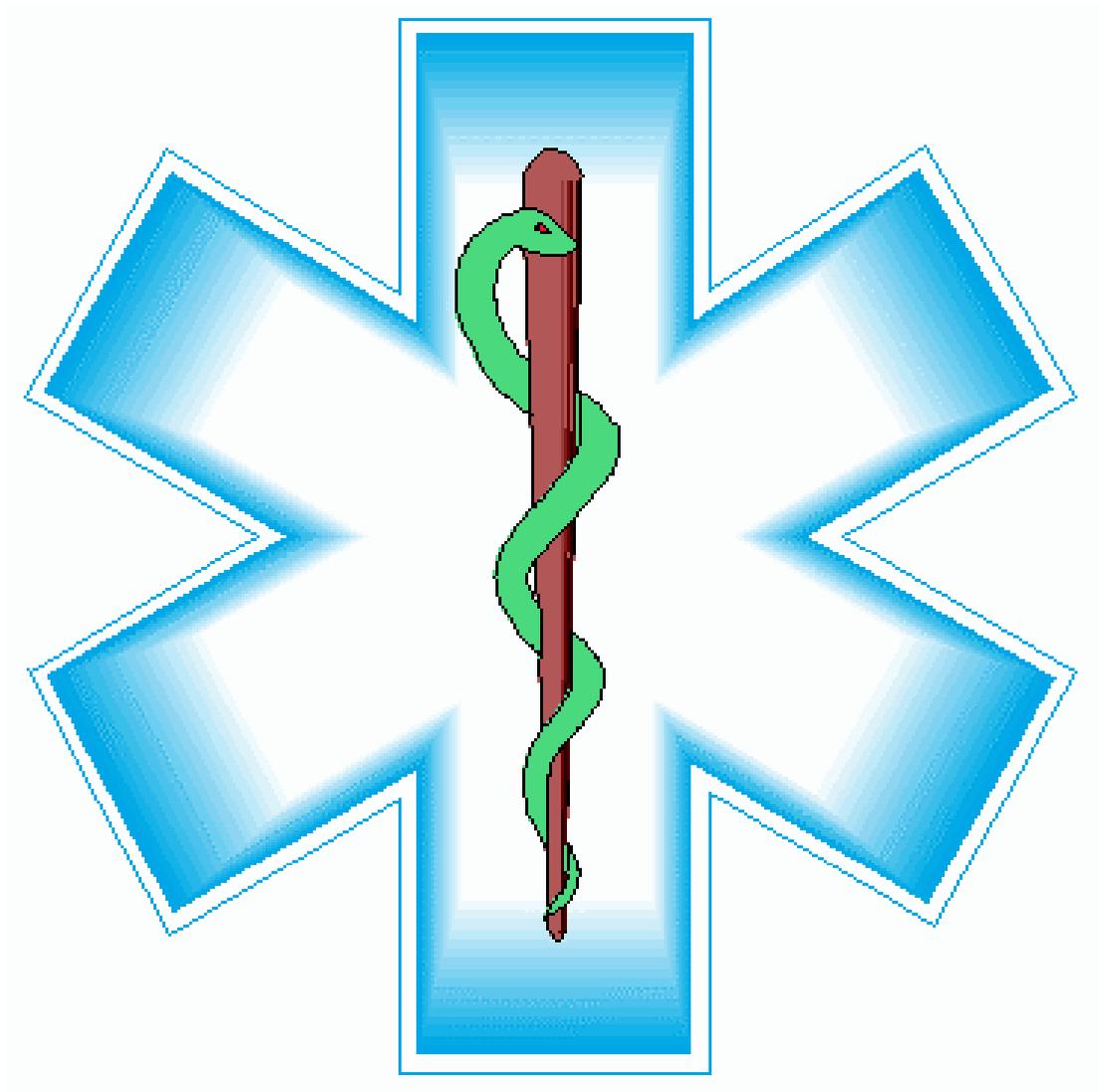
Miles In	Text	3	447	Numeric	Y	Y
Ethnicity	Text	1	450	“Y” “N” Default “N”	Y	Y
Rash/Blister	Text	1	451	“Y” “N” Default “N”	Y	Y
CPAP Medic	Text	1	452	“D” “1” “2”	Y	N
CPAP Attempt	Numeric	1	453		Y	Y
CPAP Success	Text	1	454	“Y” “N”	Y	Y
Stroke	Text	1	455	“Y” “N” Default “N”	Y	Y
DRV/Medic	Text	5	456	Numeric (Cert Number)	Y	Y
Medic1	Text	5	461	Numeric (Cert Number)	Y	Y
Medic2	Text	5	466	Numeric (Cert Number)	Y	Y
Traffic/Train	Text	1	471	“Y” “N” Default “N”	Y	Y
END OF DATA DEFINITION						

PCRNumber***

Electronic PCR Numbers (collected through electronic means) will utilize the following format to prevent duplication with other electronic units or paper forms



**Georgia EMS Patient Care Report Data Elements
and
Supplemental Educational Material**



**Department of Human Services
Division of Public Health
Office of Emergency Medical Services and Trauma**

Georgia Uniform EMS Data Element Dictionary

The Division of Public Health, Office of Emergency Medical Services/Trauma wishes to commend the members of the EMS Data Task Force and Regional EMS Offices for the most complete and accurate document in completing the Georgia Patient Care Report and supplemental educational materials. Specific acknowledgments include:

Kirby Butler – Chairman, Dekalb County Fire Rescue
Jack Mundy, Region 2 EMS Office
Robby Atkins, National EMS
Paul Genest, Evans County EMS
Richard Lambeth, Medstar One
Debbie Carver, Thomas County EMS
Jeannie Riner, Swainsboro Technical College
Richard Roberts, Dougherty County EMS
Linda Avery, Region 1 EMS Office
Janie Crowe, Region 8 EMS Office
Connie Brown, Region 5 EMS Office
Linda Wright, Region 9 EMS Office
Daisy Gantt, RN, Trauma Program Coordinator, State Office of EMS
Stephen Phillips, Floyd Medical Center
Ann Lamb-Director, Mitchell County EMS
John Bethea, Oconee EMS
George Conley, Athens Regional EMS
Kelly Nadeau, RN, Dekalb Medical Center
Arthur Yancey, M.D., Grady Memorial Hospital

This document is divided into three sections: 1 – EMS Uniform Data Elements, 2 – Educational Materials, and 3 – Instructional Lesson Plan with audio-visuals for course delivery. Georgia has been working toward the development of a statewide data collection system as a component of the overall EMS System for planning and evaluation. This product expresses the desire and commitment toward the development of an EMS Information System and the commitment of the State and Regional Offices of Emergency Medical Services to ensure implementation.



**R. David Bean, Director
Office of Emergency Medical Services/Trauma**

TABLE OF CONTENTS
SECTION 1: DATA ELEMENTS

ACKNOWLEDGMENT	02
INTRODUCTION AND FORMAT	08
AGENCY	09
UNIT	10
EMSVID	11
SERVICE REQUESTED	12
VEHICLE TYPE	13
LOCATION TYPE	14
911 USED?	16
RESPONSE MODE OUT	17
RESPONSE MODE IN	18
COUNTY	19
RESPONSE NUMBER	20
DRIVER/MEDIC	21
DRIVER/MEDIC TYPE	22
MEDIC 1	23
MEDIC 1 TYPE	24
MEDIC 2	25
MEDIC 2 TYPE	26
CALL DATE	27
REPORT 911	28
DISPATCH NOTIFIED	29

UNIT NOTIFIED	30
UNIT RESPONSE	31
AT SCENE	32
AT PATIENT	33
1 ST SHOCK OR EXTRICATION	34
ENROUTE	35
DESTINATION	36
IN SERVICE	37
GENDER	38
RACE	39
HISPANIC	40
DATE OF BIRTH	41
PATIENT ID NUMBER	42
ALPHA CHARACTER CONVERSION CHART	42
CLINICAL AREA	43
TRAUMA TRIAGE	44
CAUSE OF INJURY	46
PROVIDER IMPRESSIONS, SIGNS AND SYMPTOMS	49
SAFETY EQUIPMENT	54
FACTORS	55
INJURY SITE AND TYPE	56
PULSE	57
RESPIRATIONS	58

SYSTOLIC BLOOD PRESSURE	59
DIASTOLIC BLOOD PRESSURE	60
PULSE OXIMETRY (PULSE OX)	61
RESPIRATORY EFFORT	62
SKIN PERFUSION	63
GLASGOW EYE OPENING COMPONENT	64
GLASGOW VERBAL COMPONENT	65
GLASGOW MOTOR COMPONENT	66
GLASGOW COMA SCORE (TOTAL)	67
TREATMENT AUTHORIZATION	68
CLINICAL COURSE	69
ENVIRONMENTAL CAUSES	70
INJURY INTENT	71
INITIAL CARDIAC RHYTHM	72
DESTINATION CHARDIAC RHYTHM	73
CARE RENDERED	74
PROCEDURE	75
PROCEDURE ATTEMPTS	76
PROCEDURE SUCCESS	77
MEDICATION NAMES	78
RETURN OF SPONTANEOUS CIRCULATION	79
DESTINATION	80
MILES OUT	86

MILES IN	87
PRE-EXISTING	88
INCIDENT/PATIENT DISPOSITION	89
TRANSPORT CHOICE	91
MISCELLANEOUS	92
STUDY #1	93
STUDY #2	94
TECHNOLOGY ASSISTED	95
SERVICE NAME	96
SERVICE NUMBER	96
RESPONSE NUMBER	96
TODAY'S DATE	96
INCIDENT LOCATION	96
TRANSPORTED TO	96
PATIENT LAST NAME, FIRST, MI	97
PATIENT ADDRESS	97
CITY OF RESIDENCE	98
STATE OF RESIDENCE	98
ZIP CODE OF RESIDENCE	98
TELEPHONE NUMBER	99
AGE	99
DATE OF BIRTH (DOB)	99
GENDER	100

SOCIAL SECURITY NUMBER	100
HOSPITAL RECORD NUMBER	100
PERSONAL MEDICAL DOCTOR (MD)	101
TREATING MEDICAL DOCTOR (MD)	101
RESPONSIBLE PARTY, PHONE, ADDRESS, CITY, STATE, ZIP	101
CHIEF COMPLAINT	102
CURRENT MEDICATIONS (MEDS)	102
ALLERGIES MEDICATIONS (MEDS)	102
PAST MEDICAL HISTORY (HX)	103
NARRATIVE	103
SIGNATURES	103

Introduction and Format

Each data element is presented using the following template. This data set was developed by the Georgia Emergency Medical Services (EMS) Data Task Force, assigned by the Office of EMS, Division of Public Health and is based heavily on the National Highway Traffic Safety Administration (NHTSA) recommended data set. The EMS Data Task Force considered it important to provide sufficient detail about each data element to justify its inclusion in the uniform data set, as well as to assist agencies, in the implementation a data collection system. When a data element requires specific categories, these are listed in the data item specification ("Data Items").

It is important to understand that this data set does not contain all fields that are actually on the Georgia Patient Care Report (PCR) in the electronic versions. The Task Force members felt that an expanded data set that adhered closely to the NHTSA standard set would provide a more comprehensive and more flexible data collection and analysis system for Georgia. It will also allow those services using computer based data collection methods (i.e. pen or pad based computers) to collect additional information over and above what is collected via scanning of the Patient Care Report (PCR) without having multiple databases or requiring elaborate conversion processes.

The new version of the Georgia PCR includes a legend indicating shaded areas and the appropriate responses these areas must be completed. They are shown below and the corresponding areas in this manual may be shaded to match.

Always required

Required for all Patient Contact

Required for Trauma Only Responses

Name of Data Element:	Agency
Definition:	Number that identifies the responding agency
Code:	Numerical Entry 3 Digit

Content: This element consists of the Georgia EMS Agency Number as assigned by the Department Of Human Resources, Division of Public Health, Office of EMS.

Discussion and Justification: Identifies specific agency. Can be used to construct reports, which are specific to agencies. It is particularly valuable for local reporting. This number is also of value in the automatic construction of PCR numbers or incident numbers.

Must use state assigned number in order to maintain uniqueness of data element

Name of Data Element:	Unit
Definition:	Service assigned unique identifier for an EMS unit
Code:	Numerical Entry 3 Digit

Content: 3-digit Unit Identifier

Discussion and Justification: Allows local services to identify and sort data by unit number.

Services that use unit identifiers of less than 3 digits may continue to do so. The length of the field should be padded with zeroes in order to reach the 3-digit length.

Name of Data Element:	EMS VID
Definition:	EMS Vehicle Identification Number Provided by the State Office of EMS/Trauma
Code:	5 Digit Numerical Entry

Content: This element can be coded using the 5 - digit number provided by the State Office of EMS/Trauma

Discussion and Justification: Provides a means of complying with the Health and Human Services Administration's requirement to ensure that EMS Vehicles are appropriately equipped and manned by licensed EMS Personnel

This area cannot be left blank.

Name of Data Element:	Service Requested
Definition:	Type of service requested
Code:	Single Entry
Data Items:	Scene Unscheduled Scheduled Standby Rendezvous Other

Discussion and Justification: Used to categorize the types of service that are required and allows planning of EMS resource allocation.

Scene

Refers to direct response to scene of incident or injury, such as roadway, etc. This location should be the location indicated in Data Elements 1-5 in this document. This code should not be used by the second unit that receives the transfer, of a patient from another EMS responder, prior to arrival at a medical facility or final destination that is coded as a rendezvous.

Unscheduled

Refers to transfers of patients from one facility to another facility. This code should not be used for planned, scheduled transfers, which are coded separately. This code should not be used by the second unit involved in the transfer of a patient from one EMS responder to another responder during an unscheduled inter-facility transfer, which is also coded as a rendezvous.

Scheduled

Refers to transfers of patients from one facility to another facility, as defined above for *inter-facility*. However, this code is chosen when the transfer is scheduled in advance, such as a planned morning transfer of a patient from one hospital to another.

Standby

Refers to situation in which EMS response unit is requested to arrive at a scene and be available, such as at a football stadium. If an incident occurs during the *standby*, the service requested becomes *scene*.

Rendezvous

Refers to situation in which a second EMS unit receives transfer of patient from first EMS unit before arrival at a medical facility. Can be used when two units meet to complete the initial scene response or during an unscheduled inter-facility transfer. Can also be used by ALS Non-transport units conducting ALS intercepts with BLS transport units.

Name of Data Element:	Vehicle type
Definition:	Type of vehicle that responded to incident
Code:	Single Entry
Data Items:	
	Ground Rotor craft Fixed wing Other None

Discussion and Justification: Allows EMS managers and planners to break out EMS responses by the major categories of responding vehicles. While there are clearly numerous other possible vehicles, such as watercraft, skis, sleds, etc., the categories provided here are the major vehicle types, which will be of interest at regional and state levels.

Name of Data Element:	Location Type
Definition:	Type of location of incident
Code:	Single Entry
Location Type Data Items:	
Home	Educational Institution
Farm	Hospital
Mine/Quarry	Physician/Clinic
Industry	Jail
Recreation	Pubic Building
Street/HWY	Nursing Home
Residence/Institution	Other

Content: This location refers to the location where the injury occurred, not necessarily the origin of the transport.

Discussion and Justification: Location type of the incident is important for epidemiologists as well as EMS planners deciding where to allocate EMS resources. The categories in this dictionary are from ICD-9 and are E849 place of occurrence codes, with the exceptions that a category for educational institutions has been added.

Home / Residence

Includes apartment, boarding house, farm house, home premises, residential house, non-institutional place of residence, private driveway, private garage, private garden, private home, private walkway, swimming pool within private house or garden, and yard of home. Excludes home under construction but not occupied, or institutional place of residence.

Farm

Includes farm buildings and land under cultivation. Excludes farm house and home premises of farm.

Mine or quarry

Includes gravel pit, sand pit, or tunnel under construction.

Industry

Includes building under construction, dockyard, dry dock, factory building or premises, garage (place of work), industrial yard, loading platform in factory or store, industrial plant, railway yard, shop (place of work), warehouse, and workhouse.

Place for recreation or sport

Includes amusement park, baseball field, basketball court, beach resort, cricket ground, football field, golf course, gymnasium, hockey field, holiday camps, ice palace, lake resort, mountain resort, playgrounds including school playground, public parks, racecourses, resorts of all types, riding school, rifle range, seashore resorts, skating rink, sports ground, sports palace, stadium, public swimming pool, tennis court, vacation resort. Excludes occurrences in private house, private garden, private swimming pool, private yard.

Street or highway

Includes all public roadways.

Residential institution

Children's home, dormitory, jail, assisted-living center, orphanage

Educational institution

Includes state, public and private schools. Excludes playground, gymnasium, and other recreational locations within educational institutions, which should be coded as place for recreation or sport.

Hospital

Hospitals, Medical Centers or other recognized medical facilities of similar type.

Physician/Clinic

Doctor offices; free standing clinics (other than one meeting the definition of 'Hospital'), etc.

Jail

Facility where persons are in custody of the judicial system.

Public building

Includes any building used by the general public, including airport, bank, cafe, casino, church, cinema, clubhouse, courthouse, dance hall, parking garage, hotel, market, movie theater, music hall, nightclub, office, office building, opera house, post office, public hall, broadcasting station, restaurant, commercial shop, bus or railway station, store, or theater. Excludes home garage or industrial building or workplace. Also excludes state, public, and private schools and physician offices, which vary from the ICD-9 definition.

Nursing Home

Includes all medical residential institutions that are licensed by the State as a Nursing Home.

Other

Is to be used when location of the incident is not included in the above categories.

Name of Data Element:	911 Used?
Definition:	Establishes whether the call for assistance was received via a 911 Center
Code:	Yes/No Entry
Data Items:	
	Yes
	No

Content: This entry will be marked "Y"es if the unit received the call via a 911 PSAP. If they received from some other dispatcher (i.e. company dispatches unit on routine transfer call that did not originate at a PSAP) then the entry is marked "N"o.

Discussion and Justification: Provides a method to assess 911-response traffic.

Name of Data Element:	Response Mode Out
Definition:	The use of lights and sirens en route to scene
Code:	Single Entry
<p>Data Items:</p> <ul style="list-style-type: none"> Red Lights and Sirens (RLS) No Red Lights and Sirens (NoRLS) Upgrade Downgrade Walk/Drive Urgent 	

Discussion and Justification: To allow system administrators to know the frequency with which responder vehicles are using lights and sirens. Such usage carries explicit risks and EMS managers are responsible to assure that lights and sirens are used appropriately.

Urgent: Will allow the system administrators to track calls that are emergent in nature but does not require lights or sirens. Examples: Chest pain, where siren would affect patient's condition, close proximity to receiving facility, and etc.

Name of Data Element:	Response Mode In
Definition:	Use of lights and/or sirens from the scene
Code:	Yes/No Entry
Data Items: Red Lights and Sirens (RLS) No Red Lights and Sirens (NoRLS) Upgrade Downgrade Walk/Drive Urgent	

Discussion and Justification: Allows system administrators to know the frequency with which responder vehicles are using lights and sirens. Such usage carries explicit risks and EMS managers are responsible to assure that lights and sirens are used appropriately.

Urgent: Will allow the system administrators to track calls that are emergent in nature but does not require lights or sirens. Examples: Chest pain, where siren would affect patient's condition, close proximity to receiving facility, and etc.

Name of Data Element:	County
Definition:	County patient was found or to which unit responded (or best approximation) (if applicable)
Code:	Numerical Entry 3 Digit
Data Items: Refer to current county code list, which includes bordering States.	

Content: This field will be coded with the 3-digit number assigned to each Georgia county and bordering states.

Discussion and Justification: Provides county location of incident, which can be used to determine the appropriate level of EMS resources for specific areas. In addition, this field may facilitate probabilistic linkage to crash reports from the same county, or to hospitals within the same county. Field may be used for local county reports, permitting local understanding of the impact of EMS. Can link data file with census data to determine effects of population density, socioeconomic information, etc. on need for EMS and evaluations of EMS outcome.

Name of Data Element:	Response Number
Definition:	Unique number for each individual response by a response unit to an incident
Code:	Numerical Entry 6 Digit

Content: Code missing values in a consistent manner.

Discussion and Justification: This is the unique number within an individual response unit's records that identifies its runs. This number should be unique for an incident within a single EMS response unit. Useful for linking to other health files. Same purposes as incident number. This number is sometime referred to as "Alarm number" or "Case Number".

Name of Data Element:	Driver / Medic
Definition:	Certification number for first crewmember.
Code:	Numerical Entry 5 Digit

Discussion and Justification: Necessary to identify specific crewmembers participating in an EMS response. Useful for constructing experience reports, monitoring care rendered by specific providers and planning educational programs. This number is the state assigned certification number as shown on the individual's current license.

Name of Data Element:	Driver / Medic Type												
Definition:	Personnel certification / license level of crew member												
Code:	Single Entry												
Data Items: <table> <tr> <td>First Responder</td> <td>Other Includes:</td> </tr> <tr> <td>EMT-Basic</td> <td>Physician</td> </tr> <tr> <td>EMT-Intermediate</td> <td>Nurse</td> </tr> <tr> <td>Cardiac Technician</td> <td>Respiratory Therapist</td> </tr> <tr> <td>EMT-Paramedic</td> <td></td> </tr> <tr> <td>Other</td> <td></td> </tr> </table>		First Responder	Other Includes:	EMT-Basic	Physician	EMT-Intermediate	Nurse	Cardiac Technician	Respiratory Therapist	EMT-Paramedic		Other	
First Responder	Other Includes:												
EMT-Basic	Physician												
EMT-Intermediate	Nurse												
Cardiac Technician	Respiratory Therapist												
EMT-Paramedic													
Other													

Discussion and Justification: This data element permits assessing the level of care, which was available on the EMS responder team. By combining this information with vehicle type, there is maximum flexibility in describing the type of service that was provided. For instance, any level of crewmember certification may be present with any type of vehicle.

Reports of value may include descriptions of therapies according to level of provider, adherence to protocols, which are written differently for various levels of provider, etc.

Name of Data Element:	Medic 1
Definition:	Certification number for first crew member
Code:	Numerical Entry 5 Digit

Discussion and Justification: Necessary to identify specific crewmembers participating in an EMS response. Useful for constructing experience reports, monitoring care rendered by specific providers and planning educational programs. This number is the state assigned certification number as shown on the individual's current license.

Name of Data Element:	Medic 2
Definition:	Certification number for first crew member
Code:	Numerical Entry 5 Digit

Discussion and Justification: Necessary to identify specific crewmembers participating in an EMS response. Useful for constructing experience reports, monitoring care rendered by specific providers and planning educational programs. This number is the state assigned certification number as shown on the individual's current license.

Name of Data Element:	Medic 2 Type												
Definition:	Personnel certification / license level of crew member												
Code:	Single Entry												
Data Items: <table> <tr> <td>First Responder</td> <td>Other Includes:</td> </tr> <tr> <td>EMT-Basic</td> <td>Physician</td> </tr> <tr> <td>EMT-Intermediate</td> <td>Nurse</td> </tr> <tr> <td>Cardiac Technician</td> <td>Respiratory Therapist</td> </tr> <tr> <td>EMT-Paramedic</td> <td></td> </tr> <tr> <td>Other</td> <td></td> </tr> </table>		First Responder	Other Includes:	EMT-Basic	Physician	EMT-Intermediate	Nurse	Cardiac Technician	Respiratory Therapist	EMT-Paramedic		Other	
First Responder	Other Includes:												
EMT-Basic	Physician												
EMT-Intermediate	Nurse												
Cardiac Technician	Respiratory Therapist												
EMT-Paramedic													
Other													

Discussion and Justification: This data element permits assessing the level of care, which was available on the EMS responder team. By combining this information with vehicle type, there is maximum flexibility in describing the type of service that was provided. For instance, any level of crewmember certification may be present with any type of vehicle.

Reports of value may include descriptions of therapies according to level of provider, adherence to protocols, which are written differently for various levels of provider, etc.

Name of Data Element:	Call Date
Definition:	Date the call is responded to by provider
Code:	Date format should be coded as abbreviated Month Entry : DD, YY

Content: Required for data export purposes.

Discussion and Justification: The data element is used to help EMS planners allocate resources by day of week and season of year. For day and year, use leading zeros if necessary to pad the fields to 2-characters.

Name of Data Element:	Report 911
Definition:	Time call is first received by Public Safety Answering Point (PSAP) or other designated entity
Code:	Time format should be coded as HH:MM

Content: HH ranges from 00 to 23; MM ranges from 00 to 59. When available, the time should be the connect time to the PSAP.

Discussion and Justification: Provides the start point of the EMS response, and allows managers to assess the adequacy of EMS response, identify delays, and plan resources in a manner to provide expeditious EMS response. Use leading zeros to assure 2-character field width for HH and MM. Midnight is coded as 00:00, and begins the new day.

Name of Data Element:	Dispatch Notified
Definition:	Time of first connection with EMS dispatch
Code:	Time format should be coded as HH:MM

Content: HH ranges from 00 to 23; MM ranges from 00 to 59.

Discussion and Justification: Provides the start point of the dispatch component of the EMS response. This data element allows managers to assess delays between the time of incident report and the notification of EMS dispatchers. Use leading zeros to assure 2-character field width for HH and MM. Midnight is coded as 00:00, and begins the new day.

Name of Data Element:	Unit Notified
Definition:	Time response unit is notified by EMS dispatch
Code:	Time format should be coded as HH:MM

Content: *HH ranges from 00 to 23; MM ranges from 00 to 59.*

Discussion and Justification: Permits measurement of the actual responder response or delays. Assists planning of communication resources for individual responders, and allows identification of system delays following the dispatch component of the EMS system. Use leading zeros to assure 2-character field width for HH and MM. *Midnight is coded as 00:00, and begins the new day.*

Name of Data Element:	Unit Response
Definition:	Time that the response unit begins physical motion
Code:	Time format should be coded as HH:MM

Content: HH ranges from 00 to 23; MM ranges from 00 to 59.

Discussion and Justification: Permits measurement of delay between notification of EMS responder and the actual mobilization of the response unit. This data element refers to physical motion of the responding EMS vehicle, and does not refer to individual EMTs who may respond directly to the scene when notified by individual radio or telephone. For example, if an EMS incident is reported, one EMT may be at home or at work and be responsible to go to the station that holds the EMS vehicle. Another EMT may be notified and may drive in a private vehicle directly to the scene. The data element entered should be the time that the ambulance actually leaves the station, not the time at which the other EMT drives to the scene in the private vehicle. Use leading zeros to assure 2-character field width for HH and MM. Midnight is coded as 00:00, and begins the new day.

Name of Data Element:	At Scene
Definition:	Time EMS unit stops physical motion at scene (last place that the unit or vehicle stops prior to assessing the patient)
Code:	Time format should be coded as HH:MM

Content: *HH ranges from 00 to 23; MM ranges from 00 to 59.*

Discussion and Justification: Permits measurement of the time required for the response vehicle to go from the station to the scene. This data element refers to the physical motion of the responding EMS vehicle. If an individual EMT arrives at the scene by private vehicle the value is NOT to be entered in this field. Otherwise, system delays in having an equipped vehicle at the scene will fail to be identified. Use leading zeros to assure 2-character field width for HH and MM. *Midnight is coded as 00:00, and begins the new day.*

Name of Data Element:	At Patient
Priority:	Critical
Definition:	Time response personnel establish direct contact with patient
Code:	Time format should be coded as HH:MM

Content: *HH ranges from 00 to 23:MM ranges from 00 to 59.*

Discussion and Justification: Desirable in certain situations in which there may be a significant delay between the time at which a response unit arrives at the scene and the time at which the personnel can access the patient. For example, if the EMTs are prevented because of fire or adverse conditions from approaching the patient, this time will be useful. Search and rescue operations will also note delays between arrival at the overall scene and the actual patient contact. Use leading zeros to assure 2-character field width for HH and MM. *Midnight is coded as 00:00, and begins the new day.*

Name of Data Element:	1st Shock OR Extrication
Definition:	Time when patient in Cardiac Arrest presenting with V-Fib or Pulseless V-Tach was defibrillated or in cases of entrapment/entanglement, the time the patient was extricated
Code:	Time format should be coded as HH:MM

Content: *HH ranges from 00 to 23; MM ranges from 00 to 59.*

Discussion and Justification: Permits calculation of the time required to deliver defibrillation to an arrest patient. This data element is a required element for services that report their cardiac arrest data using the Utstein Data format, which is the international standard for recording cardiac arrest statistics. Use leading zeros to assure 2-character field width for HH and MM. *Midnight is coded as 00:00, and begins the new day.*

Name of Data Element:	En Route
Definition:	Time when the response unit begins physical motion from scene
Code:	Time format should be coded as HH:MM

Content: *HH ranges from 00 to 23; MM ranges from 00 to 59.*

Discussion and Justification: Permits calculation of scene time by subtracting the time of arrival at scene from the time unit left scene. Use leading zeros to assure 2-character field width for HH and MM. **Midnight is coded as 00:00, and begins the new day.**

Name of Data Element:	Destination
Definition:	Time when patient arrives at destination or transfer point
Code:	Time format should be coded as HH:MM

Content: *HH ranges from 00 to 23; MM ranges from 00 to 59.*

Discussion and Justification: Permits calculation of the time required to go from the scene to the destination of the response unit. If the patient is transferred from one EMS responder vehicle to another, then the time of arrival at destination for the first responder is the time of arrival or patient contact (or both) for the second agency. Use leading zeros to assure 2-character field width for HH and MM. *Midnight is coded as 00:00, and begins the new day.*

Name of Data Element:	In Service
Definition:	Time response unit back in service and available for response
Code:	Time format should be coded as HH:MM

Content: HH ranges from 00 to 23; MM ranges from 00 to 59.

Discussion and Justification: Allows planning of EMS resources. Permits assessment of the delay between arrival at destination and availability of the response unit. Use leading zeros to assure 2-character field width for HH and MM. Midnight is coded as 00:00, and begins the new day.

Note:

The relationship between various time periods may be demonstrated through the use of a chart as follows:

Report 911	Time/date
Dispatch notified	Time
Unit notified	Time
Unit response	Time
At scene	Time
At patient	Time
1 st Shock/Extrication	Time
En route	Time
Destination	Time
In service	Time

Name of Data Element:	Gender
Definition:	Gender of patient
Code:	Single Entry
Data Items:	
Male	Female
	Unknown

Discussion and Justification: Valuable for linkage to other files, and permits reporting of epidemiological information by gender.

Name of Data Element:	Race
Definition:	Patient's ethnic origin
Code:	Single Entry
Data Items: African American Asian Caucasian Native American Pacific Islander Multiracial	

Discussion and Justification: Useful for epidemiological studies, and of importance to data systems in order to access certain types of Federal or state funds which are directed to specific ethnic groups. Data item format taken from the Office of Management and Budget Directive 15.

Name of Data Element:	Hispanic
Definition:	Patient's ethnic origin
Code:	Single Entry
Data Items: Yes No	

Discussion and Justification: Useful for epidemiological studies, and of importance to data systems in order to access certain types of Federal or state funds which are directed to specific ethnic groups. Data item format taken from the Office of Management and Budget Directive 15. Primarily applies to those individuals who are Caucasian or African- American.

Name of Data Element:	Date of Birth (DOB)
Definition:	Patient's date of birth
Code:	Date format should be coded as abbreviated Month, DD, choice of 18,19,or 20 century digits, and YY

Content: Format permits sorting across multiple years, and is recommended for data export purposes. Century digits are mandatory.

Discussion and Justification: Extremely valuable for probabilistic linkage and calculation of accurate age information. Provides much more discriminatory power in probabilistic linkage than the numeric age. For day and year, use leading zeros if necessary to pad the fields to 2 characters. If DOB is unknown, leave entire field blank.

Name of Data Element:	Patient ID Number
Definition:	First and second letter of first name, first and second letters of last name, and last two letters of last name
Code:	Numerical Entry
Data Items: A-Z coded as 1-26, See next page for conversion chart.	

Content: Code as 12-character text field with input limited to numerals representing alpha characters.

Discussion and Justification: Will provide THE link that will facilitate total patient tracking from pre-hospital to discharge. This will allow true outcome studies.

ALPHA CHARACTER CONVERSION CHART

A	1	N	14
B	2	O	15
C	3	P	16
D	4	Q	17
E	5	R	18
F	6	S	19
G	7	T	20
H	8	U	21
I	9	V	22
J	10	W	23
K	11	X	24
L	12	Y	25
M	13	Z	26

Name of Data Element:	Clinical Area
Definition:	Designates the primary clinical category for the patient
Code:	Single Entry
Data Items:	
	Cardiac C
	Medical M
	Neonate N
	OB/GYN O
	Psych P
	Trauma T

Discussion and Justification: Allows the sorting of data into clinical categories, which can facilitate statistical research.

Name of Data Element:	Trauma Triage
Definition:	Criteria to Identify patients needing transport to a Trauma Center
Code:	Single Entry

Content: Physio = Physiologic, Anat = Anatomic, Mech = Mechanism of injury

Discussion and Justification: The need for a standardized method of identifying patients who need the services of a Trauma Center has been well documented. Several methods exist for identifying these patients, however the simplest method and the one endorsed by the American College of Surgeons - Committee on Trauma, is the one that will be used in Georgia. This allows the field personnel a straightforward means of relaying to the Trauma Center the status of their patient.

The Trauma Triage Criteria is a hierarchical pick list, *Physiologic, Anatomic and Mechanism of Injury*. The medic runs through the list starting at the most life threatening, physiologic complications. As the medic goes through the list of qualifiers if they find one that the patient matches, *i.e. Systolic BP <90 (no radial pulse)* they stop there. The patient is not identified as having met *physiologic* criteria. If the patient does not meet *physiologic* then the medic goes through the *Anatomic* qualifiers. If the patient meets one of these then they are identified as meeting *Anatomic* criteria. If the patient does not meet *physiologic or Anatomic* criteria the medic goes through the list of Mechanism of Injury qualifiers to see if any apply. When ever a patient meets one of these criteria's then the medic stops there and designates the patient according to the highest or most urgent qualifier. The qualifiers are marked as 1, 2 or 3 respectively for *Physiologic, Anatomic and Mechanism of Injury*.

TRAUMA TRIAGE CRITERIA

PHYSIOLOGIC

- A. Systolic <90 (No radial pulse)
- B. GCS \leq 10
- C. Respiratory rate < 10 or > 29 with respiratory compromise or impending respiratory compromise.

If YES to ANY of these then STOP HERE. The patient is a candidate for a Trauma Center. Indicate this by filling in the (1) bubble for Physiologic criteria.

ANATOMIC

- A. Penetrating wound to head, torso or long bones
- B. Flail Chest
- C. Trauma with burns
- D. Two or more proximal long bone fractures
- E. Pelvic Fractures
- F. Paralysis (related to current event)
- G. Amputations (excluding fingers and toes)

If YES to ANY of these then STOP HERE. The patient is a candidate for a Trauma Center. Indicate this by filling in the (2) bubble for Anatomic Criteria.

MECHANISM OF INJURY

- A. Ejection from auto
- B. Death in same passenger compartment
- C. Extrication time > 20 minutes
- D. Falls > 20 feet
- E. Rollover
- F. High Speed MVC (25 MPH)
- G. Passenger space intrusion > 15 inches
- H. Pedestrian or bicycle rider struck by a vehicle moving > 5 MPH
- I. Pedestrian thrown or run over
- J. Motorcycle crash > 20 MPH or separation of rider from motorcycle

If YES to ANY of these then STOP HERE. The patient is a candidate for a Trauma Center. Indicate this by filling in the (3) bubble for Mechanism of Injury Criteria.

This data should be entered for Trauma patients only. This data is not required for medical patients. The forwarding of this information to the respective trauma center would be appropriate and in keeping with ACS-COT guidelines for pre-hospital activation of a "Trauma Alert."

Name of Data Element:	Cause of Injury
Definition:	Cause of injury
Code:	Single Entry

Discussion and Justification: It is necessary to have a broad taxonomy for defining the causes of injury. This data element is based on E codes, but the coding structure is intended to be more flexible. An additional category for unknown has been added, so that this data element can always be filled in on the database.

Injury Codes Definitions

Acc Hit - *Struck by accident*

Patients who are hit by individuals, objects, or animals accidentally, i.e. a child hit by a baseball bat while playing baseball.

Aircraft - *Aircraft related accident*

Includes spacecraft.

Assault

Assault, non-specific to wound type.

Bicycle - *Bicycle accident*

Includes any pedal cycle accident. Pedal cycle is defined to include bicycles, tricycles, and excludes any motorized cycles.

Bites

Includes animal bites, including non-venomous snakes and lizards. Sub-codes are available to include dog, cat, rat, and other specific bites.

Chem Ex - *Accidental chemical exposure*

Includes accidental poisoning by solid or liquid substances, gases, and vapors, which are not included under accidental drug poisoning.

Cold Ex - *Excessive cold exposure*

Includes cold injury due to weather exposure, or cold produced by man, such as in a freezer.

Drowning

Accidental drowning not related to watercraft use. Includes swimming accidents, bathtubs, etc.

Electric - *Electrical accident (non-lightning)*

Includes accidents related to electric current from exposed wire, faulty appliance, high voltage cable, live rail, or open electric socket.

Fall - Accidental falls

Excludes falls that occur in the context of other external causes of injury, such as fires, falling off boats, or falling in accidents involving machinery.

Fall Obj - Struck by Falling Object

Patients struck by any falling object not thrown, projected, dropped or otherwise a result of an intentional act.

Fire - Fire and flames

Includes burning by fire, asphyxia or poisoning from conflagration or ignition, and fires secondary to explosions. Excludes injuries related to machinery in operation, vehicle accidents, and arson.

GSW - ACC - Firearm injury (accidental)

GSW - ASLT - Firearm assault

GSW - SELF - Firearm self inflicted (intentional)

Heat Ex - Excessive heat exposure

Includes thermal injuries related to weather or heat produced by man, such as in a boiler room or factory. Excludes heat injury from conflagration.

Lightning

Excludes falling of an object secondary to lightning, and also excludes injuries from fire secondary to lightning.

Machine - Machinery accidents

Includes all machinery accidents except when machinery is not in operation. Excludes electrocution.

Motorcycle- Motorcycle accidents

Includes all injuries as a result of a motorcycle accident.

MVC - Motor vehicle collision

This includes any motor vehicle accident occurring on a public roadway or highway.

Off Road - Motor vehicle non-traffic accident

This includes any motor vehicle accident occurring entirely off public roadways or highways. For instance, an accident involving an all terrain vehicle (ATV) in an off-road location would be a non-traffic accident.

Other

Includes all injuries as a result of anything not listed within this category.

Pedest - *Pedestrian traffic accident*

Motor vehicle accidents in which the patient was a pedestrian struck by a motor vehicle of any type. Includes individuals on skates, in baby carriages, in wheelchairs, on skateboards, skiers, etc.

Radiation - *Radiation exposure*

Excludes complications of radiation therapy.

Rape

Includes all injuries as a result of forced sexual assault.

Rx OD - *Accidental drug poisoning*

Includes accidental poisoning by drugs, medicinal substances, or biological products.

Smoke - *Smoke inhalation*

Includes smoke and fume inhalation from conflagration.

Stabbing- *assault by stabbing*

Includes cuts, punctures, or stabs of any part of the body.

Stings - *Venomous stings (plants, animals)*

Includes bites and stings from venomous snakes, lizards, spiders, scorpion, insects, marine life, or plants.

Suffocat - *Mechanical suffocation*

Includes suffocation in bed or cradle (crib death), closed space suffocation, plastic bag asphyxia, accidental hanging, etc.

Unknown

This code is provided primarily for situations in which the data is being entered at a time when the information cannot be accurately reconstructed from the run record. This should be a rare entry.

Water Craft - *Water transport accident*

Includes all accidents related to watercraft. Excludes drowning and submersion accidents unless they are related to watercraft use. Thus, if a person falls out of a boat and drowns, it should be coded within this category. If a person drowns in a swimming pool or bathtub, it should be coded as drowning.

Name of Data Element:	Provider Impressions/Signs and Symptoms
Definition:	Provider's clinical impression which led to the management given to the patient (treatments, medications, procedures)
Code:	Single Entry
Data Items: Abdominal Pain / Problems Airway Obstruction Allergic Altered Level of Consciousness Apparent Death Back Pain Bleeding Burn/Other Burn/Term Cardiac Arrest Choking Chest Pain Crush Injury Diarrhea Dizziness Dysrhythmia Ear Pain Eye Pain Fever GI Bleed Headache Hyperglycemia	Hypertension Hyperthermia Hypoglycemia Hypothermia Hypovolemia Inhalation Rash/Blister Nausea/Vomiting OB Delivery Palpitation Paralysis Poisoning Psychiatric Respiratory Arrest Respiratory Distress Seizures Sexual Assault Stroke Syncope Unresponsive Vaginal Bleed Weakness

Discussion and Justification: This data element contains the single clinical assessment, which primarily drove the actions of the EMS responder. It should be possible to determine whether the treatments or medications provided match protocols that relate to the clinical impression. ***When more than one choice is applicable to a patient, the responder should indicate the clinical assessments that drove most of the plan of therapy and management.***

It is obvious that this list is incomplete. It is also recognized that different agencies, which have different assessment driven protocols, will wish to have additional lists corresponding to the authority of their own responders. The list above is provided in order that consistent coding of at least the above items is achieved.

Provider Impressions/Signs and Symptoms

Abdominal Pain

Includes acute abdomen, painful abdomen, cramps, etc. Does not include abdominal trauma.

Airway Obstruction

Includes choking, swelling of neck, croup, epiglottitis, foreign body in airway, etc.

Allergic

Includes reactions to drugs, plants, insects, etc. Category includes hives, urticaria, wheezing and so forth when suspected of being related to allergy.

Altered Level of Consciousness

Refers to patients with any alteration of consciousness, including patients who appear to be substance abusers or under the influence of drugs or alcohol.

App Death - Obvious death

Patients who were dead at the scene, in which no therapy was undertaken. Situations where CPR is withheld pending official pronouncement of death. It would also apply in circumstances where DNR orders are received/available on scene and CPR withheld pending official pronouncement of death.

Back Pain

Patients complaining of back pain.

Bleeding

Patients with bleeding, excluding gastrointestinal bleeding.

Burn/Other

Patients suffering from burns, non-thermal in nature.

Burn/Thermal

Patients suffering from burns thermal in nature.

Cardiac Arrest

All instances in which cardiac arrest occurred and either death was pronounced immediately, or external cardiac massage was instituted.

Choking

Patients with injuries resulting from choking both internal and external.

Chest Pain

Includes patients with complaint of chest pain, including pain felt related to heart disease, upset stomach, or muscle pain in the chest wall.

Crush Injury

Patients suffering from injuries as a result of a crushing mechanism.

Diarrhea

Patients suffering from the gastrointestinal disturbance of diarrhea or loose stools.

Dizziness

Patients suffering from an alteration in spacial orientation or balance.

Dysrhythm - Cardiac rhythm disturbance

Includes any rhythm disturbance, which was noted on physical examination or with a cardiac monitor, when the rhythm was the major clinical reason for care rendered by the EMS responder.

Ear Pain

Patients suffering from pain in the ear, internal or external.

Eye Pain

Patients suffering from pain in the eye or on the external surface of the eye area.

Fever

Patients suffering from an elevation in body temperature, excluding conditions of hyperthermia resulting from excessive heat exposure.

GI Bleed- Gastrointestinal bleed

Patients suffering from blood loss, internal or external, within the gastrointestinal system.

Headache

Patients suffering from head pain, internally or externally caused.

Hyperglyc - Diabetic symptoms (hyperglycemia)

The major symptom is hypoglycemia, but in circumstances where diabetes is known to exist, this category can include ketoacidosis, as well as other complications of diabetes.

Hypertension

Patients suffering from an elevation in blood pressure, either acute or chronic.

Hyperthermia

When hyperthermia is the major clinical assessment driving EMS responder care.

Hypoglyc -Diabetic symptoms (hypoglycemia)

Relates to patients with symptoms related to diabetes, generally when there is a history of diabetes in the patient.

Hypothermia

Usually relates to environmental hypothermia, such as following submersion in cold water, avalanches, or other environmental exposure situations.

Hypovolemia

Patients with clinical shock, usually felt to be hypovolemic. All patients considered to have shock by EMS responders should be coded with this code, as it is relatively difficult to identify other less common forms of shock outside the hospital setting.

Inhalation

Patients suffering from inhalation injuries from toxic gases, excludes smoke.

Rash/Blister

Patients suffering from external rashes or blisters.

Nausea/Vomiting

Patients suffering from nausea or stomach upset and/or regurgitation of stomach contents.

OB Deliv - Pregnancy / OB delivery

Includes all aspects of obstetric care rendered in the out-of-hospital setting.

Palpitation

Patients complaining of palpitations cardiac in nature.

Paralysis

Patients suffering from immobility of any part of the body, non-stroke related.

Poisoning

Includes drug ingestions, which are inappropriate drugs or overdoses, as well as poisonings from chemicals.

Psychiatric

Includes all situations in which a behavioral or psychiatric problem was considered the major problem for the EMS responder.

Resp Arr - Respiratory arrest

Instance in which the patient stops breathing. These patients always require ventilatory support on at least a temporary basis.

Resp Dist - Respiratory distress

Includes patients with respiratory distress who continue to have spontaneous breathing and never suffer respiratory arrest. These patients may require ventilatory support.

Seizures

Includes major and minor motor or focal seizures.

Sex Aslt - Sexual assault / rape

Refers to suspected sexual assault / rape. The code refers to unspecified traumatic injury, but the Cause of Injury code should resolve this adequately.

Stroke - CVA

Cerebral vascular accidents, strokes, TIA.

Syncope - fainting

Fainting is the major clinical assessment, even though the patient may be fully awake at the time of EMS evaluation.

Unresponsive

Patient is unconscious or unresponsive to stimuli upon clinical exam by EMS.

Vag Bleed - Vaginal hemorrhage

Refers to abnormal vaginal bleeding in sufficient amount to have driven the EMS response. When pregnancy is involved, vaginal hemorrhage should be coded when the hemorrhage itself was the major concern to the EMS responder.

Weakness

Patient complains of generalized nonspecific weakness or nonspecific pain.

Name of Data Element:	Safety Equipment												
Definition:	Safety equipment in use by patient at time of injury												
Code:	Single Entry												
<p>Data Items:</p> <table> <tr> <td>Not used</td> <td>Helmet</td> </tr> <tr> <td>Shoulder-(belt only)</td> <td>Eye protection</td> </tr> <tr> <td>Lap only</td> <td>Flotation device</td> </tr> <tr> <td>Lap/Shoulder-(combination)</td> <td>Protective clothing-(gear)</td> </tr> <tr> <td>Child seat-(car seat)</td> <td>Unknown</td> </tr> <tr> <td>Airbag</td> <td>deployed</td> </tr> </table>		Not used	Helmet	Shoulder-(belt only)	Eye protection	Lap only	Flotation device	Lap/Shoulder-(combination)	Protective clothing-(gear)	Child seat-(car seat)	Unknown	Airbag	deployed
Not used	Helmet												
Shoulder-(belt only)	Eye protection												
Lap only	Flotation device												
Lap/Shoulder-(combination)	Protective clothing-(gear)												
Child seat-(car seat)	Unknown												
Airbag	deployed												

Discussion and Justification: Provides important information about safety device use in motor vehicle accidents, boating accidents, and industrial accidents with eye injuries. Data will be of use for corroboration of police reports concerning crashes.

If the EMS responder knows that no safety device was employed, then the data element should be coded as not used. ***Finally, if the EMS provider has no information about safety device use and cannot obtain such information from first responders or public safety, then the data element should be coded as unknown.***

Name of Data Element:	Factors
Definition:	Special circumstances affecting the EMS response or delivery of care
Code:	Single Entry
Data Items:	
Weather	Extrication (>20 min)
Road conditions	Hazardous material
Vehicle problems	Crowd
Unsafe scene	Other
Language	Not applicable
Traffic/Train	

Discussion and Justification: For systems planners who are evaluating response times, this data element provides explanations for delays encountered in the system. For instance, the time to scene would be expected to be prolonged if there was a blizzard, or if gunfire prevented EMS responders from patient access. If there were no problem with EMS delivery, this data element would be coded as not applicable. Unsafe scene includes presence of gunfire, instances in which police prevented access because of safety concerns, etc. Vehicle problems include problems with the EMS responder vehicle itself, not with other vehicles, which might have obstructed traffic. Extrication has been moved into this data element because extrication is not a patient treatment and relates less to the medical care of the patient than to the environment in which EMS responders must work.

Name of Data Element:	Injury Site and Type
Definition:	Clinical description of injury type and body site
Code:	Single or Multiple Entry, Cross-Tabular
Data Items:	
<u>Body Sites</u>	<u>Injury Types</u>
<ul style="list-style-type: none"> - Head only (excluding neck, cervical spine and ear) - Face (<i>including ear</i>) - Neck - Thorax (excluding thoracic spine) - Abdomen (<i>excluding lumbar spine</i>) - Pelvis - Back - Upper extremities - Lower extremities 	<ul style="list-style-type: none"> - Amputation - Burn - Dislocation/fracture - Gunshot wound - Laceration - Pain - Puncture - Soft tissue/blunt injury

Content: Intended to permit the detailed listing of all injuries sustained by a patient, coded according to injury type and body site of the injury. Multiple entries will be possible. Each injury should be designated by body site and injury type

Discussion and Justification: This is a crucial data element that will enable EMS planners to know what types of injuries are incurred by patients using the EMS system. The data element will also be of value in assessing the correspondence between injury assessment in the field and actual injuries as evaluated in medical facilities. A major reason for using ISS related body sites is the ability to compare the hospital inpatient ISS areas with those indicated by the pre-hospital provider.

It is understood that various levels of providers will be permitted to make injury assessments at different levels of sophistication. ***It is stressed that this data element is supposed to reflect the clinical impression of injury by the EMS responder, not necessarily the final, correct medical diagnosis.***

Name of Data Element:	Pulse
Definition:	Patient's palpated or auscultated pulse rate expressed in number per minute
Code:	Numerical Entry 3 Digits

Content: Code as 3-digit field.

Discussion and Justification: The pulse rate is a component of various triage-scoring systems, and permits a rough assessment of the severity of illness of the patient. This data element is based on the physical examination of the patient, and the pulse must be palpated or auscultated. An electrical rhythm is not sufficient, as the patient could have electromechanical dissociation. In this instance, the correct value of this data element is '000'. Leading zeros must be used for entries with only two digits.

Name of Data Element:	Respirations
Definition:	Unassisted patient respiratory rate expressed as number per minute
Code:	Numerical Entry 2 Digits

Content: Coded as 2-digit field.

Discussion and Justification: Component of several triage scoring systems and provides some assessment of severity of illness or injury. If a patient is not breathing and requires artificial ventilation, **this data element should be coded as '00'**. Leading zeros must be used for one-digit entries.

Name of Data Element:	Systolic Blood Pressure
Definition:	Patient's systolic blood pressure
Code:	Numerical Entry 3 Digits
Data Items:	
Palpated - single entry	

Content: Coded as 3-digit field.

Discussion and Justification: Important component of several scoring systems for triage, and permits some assessment of acuity of patient. Leading zeros must be used for two digit entries.

Palpated Systolic Blood Pressure entry is a single box. If left blank, entry is no. If marked, entry is yes.

Name of Data Element:	Diastolic Blood Pressure
Definition:	Patient's diastolic blood pressure
Code:	Numerical Entry 3 Digits

Content: Coded as 3-digit field.

Discussion and Justification: Important component of several scoring systems for triage, and permits some assessment of acuity of patient. Leading zeros must be used for two-digit entry.

Name of Data Element:	Pulse Oximetry (OX)
Definition:	Patient's oxygen saturation
Code:	Numerical Entry 3 Digits
Data Items: RA-Room Air O2-Oxygen	

Content: Coded as 3-digit field.

Discussion and Justification: Permits some assessment of acuity of patient. Leading zeros must be used for two-digit entry. Notation should be made as to whether saturation reading was obtained with patient breathing room air or on supplemental oxygen.

Name of Data Element:	Respiratory Effort
Definition:	Patient respiratory effort
Code:	Single Entry

Data Items:	
N	Normal
L	Labored
S	Shallow
A	Absent

Discussion and Justification: Respiratory effort is an integral component of respiratory assessment.

Name of Data Element:	Skin Perfusion
Definition:	Patient skin perfusion, expressed as normal or decreased
Code:	Single Entry
Data Items:	
	N Normal
	D Decreased

Discussion and Justification: Normal is defined as warm, pink, and with a capillary refill time of 2 or less seconds. Decreased is defined as cool, pale, mottled, dusky, and with a capillary refill time of greater than 2 seconds.

If the patient is hypothermic or febrile, this may affect skin perfusion. However, the skin perfusion should be scored consistently as defined above.

Name of Data Element:	Glasgow Eye Opening Component
Definition:	Patient's eye opening component of the Glasgow coma scale
Code:	Single Entry
Data Items:	
1	None
2	Opens eyes in response to painful stimulation
3	Opens eyes in response to verbal stimulation
4	Opens eyes spontaneously

Discussion and Justification: One of three components of the Glasgow coma scale, which is widely used to assess neurological status. The score and its components are also parts of a variety of triage scoring systems.

Name of Data Element:	Glasgow Verbal Component
Definition:	Patient's verbal component of the Glasgow coma scale
Code:	Single entry

Data Items:

For patients >5years:

- 1 None
- 2 Non-specific sounds
- 3 Inappropriate words
- 4 Confused conversation or speech
- 5 Oriented and appropriate speech

For patients 2-5 years:

- 1 None
- 2 Grunts
- 3 Cries and/or screams
- 4 Inappropriate words
- 5 Appropriate words

For patients 0-23 months:

- 1 None
- 2 Persistent cry, grunting
- 3 Inappropriate cry
- 4 Cries, inconsolable
- 5 Smiles, coos, cries appropriately

Discussion and Justification: One of three components of the Glasgow coma scale, which is widely used to assess neurological status. The score and its components are also parts of a variety of triage scoring systems. If the patient is intubated and deeply comatose, then this data element is coded as 1 for none, since there was no verbal response at the time of intubations. However, if the patient is intubated but not deeply comatose, and there is a possibility of verbal response, it is difficult to apply the Glasgow coma scale. The EMS responder can ask questions and if the patient can nod his head or blink eyes, etc. appropriately, then this element is coded as 5.

If the medic uses one of the scoring categories other than greater than five years of age, the age category used should be documented in the narrative. You do not have to document all the elements of the category. Document only the age range used. Example: "0 -23 months or 2 - 5 years."

Name of Data Element:	Glasgow Motor Component
Definition:	Patient's motor component of the Glasgow coma scale
Code:	Single Entry

Data Items:	
<i>For patients >5 years:</i>	
1	None
2	Extensor posturing in response to painful stimulation
3	Flexor posturing in response to painful stimulation
4	General withdrawal in response to painful stimulation
5	Localization of painful stimulation
6	Obeys commands with appropriate motor response
<i>For patients up to 5 years:</i>	
1	None
2	Extensor posturing in response to painful stimulation
3	Flexor posturing in response to painful stimulation
4	General withdrawal in response to painful stimulation
5	Localization of painful stimulation
6	Spontaneous

Discussion and Justification: One of three components of the Glasgow coma scale, which is widely used to assess neurological status. The score and its components are also parts of a variety of triage scoring systems. This component cannot be assessed if the patient has received a muscle relaxant

If the medic uses the scoring category other than greater than five years of age, the age category used should be documented in the narrative. You do not have to document all the elements of the category. Document only the age range used. Example: "up to 5 years."

Name of Data Element:	Glasgow Coma Score (Total)
Definition:	Patient's total Glasgow coma scale score
Code:	Numerical Entry, Written

Content: Calculated 2-digit character field. It is a sum of the eye opening, verbal and motor response components.

Discussion and Justification: Important component of several triage scoring systems. Provides information about severity of a neurological disorder. The range of the score is 3 to 15.

Name of Data Element:	Treatment Authorization
Definition:	Indicates the type, if any, of treatment authorization
Code:	Single Entry
Data Items Standing Orders (Protocols) On-Line (Radio/Telephone) On-Scene Written Orders (Patient Specific)	

Discussion and Justification: Enables managers of EMS systems to determine the authorization type used for emergency medical care provided on specific EMS runs. This data may be of used for determining legal accountability and for auditing the supervision of EMS systems.

Standing Orders (Protocols)

A set of policies and procedures for all components of an EMS system.

On-line (*Radio Telephone*)

Immediate physician orders to EMS provider through direct telecommunications such as radio or telephone. Also known as *on-line medical direction*.

On-Scene

Immediate orders to an EMS provider by a physician at the scene of the medical emergency who has officially assumed responsibility for the management of the pre-hospital care of the patient.

Written Orders (*Patient Specific*)

Written instructions must accompany the patient, they must be in writing, and be signed by approved personnel. Also known as advanced medical directions. An example is "Do Not Resuscitate" orders.

Name of Data Element:	Clinical Course
Definition:	Change in patient's condition from time of initial assessment to time released from the EMS providers care
Code:	Single Entry
Data Items: Improved Maintained Deteriorated Expired	

Content: This entry will contain a coded entry containing the field personnel's assessment of the change, if any, in the patient's condition.

Discussion and Justification: This element will be helpful in the assessment of the efficacy of out-of-hospital interventions

Improved - Subjective and Objective assessments demonstrate positive changes from the original assessments.

Maintained - Neither positive nor negative changes noted between assessments.

Deteriorated - Subjective and Objective assessments demonstrate negative changes from the original assessments.

Expired - Assessment of patient condition reveals clinical death pending authorized pronouncement of death and no further interventions are performed.

Name of Data Element:	Environmental Causes	
Definition:	Suspected alcohol or drug use by patient	
Code:	Single Entry	
Data Items:		
	Abuse Alcohol	Suspected Abuse Suspected Alcohol
Housing Neglect	Suspected Housing Suspected Neglect	Inadequacies
Nutrition	Suspected Nutrition	
Substance	Suspected Drugs	
N/A	Does not apply	

Discussion and Justification: Important data element for injury research, permitting reports of value to public health researchers and policy makers. Should be coded whenever the EMS responder suspect alcohol or drugs used by the patient may have contributed to the incident. The use of drugs or alcohol in isolation has been coded individually for epidemiological purposes and specific use should be coded appropriately when possible.

Not applicable should be used when there is no patient, such as in a standby response.

Name of Data Element:	Injury Intent
Definition:	Intent of individual inflicting injury
Code:	Single Entry
Data Items:	
Unintent	Unintentional
Intent-Self	Intentional, self
Intent-Other	Intentional, other
Unknown	Unknown
N/A	Not applicable

Discussion and Justification: Intended to help injury surveillance specialists who are interested in homicide and suicides, inflicted child injuries, etc. The EMS provider may be in a unique situation to assess this issue which would then be of enormous value to the medical personnel caring for the patient. However, it is clear that the EMS provider will often not be able to assess this question.

Drug or alcohol abuse is impossible to code with this data element unless involved in a suicide attempt. For instance, if an EMS responder transports an intoxicated patient to a hospital with no other injuries, this data element would be coded as not applicable.

If the data element is collected, the EMS provider should indicate that an event is intentional if he or she has any suspicion of such. The data element is not intended to carry legal significance, but rather is intended to assist researchers in identifying possible cases of intentional injury for further study.

Name of Data Element:	Initial Cardiac Rhythm
Definition:	Initial monitored cardiac rhythm as interpreted by EMS personnel
Code:	Single Entry
Data Items:	
Sinus	Sinus Rhythm
S Brady	Bradycardia
S Tach	Sinus Tachycardia
Narrow Complex Tach	Narrow Complex Tachycardia
Wide Complex Tach	Wide complex Tachycardia
PVC, PAC, PJC	Premature Ventricular, Atrial or Junction Contractions
V-Tach	Ventricular Tachycardia
V-Fib	Ventribular Fibrillation
Asystole	Asystole
PEA	Pulseless Electrical Activity
A-Fib	Atrial Fibrillation
2nd Deg Type 1	Second Degree Block Type 1
2nd Deg Type 2	Second Degree Block Type 2
3rd Deg Block	Third Degree Block
Paced	Paced Rhythm

Discussion and Justification: Provides the initial monitored rhythm, permitting reports generated according to initial rhythm. Such reports would be of use in assessing the survival rate after certain rhythms. **Only one rhythm should be marked for the initial rhythm.**

Name of Data Element:	Destination Cardiac Rhythm
Definition:	Initial monitored cardiac rhythm as interpreted by EMS personnel
Code:	Single Entry
Data Items:	
Sinus S Brady S Tach Narrow Complex Tach Wide Complex Tach PVC, PAC, PJC V-Tach V-Fib Asystole PEA A-Fib 2 nd Deg Type 1 2 nd Deg Type 2 3 rd Deg Block Paced	Sinus Rhythm Bradycardia Sinus Tachycardia Narrow Complex Tachycardia Wide complex Tachycardia Premature Ventricular, Atrial or Junction Contractions Ventricular Tachycardia Ventricular Fibrillation Asystole Pulseless Electrical Activity Atrial Fibrillation Second Degree Block Type 1 Second Degree Block Type 2 Third Degree Block Paced Rhythm

Discussion and Justification: Provides the destination monitored rhythm, permitting reports generated according to destination rhythm. Such reports would be of use in assessing the survival rate after certain rhythms. **Only one rhythm should be marked for the destination rhythm.**

Name of Data Element:	Care Rendered
Definition:	Identification of care attempted or performed on patient
Code:	Multiple Entry

Data	Items:
CARE RENDERED	
12 Lead ECG	C-Spine Management
Assist Delivery	Glucose Monitor
Bag Valve Mask	MAST
Auto Ventilation	Oxygen
Bleeding Control	Splints
Cardiac Monitor	Suction
CPR	Traction Splint

Discussion and Justification: Intended to provide planners and educators with information about which care is rendered in the field, by whom, and for what indications.

More than one medic number can be entered for each care rendered category.

Name of Data Element:	Procedure
Definition:	Identification of procedure attempted or performed on patient
Code:	Multiple Entry
Data Items: <u>PROCEDURES</u>	
Automatic Defibrillation (AED)	IV #1
Synchronized Cardioversion	IV #2
Manual Defibrillation	IV #3
Chest Decompression	Needle Cricothyrotomy
Oral/Nasal Airway	Transcutaneous Pacing
Advanced Airway	Vagal Maneuvers
ET/NT Intubation	CPAP (Continuous Positive Airway Pressure)
Intraosseous	

Discussion and Justification: Intended to provide planners and educators with information about which procedures are conducted in the field, by whom, and for what indications. All of these would be considered procedures for purposes of this data element.

Name of Data Element:	Procedure Attempts
Definition:	Total number of attempts for each procedure attempted, regardless of success
Code:	Single Entry

Discussion and Justification: For procedures, which are performed on the patient, this field indicates the number of attempts required. In most instances, this number will be 1. This data element permits educators to know whether certain procedures are posing particular technical problems in the field. This data element will be linked to the procedure name and medic ID number. In order to insure accurate data the definition of what constitutes attempts for various procedures needs to be clearly defined. The Data Taskforce proposes the following definitions:

Attempt / Success Definitions

Intubation (ET/NT): An attempt is defined as any time an attempt is made to pass an endotracheal tube into the trachea. Visualization and/or manipulation of the airway with a laryngoscope does constitute an attempt.

IV / IO: Any time the skin is punctured is a valid attempt. A success would be a free flowing line.

Defibrillation: An attempt is any time an unsynchronized defibrillation is performed. A successful defibrillation is defined as the patient converting to a viable, pulse producing rhythm.

Name of Data Element:	Procedure Success
Definition:	Success / Failure of procedure
Code:	Single Entry

Discussion and Justification: For procedures which are performed on the patient, this field indicates the whether the procedure was successful or not. This can be useful in tracking skill competency trends among providers and the efficacy of various interventions.

Procedure: In medic procedure column enter only one medic for each procedure .

Success Definitions

Intubation (ET/NT): Success is establishing a patent airway through which the patient Can be successfully ventilated.

IV / IO: Success would be a free flowing line.

Defibrillation: A successful defibrillation is defined as the patient converting to a viable, pulse-producing rhythm.

Name of Data Element:	Medication Name
Definition:	Medication name
Code:	Numerical Entry 2 Digit

Discussion and Justification: Intended to provide planners and educators with information about which drugs are administered in the field. The drugs listed on the medication list is consistent statewide, however additional service specific medications may be added to the list as needed. This is not a restrictive list, nor is it expected that every agency will permit its providers to use all these drugs.

Enter only entry per medication administered not per dose.

There will be 10 fields for entering drugs given. Items will be entered using the appropriate 2-digit number.

GEORGIA PCR 2000 DRUG LIST ID CODES

NUMBER	DRUG NAME	NUMBER	DRUG NAME	NUMBER	DRUG NAME
01	Activated Charcoal	34	Ipecac	67	Valium
02	Adenocard	35	Isuprel	68	Verapmil
03	Alupent	36	Lactated Ringers	69	Versed
04	Aminophylline	37	Lasix	70	Vistaril
05	Anectine	38	Lidocaine 21%	71	
06	Aspirin	39	Lidocaine Drip	72	
07	Ativan	40	Mag Sulfate	73	
08	Atropine	41	Mivacron	74	
09	Benadryl	42	Morphine	75	
10	Bretylum	43	Narcan	76	
11	Calcium Chloride	44	Nipride	77	
12	Cardizen	45	Nitro Paste	78	
13	Compazine	46	NS	78	
14	D5 ½ NS	47	NTG	80	
15	D5W	48	NTG Drip	81	
16	Decadron	49	Nubain	82	
17	Demerol	50	Other Thrombolytic	83	
18	Dextrose 10%	51	Phenergan	84	
19	Dextrose 25%	52	Phenobarb	85	
20	Dextrose 50%	53	Pitocin	86	
21	Digoxin	54	Procaïnamide	87	
22	Dilantin	55	Procardia	88	
23	Dobutamine	56	Proventil	89	
24	Dopamine	57	Respiratory Saline	90	
25	Fentanyl	58	Romazicon	91	
26	Epinephrine 1:1,000	59	Saline Flush	92	
27	Epinephrine 1:10,000	60	Sodium Bicarb	93	
28	Epi-Pen	61	Solumedrol	94	
29	Glucagon	62	Stadol	95	
30	Haldol	63	Terbutaline	96	
31	Heparin Drip	64	Thiamine	97	
32	Heparin	65	TPA	98	
33	Instant Glucose	66	Tylenol	99	Other

Name of Data Element:	Return of Spontaneous Circulation
Definition:	Whether a palpable pulse or blood pressure was restored following cardiac arrest and resuscitation in the field
Code:	Yes or No Entry
Data Items:	
	Y - Yes
	N - No

Discussion and Justification: Outcome of cardiac resuscitation in the field. If the patient remains in cardiac arrest throughout the incident and continues to receive CPR until reaching the emergency department, this data element should be coded as no, even if the patient was subsequently resuscitated in the emergency department. There should be no unknown value for this data element. **If no cardiac arrest ever occurred, this data element is not applicable and should be left blank.**

Name of Data Element:	Destination
Definition:	Health Care Facility or Pre-hospital Unit/Home that received patient from EMS responder providing this record
Code:	Numerical Entry 3 Digit
Data Items: Georgia Hospital Association ID numbers Additional Destination Numbers as assigned by the State	

Discussion and Justification: Allows reporting by destination facilities, and allows linking when a patient is transferred between EMS responder agencies. Hospitals will be identified by their GHA assigned numbers. If a patient is transferred to another EMS service then enter that services 3-digit state assigned Identification number.

This data element is very valuable for probabilistic linkage. For instance, when an EMS responder indicates a specific hospital identifier, this can greatly facilitate linkage to outpatient and inpatient facility records.

Georgia Hospital List - PCR Codes

HOSPITAL NAME	ID NUMBER	COUNTY
ANCHOR HOSPITAL	375	FULTON
APPLING GENERAL HOSPITAL	301	APPLING
ATHENS REGIONAL MEDICAL CENTER	603	CLARKE
ATLANTA MEDICAL CENTER	709	FULTON
BACON COUNTY HEALTH SYSTEM	302	BACON
BAPTIST MEDICAL CENTER-CUMMING	346	FORSYTH
BERRIEN COUNTY HOSPITAL	445	BERRIEN
BJC MEDICAL CENTER	400	JACKSON
BLECKLEY MEMORIAL HOSPITAL	452	BLECKLEY
BOWDON AREA HOSPITAL	458	CARROLL
BRADLEY CENTER	456	MUSCOGEE
BROOKS COUNTY HOSPITAL	305	BROOKS
BULLOCH MEMORIAL HOSPITAL	502	BULLOCH
BURKE COUNTY HOSPITAL	306	BURKE
CALHOUN MEMORIAL HOSPITAL	203	CALHOUN
CAMDEN MEDICAL CENTER	411	CAMDEN
CANDLER COUNTY HOSPITAL	209	CANDLER
CANDLER HOSPITAL-SAVANAH	626	CHATHAM
CENTRAL GEORGIA REHABILITATION HOSPITAL	731	BIBB
CENTRAL STATE HOSPITAL	713	BALDWIN
CHARLTON MEMORIAL HOSPITAL	234	CHARLTON
CHARTER AUGUSTA BEHAVIORIAL HEALTH SYSTEM	166	RICHMOND
CHARTER BROOK BEHAVIORIAL HEALTH SYSTEM	115	FULTON
CHARTER BY-THE-SEA BEHAVIORIAL HEALTH SYSTEM	235	GLYNN
CHARTER LAKE BEHAVIORIALHEALTH SYSTEM MACON	308	BIBB
CHARTER PEACHFORD BEHAVIORIAL HEALTH SYSTEM-ATLANTA	601	DEKALB
CHARTER SAVANNAH BEHAVIORIAL HEALTH	550	CHATHAM
CHARTER WINDS BEHAVIORIAL HEALTH SYSTEMS-ATHENS	116	CLARKE
CHATUGE REGIONAL HOSPITAL	229	TOWNS
CHESTATEE REGIONAL HOSPITAL	404	LUMPKIN
CHILDRENS HEALTHCARE OF ATLANTA-EGLESTON CAMPUS	416	DEKALB
CHILDRENS HEALTHCARE OF ATLANTA-SCOTTISH RITE CAMPUS	518	DEKALB
CLINCH MEMORIAL HOSPITAL	347	CLINCH

COBB MEMORIAL HOSPITAL	211	FRANKLIN
COFFEE REGIONAL MEDICAL CENTER	406	COFFEE
COLQUITT REGIONAL MEDICAL CENTER	524	COLQUITT
COLUMBIA AUGUSTA REGIONAL MEDICAL CENTER	726	RICHMOND
COLUMBIA BARROW MEDICAL CENTER	303	BARROW
COLUMBIA CARTERSVILLE MEDICAL CENTER	542	BARTOW
COLUMBIA COLISEUM MEDICAL CENTER	636	BIBB
COLUMBIA COLISEUM PSYCH HOSPITAL	675	BIBB
COLUMBIA DOCTORS HOSPITAL	724	MUSCOGEE
COLUMBIA DUNWOOD MEDICAL CENTER	548	DEKALB
COLUMBIA FAIRVIEW PARK HOSPITAL	510	LAURENS
COLUMBIA HUGHSTON HOSPITAL	125	MUSCOHEE
COLUMBIA LANIER PARK REGIONAL	650	HALL
COLUMBIA NORTHLAKE REGIONAL	173	DEKALB
COLUMBIA PALMYRA MEDICAL CENTER	635	DOUGHERTY
COLUMBIA PARKWAY MEDICAL CENTER	639	DOUGLAS
COLUMBIA PEACHTREE REGIONAL	629	COWETTA
COLUMBIA POLK GENERAL	427	POLK
COLUMBIA REDMOND REGIONAL MEDICAL	637	FLOYD
CRAWFORD LONG HOSPITAL	705	FULTON
CRISP REGIONAL HOSPITAL	405	CRISP
DECATUR HOSPITAL	552	DEKALB
DEKALB MEDICAL CENTER	720	DEKALB
DEVEREUX CENTER IN GEORGIA	401	COBB
DODGE COUNTY HOSPITAL	309	DODGE
DONALSONVILLE HOSPITAL	310	SEMINOLE
DORMINY MEDICAL CENTER	501	BEN HILL
DR. JOHN M. MEADOWS MEMORIAL HOSPITAL	443	TOOMBS
DWIGHT D. EISENHOWER ARMY MEDICAL	702	RICHMOND
EARLY MEMORIAL HOSPITAL	357	EARLY
EASTSIDE MEDICAL CENTER	534	GWINNETT
EFFINGHAM COUNTY HOSPITAL	454	EFFINGHAM
ELBERT MEMORIAL HOSPITAL	407	ELBERT
EMANUEL MEDICAL CENTER	408	EMANUEL
EMORY UNIVERSITY HOSPITAL	705	DEKALB
EMORY-ADVENTIST HOSPITAL	641	COBB
EVANS MEMORIAL HOSPITAL	448	EVANS
FANNIN REGIONAL HOSPITAL	413	FANNIN
FAYETTE COMMUNITY HOSPITAL	200	FAYETTE
FLINT RIVER COMMUNITY HOSPITAL	329	DOOLY
FLOYD MEDICAL CENTER	606	FLOYD
GEORGIA BAPTIST MERIWETHER-HOSPITAL	709	MERIWETHER
GEORGIA REGIONAL HOSPITAL - ATLANTA	253	DEKALB
GEORGIA REGIONAL HOSPITAL - AUGUSTA	633	RICHMOND
GEORGIA REGIONAL HOSPITAL - SAVANNAH	723	CHATHAM
GORDON HOSPITAL	412	GORDON
GRADY GENERAL HOSPITAL	351	GRADY
GRADY MEMORIAL HOSPITAL	710	FULTON
GREENLEAF CENTER - FT. OGLETHORPE	257	CATOOSA
GREENLEAF CENTER - VALDOSTA	275	DOWNDES
GWINNETT MEDICAL CENTER	366	GWINNETT
HABERSHAM COUNTY MEDICAL CENTER	414	HABERSHAM
HAMILTON MEDICAL CENTER	415	WHITFIELD
HANCOCK MEMORIAL HOSPITAL	370	HANCOCK
HART COUNTY HOSPITAL	245	HART
HENRY MEDICAL CENTER	532	HENRY
HIGGINS GENERAL HOSPITAL	304	HARALSON
HILLSIDE HOSPITAL	160	FULTON
HOUSTON MEDICAL CENTER	439	HOUSTON
HUGHES SPAULDING CHILDRENS HOSPITAL	710	FULTON
HUTCHESON MEDICAL CENTER	623	WALKER

INNER HARBOUR HOSPITAL	642	DOUGLAS
INNER HARBOUR HOSPITAL - ROCKMART	427	POLK
IRWIN COUNTY HOSPITAL	314	IRWIN
JASPER MEMORIAL HOSPITAL	315	JASPER
JEFF DAVIS HOSPITAL	442	JEFF DAVIS
JEFFERSON HOSPITAL	417	JEFFERSON
JENKINS COUNTY HOSPITAL	319	JENKINS
JOAN GLANCY HOSPITAL	226	GWINNETT
JOHN D. ARCHBOLD MEMORIAL	614	THOMAS
LIBERTY REGIONAL MEDICAL CENTER	355	LIBERTY
LOUIS SMITH MEMORIAL HOSPITAL	529	LANIER
MACON NORTHSIDE	266	BIBB
MARTIN ARMY COMMUNITY HOSPITAL	708	MUSCOGEE
MCDUFFIE COUNTY HOSPITAL	321	MCDUFFIE
MEDICAL CENTER OF CENTRAL GEORGIA	712	BIBB
MEDICAL CENTER - COLUMBUS	704	MUSCOHEE
MEDICAL COLLEGE OF GEORGIA HOSPITAL	719	RICHMOND
MEMORIAL HOSPITAL AND MANOR	539	DECATUR
MEMORIAL HOSPITAL OF ADEL	317	COOK
MEMORIAL MEDICAL CENTER	703	CHATHAM
MIDDLE GEORGIA HOSPITAL	419	BIBB
MILLER COUNTY HOSPITAL	348	MILLER
MINNIE G. BOSWELL MEMORIAL HOSPITAL	420	GREENE
MITCHELL COUNTY HOSPITAL	421	MITCHELL
MONROE COUNTY HOSPITAL	345	MONROE
MOODY AFB MEDICAL GROUP	513	LOWNDES
MORGAN MEMORIAL HOSPITAL	352	MORGAN
MOUNTAINSIDE MEDICAL CENTER	451	PICKENS
NEWNAN HOSPITAL	515	COWETTA
NEWTON GENERAL HOSPITAL	322	NEWTON
NORTH FULTON REGIONAL HOSPITAL	327	FULTON
NORTH GEORGIA MEDICAL CENTER	341	GILMER
NORTHEAST GEORGIA MEDICAL CENTER	611	HALL
NORTHSIDE HOSPITAL	634	FULTON
NORTHSIDE HOSPITAL-CHEROKEE	541	CHEROKEE
NORTHWEST GEORGIA REGIONAL HOSPITAL	701	FLOYD
OCONEE REGIONAL MEDICAL CENTER	528	BALDWIN
PAULDING HOSPITAL	151	PAULDING
PEACH REGIONAL MEDICAL CENTER	323	PEACH
PERRY HOSPITAL	450	HOUSTON
PHOEBE PUTNEY MEMORIAL HOSPITAL	616	DOUGHERTY
PHOEBE PUTNEY-WORTH	343	WORTH
PIEDMONT HOSPITAL	617	FULTON
PUTNAM GENERAL HOSPITAL	227	PUTNAM
RABUN COUNTY MEMORIAL HOSPITAL	239	RABUN
RIDGECREST OSPITAL	251	RABUN
RIGEVIEW HOSPITAL	605	COBB
ROCKDALE HOSPITAL	240	ROCKDALE
ROOSEVELT WARM SPRINGS INSTITUTE	610	MERIWETHER
SOUTHWEST GEORGIA REGIONAL MEDICAL CNETER	631	RANDOLPH
SATILLA PARK HOSPITAL	114	WARE
SATILLA REGIONAL MEDICAL CENTER	627	WARE
SCREVEN COUNTY HOSPITAL	332	SCREVEN
SELECT SPECIALITY HOSPITAL-ATLANTA	236	FULTON
SHEPHERD CENTER	228	FULTON
SMITH NORTHVIEW HOSPITAL	333	LOWNDES
SOUTH FULTON MEDICAL CENTER	630	FULTON
OUTH GEORGIA MEDICAL CENTER	618	LOWNDES
SOUTHEAST GEORGIA REGIONAL MEDICAL CENTER	507	GLYNN
SOUTHERN REGIONAL MEDICAL CENTER	547	CLAYTON
SOUTHWEST HOSPITAL & MEDICAL CENTER	631	FULTON

SOUTHWESTERN STATE HOSPITAL	721	THOMAS
SPALDING REGIONAL HOSPITAL	508	SPALDING
ST. FRANCIS HOSPITAL	619	MUSCOHEE
ST. JOSEPH HOSPITAL - ATLANTA	714	FULTON
ST. JOSEPH'S HOSPITAL - SAVANNAH	621	CHATHAM
ST. MARY'S HOSPITAL	622	CLARKE
STEPHENS COUNTY HOSPITAL	545	STEPHENS
STEWART-WEBSTER HOSPITAL	242	STEWART
SUMMIT RIDGE	470	GWINNETT
SUMTER REGIONAL HOSPITAL	601	SUMTER
SYLVAN GROVE MEDICAL CENTER	356	BUTTS
TANNER MEDICAL CENTER - CARROLLTON	435	CARROLL
TANNER MEDICAL CENTER - VILLA RICA	244	CARROLL
TATTNALL MEMORIAL HOSPITAL	460	TATTNALL
TAYLOR REGIONAL HOSPITAL	519	PULASKI
TAYLOR TELFAIR REGIONAL HOSPITAL	335	TELFAR
TIFT GENERAL HOSPITAL	521	TIFT
TURNING POINT CARE CENTER	568	COLQUITT
UNION GENERAL HOSPITAL	716	RICHMOND
UPSON REGIONAL MEDICAL CENTER	523	UPSON
US AIRFORCE HOSPITAL - ROBBINS AFB	429	HOUSTON
VA MEDICAL CENTER - ATLANTA	715	DEKALB
VA MEDICAL CENTER - AUGUSTA	711	RICHMOND
VA MEDICAL CENTER - DUBLIN	718	LAURENS
VALUEMARK - BRAWNER	641	COBB
VALUEMARK - BRAWNER HOSPITAL SOUTH	402	HENRY
VENCOR HOSPITAL - ATLANTA	544	FULTON
WALTON MEDICAL CENTER	340	WALTON
WALTON REHABILITATION INSTITUTE	730	RICHMOND
WASHINGTON COUNTY REGIONAL MEDICAL CENTER	540	WASHINGTON
WAYNE MEMORIAL HOSPITAL	538	WAYNE
WELLSTAR COBB HOSPITAL	546	COBB
WELLSTAR DOUGLAS HOSPITAL	312	DOUGLAS
WELLSTAR KENNESTON HOSPITAL	615	COBB
WESLEY WOODS GERIATRIC HOSPITAL	288	DEKALB
WEST CENTRAL GEORGIA REGIONAL	727	MUSCOGEE
WEST GEORGIA MEDICAL CENTER	605	TROUP
WHEELER COUNTY HOSPITAL	252	WHEELER
WILDWOOD LIFESTYLE CENTER AND HOSPITAL	342	DADE
WILLINGWAY HOSPITAL	363	BULLOCH
WILLS MEMORIAL HOSPITAL	526	WILKES
WINDWOOD HOSPITAL	109	FLOYD
WINDY HILL HOSPITAL	640	COBB
WINN ARMY COMMUNITY HOSPITAL	522	LIBERTY

OUT OF STATE HOSPITALS

SOUTH CAROLINA HOSPITAL NAMES	ID NUMBER
ABBAYVILLE MEMORIAL HOSPITAL	950
ANDERSON AREA MEDICAL CENTER - ANDERSON	951
AIKEN REGIONAL MEDICAL CENTER - AIKEN	952
BEAUFORT MEMORIAL - BEAUFORT	953
CHARLESTON MEDICAL CENTER - CHARLESTON	954
GREENVILLE GENERAL HOSPITAL - GREENVILLE	955
GREENVILLE MEMORIAL HOSPITAL - GREENVILLE	956
HILTON HEAD HOSPITAL - HILTON HEAD	957
LOW COUNTRY REGIONAL HOSPITAL - RIDGELAND	958
MEDICAL UNIVERSITY OF SOUTH CAROLINA	959
OCONEE MEMORIAL - SENECA	960
PROVIDENCE HOSPITAL - COLUMBIA	961
ROGER C. PEACH HOSPITAL - GREENVILLE	962
SELF MEMORIAL HOSPITAL - GREENWOOD	963
VA HOSPITAL - CHARLESTON	964
OTHER SOUTH CAROLINA HOSPITALS	969

NORTH CAROLINA HOSPITALS	ID NUMBER
MURPHY MEDICAL CENTER	940
ANGEL COMMUNITY HOSPITAL - FRANKLIN	941
OTHER NORTH CAROLINA HOSPITALS	949

TENNESSEE HOSPITAL NAMES	ID NUMBER
ERLANGER MEDICAL CENTER - CHATTANOOGA	970
ERLANGER NORTH - CHATTANOOGA	971
HUMANA-EAST RIDGE - CHATTANOOGA	972
NORTH PARK HOSPITAL - CHATTANOOGA	973
PARKRIDGE HOSPITAL - CHATTANOOGA	974
RENAISSANCE HOSPITAL - CHATTANOOGA	975
SISKINS - CHATTANOOGA	977
OTHER TENNESSEE HOSPITALS	989

FLORIDA HOSPITAL NAMES	ID NUMBER
BAPTIST MEDICAL CENTER - JACKSONVILLE	920
MEMORIAL HOSPITAL - JACKSONVILLE	921
METHODIST HOSPITAL - JACKSONVILLE	922
RIVERSIDE HOSPITAL - JACKSONVILLE	923
ST LUKES HOSPITAL - JACKSONVILLE	924
ST VINCENT MEDICAL CENTER - JACKSONVILLE	925
SHANDS TEACHING HOSPITAL - GAINESVILLE	926
TALLAHASSEE COMMUNITY HOSPITAL - TALLAHASSEE	927
TALLAHASSEE REGIONAL MEDICAL CENTER	928
UNIVERSITY HOSPITAL - JACKSONVILLE	929
VA HOSPITAL - LAKE CITY	930
VA HOSPITAL - GAINESVILLE	931
OTHER FLORIDA HOSPITALS	939

ALABAMA HOSPITAL NAMES	ID NUMBER
UAB - BIRMINGHAM	900
CAROWAY HOSPITAL - BIRMINGHAM	901
EAST ALABAMA MEDICAL CENTER - OPELIKA	902
FLOWERS MEDICAL CENTER - DOTHAN	903
LANIER MEMORIAL HOSPITAL - VALLEY	904
MONTGOMERY REHABILITATION - MONTGOMERY	905
N.E. ALABAMA REGIONAL MEDICAL CENTER - ANNISTON	906
PHOENIX MEDICAL PARK - PHOENIX CITY	907
RANDOLPH COUNTY HOSPITAL - ROANAKE	908
TUSKEEGEE VA HOSPITAL - TUSKEEGEE	909
OTHER ALABAMA HOSPITALS	919

MISCELLANEOUS DESTINATION CODES

MISCELLANEOUS DESTINATION CODES	ID NUMBER
HOSPITALS - OTHER STATES	990
MILITARY MEDICAL FACILITY NON-SPECIFIED	991
NURSING HOMES	992
DIALYSIS CLINICS	993
PHYSICIANS OFFICES//CLINICS	994
AIR TRANSPORTATION	995
HOME	996
OTHER NOT SPECIFIED	999

Name of Data Element:	Miles Out
Definition:	Gives number of miles form point of origin of the call to the scene
Code:	Numerical Entry 3 Digit

Discussion and Justification: Permits measurement of the miles required for the response vehicle to go from the point of origin to the scene. This data element refers to the physical motion of the responding EMS vehicle. If an individual EMT arrives at the scene by private vehicle, which is NOT the value to be entered in this field. Otherwise, system delays in having an equipped vehicle at the scene will fail to be identified.

This data element should be zero padded if the total mileage is less than 099 to assure 3-digit field width.

Name of Data Element:	Miles In
Definition:	Gives number of miles form point of origin of the call to the scene
Code:	Numerical Entry 3 Digit

Discussion and Justification: Permits measurement of the miles required for the response vehicle to go from the scene to the destination. This data element refers to the physical motion of the responding EMS vehicle.

This data element should be zero padded if the total mileage is less than 099 to assure 3-digit field width.

Name of Data Element:	Pre-existing Condition														
Definition:	Pre-existing medical conditions known to the provider														
Code:	Multiple Entry														
Data Items: <table border="0"> <tr> <td>Asthma</td> <td>MR/Developmental Delay</td> </tr> <tr> <td>Diabetes</td> <td>Premature Baby</td> </tr> <tr> <td>Tuberculosis</td> <td>Psychiatric</td> </tr> <tr> <td>Emphysema</td> <td>Seizure Disorder</td> </tr> <tr> <td>Chronic Renal</td> <td>Stroke</td> </tr> <tr> <td>Cardiac</td> <td>Traumatic Brain Injury</td> </tr> <tr> <td>Hypertension</td> <td></td> </tr> </table>		Asthma	MR/Developmental Delay	Diabetes	Premature Baby	Tuberculosis	Psychiatric	Emphysema	Seizure Disorder	Chronic Renal	Stroke	Cardiac	Traumatic Brain Injury	Hypertension	
Asthma	MR/Developmental Delay														
Diabetes	Premature Baby														
Tuberculosis	Psychiatric														
Emphysema	Seizure Disorder														
Chronic Renal	Stroke														
Cardiac	Traumatic Brain Injury														
Hypertension															

Discussion and Justification: Pre-existing conditions may affect the protocols followed by EMS responders. The data element is intended to capture information as understood by EMS providers at the scene, not as defined later in the medical record of the hospital. Thus, if the EMS responder finds out that a patient has several pre-existing conditions after he or she arrives at the hospital, those conditions should not be coded in this data element. It is clear that the list provided here is not all-inclusive.

Name of Data Element:	Incident / Patient Disposition
Definition:	End result of EMS response
Code:	Numerical Entry
Data Items: Cancelled No Patient Found False Call Refused All Assist at Home Dead at Scene No Treatment Required	Treated, Transported Treated, Transferred Care Treated, POV Treated, Released Treated, Refused Transport Transport Only N/A

Discussion and Justification: Allows reports to be generated according to the final disposition of EMS responses. This will provide information about the reasons for which EMS is notified, correlated with the ultimate incident disposition. For instance, it will be of value to know that in certain regions, EMS is frequently activated to see patients who require neither treatment nor transport. Reports generated from this data element may be of use in coordinating the dispatch and responder functions as well.

Treatment will include the assessment of a patient.

Cancelled

This code means the EMS response was cancelled en route or on scene.

No patient found

EMS crew cannot locate a patient on scene.

False Call

This code is used when a call is determined to be a malicious false alarm.

Refused All

Patient was at scene and refused care, whether injured or not. If the EMS responder knows that there is an injury, but the patient refuses care and is transported by friends or acquaintances, this is still the correct code for this data element.

Assist at home

This code is used when a unit renders assistance to a patient as requested, i.e. assisting an invalid back to bed, routine vital sign assessment at patient's request.

Dead at scene

Situations where CPR withheld pending official pronouncement of death or DNR orders are received/available on scene and CPR withheld pending official pronouncement of death. If a patient is given CPR at the scene and transported to the hospital while undergoing CPR, then this is not the correct code. If a patient is given CPR and is then pronounced dead at the scene, this is the correct code.

No treatment required

This code means that the EMS responder evaluated the patient, and no treatment was required. If the patient refused evaluation, or if the EMS responder did not evaluate a specific patient, this is not the correct code for this data element.

Treated and transported by EMS

This code means that the EMS responder providing the data record treated and transported the patient. Transport may be to any valid destination, as defined for the destination data element. If the EMS responder transports a patient to a rendezvous point with another EMS responder (for instance, a ground crew rendezvous with a helicopter based agency), this is the correct code for this data element.

Treated, transferred care

This code means that the EMS responder provided treatment at the scene but the patient was transferred into the care of another service. The EMS responder did not provide transport in this instance. For example, if a BLS provider is at a scene and treats a patient, but a separate ALS responder arrives and takes over, the BLS record would indicate this code. If an EMS responder treats a patient who is then transported by a separate police or fire vehicle, this is the correct code for the EMS responder record.

Treated, transported by private vehicle

This code means that the EMS responder provided treatment, but the patient was transported to his or her destination by a private vehicle. This includes instances in which the patient transports himself via private automobile, if the EMS responder understands that the patient is going to seek further medical care, such as at a private doctor's office or the local emergency department.

Treated and released

This code means the EMS responder provided treatment, and the patient required no further emergency care. This is distinct from the instance in which the patient is known to be in need of further care, but is transported by himself or others to the facility providing further care

Treated and Refused Transport

For patients that accepted treatment on scene and then refused transport by EMS.

Transport only

Refers to transport of patient requiring no treatment, such as transport of equipment or transport of specialty patients and/or their crews.

Not Applicable

This code is used when a disposition is not applicable. For instance, if the unit is on standby and no incident occurs, then this data element is not applicable. In this instance, the data element call "Service Requested" will have been coded as standby. For all standby records, this data element should be coded as not applicable.

Name of Data Element:	Transport Choice
Definition:	Reason a transport destination was selected
Code:	Single Entry
Data Items: Closest Patient/Family Choice Patient/Physician Choice Managed Care Law Enforcement Choice Protocol	Specialty (i.e. Burn, Spinal, Hyperbaric) On-line Medical Direction Diversion N/A

Discussion and Justification: Helps EMS managers to determine whether the choice of destination is appropriate. Items, which are defined as patient, physician, or family choice, are of interest to determine whether a trauma or referral system is functioning well, or is frequently overridden by non-medical issues.

Only 1 choice should be selected.

Closest Facility - facility chosen when there are no other determining factors available for medics, ex. Unresponsive without family available to direct.

Patient/Family Choice - patient or family chose disposition of response and/or destination.

Pt Physician Choice - Patient's physician chose disposition of response and/or destination.

Managed Care - facility chosen based solely on patient's insurance coverage.

Law Enforcement - authorized officer of law enforcement chose disposition or response and/or destination.

Protocol - facility chosen by preset policies and procedures.

Specialty Resource Center - facility chosen based on specific medical needs of patient.

On-Line Medical Direction - medical control determines disposition of response and/or destination.

Diversion - facility of choice directs transport to another facility.

Trauma Center - facility chosen based on approved trauma center designation.

N/A - all response dispositions not covered by the above selection, ex. Cancelled en route, no-patient contact calls.

Name of Data Element:	Miscellaneous
Definition:	A area where individual services may enter service specific data, i.e. ER delay data, additional run numbers, linkage with additional PCRs
Code:	Numerical Entry 9 Digit

Content: This element will contain up 9 digits. The local service may break down the content of this 8 digit number as they wish, i.e. The first 2 digits as an internal billing code, the next 2 or 4 as the unit number of any supervisors on the scene, etc.

Discussion and Justification: Provides local services flexibility in the collection of data that is specific to their service. May be used to link more than one PCR for one call.

Name of Data Element:	Study #1
Definition:	Data collected any current research studies the service is involved in
Code:	Numerical Entry 3 Digit

Content: This element will provide the ability to collect data at the local, district and statewide levels for specific research studies.

Discussion and Justification: Provides a means to collect data not already collected from the PCR that is needed for a particular research study. Allows changing of data collected without re-write of PCR. It is suggested that Study #1 be used at the Local / District level and Study #2 be used at the state level, i.e. the ODDS study during the Olympics.

Name of Data Element:	Study #2
Definition:	Data collected any current research studies the service is involved in
Code:	Numerical Entry 3 Digit

Content: This element will provide the ability to collect data at the local, district and statewide levels for specific research studies.

Discussion and Justification: Provides a means to collect data not already collected from the PCR that is needed for a particular research study. Allows changing of data collected without re-write of PCR. It is suggested that Study #1 be used at the Local / District level and Study #2 be used at the state level, i.e. the ODDS study during the Olympics

Name of Data Element:	Technology Assisted
Definition:	Patient technology possibly requiring additional assistance to maintain
Code:	Multiple Entry
Data Items:	
	<p style="text-align: right;">Home Ventilators</p> <p style="text-align: center;">CPAP (Continuous Positive Airway Pressure)</p> <p>Central IV (Central Line, Qport, Quentin Cath, Permacath, etc.)</p> <p>Pacemaker</p> <p style="text-align: right;">Feeding Catheter</p> <p>CSF Shunt (Cerebrospinal Fluid Shunt)</p> <p>Colostomies</p> <p>Tracheostomy</p>

Content: This element will provide the ability to collect data at the local, district and statewide levels for specific research studies.

Discussion and Justification: Provides a means to collect data not already collected from the PCR that is needed for a particular research study or local allocation of resources. This data set is of particular interest to the EMS-C Program.

BACK PAGE OF PCR

Service Name, Service Number, Response Number, and Today's Date correspond to those fields from the scan form, but are handwritten.

Name of Data Element:	Incident Location
Definition:	Address (or best approximation) where patient was found, or, if no patient, address to which unit responded
Code:	Free Text Entry

Content: Contains the street address or post office box number, followed by the apartment number or internal building number.

Discussion and Justification: Provides location of incident, which can be used to determine the appropriate level of EMS resources for specific areas. Use route numbers and mileposts, or other landmarks, which can be coded in a consistent manner if a street address is not applicable.

Name of Data Element:	Transported To
Definition:	Address (or facility) where patient was transported
Code:	Free Text Entry

Content: Contains the street address or facility name to which the patient was transported, if transported.

Discussion and Justification: Provides location of transport, which can be used to determine the appropriate level of EMS resources for specific areas.

Name of Data Element:	Patient Name
Definition:	Patient name
Code:	Free Text Entry, "not applicable" or "unknown"

Content: It is felt that this item should be designated as critical for those services with the ability to capture the patient's name, address, etc either via pen-based or laptop systems on scene or by manual entry into the database by administrative staff after the completion of the call. "Not applicable" is used when there is no patient, such as when the responding team cannot find the patient, or when the responding team is on standby.

Discussion and Justification: Critical because of its value in probabilistic linkage, both as a linking variable as well as a confirmatory variable to determine appropriate linkage. It is recognized that this data element requires careful protection from misuse, but it is more appropriate to regulate appropriate use of this field rather than to prevent its collection.

The format should be LAST, FIRST, MIDDLE INITIAL with only one space after the comma between the last and first names, and between first name and initial.

Name of Data Element:	Patient Street Address
Definition:	Patient's street address
Code:	Free Text Entry, "not applicable", "unknown" or "none"

Discussion and Justification: It is felt that this item should be designated as CRITICAL. The rationale for this is that services who have the capability to capture the patient's name, address, etc. either via pen-based or laptop systems on scene or by manual entry into the database by administrative staff after the completion of the call.

"Not applicable" is used when there is no patient, such as when the responding team cannot find the patient, or when the responding team is on standby.

Name of Data Element:	City of Residence
Definition:	Patient city or township of residence (if applicable)
Code:	Free Text Entry

Content: This is the name of the city / township / village or other political sub-district below county in which the patient resides.

Discussion and Justification: Useful for determining the political entity responsible for potential public health interventions, payment for services, etc.

Name of Data Element:	State of Residence
Definition:	State, territory, or Province, or District of Columbia, where patient resides
Code:	Free Text Entry

Content: This element will be coded using current 2 (two) character state abbreviations used by the United States Postal Service.

Discussion and Justification: Provides a means of aggregating EMS incidents by state, which allows reports to state legislatures concerning statewide EMS activities. Can be used to assess statewide resource requirements for EMS operations.

Name of Data Element:	Zip Code of Residence
Definition:	Zip Code of patient's residence
Code:	Free Text Entry

Content: Zip Code as assigned by US Postal Service.

Discussion and Justification: Useful for determining the political entity responsible for potential public health interventions, payment for services, etc.

Name of Data Element:	Telephone Number
Definition:	Patient's primary telephone number
Code:	Free Text Entry

Content: 10-digit number including area code

Discussion and Justification: Permits follow-up with patient and facilitates billing.

Name of Data Element:	Age
Definition:	Patient's age or best approximation
Code:	Free Text Entry

Content: Patient's age.

Discussion and Justification: Valuable in the absence of a date of birth. Age information permits linkage to other files, and is useful for epidemiologists interested in patterns of emergency medical problems in different age groups.

Name of Data Element:	DOB
Definition:	Date of Birth
Code:	Free Text Entry

Content: Patient's date of birth.

Discussion and Justification: Date of birth information permits linkage to other files, and is useful for epidemiologists interested in patterns of emergency medical problems in different age groups.

Name of Data Element:	Gender
Definition:	Patients gender
Code:	Free Text Entry

Content: Male, Female, or Unknown

Discussion and Justification: Permits more accurate matching of patient information.

Name of Data Element:	Social Security Number
Definition:	Government assigned social security number
Code:	Free Text Entry

Content: Patient's social security number.

Discussion and Justification: Social Security information permits linkage to other files. Some patients may not be forthcoming with this information, primarily beneficial to billing.

Name of Data Element:	Hospital Record Number
Definition:	Patient's record number issued by hospital
Code:	Free Text Entry

Content: Patient's hospital or medical record number

Discussion and Justification: May be beneficial to individual services for linkage with hospital data.

Name of Data Element:	Personal MD
Definition:	Patient's personal physician
Code:	Free Text Entry

Content: Patient's personal physician

Discussion and Justification: May be useful in obtaining additional information about patient.

Name of Data Element:	Treating MD
Definition:	Physician treating patient at receiving facility
Code:	Free Text Entry

Content: Patient's physician at receiving facility

Discussion and Justification: May be useful for billing or obtaining additional information about patient. May also be useful to indicate physician giving orders regarding patient care.

Name of Data Element:	Responsible Party Information
Definition:	Person responsible for patient in case patient is incapable of making legal decisions or for billing purposes
Code:	Free Text Entry

Content: Person responsible for care of patient or financial/ insurance coverage for the patient. Information includes person's phone number, street address, city, state, and zip code.

Discussion and Justification: Valuable for billing purposes or incapacitated patients.

Name of Data Element:	Chief Complaint
Definition:	Statement of problem by patient or other person
Code:	Free Text Entry, "not applicable" or "unknown"

Content: Use "unknown" when this information cannot be obtained (for instance, a comatose patient, or a patient injured without witnesses)

Discussion and Justification: May be useful, particularly with sophisticated text searching algorithms, for analysis of certain types of EMS incidents. Difficulties of categorization and interpretation were the primary reasons for labeling this item as desirable rather than Critical.

May be of use in correlating the perception of patients who utilize the EMS system with the objective outcome of the run. This information could be of use in directing public educational efforts concerning health or EMS use.

Name of Data Element:	Current Medications
Definition:	Medications patient currently taking
Code:	Free Text Entry, "not applicable" or "unknown"

Content: Use "unknown" when this information cannot be obtained (for instance, a comatose patient, or a patient injured without witnesses)

Discussion and Justification: May be useful, particularly with determination of past medical history of patient and potential orders for meds to be requested.

Name of Data Element:	Allergies (Meds)
Definition:	Medications patient is allergic to
Code:	Free Text Entry, "not applicable" or "unknown"

Content: Use "unknown" when this information cannot be obtained (for instance, a comatose patient, or a patient injured without witnesses)

Discussion and Justification: May be useful, particularly with determination of past medical history of patient and potential orders for meds to be requested.

Name of Data Element:	Past Medical History
Definition:	Patient's previously diagnosed medical problems
Code:	Free Text Entry, "not applicable" or "unknown"

Content: Use "unknown" when this information cannot be obtained (for instance, a comatose patient, or a patient injured without witnesses)

Discussion and Justification: May be useful, particularly with determination of present patient problem and potential orders for meds to be requested.

Name of Data Element:	Narrative
Definition:	EMS Providers handwritten account of patient status and care
Code:	Free Text Entry

Content: EMS Providers' handwritten account of patient status, assessments, care rendered, response to care, and vital signs.

Discussion and Justification: Useful to continued care of patient, recorded data for legal and financial purposes.

Name of Data Element:	Signatures
Definition:	Appropriate personnel signatures and level of provider
Code:	Free Text Entry

Content: Signature of receiving individual, physician providing care to patient, and all pre-hospital care providers, as well as their certification level and assigned number.

Discussion and Justification: Legal recording of all providers responsible for care provided to patient.

	Department of Human Resources Division of Public Health Office of Emergency Medical Services	Index: R-P01A Effective: 09/14/2006 Review: 09/14/2007 Page: 1 of 3
---	---	--

Scope of Practice for EMS Personnel

B	Emergency Medical Technician-Basic
I	Emergency Medical Technician-Intermediate 1985
CT	Cardiac Technician
P	Emergency Medical Technician-Paramedic

Current Scope of Practice for emergency procedures to be performed by emergency medical service personnel in Georgia that are authorized by the supervising physician.	B	I	CT	P
1. Perform comprehensive patient assessments	X	X	X	X
2. Taking and recording of vital signs	X	X	X	X
3. Basic airway management, including but not limited to:				
a. Open and maintain airway using head-tilt, chin-lift, tongue and jaw lift, and modified jaw thrust	X	X	X	X
b. Oropharyngeal and nasopharyngeal airways	X	X	X	X
c. Pharyngeal suctioning	X	X	X	X
4. Advanced airway management, including, but not limited to:				
a. Supraglottic ventilation devices		X _a	X _a	X
b. Endotracheal intubation			X	X
c. Needle cricothyrotomy				X
d. Tracheal Suctioning			X	X
5. Perform gastric decompression (NG or OG tube-suctioning by gastric intubation)				X
6. Use of oxygen units with cannulas or masks	X	X	X	X
7. Use of bag-valve-mask ventilation devices	X	X	X	X
8. Use of mouth to barrier devices	X	X	X	X
9. Use of positive pressure ventilation devices	X	X	X	X
10. Transport ventilator management				
a. chronic use home ventilators		X _b	X _b	X _b
b. acute use ventilators			X _b	X _b
11. CPAP/BiPAP administration and management		X _b	X _b	X _b
12. Obstructed airway management/cardiopulmonary resuscitation-infants, children, and adults	X	X	X _c	X _c
13. Managing soft tissue injuries	X	X	X	X
14. Managing suspected fractures	X	X	X	X
15. Utilization of pneumatic anti-shock garment (PASG) (As of March 28, 2006, the EMS Medical Directors' Advisory Council voted to remove this procedure from all levels of Scope of Practice)				

16. Managing suspected medical emergencies, including:				
a. Obtaining a peripheral blood specimen for blood glucose monitoring, obtained via finger-stick, heel-stick, or earlobe-stick	X	X	X	X
b. Hypoglycemia-administration of anti-hypoglycemic medication	X _d	X _e	X	X
c. Anaphylactic shock-administration of epinephrine by parenteral routes	X _f	X _f	X	X
d. Poisons-administration of activated charcoal	X	X	X	X
e. Ischemic chest pain-administration of aspirin	X _b	X _b	X _b	X
f. Narcotic overdose-narcotic antagonist			X	X
g. Febrile emergency-oral antipyretic medications as approved by medical direction	X _b	X _b	X _b	X
17. Emergency childbirth management	X	X	X	X
18. Cardiac defibrillation (AED only for EMT-B and EMT-I)	X _g	X _g	X _h	X
19. Emergency cardioversion, to include vagal maneuvers			X _b	X
20. Initiate electrocardiograph monitoring and interpret presenting rhythms			X	X
21. Transcutaneous cardiac pacing			X _b	X
22. Initiate and maintain peripheral intravenous therapy		X	X	X
23. Initiate saline locks/INT		X	X	X
24. Initiate intraosseous infusion				
a. Pediatric		X	X _b	X
b. Adult		X _b	X _b	X
25. Access indwelling catheters and implanted central IV ports for fluid and medication administration.			X	X
26. Infuse the following intravenous fluids, or combinations thereof, including:				
a. Dextrose 5% water		X	X	X
b. Lactated Ringers		X	X	X
c. Normal Saline		X	X	X
d. Any physiologic isotonic crystalloid solution		X	X	X
27. Draw peripheral intravenous blood specimens		X	X	X
28. Initiate or administer the following medications, including but not limited to:				
a. Anti-arrhythmics			X	X
b. Vagolytic agents			X	X
c. Chronotropic agents			X	X
d. Alkalizing agents			X	X
e. Parenteral Analgesic agents			X _i	X
f. Vasopressor agents			X	X
g. Inhaled (nebulized) respiratory agents	X _b	X _b	X _b	X
h. Mark I Plus Kit	X	X	X	X
29. Maintain intravenous medication infusions and other procedures to include blood or blood by-products		X _b	X _b	X

initiated in a medical facility with appropriate written instructions from the sending facility.				
30. Initiate needle decompression for tension pneumothorax				X
31. Assist patient in taking their own prescribed medications (prescribed by a physician, carried by the patient, and not carried on the EMS unit) if approved by medical direction				
a. nitroglycerin	X	X	X	X
b. metered dose inhalers	X	X	X	X
c. epinephrine auto-injector	X	X	X	X
d. inhaled (nebulized) respiratory agents	X _b	X _b	X	X

X_a	Supraglottic devices include dual lumen airways, as well as laryngeal airway devices. May include more recent medical technology not included in initial education. All devices must have approval of the local EMS Medical Director.
X_b	More recent medical technology/recommendations that may not have been included in initial education; procedure/medication must also have approval of the local EMS Medical Director.
X_c	To include manual removal using direct visualization techniques.
X_d	EMT-Basic can only administer oral glucose.
X_e	Oral glucose; or, adult administration of D ₅₀ ; pediatric administration of D ₂₅ ; or pediatric administration of D ₁₀ . May include additional training not previously included in initial education. Requires approval of local EMS Medical Director.
X_f	EMT-Basic and EMT-Intermediate can use only Epinephrine auto injector.
X_g	EMT-Basic and EMT-Intermediate can use AED after successfully completing an AED training program.
X_h	Cardiac Technician can only perform these procedures on a pulseless and non-breathing patient.
X_i	Cardiac Technicians can administer morphine for cardiac emergencies only.

EMS Course Equipment Listing

B	EMT - BASIC
I	EMT – INTERMEDIATE
P	EMT – PARAMEDIC

Each level of instruction must possess the minimal equipment needs for the students to meet each stated objective.	B	I	P
I. Airway			
A. Oropharyngeal Airways (Infant, Child, and Adult sizes)	X	X	X
B. Nasopharyngeal Airways (Infant, Child, and Adult sizes)	X	X	X
C. Bag-Valve Mask Resuscitators(Infant, Child, and Adult sizes)	X	X	X
D. Endotracheal Tubes (Assorted Sizes)			X
E. Laryngoscope Handle (Adult and Pediatric)			X
F. Laryngoscope Blades- Assorted (Straight and curved)			X
G. Endotracheal Stylette (Adult and Pediatric)			X
H. Esophageal Intubation Detector			X
I. Dual Lumen Airways- Multiple Types		X	x
J. Oxygen Delivery Devices			
1. High Concentration Mask (Adult and Pediatric)	X	X	X
2. Nasal Cannula (Adult and Pediatric)	X	X	X
3. Simple Mask (Adult and Pediatric)	X	X	X
4. Venturi mask	X	X	X
5. Nebulizer (Mask and Hand-held Device)			X
6. Oxygen Supply Tubing	X	X	X
7. Pocket Mask	X	X	X
K. Portable Oxygen tank w/regulator	X	X	X
L. Suction Unit	X	X	X
M. Suction Catheters (Soft and Rigid) (Various Sizes)	X	X	X
N. Suction Tubing	X	X	X
O. Magill Forceps (Adult and Pediatric)			X

Additional resources may be needed from outside sources, but it is the instructor's responsibility to ensure that appropriate equipment is available for the number of students enrolled in the program.

1

Each level of instruction must possess the minimal equipment needs for the students to meet each stated objective.	B	I	P
II. Cardiac			
A. AED Trainer (With Pads)	X	X	X
B. Cardiac Monitor (capable of defibrillation and Pacing) with electrodes and gel/paste)			X
C. Dysrhythmia Generator			X
III. Bandages and Dressings			
A. Abdominal Pad	X	X	X
B. Elastic Bandage (Various sizes)	X	X	X
C. Adhesive Bandage with a non-stick center	X	X	X
D. Elastic gauze	X	X	X
E. Burn Sheet (Sterile) or Clean Wrapped Sheets	X	X	X
F. Gauze Pads (Sterile and non-sterile) (4X4 and 2X2)	X	X	X
G. Multi-Trauma Dressing	X	X	X
H. Scissors			
I. Sterile Eye Pads	X	X	X
J. Triangular Bandage	X	X	X
K. Petroleum Gauze	X	X	X
L. Adhesive Tape - Assorted sizes	X	X	X
IV. Immobilization			
A. Splints - Arm and leg (various types)	X	X	X
B. Cervical Collars - Assorted sizes or adjustable	X	X	X
C. Head Stabilization Devices	X	X	X
D. Long Spine Boards w/3 straps	X	X	X
E. Scoop Stretcher	X	X	X
F. Short Immobilization Device (Vest type)	X	X	X

Additional resources may be needed from outside sources, but it is the instructor's responsibility to ensure that appropriate equipment is available for the number of students enrolled in the program. 2

Each level of instruction must possess the minimal equipment needs for the students to meet each stated objective.	B	I	P
G. Pediatric Immobilization Device	X	X	X
H. Traction Splint (Adult and Pediatric)	X	X	X
V. IV Supplies			
A. Blood Collection Tubes and supplies(may be expired)		X	X
B. IV catheters- Assorted sizes and types		X	X
C. IV Administration Sets (Macro and Micro)		X	X
D. IV Fluids (May be expired)		X	X
E. IV Hanger		X	X
F. Intraosseous Needle		X	X
G. Butterfly Needles		X	X
H. Syringes w/ needles			X
I. Tourniquets		X	X
VI. Pharmacological			
A. Aerosol Bronchodilators		X	X
B. Expired Medications utilized in training		X	X
C. Poison Antidote Kit w/ Activated Charcoal)	X	X	X
D. Epi-Pen Trainer	X	X	X
VII. Diagnostic			
A. Blood Pressure Cuffs (Infant, Child, Adult, and Large Adult)	X	X	X
B. Stethoscope and Trainer Stethoscope	X	X	X
C. Glucose Monitoring Device w/strips	X	X	X
D. Pulse Oximeter	X	X	X
E. Penlight	X	X	X
VIII. Body Substance Isolation			
A. Gloves- Assorted sizes (latex and latex-free)	X	X	X
B. Face and Eye Protection	X	X	X
C. Hepa and N95 Masks	X	X	X
D. Gowns- Assorted sizes	X	X	X

Additional resources may be needed from outside sources, but it is the instructor's responsibility to ensure that appropriate equipment is available for the number of students enrolled in the program.

Each level of instruction must possess the minimal equipment needs for the students to meet each stated objective.	B	I	P
IX. Mannequins/Simulators			
A. Airway Mannequins- (Infant, Child, and Adult sizes)	X	X	X
B. CPR Mannequins (Infant, Child, and Adult sizes)	X	X	X
C. Cricothyrotomy Simulator			X
D. IV Simulation Arms		X	X
E. Intraosseous Mannequin		X	X
F. OB Mannequin	X	X	X
G. Pediatric IV Simulator		X	X
H. Defibrillation Mannequins	X	X	X
I. IM Injection Simulator			X
J. Chest Decompression Mannequin			X
K. Anatomical Charts and Models	X	X	X
L. Moulage Kit	X	X	X
X. Weapons of Mass Destruction			
A. Mark I Auto-Injector Trainers	X	X	X
B. Escape Hoods/PAPR's	X	X	X

Additional resources may be needed from outside sources, but it is the instructor's responsibility to ensure that appropriate equipment is available for the number of students enrolled in the program.

Each level of instruction must possess the minimal equipment needs for the students to meet each stated objective.	B	I	P
C. Disaster Tags	X	X	X
XI. Communications			
A. Portable Radios(Two-way)	X	X	X
XII. Miscellaneous			
A. Alcohol Prep Sponge	X	X	X
B. Aluminum Foil	X	X	X
C. Ambulance Patient Care Reports (PCR's)	X	X	X
D. Bite Stick	X	X	X
E. Blankets	X	X	X
F. Blood Lancets	X	X	X
G. Cold and Hot Chemical Packs	X	X	X
H. Sharps Container	X	X	X
I. Cotton Swabs	X	X	X
J. Emesis Container	X	X	X
K. Flashlight	X	X	X
L. Water Based Lubricant	X	X	X
M. Jump Kit	X	X	X
N. Linen	X	X	X
O. Positive Pressure Ventilation Device	X	X	X
P. Motorcycle Helmet (Open and Closed)	X	X	X
Q. Multi-level Stretcher w/ straps to include shoulder harness and pediatric device	X	X	X
U. OB Kit	X	X	X
R. Pillow	X	X	X

Additional resources may be needed from outside sources, but it is the instructor's responsibility to ensure that appropriate equipment is available for the number of students enrolled in the program.

Each level of instruction must possess the minimal equipment needs for the students to meet each stated objective.	B	I	P
S. Pneumatic Anti-Shock Trousers	X	X	X
T. Restraints- 1 set (Ankle and Wrist)	X	X	X
W. Stair Chair	X	X	X
X. Syringe (Bulb)	X	X	X
Y. Tongue Depressor	X	X	X
Z. Irrigation Fluid (may be expired)	X	X	X

Additional resources may be needed from outside sources, but it is the instructor's responsibility to ensure that appropriate equipment is available for the number of students enrolled in the program. 6



Department of Human Resources
Division of Public Health
Office of Emergency Medical Services

Georgia EMS Curricula Standards

EMT-Basic

Revised 1/2007

EMT-Basic Curriculum Guide by Module**Module 1 - Preparatory**

Lesson	1-1	Introduction to Emergency Medical Care	
	1-2	Well Being of the EMT	
	1-3	Medical/Legal and Ethical Issues	
	1-4	The Human Body	
	1-5	Baseline Vital Signs and SAMPLE History	
	1-6	Lifting and Moving Patients	
	1-7	Evaluation	
		Total Hours for Module	13

Module 2 - Airway

Lesson	2-1	Airway	
	2-2	Evaluation	
		Total Hours for Module	7

Module 3 - Patient Assessment

Lesson	3-1	Scene Size – Up	
	3-2	Initial Assessment	
	3-3	Focused History and Physical Exam - Trauma	
	3-4	Focused History and Physical Exam - Medical	
	3-5	Detailed Physical Exam	
	3-6	On-Going Assessment	
	3-7	Communications	
	3-8	Documentation	
	3-9	Practical Lab	
	3-10	Skills Evaluation	
		Total Hours for Module	21

Module 4 - Medical

Lesson	4-1	General Pharmacology	
	4-2	Respiratory Emergencies	
	4-3	Cardiovascular Emergencies	
	4-4	Diabetes/Altered Mental Status	
	4-5	Allergies	
	4-6	Poisoning/Overdose	
	4-7	Environmental Emergencies	
	4-8	Behavioral Emergencies	
	4-9	Obstetrics/Gynecology	
	4-10	Practical Evaluation	
	4-11	Evaluation	
		Total Hours for Module	33

Module 5 - Trauma

Lesson	5-1	Bleeding and Shock	
	5-2	Soft Tissue Injuries	
	5-3	Musculoskeletal Care	
	5-4	Injuries to the Head and Spine	
	5-5	Practical Lab	
	5-6	Evaluation	
Total Hours for Module			19

Module 6 - Infants and Children

Lesson	6-1	Infants and Children	
	6-2	Practical Skills Lab	
	6-3	Evaluation	
Total Hours for Module			7

Module 7 - Operations

Lesson	7-1	Ambulance Operations	
	7-2	Gaining Access	
	7-3	Overviews	
	7-4	Evaluation	
Total Hours for Module			5

Module G - Georgia Specific Education

Lesson	G-1	Response to WMD Events	
	G-2	CPR & AED	
	G-3	Geriatrics	
	G-4	Evaluation	
Total Hours for Module			12

Module C – Required Clinical

Lesson	C-1	Clinical Rotation(s)	
Total Hours for Module			8

Final Course Written/Practical Evaluation			7
---	--	--	----------

Total minimum hours for EMT-Basic Course including Clinical			132
--	--	--	------------

Table of Contents

Module/Topic	Page
Module 1 – Preparatory	5
Lesson 1-1 Introduction to Emergency Medical Care	5
Lesson 1-2 Well Being of the EMT	5
Lesson 1-3 Medical/Legal and Ethical Issues	6
Lesson 1-4 The Human Body	7
Lesson 1-5 Baseline Vital Signs and SAMPLE History	7
Lesson 1-6 Lifting and Moving Patients	8
Lesson 1-7 Evaluation	9
Module 2 – Airway	11
Lesson 2-1 Airway	11
Lesson 2-2 Evaluation	12
Module 3 - Patient Assessment	13
Lesson 3-1 Scene Size-Up	13
Lesson 3-2 Initial Assessment	13
Lesson 3-3 Focused History and Physical Exam – Trauma	14
Lesson 3-4 Focused History and Physical Exam – Medical	15
Lesson 3-5 Detailed Physical Exam	15
Lesson 3-6 On-Going Assessment	16
Lesson 3-7 Communications	16
Lesson 3-8 Documentation	17
Lesson 3-9 Practical Lab	18
Lesson 3-10 Skills Evaluation	19
Module 4 – Medical	21
Lesson 4-1 General Pharmacology	21
Lesson 4-2 Respiratory Emergencies	22
Lesson 4-3 Cardiovascular Emergencies	23
Lesson 4-4 Diabetes/Altered Mental Status	26
Lesson 4-5 Allergies	26
Lesson 4-6 Poisoning/Overdose	27
Lesson 4-7 Environmental Emergencies	28
Lesson 4-8 Behavioral Emergencies	29
Lesson 4-9 Obstetrics/Gynecology	29
Lesson 4-10 Practical Evaluation	30
Lesson 4-11 Evaluation	31
Module 5 – Trauma	34
Lesson 5-1 Bleeding and Shock	34
Lesson 5-2 Soft Tissue Injuries	34
Lesson 5-3 Musculoskeletal Care	36
Lesson 5-4 Injuries to the Head and Spine	37

Lesson 5-5	Practical Lab	38
Lesson 5-6	Evaluation	39
Module 6 - Infants and Children		40
Lesson 6-1	Infants and Children	40
Lesson 6-2	Practical Skills Lab	41
Lesson 6-3	Evaluation	41
Module 7 – Operations		43
Lesson 7-1	Ambulance Operations	43
Lesson 7-2	Gaining Access	44
Lesson 7-3	Overviews	44
Lesson 7-4	Evaluation	45
Module G - Georgia Specific Education		46
Lesson G-1	Response to WMD Events	46
Lesson G-2	CPR & AED	46
Lesson G-3	Geriatrics	47
Lesson G-4	Evaluation	47
Module C – Required Clinical		48
Lesson C-1	Clinical Rotation(s)	48
Clinical Task Table		50

Georgia EMT-B Curriculum Objectives

Module 1 Preparatory

Lesson 1-1 Introduction to Emergency Medical Care

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 1-1.1 Define Emergency Medical Services (EMS) systems. (C-1)
- 1-1.2 Differentiate the roles and responsibilities of the EMT-Basic from other prehospital care providers. (C-3)
- 1-1.3 Describe the roles and responsibilities related to personal safety. (C-1)
- 1-1.4 Discuss the roles and responsibilities of the EMT-Basic towards the safety of the crew, the patient and bystanders. (C-1)
- 1-1.5 Define quality improvement and discuss the EMT-Basic's role in the process. (C-1)
- 1-1.6 Define medical direction and discuss the EMT-Basic's role in the process. (C-1)
- 1-1.7 State the specific statutes and regulations in your state regarding the EMS system. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 1-1.8 Assess areas of personal attitude and conduct of the EMT-Basic. (A-3)
- 1-1.9 Characterize the various methods used to access the EMS system in your community. (A-3)

PSYCHOMOTOR OBJECTIVES

No psychomotor objectives identified.

Lesson 1-2 Well-Being of the EMT

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 1-2.1 List possible emotional reactions that the EMT-Basic may experience when faced with trauma, illness, death and dying. (C-1)
- 1-2.2 Discuss the possible reactions that a family member may exhibit when confronted with death and dying. (C-1)
- 1-2.3 State the steps in the EMT-Basic's approach to the family confronted with death and dying. (C-1)
- 1-2.4 State the possible reactions that the family of the EMT-Basic may exhibit due to their outside involvement in EMS. (C-1)
- 1-2.5 Recognize the signs and symptoms of critical incident stress. (C-1)
- 1-2.6 State possible steps that the EMT-Basic may take to help reduce/alleviate stress. (C-1)

- 1-2.7 Explain the need to determine scene safety. (C-2)
- 1-2.8 Discuss the importance of body substance isolation (BSI). (C-1)
- 1-2.9 Describe the steps the EMT-Basic should take for personal protection from airborne and bloodborne pathogens. (C-1)
- 1-2.10 List the personal protective equipment necessary for each of the following situations:(C-1)
 - Hazardous materials
 - Rescue operations
 - Violent scenes
 - Crime scenes
 - Exposure to bloodborne pathogens
 - Exposure to airborne pathogens

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 1-2.11 Explain the rationale for serving as an advocate for the use of appropriate protective equipment. (A-3)

PSYCHOMOTOR OBJECTIVES

- 1-2.12 Given a scenario with potential infectious exposure, the EMT-Basic will use appropriate personal protective equipment. At the completion of the scenario, the EMT-Basic will properly remove and discard the protective garments. (P-1, 2)
- 1-2.13 Given the above scenario, the EMT-Basic will complete disinfection/cleaning and all reporting documentation. (P-1, 2)

Lesson 1-3 Medical/Legal and Ethical Issues

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 1-3.1 Define the EMT-Basic scope of practice. (C-1)
- 1-3.2 Discuss the importance of Do Not Resuscitate [DNR] (advance directives) and local or state provisions regarding EMS application. (C-1)
- 1-3.3 Define consent and discuss the methods of obtaining consent. (C-1)
- 1-3.4 Differentiate between expressed and implied consent. (C-3)
- 1-3.5 Explain the role of consent of minors in providing care. (C-1)
- 1-3.6 Discuss the implications for the EMT-Basic in patient refusal of transport. (C-1)
- 1-3.7 Discuss the issues of abandonment, negligence, and battery and their implications to the EMT-Basic. (C-1)
- 1-3.8 State the conditions necessary for the EMT-Basic to have a duty to act. (C-1)
- 1-3.9 Explain the importance, necessity and legality of patient confidentiality. (C-1)
- 1-3.10 Discuss the considerations of the EMT-Basic in issues of organ retrieval. (C-1)
- 1-3.11 Differentiate the actions that an EMT-Basic should take to assist in the preservation of a crime scene. (C-3)
- 1-3.12 State the conditions that require an EMT-Basic to notify local law enforcement officials. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 1-3.13 Explain the role of EMS and the EMT-Basic regarding patients with DNR orders. (A-3)
- 1-3.14 Explain the rationale for the needs, benefits and usage of advance directives. (A-3)
- 1-3.15 Explain the rationale for the concept of varying degrees of DNR. (A-3)

PSYCHOMOTOR OBJECTIVES

No psychomotor objectives identified.

Lesson 1-4 The Human Body

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 1-4.1 Identify the following topographic terms: Medial, lateral, proximal, distal, superior, inferior, anterior, posterior, midline, right and left, mid-clavicular, bilateral, mid-axillary. (C-1)
- 1-4.2 Describe the anatomy and function of the following major body systems: Respiratory, circulatory, musculoskeletal, nervous and endocrine. (C-1)

AFFECTIVE OBJECTIVES

No affective objectives identified.

PSYCHOMOTOR OBJECTIVES

No psychomotor objectives identified.

Lesson 1-5 Baseline Vital Signs and SAMPLE History

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 1-5.1 Identify the components of vital signs. (C-1)
- 1-5.2 Describe the methods to obtain a breathing rate. (C-1)
- 1-5.3 Identify the attributes that should be obtained when assessing breathing. (C-1)
- 1-5.4 Differentiate between shallow, labored and noisy breathing. (C-3)
- 1-5.5 Describe the methods to obtain a pulse rate. (C-1)
- 1-5.6 Identify the information obtained when assessing a patient's pulse. (C-1)
- 1-5.7 Differentiate between a strong, weak, regular and irregular pulse. (C-3)
- 1-5.8 Describe the methods to assess the skin color, temperature, condition (capillary refill in infants and children). (C-1)
- 1-5.9 Identify the normal and abnormal skin colors. (C-1)
- 1-5.10 Differentiate between pale, blue, red and yellow skin color. (C-3)
- 1-5.11 Identify the normal and abnormal skin temperature. (C-1)

- 1-5.12 Differentiate between hot, cool and cold skin temperature. (C-3)
- 1-5.13 Identify normal and abnormal skin conditions. (C-1)
- 1-5.14 Identify normal and abnormal capillary refill in infants and children. (C-1)
- 1-5.15 Describe the methods to assess the pupils. (C-1)
- 1-5.16 Identify normal and abnormal pupil size. (C-1)
- 1-5.17 Differentiate between dilated (big) and constricted (small) pupil size. (C-3)
- 1-5.18 Differentiate between reactive and non-reactive pupils and equal and unequal pupils. (C-3)
- 1-5.19 Describe the methods to assess blood pressure. (C-1)
- 1-5.20 Define systolic pressure. (C-1)
- 1-5.21 Define diastolic pressure. (C-1)
- 1-5.22 Explain the difference between auscultation and palpation for obtaining a blood pressure. (C-1)
- 1-5.23 Identify the components of the SAMPLE history. (C-1)
- 1-5.24 Differentiate between a sign and a symptom. (C-3)
- 1-5.25 State the importance of accurately reporting and recording the baseline vital signs. (C-1)
- 1-5.26 Discuss the need to search for additional medical identification. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 1-5.27 Explain the value of performing the baseline vital signs. (A-2)
- 1-5.28 Recognize and respond to the feelings patients experience during assessment. (A-1)
- 1-5.29 Defend the need for obtaining and recording an accurate set of vital signs. (A-3)
- 1-5.30 Explain the rationale of recording additional sets of vital signs. (A-1)
- 1-5.31 Explain the importance of obtaining a SAMPLE history. (A-1)

PSYCHOMOTOR OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 1-5.32 Demonstrate the skills involved in assessment of breathing. (P-1, 2)
- 1-5.33 Demonstrate the skills associated with obtaining a pulse. (P-1, 2)
- 1-5.34 Demonstrate the skills associated with assessing the skin color, temperature, condition, and capillary refill in infants and children. (P-1, 2)
- 1-5.35 Demonstrate the skills associated with assessing the pupils. (P-1, 2)
- 1-5.36 Demonstrate the skills associated with obtaining blood pressure. (P-1, 2)
- 1-5.37 Demonstrate the skills that should be used to obtain information from the patient, family, or bystanders at the scene. (P-1, 2)

Lesson 1-6 Lifting and Moving Patients

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 1-6.1 Define body mechanics. (C-1)
- 1-6.2 Discuss the guidelines and safety precautions that need to be followed when lifting a patient. (C-1)
- 1-6.3 Describe the safe lifting of cots and stretchers. (C-1)
- 1-6.4 Describe the guidelines and safety precautions for carrying patients and/or equipment. (C-1)
- 1-6.5 Discuss one-handed carrying techniques. (C-1)
- 1-6.6 Describe correct and safe carrying procedures on stairs. (C-1)
- 1-6.7 State the guidelines for reaching and their application. (C-1)
- 1-6.8 Describe correct reaching for log rolls. (C-1)
- 1-6.9 State the guidelines for pushing and pulling. (C-1)
- 1-6.10 Discuss the general considerations of moving patients. (C-1)
- 1-6.11 State three situations that may require the use of an emergency move. (C-1)
- 1-6.12 Identify the following patient carrying devices:
 - Wheeled ambulance stretcher
 - Portable ambulance stretcher
 - Stair chair
 - Scoop stretcher
 - Long spine board
 - Basket stretcher
 - Flexible stretcher (C-1)

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 1-6.13 Explain the rationale for properly lifting and moving patients. (A-3)

PSYCHOMOTOR OBJECTIVES

- 1-6.14 Working with a partner, prepare each of the following devices for use, transfer a patient to the device, properly position the patient on the device, move the device to the ambulance and load the patient into the ambulance:
 - Wheeled ambulance stretcher
 - Portable ambulance stretcher
 - Stair chair
 - Scoop stretcher
 - Long spine board
 - Basket stretcher
 - Flexible stretcher (P-1,2)
- 1-6.15 Working with a partner, the EMT-Basic will demonstrate techniques for the transfer of a patient from an ambulance stretcher to a hospital stretcher. (P-1, 2)

Lesson 1-7 Evaluation

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- Demonstrate knowledge of the cognitive objectives of Lesson 1-1: Introduction to Emergency Care.
- Demonstrate knowledge of the cognitive objectives of Lesson 1-2: Well-Being of the EMT-Basic.
- Demonstrate knowledge of the cognitive objectives of Lesson 1-3: Medical/Legal and Ethical Issues.
- Demonstrate knowledge of the cognitive objectives of Lesson 1-4: The Human Body.
- Demonstrate knowledge of the cognitive objectives of Lesson 1-5: Baseline Vital Signs and SAMPLE History.
- Demonstrate knowledge of the cognitive objectives of Lesson 1-6: Lifting and Moving Patients.

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- Demonstrate knowledge of the affective objectives of Lesson 1-1: Introduction to Emergency Care.
- Demonstrate knowledge of the affective objectives of Lesson 1-2: Well-Being of the EMT-Basic.
- Demonstrate knowledge of the affective objectives of Lesson 1-3: Medical/Legal and Ethical Issues.
- Demonstrate knowledge of the affective objectives of Lesson 1-5: Baseline Vital Signs and SAMPLE History.

PSYCHOMOTOR OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- Demonstrate proficiency in the psychomotor objectives of Lesson 1-2: Well-Being of the EMT-Basic.
- Demonstrate proficiency in the psychomotor objectives of Lesson 1-5: Baseline Vital Signs and SAMPLE History.
- Demonstrate proficiency in the psychomotor objectives of Lesson 1-6: Lifting and Moving Patients.

MODULE 2 - Airway

Lesson 2-1 Airway

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 2-1.1 Name and label the major structures of the respiratory system on a diagram. (C-1)
- 2-1.2 List the signs of adequate breathing. (C-1)
- 2-1.3 List the signs of inadequate breathing. (C-1)
- 2-1.4 Describe the steps in performing the head-tilt chin-lift. (C-1)
- 2-1.5 Relate mechanism of injury to opening the airway. (C-3)
- 2-1.6 Describe the steps in performing the jaw thrust. (C-1)
- 2-1.7 State the importance of having a suction unit ready for immediate use when providing emergency care. (C-1)
- 2-1.8 Describe the techniques of suctioning. (C-1)
- 2-1.9 Describe how to artificially ventilate a patient with a pocket mask. (C-1)
- 2-1.10 Describe the steps in performing the skill of artificially ventilating a patient with a bag-valve-mask while using the jaw thrust. (C-1)
- 2-1.11 List the parts of a bag-valve-mask system. (C-1)
- 2-1.12 Describe the steps in performing the skill of artificially ventilating a patient with a bag-valve-mask for one and two rescuers. (C-1)
- 2-1.13 Describe the signs of adequate artificial ventilation using the bag-valve-mask. (C-1)
- 2-1.14 Describe the signs of inadequate artificial ventilation using the bag-valve-mask. (C-1)
- 2-1.15 Describe the steps in artificially ventilating a patient with a flow restricted, oxygen-powered ventilation device. (C-1)
- 2-1.16 List the steps in performing the actions taken when providing mouth-to-mouth and mouth-to-stoma artificial ventilation. (C-1)
- 2-1.17 Describe how to measure and insert an oropharyngeal (oral) airway. (C-1)
- 2-1.18 Describe how to measure and insert a nasopharyngeal (nasal) airway. (C-1)
- 2-1.19 Define the components of an oxygen delivery system. (C-1)
- 2-1.20 Identify a nonrebreather face mask and state the oxygen flow requirements needed for its use. (C-1)
- 2-1.21 Describe the indications for using a nasal cannula versus a nonrebreather face mask. (C-1)
- 2-1.22 Identify a nasal cannula and state the flow requirements needed for its use. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 2-1.23 Explain the rationale for basic life support artificial ventilation and airway protective skills taking priority over most other basic life support skills. (A-3)

- 2-1.24 Explain the rationale for providing adequate oxygenation through high inspired oxygen concentrations to patients who, in the past, may have received low concentrations. (A-3)

PSYCHOMOTOR OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 2-1.25 Demonstrate the steps in performing the head-tilt chin-lift. (P-1, 2)
- 2-1.26 Demonstrate the steps in performing the jaw thrust. (P-1, 2)
- 2-1.27 Demonstrate the techniques of suctioning. (P-1, 2)
- 2-1.28 Demonstrate the steps in providing mouth-to-mouth artificial ventilation with body substance isolation (barrier shields). (P-1, 2)
- 2-1.29 Demonstrate how to use a pocket mask to artificially ventilate a patient. (P-1, 2)
- 2-1.30 Demonstrate the assembly of a bag-valve-mask unit. (P-1, 2)
- 2-1.31 Demonstrate the steps in performing the skill of artificially ventilating a patient with a bag-valve-mask for one and two rescuers. (P-1, 2)
- 2-1.32 Demonstrate the steps in performing the skill of artificially ventilating a patient with a bag-valve-mask while using the jaw thrust. (P-1, 2)
- 2-1.33 Demonstrate artificial ventilation of a patient with a flow restricted, oxygen-powered ventilation device. (P-1, 2)
- 2-1.34 Demonstrate how to artificially ventilate a patient with a stoma. (P-1, 2)
- 2-1.35 Demonstrate how to insert an oropharyngeal (oral) airway. (P-1, 2)
- 2-1.36 Demonstrate how to insert a nasopharyngeal (nasal) airway. (P-1, 2)
- 2-1.37 Demonstrate the correct operation of oxygen tanks and regulators. (P-1, 2)
- 2-1.38 Demonstrate the use of a nonrebreather face mask and state the oxygen flow requirements needed for its use. (P-1, 2)
- 2-1.39 Demonstrate the use of a nasal cannula and state the flow requirements needed for its use. (P-1, 2)
- 2-1.40 Demonstrate how to artificially ventilate the infant and child patient. (P-1, 2)
- 2-1.41 Demonstrate oxygen administration for the infant and child patient. (P-1, 2)

Lesson 2-1 Evaluation

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- Demonstrate the cognitive objectives of Lesson 2-1: Airway.

AFFECTIVE OBJECTIVES

- Demonstrate the affective objectives of Lesson 2-1: Airway.

PSYCHOMOTOR OBJECTIVES

- Demonstrate the psychomotor objectives of Lesson 2-1: Airway.

MODULE 3 PATIENT ASSESSMENT

Lesson 3-1 Scene Size-Up

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 3-1.1 Recognize hazards/potential hazards. (C-1)
- 3-1.2 Describe common hazards found at the scene of a trauma and a medical patient. (C-1)
- 3-1.3 Determine if the scene is safe to enter. (C-2)
- 3-1.4 Discuss common mechanisms of injury/nature of illness. (C-1)
- 3-1.5 Discuss the reason for identifying the total number of patients at the scene. (C-1)
- 3-1.6 Explain the reason for identifying the need for additional help or assistance. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 3-1.7 Explain the rationale for crew members to evaluate scene safety prior to entering. (A-2)
- 3-1.8 Serve as a model for others explaining how patient situations affect your evaluation of mechanism of injury or illness. (A-2)

PSYCHOMOTOR OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 3-1.9 Observe various scenarios and identify potential hazards. (P-1)

Lesson 3-2 Initial Assessment

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 3-2.1 Summarize the reasons for forming a general impression of the patient. (C-1)
- 3-2.2 Discuss methods of assessing altered mental status. (C-1)
- 3-2.3 Differentiate between assessing the altered mental status in the adult, child and infant patient. (C-3)
- 3-2.4 Discuss methods of assessing the airway in the adult, child and infant patient. (C-1)
- 3-2.5 State reasons for management of the cervical spine once the patient has been determined to be a trauma patient. (C-1)
- 3-2.6 Describe methods used for assessing if a patient is breathing. (C-1)
- 3-2.7 State what care should be provided to the adult, child and infant patient with adequate breathing. (C-1)
- 3-2.8 State what care should be provided to the adult, child and infant patient without adequate breathing. (C-1)
- 3-2.9 Differentiate between a patient with adequate and inadequate breathing. (C-3)

- 3-2.10 Distinguish between methods of assessing breathing in the adult, child and infant patient. (C-3)
- 3-2.11 Compare the methods of providing airway care to the adult, child and infant patient. (C-3)
- 3-2.12 Describe the methods used to obtain a pulse. (C-1)
- 3-2.13 Differentiate between obtaining a pulse in an adult, child and infant patient. (C-3)
- 3-2.14 Discuss the need for assessing the patient for external bleeding. (C-1)
- 3-2.15 Describe normal and abnormal findings when assessing skin color. (C-1)
- 3-2.16 Describe normal and abnormal findings when assessing skin temperature. (C-1)
- 3-2.17 Describe normal and abnormal findings when assessing skin condition. (C-1)
- 3-2.18 Describe normal and abnormal findings when assessing skin capillary refill in the infant and child patient. (C-1)
- 3-2.19 Explain the reason for prioritizing a patient for care and transport. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 3-2.20 Explain the importance of forming a general impression of the patient. (A-1)
- 3-2.21 Explain the value of performing an initial assessment. (A-2)

PSYCHOMOTOR OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 3-2.22 Demonstrate the techniques for assessing mental status. (P-1, 2)
- 3-2.23 Demonstrate the techniques for assessing the airway. (P-1, 2)
- 3-2.24 Demonstrate the techniques for assessing if the patient is breathing. (P-1, 2)
- 3-2.25 Demonstrate the techniques for assessing if the patient has a pulse. (P-1, 2)
- 3-2.26 Demonstrate the techniques for assessing the patient for external bleeding. (P-1, 2)
- 3-2.27 Demonstrate the techniques for assessing the patient's skin color, temperature, condition and capillary refill (infants and children only). (P-1, 2)
- 3-2.28 Demonstrate the ability to prioritize patients. (P-1, 2)

Lesson 3-3 Focused History and Physical Exam – Trauma Patients

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 3-3.1 Discuss the reasons for reconsideration concerning the mechanism of injury. (C-1)
- 3-3.2 State the reasons for performing a rapid trauma assessment. (C-1)
- 3-3.3 Recite examples and explain why patients should receive a rapid trauma assessment. (C-1)
- 3-3.4 Describe the areas included in the rapid trauma assessment and discuss what should be evaluated. (C-1)
- 3-3.5 Differentiate when the rapid assessment may be altered in order to provide patient care. (C-3)

- 3-3.6 Discuss the reason for performing a focused history and physical exam. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 3-3.7 Recognize and respect the feelings that patients might experience during assessment. (A-1)

PSYCHOMOTOR OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 3-3.8 Demonstrate the rapid trauma assessment that should be used to assess a patient based on mechanism of injury. (P-1, 2)

Lesson 3- 4 Focused Histories and Physical Exam – Medical Patients

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 3-4.1 Describe the unique needs for assessing an individual with a specific chief complaint with no known prior history. (C-1)
- 3-4.2 Differentiate between the history and physical exam that are performed for responsive patients with no known prior history and responsive patients with a known prior history. (C-3)
- 3-4.3 Describe the needs for assessing an individual who is unresponsive. (C-1)
- 3-4.4 Differentiate between the assessment that is performed for a patient who is unresponsive or has an altered mental status and other medical patients requiring assessment. (C-3)

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 3-4.5 Attend to the feelings that these patients might be experiencing. (A-1)

PSYCHOMOTOR OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 3-4.6 Demonstrate the patient assessment skills that should be used to assist a patient who is responsive with no known history. (P-1, 2)
- 3-4.7 Demonstrate the patient assessment skills that should be used to assist a patient who is unresponsive or has an altered mental status. (P-1, 2)

Lesson 3-5 Detailed Physical Exam

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 3-5.1 Discuss the components of the detailed physical exam. (C-1)

- 3-5.2 State the areas of the body that are evaluated during the detailed physical exam. (C-1)
- 3-5.3 Explain what additional care should be provided while performing the detailed physical exam. (C-1)
- 3-5.4 Distinguish between the detailed physical exam that is performed on a trauma patient and that of the medical patient. (C-3)

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 3-5.5 Explain the rationale for the feelings that these patients might be experiencing. (A-3)

PSYCHOMOTOR OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 3-5.6 Demonstrate the skills involved in performing the detailed physical exam. (P-1, 2)

Lesson 3-6 On-Going Assessment

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 3-6.1 Discuss the reasons for repeating the initial assessment as part of the on-going assessment. (C-1)
- 3-6.2 Describe the components of the on-going assessment. (C-1)
- 3-6.3 Describe trending of assessment components. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 3-6.4 Explain the value of performing an on-going assessment. (A-2)
- 3-6.5 Recognize and respect the feelings that patients might experience during assessment. (A-1)
- 3-6.6 Explain the value of trending assessment components to other health professionals who assume care of the patient. (A-2)

PSYCHOMOTOR OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 3-6.7 Demonstrate the skills involved in performing the on-going assessment. (P-1, 2)

Lesson 3-7 Communications

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 3-7.1 List the proper methods of initiating and terminating a radio call. (C-1)
- 3-7.2 State the proper sequence for delivery of patient information. (C-1)

- 3-7.3 Explain the importance of effective communication of patient information in the verbal report. (C-1)
- 3-7.4 Identify the essential components of the verbal report. (C-1)
- 3-7.5 Describe the attributes for increasing effectiveness and efficiency of verbal communications. (C-1)
- 3-7.6 State legal aspects to consider in verbal communication. (C-1)
- 3-7.7 Discuss the communication skills that should be used to interact with the patient. (C-1)
- 3-7.8 Discuss the communication skills that should be used to interact with the family, bystanders, and individuals from other agencies while providing patient care and the difference between skills used to interact with the patient and those used to interact with others. (C-1)
- 3-7.9 List the correct radio procedures in the following phases of a typical call:(C-1)
 - To the scene.
 - At the scene.
 - To the facility.
 - At the facility.
 - To the station.
 - At the station.

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 3-7.10 Explain the rationale for providing efficient and effective radio communications and patient reports. (A-3)

PSYCHOMOTOR OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 3-7.11 Perform a simulated, organized, concise radio transmission. (P-2)
- 3-7.12 Perform an organized, concise patient report that would be given to the staff at a receiving facility. (P-2)
- 3-7.13 Perform a brief, organized report that would be given to an ALS provider arriving at an incident scene at which the EMT-Basic was already providing care. (P-2)

Lesson 3-8 Documentation

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 3-8.1 Explain the components of the written report and list the information that should be included in the written report. (C-1)
- 3-8.2 Identify the various sections of the written report. (C-1)
- 3-8.3 Describe what information is required in each section of the prehospital care report and how it should be entered. (C-1)
- 3-8.4 Define the special considerations concerning patient refusal. (C-1)
- 3-8.5 Describe the legal implications associated with the written report. (C-1)
- 3-8.6 Discuss all state and/or local record and reporting requirements. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 3-8.7 Explain the rationale for patient care documentation. (A-3)
- 3-8.8 Explain the rationale for the EMS system gathering data. (A-3)
- 3-8.9 Explain the rationale for using medical terminology correctly. (A-3)
- 3-8.10 Explain the rationale for using an accurate and synchronous clock so that information can be used in trending. (A-3)

PSYCHOMOTOR OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 3-8.11 Complete a prehospital care report. (P-2)

Lesson 3-9 Practical Lab

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- Demonstrate the cognitive objectives of Lesson 3-1: Scene Size-up.
- Demonstrate the cognitive objectives of Lesson 3-2: Initial Assessment.
- Demonstrate the cognitive objectives of Lesson 3-3: Focused History and Physical Exam: Trauma
- Demonstrate the cognitive objectives of Lesson 3-4: Focused History and Physical Exam: Medical
- Demonstrate the cognitive objectives of Lesson 3-5: Detailed Physical Exam.
- Demonstrate the cognitive objectives of Lesson 3-6: On-going Assessment.
- Demonstrate the cognitive objectives of Lesson 3-7: Communications.
- Demonstrate the cognitive objectives of Lesson 3-8: Documentation.

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- Demonstrate the affective objectives of Lesson 3-1: Scene Size-up.
- Demonstrate the affective objectives of Lesson 3-2: Initial Assessment.
- Demonstrate the affective objectives of Lesson 3-3: Focused History and Physical Exam: Trauma
- Demonstrate the affective objectives of Lesson 3-4: Focused History and Physical Exam: Medical
- Demonstrate the affective objectives of Lesson 3-5: Detailed Physical Exam.
- Demonstrate the affective objectives of Lesson 3-6: On-going Assessment.
- Demonstrate the affective objectives of Lesson 3-7: Communications.
- Demonstrate the affective objectives of Lesson 3-8: Documentation.

PSYCHOMOTOR OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- Demonstrate the psychomotor objectives of Lesson 3-1: Scene Size-up.
- Demonstrate the psychomotor objectives of Lesson 3-2: Initial Assessment.
- Demonstrate the psychomotor objectives of Lesson 3-3: Focused History and Physical Exam: Trauma
- Demonstrate the psychomotor objectives of Lesson 3-4: Focused History and Physical Exam: Medical
- Demonstrate the psychomotor objectives of Lesson 3-5: Detailed Physical Exam.
- Demonstrate the psychomotor objectives of Lesson 3-6: On-going Assessment.
- Demonstrate the psychomotor objectives of Lesson 3-7: Communications.
- Demonstrate the psychomotor objectives of Lesson 3-8: Documentation.

Lesson 3-10 Skills Evaluation

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- Demonstrate knowledge of the cognitive objectives of Lesson 3-1: Scene Size-up.
- Demonstrate knowledge of the cognitive objectives of Lesson 3-2: Initial Assessment.
- Demonstrate knowledge of the cognitive objectives of Lesson 3-3: Focused History and Physical Exam: Trauma.
- Demonstrate knowledge of the cognitive objectives of Lesson 3-4: Focused History and Physical Exam: Medical.
- Demonstrate knowledge of the cognitive objectives of Lesson 3-5: The Detailed Physical Exam.
- Demonstrate knowledge of the cognitive objectives of Lesson 3-6: On-going Assessment.
- Demonstrate knowledge of the cognitive objectives of Lesson 3-7: Communications.
- Demonstrate knowledge of the cognitive objectives of Lesson 3-8: Documentation.

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- Demonstrate knowledge of the affective objectives of Lesson 3-1: Scene Size-up.
- Demonstrate knowledge of the affective objectives of Lesson 3-2: Initial Assessment.
- Demonstrate knowledge of the affective objectives of Lesson 3-3: Focused History and Physical Exam: Trauma.
- Demonstrate knowledge of the affective objectives of Lesson 3-4: Focused History and Physical Exam: Medical.
- Demonstrate knowledge of the affective objectives of Lesson 3-5: The Detailed Physical Exam.
- Demonstrate knowledge of the affective objectives of Lesson 3-6: On-going Assessment.

- Demonstrate knowledge of the affective objectives of Lesson 3-7: Communications.
- Demonstrate knowledge of the affective objectives of Lesson 3-8: Documentation.

PSYCHOMOTOR OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- Demonstrate knowledge of the psychomotor objectives of Lesson 3-1: Scene Size-up.
- Demonstrate knowledge of the psychomotor objectives of Lesson 3-2: Initial Assessment.
- Demonstrate knowledge of the psychomotor objectives of Lesson 3-3: Focused History and Physical Exam: Trauma.
- Demonstrate knowledge of the psychomotor objectives of Lesson 3-4: Focused History and Physical Exam: Medical.
- Demonstrate knowledge of the psychomotor objectives of Lesson 3-5: The Detailed Physical Exam.
- Demonstrate knowledge of the psychomotor objectives of Lesson 3-6: On-going Assessment.
- Demonstrate knowledge of the psychomotor objectives of Lesson 3-7: Communications.
- Demonstrate knowledge of the psychomotor objectives of Lesson 3-8: Documentation.

MODULE 4 MEDICAL

Lesson 4-1 General Pharmacology

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 4-1.1 Identify which medications will be carried on the unit. (C-1)
- EB- 4-1.2 Differentiate among the chemical, generic (non-proprietary), and trade (proprietary) names of a drug.
- EB 4-1.3 Describe how drugs are classified.
- EB 4-1.4 List the authoritative sources for drug information.
- EB 4-1.5 Discuss special considerations in drug treatment with regard to pregnant, pediatric, and geriatric patients for medications delivered by the EMT-Basic.
- EB 4-1.6 Discuss the EMT-Basic's responsibilities and scope of management pertinent to the administration of medications.
- EB 4-1.7 List and describe the drug profiles of the drugs carried on the unit that EMT-Basics may administer in a pharmacological management plan according to local protocol.
- EB 4-1.8 List and describe the drug profiles of the medications with which the EMT-Basic may assist the patient with administering.
- EB 4-1.9 List and differentiate routes of drug administration pertinent to the medications delivered by the EMT-Basic.
- EB 4-1.10 Describe mechanisms of drug action pertinent to the medications delivered by the EMT-Basic.
- EB 4-1.11 Discuss considerations for storing the drugs pertinent to the medications delivered by the EMT-Basic.
- EB 4-1.12 Review mathematical equivalents.
- EB 4-1.13 Differentiate temperature readings between the Centigrade and Fahrenheit scales.
- EB 4-1.14 Discuss legal aspects affecting medication administration.
- EB 4-1.15 Discuss the "six rights" of drug administration and correlate these with the principles of medication administration.
- EB 4-1.16 Describe the use of universal precautions and body substance isolation (BSI) procedures when administering a medication.
- EB 4-1.17 Describe the indications, equipment needed, techniques utilized, precautions, and general principles of administering medications by the inhalation route.
- EB 4-1.18 Differentiate among the different dosage forms of oral medications.
- EB 4-1.19 Describe the equipment needed and general principles of administering oral medications.
- EB 4-1.20 Describe disposal of contaminated items and sharps.

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- EB 4-1.21 Defend medication administration by an EMT-Basic to effect positive

therapeutic effect.

EB 4-1.22 Explain the rationale for the administration of medications.

PSYCHOMOTOR OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

4-1.23 Demonstrate general steps for assisting patients with self-administration of medications.

EB 4-1.24 Demonstrate preparation and administration of the auto-injection delivery epinephrine.

EB 4-1.25 Demonstrate preparation and administration of oral medications.

EB 4-1.26 Demonstrate preparation and administration of nebulized respiratory agents.

EB 4-1.27 Demonstrate the appropriate disposal of sharps and contaminated items.

Lesson 4-2 Respiratory Emergencies

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

4-2.1 List the structure and function of the respiratory system. (C-1)

4-2.2 State the signs and symptoms of a patient with breathing difficulty. (C-1)

4-2.3 Describe the emergency medical care of the patient with breathing difficulty. (C-1)

4-2.4 Recognize the need for medical direction to assist in the emergency medical care of the patient with breathing difficulty. (C-3)

4-2.5 Describe the emergency medical care of the patient with breathing distress. (C-1)

4-2.6 Establish the relationship between airway management and the patient with breathing difficulty. (C-3)

4-2.7 List signs of adequate air exchange. (C-1)

4-2.8 State the generic name, medication forms, dose, administration, action, indications and contraindications for the prescribed inhaler. (C-1)

4-2.9 Distinguish between the emergency medical care of the infant, child and adult patient with breathing difficulty. (C-3)

4-2.10 Differentiate between upper airway obstruction and lower airway disease in the infant and child patient. (C-3)

EB 4-2.11 Identify the anatomy, pathophysiology, and assessment findings for the following respiratory diseases and conditions that can cause bronchospasm:

a. bronchial asthma

b. chronic bronchitis

c. emphysema

EB 4-2.12 Describe the physical signs and symptoms of bronchospasm.

EB 4-2.13 Identify the importance in the prehospital setting for the administration of nebulized bronchodilator and other approved respiratory agents.

EB 4-2.14 Review the following concerning administration of nebulized bronchodilators as used in the management of bronchospasm:

a. Mechanism of Action

b. Indications for Use

- c. Side/Adverse Effects
 - d. How Supplied
 - e. Administration Dosages (Adult and Pediatric)
 - f. Contraindications for Use
 - g. Special Considerations
 - h. Approved Local Protocols
- EB 4-2.15 Describe the proper technique used to administer medication through a handheld nebulizer.
- EB 4-2.16 Review universal precautions and body substance isolation when administering nebulized medications.
- EB 4-2.17 Describe the necessary elements to be documented concerning the administration of nebulized medications.

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 4-2.18 Defend EMT-Basic treatment regimens for various respiratory emergencies. (A-1)
- EB 4-2.19 Explain the rationale for administering an inhaler or nebulized medication. (A-3)
- EB 4-.2-20 Demonstrate appreciation for the critical nature of accurate field impressions of patients with bronchospasm.

PSYCHOMOTOR OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 4-2.21 Demonstrate the emergency medical care for breathing difficulty. (P-1, 2)
- 4-2.22 Perform the steps in facilitating the use of an inhaler. (P-2)
- EB 4-2.23 Demonstrate the proper use of a nebulizer to deliver medication.
- EB 4-2.24 Demonstrate the proper documentation of delivery of a nebulized medication.

Lesson 4-3 Cardiovascular Emergencies

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 4-3.1 Describe the structure and function of the cardiovascular system. (C-1)
- 4-3.2 Describe the emergency medical care of the patient experiencing chest pain/discomfort. (C-1)
- 4-3.3 List the indications for automated external defibrillation (AED). (C-1)
- 4-3.4 List the contraindications for automated external defibrillation. (C-1)
- 4-3.5 Define the role of EMT-B in the emergency cardiac care system. (C-1)
- 4-3.6 Explain the impact of age and weight on defibrillation. (C-1)
- 4-3.7 Discuss the position of comfort for patients with various cardiac emergencies. (C-1)
- 4-3.8 Establish the relationship between airway management and the patient with cardiovascular compromise. (C-3)

- 4-3.9 Predict the relationship between the patient experiencing cardiovascular compromise and basic life support. (C-2)
- 4-3.10 Discuss the fundamentals of early defibrillation. (C-1)
- 4-3.11 Explain the rationale for early defibrillation. (C-1)
- 4-3.12 Explain that not all chest pain patients result in cardiac arrest and do not need to be attached to an automated external defibrillator. (C-1)
- 4-3.13 Explain the importance of prehospital ACLS intervention if it is available. (C-1)
- 4-3.14 Explain the importance of urgent transport to a facility with Advanced Cardiac Life Support if it is not available in the prehospital setting. (C-1)
- 4-3.15 Discuss the various types of automated external defibrillators. (C-1)
- 4-3.16 Differentiate between the fully automated and the semiautomated defibrillator. (C-3)
- 4-3.17 Discuss the procedures that must be taken into consideration for standard operations of the various types of automated external defibrillators. (C-1)
- 4-3.18 State the reasons for assuring that the patient is pulseless and apneic when using the automated external defibrillator. (C-1)
- 4-3.19 Discuss the circumstances which may result in inappropriate shocks. (C-1)
- 4-3.20 Explain the considerations for interruption of CPR, when using the automated external defibrillator. (C-1)
- 4-3.21 Discuss the advantages and disadvantages of automated external defibrillators. (C-1)
- 4-3.22 Summarize the speed of operation of automated external defibrillation. (C-1)
- 4-3.23 Discuss the use of remote defibrillation through adhesive pads. (C-1)
- 4-3.24 Discuss the special considerations for rhythm monitoring. (C-1)
- 4-3.25 List the steps in the operation of the automated external defibrillator. (C-1)
- 4-3.26 Discuss the standard of care that should be used to provide care to a patient with persistent ventricular fibrillation and no available ACLS. (C-1)
- 4-3.27 Discuss the standard of care that should be used to provide care to a patient with recurrent ventricular fibrillation and no available ACLS. (C-1)
- 4-3.28 Differentiate between the single rescuer and multi-rescuer care with an automated external defibrillator. (C-3)
- 4-3.29 Explain the reason for pulses not being checked between shocks with an automated external defibrillator. (C-1)
- 4-3.30 Discuss the importance of coordinating ACLS trained providers with personnel using automated external defibrillators. (C-1)
- 4-3.31 Discuss the importance of post-resuscitation care. (C-1)
- 4-3.32 List the components of post-resuscitation care. (C-1)
- 4-3.33 Explain the importance of frequent practice with the automated external defibrillator. (C-1)
- 4-3.34 Discuss the need to complete the Automated Defibrillator: Operator's Shift Checklist. (C-1)
- 4-3.35 Discuss the role of the American Heart Association (AHA) in the use of automated external defibrillation. (C-1)
- 4-3.36 Explain the role medical direction plays in the use of automated external defibrillation. (C-1)

- 4-3.37 State the reasons why a case review should be completed following the use of the automated external defibrillator. (C-1)
- 4-3.38 Discuss the components that should be included in a case review. (C-1)
- 4-3.39 Discuss the goal of quality improvement in automated external defibrillation. (C-1)
- 4-3.40 Recognize the need for medical direction of protocols to assist in the emergency medical care of the patient with chest pain. (C-3)
- 4-3.41 List the indications for the use of nitroglycerin. (C-1)
- 4-3.42 State the contraindications and side effects for the use of nitroglycerin. (C-1)
- 4-3.43 Define the function of all controls on an automated external defibrillator, and describe event documentation and battery defibrillator maintenance. (C-1)
- EB 4-3.44 Describe the importance of the administration of aspirin in the prehospital setting.
- EB 4-3.45 State the indications, contraindications, and side effects for the administration of aspirin.
- EB 4-3.46 Describe the mechanism of action for aspirin.
- EB 4-3.47 Explain the range of dosage for the administration of aspirin to a patient having chest pain.
- EB 4-3.48 State the route of administration of aspirin.
- EB 4-3.49 Describe the necessary elements to be documented concerning the administration of medications for chest pain.

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 4-3.50 Defend the reasons for obtaining initial training in automated external defibrillation and the importance of continuing education. (A-3)
- 4-3.51 Defend the reason for maintenance of automated external defibrillators. (A-3)
- 4-3.52 Explain the rationale for administering nitroglycerin to a patient with chest pain or discomfort. (A-3)
- EB 4-3.53 Explain the rationale for administering aspirin to a patient with chest pain or discomfort.

PSYCHOMOTOR OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 4-3.54 Demonstrate the assessment and emergency medical care of a patient experiencing chest pain/discomfort. (P-1, 2)
- 4-3.55 Demonstrate the application and operation of the automated external defibrillator. (P-1, 2)
- 4-3.56 Demonstrate the maintenance of an automated external defibrillator. (P-1, 2)
- 4-3.57 Demonstrate the assessment and documentation of patient response to the automated external defibrillator. (P-1, 2)
- 4-3.58 Demonstrate the skills necessary to complete the Automated Defibrillator: Operator's Shift Checklist. (P-1, 2)
- 4-3.59 Perform the steps in facilitating the use of nitroglycerin for chest pain or discomfort. (P-2)

- EB 4-3.60 Demonstrate the steps in administering aspirin to a patient.
- 4-3.61 Demonstrate the assessment and documentation of patient response to nitroglycerin. (P-1, 2)
- EB 4-3.62 Demonstrate the assessment and documentation of a patient receiving aspirin.
- 4-3.63 Practice completing a prehospital care report for patients with cardiac emergencies. (P-2)

Lesson 4-4 Diabetes/Altered Mental Status

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 4-4.1 Identify the patient taking diabetic medications with altered mental status and the implications of a diabetes history. (C-1)
- 4-4.2 State the steps in the emergency medical care of the patient taking diabetic medicine with an altered mental status and a history of diabetes. (C-1)
- 4-4.3 Establish the relationship between airway management and the patient with altered mental status. (C-3)
- 4-4.4 State the generic and trade names, medication forms, dose, administration, action, and contraindications for oral glucose. (C-1)
- 4-4.5 Evaluate the need for medical direction in the emergency medical care of the diabetic patient. (C-3)

AFFECTIVE OBJECTIVES

- 4-4.6 Explain the rationale for administering oral glucose. (A-3)

PSYCHOMOTOR OBJECTIVES

- 4-4.7 Demonstrate the steps in the emergency medical care for the patient taking diabetic medicine with an altered mental status and a history of diabetes. (P-1, 2)
- 4-4.8 Demonstrate the steps in the administration of oral glucose. (P-1, 2)
- 4-4.9 Demonstrate the assessment and documentation of patient response to oral glucose. (P-1, 2)
- 4-4.10 Demonstrate how to complete a prehospital care report for patients with diabetic emergencies. (P-2)

Lesson 4-5 Allergies

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 4-5.1 Recognize the patient experiencing an allergic reaction. (C-1)
- 4-5.2 Describe the emergency medical care of the patient with an allergic reaction. (C-1)
- 4-5.3 Establish the relationship between the patient with an allergic reaction and airway management. (C-3)

- 4-5.4 Describe the mechanisms of allergic response and the implications for airway management. (C-1)
- 4-5.5 State the generic and trade names, medication forms, dose, administration, action, and contraindications for the epinephrine auto-injector. (C-1)
- 4-5.6 Evaluate the need for medical direction in the emergency medical care of the patient with an allergic reaction. (C-3)
- 4-5.7 Differentiate between the general category of those patients having an allergic reaction and those patients having an allergic reaction and requiring immediate medical care, including immediate use of epinephrine auto-injector. (C-3)

AFFECTIVE OBJECTIVES

- 4-5.8 Explain the rationale for administering epinephrine using an auto-injector. (A-3)

PSYCHOMOTOR OBJECTIVES

- 4-5.9 Demonstrate the emergency medical care of the patient experiencing an allergic reaction. (P-1, 2)
- 4-5.10 Demonstrate the use of epinephrine auto-injector. (P-1, 2)
- 4-5.11 Demonstrate the assessment and documentation of patient response to an epinephrine injection. (P-1, 2)
- 4-5.12 Demonstrate proper disposal of equipment. (P-1, 2)
- 4-5.13 Demonstrate completing a prehospital care report for patients with allergic emergencies. (P-2)

Lesson 4-6 Poisoning/Overdose

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 4-6.1 List various ways that poisons enter the body. (C-1)
- 4-6.2 List signs/symptoms associated with poisoning. (C-1)
- 4-6.3 Discuss the emergency medical care for the patient with possible overdose. (C-1)
- 4-6.4 Describe the steps in the emergency medical care for the patient with suspected poisoning. (C-1)
- 4-6.5 Establish the relationship between the patient suffering from poisoning or overdose and airway management. (C-3)
- 4-6.6 State the generic and trade names, indications, contraindications, medication form, dose, administration, actions, side effects and re-assessment strategies for activated charcoal. (C-1)
- 4-6.7 Recognize the need for medical direction in caring for the patient with poisoning or overdose. (C-3)

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 4-6.8 Explain the rationale for administering activated charcoal. (A-3)
- 4-6.9 Explain the rationale for contacting medical direction early in the prehospital management of the poisoning or overdose patient. (A-3)

PSYCHOMOTOR OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 4-6.10 Demonstrate the steps in the emergency medical care for the patient with possible overdose. (P-1, 2)
- 4-6.11 Demonstrate the steps in the emergency medical care for the patient with suspected poisoning. (P-1, 2)
- 4-6.12 Perform the necessary steps required to provide a patient with activated charcoal. (P-2)
- 4-6.13 Demonstrate the assessment and documentation of patient response. (P-1, 2)
- 4-6.14 Demonstrate proper disposal of the equipment for the administration of activated charcoal. (P-1, 2)
- 4-6.15 Demonstrate completing a prehospital care report for patients with a poisoning/overdose emergency. (P-1, 2)

Lesson 4-7 Environmental Emergencies

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 4-7.1 Describe the various ways that the body loses heat. (C-1)
- 4-7.2 List the signs and symptoms of exposure to cold. (C-1)
- 4-7.3 Explain the steps in providing emergency medical care to a patient exposed to cold. (C-1)
- 4-7.4 List the signs and symptoms of exposure to heat. (C-1)
- 4-7.5 Explain the steps in providing emergency care to a patient exposed to heat. (C-1)
- 4-7.6 Recognize the signs and symptoms of water-related emergencies. (C-1)
- 4-7.7 Describe the complications of near drowning. (C-1)
- 4-7.8 Discuss the emergency medical care of bites and stings. (C-1)

AFFECTIVE OBJECTIVES

No affective objectives identified.

PSYCHOMOTOR OBJECTIVES

- 4-7.9 Demonstrate the assessment and emergency medical care of a patient with exposure to cold. (P-1, 2)
- 4-7.10 Demonstrate the assessment and emergency medical care of a patient with exposure to heat. (P-1, 2)
- 4-7.11 Demonstrate the assessment and emergency medical care of a near drowning patient. (P-1, 2)
- 4-7.12 Demonstrate completing a prehospital care report for patients with environmental emergencies. (P-2)

Lesson 4-8 Behavioral Emergencies

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 4-8.1 Define behavioral emergencies. (C-1)
- 4-8.2 Discuss the general factors that may cause an alteration in a patient's behavior. (C-1)
- 4-8.3 State the various reasons for psychological crises. (C-1)
- 4-8.4 Discuss the characteristics of an individual's behavior which suggests that the patient is at risk for suicide. (C-1)
- 4-8.5 Discuss special medical/legal considerations for managing behavioral emergencies. (C-1)
- 4-8.6 Discuss the special considerations for assessing a patient with behavioral problems. (C-1)
- 4-8.7 Discuss the general principles of an individual's behavior which suggests that he is at risk for violence. (C-1)
- 4-8.8 Discuss methods to calm behavioral emergency patients. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 4-8.9 Explain the rationale for learning how to modify your behavior toward the patient with a behavioral emergency. (A-3)

PSYCHOMOTOR OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 4-8.10 Demonstrate the assessment and emergency medical care of the patient experiencing a behavioral emergency. (P-1, 2)
- 4-8.11 Demonstrate various techniques to safely restrain a patient with a behavioral problem. (P-1, 2)

Lesson 4-9 Obstetrics/Gynecology

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 4-9.1 Identify the following structures: Uterus, vagina, fetus, placenta, umbilical cord, amniotic sac, and perineum. (C-1)
- 4-9.2 Identify and explain the use of the contents of an obstetrics kit. (C-1)
- 4-9.3 Identify predelivery emergencies. (C-1)
- 4-9.4 State indications of an imminent delivery. (C-1)
- 4-9.5 Differentiate the emergency medical care provided to a patient with predelivery emergencies from a normal delivery. (C-3)
- 4-9.6 State the steps in the predelivery preparation of the mother. (C-1)
- 4-9.7 Establish the relationship between body substance isolation and childbirth. (C-3)
- 4-9.8 State the steps to assist in the delivery. (C-1)

- 4-9.9 Describe care of the baby as the head appears. (C-1)
- 4-9.10 Describe how and when to cut the umbilical cord. (C-1)
- 4-9.11 Discuss the steps in the delivery of the placenta. (C-1)
- 4-9.12 List the steps in the emergency medical care of the mother post-delivery. (C-3)
- 4-9.13 Summarize neonatal resuscitation procedures. (C-1)
- 4-9.14 Describe the procedures for the following abnormal deliveries: Breech birth, prolapsed cord, limb presentation. (C-1)
- 4-9.15 Differentiate the special considerations for multiple births. (C-3)
- 4-9.16 Describe special considerations of meconium. (C-1)
- 4-9.17 Describe special considerations of a premature baby. (C-1)
- 4-9.18 Discuss the emergency medical care of a patient with a gynecological emergency. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 4-9.19 Explain the rationale for understanding the implications of treating two patients (mother and baby). (A-3)

PSYCHOMOTOR OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 4-9.20 Demonstrate the steps to assist in the normal cephalic delivery. (P-1, 2)
- 4-9.21 Demonstrate necessary care procedures of the fetus as the head appears. (P-1, 2)
- 4-9.22 Demonstrate infant neonatal procedures. (P-1, 2)
- 4-9.23 Demonstrate post delivery care of infant. (P-1, 2)
- 4-9.24 Demonstrate how and when to cut the umbilical cord. (P-1, 2)
- 4-9.25 Attend to the steps in the delivery of the placenta. (P-1, 2)
- 4-9.26 Demonstrate the post-delivery care of the mother. (P-1, 2)
- 4-9.27 Demonstrate the procedures for the following abnormal deliveries: vaginal bleeding, breech birth, prolapsed cord, limb presentation. (P-1, 2)
- 4-9.28 Demonstrate the steps in the emergency medical care of the mother with excessive bleeding. (P-1, 2)
- 4-9.29 Demonstrate completing a prehospital care report for patients with obstetrical/gynecological emergencies. (P-2)

Lesson 4-10 Practical Evaluation

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- Demonstrate the cognitive objectives of Lesson 4-1: General Pharmacology.
- Demonstrate the cognitive objectives of Lesson 4-2: Respiratory Emergencies.
- Demonstrate the cognitive objectives of Lesson 4-3: Cardiovascular Emergencies.
- Demonstrate the cognitive objectives of Lesson 4-4: Diabetes/ Altered Mental Status.
- Demonstrate the cognitive objectives of Lesson 4-5: Allergies.

- Demonstrate the cognitive objectives of Lesson 4-6: Poisoning/Overdose.
- Demonstrate the cognitive objectives of Lesson 4-7: Environmental Emergencies.
- Demonstrate the cognitive objectives of Lesson 4-8: Behavioral Emergencies.
- Demonstrate the cognitive objectives of Lesson 4-9: Obstetrics/Gynecology.

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- Demonstrate the affective objectives of Lesson 4-1: General Pharmacology.
- Demonstrate the affective objectives of Lesson 4-2: Respiratory Emergencies.
- Demonstrate the affective objectives of Lesson 4-3: Cardiovascular Emergencies.
- Demonstrate the affective objectives of Lesson 4-4: Diabetes/Altered Mental Status.
- Demonstrate the affective objectives of Lesson 4-5: Allergies.
- Demonstrate the affective objectives of Lesson 4-6: Poisoning/Overdose.
- Demonstrate the affective objectives of Lesson 4-8: Behavioral Emergencies.
- Demonstrate the affective objectives of Lesson 4-9: Obstetrics/Gynecology.

PSYCHOMOTOR OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- Demonstrate the psychomotor objectives of Lesson 4-1: General Pharmacology.
- Demonstrate the psychomotor objectives of Lesson 4-2: Respiratory Emergencies.
- Demonstrate the psychomotor objectives of Lesson 4-3: Cardiovascular Emergencies.
- Demonstrate the psychomotor objectives of Lesson 4-4: Diabetes/Altered Mental Status.
- Demonstrate the psychomotor objectives of Lesson 4-5: Allergies.
- Demonstrate the psychomotor objectives of Lesson 4-6: Poisoning/Overdose.
- Demonstrate the psychomotor objectives of Lesson 4-7: Environmental Emergencies.
- Demonstrate the psychomotor objectives of Lesson 4-8: Behavioral Emergencies.
- Demonstrate the psychomotor objectives of Lesson 4-9: Obstetrics/Gynecology.

Lesson 4-11 Evaluation

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- Demonstrate knowledge of the cognitive objectives of Lesson 4-1: General Pharmacology.
- Demonstrate knowledge of the cognitive objectives of Lesson 4-2: Respiratory Emergencies.
- Demonstrate knowledge of the cognitive objectives of Lesson 4-3: Cardiovascular Emergencies.

- Demonstrate knowledge of the cognitive objectives of Lesson 4-4: Diabetes/ Altered Mental Status.
- Demonstrate knowledge of the cognitive objectives of Lesson 4-5: Allergies.
- Demonstrate knowledge of the cognitive objectives of Lesson 4-6: Poisoning/Overdose.
- Demonstrate knowledge of the cognitive objectives of Lesson 4-7: Environmental Emergencies.
- Demonstrate knowledge of the cognitive objectives of Lesson 4-8: Behavioral Emergencies.
- Demonstrate knowledge of the cognitive objectives of Lesson 4-9: Obstetrics/Gynecological.

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- Demonstrate knowledge of the affective objectives of Lesson 4-1: General Pharmacology.
- Demonstrate knowledge of the affective objectives of Lesson 4-2: Respiratory Emergencies.
- Demonstrate knowledge of the affective objectives of Lesson 4-3: Cardiovascular Emergencies.
- Demonstrate knowledge of the affective objectives of Lesson 4-4: Diabetes/ Altered Mental Status.
- Demonstrate knowledge of the affective objectives of Lesson 4-5: Allergies.
- Demonstrate knowledge of the affective objectives of Lesson 4-6: Poisoning/Overdose.
- Demonstrate knowledge of the affective objectives of Lesson 4-8: Behavioral Emergencies.
- Demonstrate knowledge of the affective objectives of Lesson 4-9: Obstetrics/Gynecological.

PSYCHOMOTOR OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- Demonstrate knowledge of the psychomotor objectives of Lesson 4-1: General Pharmacology.
- Demonstrate knowledge of the psychomotor objectives of Lesson 4-2: Respiratory Emergencies.
- Demonstrate knowledge of the psychomotor objectives of Lesson 4-3: Cardiovascular Emergencies.
- Demonstrate knowledge of the psychomotor objectives of Lesson 4-4: Diabetes/Altered Mental Status.
- Demonstrate knowledge of the psychomotor objectives of Lesson 4-5: Allergies.
- Demonstrate knowledge of the psychomotor objectives of Lesson 4-6: Poisoning/Overdose.
- Demonstrate knowledge of the psychomotor objectives of Lesson 4-7: Environmental Emergencies.

- Demonstrate knowledge of the psychomotor objectives of Lesson 4-8: Behavioral Emergencies.
- Demonstrate knowledge of the psychomotor objectives of Lesson 4-9: Obstetrics/Gynecological.

MODULE 5 – TRAUMA

Lesson 5-1 Bleeding and Shock

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 5-1.1 List the structure and function of the circulatory system. (C-1)
- 5-1.2 Differentiate between arterial, venous and capillary bleeding. (C-3)
- 5-1.3 State methods of emergency medical care of external bleeding. (C-1)
- 5-1.4 Establish the relationship between body substance isolation and bleeding. (C-3)
- 5-1.5 Establish the relationship between airway management and the trauma patient. (C-3)
- 5-1.6 Establish the relationship between mechanism of injury and internal bleeding. (C-3)
- 5-1.7 List the signs of internal bleeding. (C-1)
- 5-1.8 List the steps in the emergency medical care of the patient with signs and symptoms of internal bleeding. (C-1)
- 5-1.9 List signs and symptoms of shock (hypoperfusion). (C-1)
- 5-1.10 State the steps in the emergency medical care of the patient with signs and symptoms of shock (hypoperfusion). (C-1)

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 5-1.11 Explain the sense of urgency to transport patients that are bleeding and show signs of shock (hypoperfusion). (A-1)

PSYCHOMOTOR OBJECTIVES

No psychomotor objectives identified.

Lesson 5-2 Soft Tissue Injuries

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 5-2.1 State the major functions of the skin. (C-1)
- 5-2.2 List the layers of the skin. (C-1)
- 5-2.3 Establish the relationship between body substance isolation (BSI) and soft tissue injuries. (C-3)
- 5-2.4 List the types of closed soft tissue injuries. (C-1)
- 5-2.5 Describe the emergency medical care of the patient with a closed soft tissue injury. (C-1)
- 5-2.6 State the types of open soft tissue injuries. (C-1)
- 5-2.7 Describe the emergency medical care of the patient with an open soft tissue injury. (C-1)

- 5-2.8 Discuss the emergency medical care considerations for a patient with a penetrating chest injury. (C-1)
- 5-2.9 State the emergency medical care considerations for a patient with an open wound to the abdomen. (C-1)
- 5-2.10 Differentiate the care of an open wound to the chest from an open wound to the abdomen. (C-3)
- 5-2.11 List the classifications of burns. (C-1)
- 5-2.12 Define superficial burn. (C-1)
- 5-2.13 List the characteristics of a superficial burn. (C-1)
- 5-2.14 Define partial thickness burn. (C-1)
- 5-2.15 List the characteristics of a partial thickness burn. (C-1)
- 5-2.16 Define full thickness burn. (C-1)
- 5-2.17 List the characteristics of a full thickness burn. (C-1)
- 5-2.18 Describe the emergency medical care of the patient with a superficial burn. (C-1)
- 5-2.19 Describe the emergency medical care of the patient with a partial thickness burn. (C-1)
- 5-2.20 Describe the emergency medical care of the patient with a full thickness burn. (C-1)
- 5-2.21 List the functions of dressing and bandaging. (C-1)
- 5-2.22 Describe the purpose of a bandage. (C-1)
- 5-2.23 Describe the steps in applying a pressure dressing. (C-1)
- 5-2.24 Establish the relationship between airway management and the patient with chest injury, burns, blunt and penetrating injuries. (C-1)
- 5-2.25 Describe the effects of improperly applied dressings, splints and tourniquets. (C-1)
- 5-2.26 Describe the emergency medical care of a patient with an impaled object. (C-1)
- 5-2.27 Describe the emergency medical care of a patient with an amputation. (C-1)
- 5-2.28 Describe the emergency care for a chemical burn. (C-1)
- 5-2.29 Describe the emergency care for an electrical burn. (C-1)

AFFECTIVE OBJECTIVES

No affective objectives identified.

PSYCHOMOTOR OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 5-2.29 Demonstrate the steps in the emergency medical care of closed soft tissue injuries. (P-1, 2)
- 5-2.30 Demonstrate the steps in the emergency medical care of open soft tissue injuries. (P-1, 2)
- 5-2.31 Demonstrate the steps in the emergency medical care of a patient with an open chest wound. (P-1, 2)
- 5-2.32 Demonstrate the steps in the emergency medical care of a patient with open abdominal wounds. (P-1, 2)
- 5-2.33 Demonstrate the steps in the emergency medical care of a patient with an impaled object. (P-1, 2)

- 5-2.34 Demonstrate the steps in the emergency medical care of a patient with an amputation. (P-1, 2)
- 5-2.35 Demonstrate the steps in the emergency medical care of an amputated part. (P-1, 2)
- 5-2.36 Demonstrate the steps in the emergency medical care of a patient with superficial burns. (P-1, 2)
- 5-2.37 Demonstrate the steps in the emergency medical care of a patient with partial thickness burns. (P-1, 2)
- 5-2.38 Demonstrate the steps in the emergency medical care of a patient with full thickness burns. (P-1, 2)
- 5-2.39 Demonstrate the steps in the emergency medical care of a patient with a chemical burn. (P-1, 2)
- 5-2.40 Demonstrate completing a prehospital care report for patients with soft tissue injuries. (P-2)

Lesson 5-3 Musculoskeletal Care

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 5-3.1 Describe the function of the muscular system. (C-1)
- 5-3.2 Describe the function of the skeletal system. (C-1)
- 5-3.3 List the major bones or bone groupings of the spinal column; the thorax; the upper extremities; the lower extremities. (C-1)
- 5-3.4 Differentiate between an open and a closed painful, swollen, deformed extremity. (C-1)
- 5-3.5 State the reasons for splinting. (C-1)
- 5-3.6 List the general rules of splinting. (C-1)
- 5-3.7 List the complications of splinting. (C-1)
- 5-3.8 List the emergency medical care for a patient with a painful, swollen, deformed extremity. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 5-3.9 Explain the rationale for splinting at the scene versus load and go. (A-3)
- 5-3.10 Explain the rationale for immobilization of the painful, swollen, deformed extremity. (A-3)

PSYCHOMOTOR OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 5-3.11 Demonstrate the emergency medical care of a patient with a painful, swollen, deformed extremity. (P-1, 2)
- 5-3.12 Demonstrate completing a prehospital care report for patients with musculoskeletal injuries. (P-2)

Lesson 5-4 Injuries to the Head and Spine

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 5-4.1 State the components of the nervous system. (C-1)
- 5-4.2 List the functions of the central nervous system. (C-1)
- 5-4.3 Define the structure of the skeletal system as it relates to the nervous system. (C-1)
- 5-4.4 Relate mechanism of injury to potential injuries of the head and spine. (C-3)
- 5-4.5 Describe the implications of not properly caring for potential spine injuries. (C-1)
- 5-4.6 State the signs and symptoms of a potential spine injury. (C-1)
- 5-4.7 Describe the method of determining if a responsive patient may have a spine injury. (C-1)
- 5-4.8 Relate the airway emergency medical care techniques to the patient with a suspected spine injury. (C-3)
- 5-4.9 Describe how to stabilize the cervical spine. (C-1)
- 5-4.10 Discuss indications for sizing and using a cervical spine immobilization device. (C-1)
- 5-4.11 Establish the relationship between airway management and the patient with head and spine injuries. (C-1)
- 5-4.12 Describe a method for sizing a cervical spine immobilization device. (C-1)
- 5-4.13 Describe how to log roll a patient with a suspected spine injury. (C-1)
- 5-4.14 Describe how to secure a patient to a long spine board. (C-1)
- 5-4.15 List instances when a short spine board should be used. (C-1)
- 5-4.16 Describe how to immobilize a patient using a short spine board. (C-1)
- 5-4.17 Describe the indications for the use of rapid extrication. (C-1)
- 5-4.18 List steps in performing rapid extrication. (C-1)
- 5-4.19 State the circumstances when a helmet should be left on the patient. (C-1)
- 5-4.20 Discuss the circumstances when a helmet should be removed. (C-1)
- 5-4.21 Identify different types of helmets. (C-1)
- 5-4.22 Describe the unique characteristics of sports helmets. (C-1)
- 5-4.23 Explain the preferred methods to remove a helmet. (C-1)
- 5-4.24 Discuss alternative methods for removal of a helmet. (C-1)
- 5-4.25 Describe how the patient's head is stabilized to remove the helmet. (C-1)
- 5-4.26 Differentiate how the head is stabilized with a helmet compared to without a helmet. (C-3)

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 5-4.27 Explain the rationale for immobilization of the entire spine when a cervical spine injury is suspected. (A-3)
- 5-4.28 Explain the rationale for utilizing immobilization methods apart from the straps on the cots. (A-3)
- 5-4.29 Explain the rationale for utilizing a short spine immobilization device when moving a patient from the sitting to the supine position. (A-3)

- 5-4.30 Explain the rationale for utilizing rapid extrication approaches only when they indeed will make the difference between life and death. (A-3)
- 5-4.31 Defend the reasons for leaving a helmet in place for transport of a patient. (A-3)
- 5-4.32 Defend the reasons for removal of a helmet prior to transport of a patient. (A-3)

PSYCHOMOTOR OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 5-4.33 Demonstrate opening the airway in a patient with suspected spinal cord injury. (P-1, 2)
- 5-4.34 Demonstrate evaluating a responsive patient with a suspected spinal cord injury. (P-1, 2)
- 5-4.35 Demonstrate stabilization of the cervical spine. (P-1, 2)
- 5-4.36 Demonstrate the four person log roll for a patient with a suspected spinal cord injury. (P-1, 2)
- 5-4.37 Demonstrate how to log roll a patient with a suspected spinal cord injury using two people. (P-1, 2)
- 5-4.38 Demonstrate securing a patient to a long spine board. (P-1, 2)
- 5-4.39 Demonstrate using the short board immobilization technique. (P-1, 2)
- 5-4.40 Demonstrate procedure for rapid extrication. (P-1, 2)
- 5-4.41 Demonstrate preferred methods for stabilization of a helmet. (P-1, 2)
- 5-4.42 Demonstrate helmet removal techniques. (P-1, 2)
- 5-4.43 Demonstrate alternative methods for stabilization of a helmet. (P-1, 2)
- 5-4.44 Demonstrate completing a prehospital care report for patients with head and spinal injuries. (P-2)

Lesson 5-5 Practical Lab

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- Demonstrate the cognitive objectives of Lesson 5-1: Bleeding and Shock.
- Demonstrate the cognitive objectives of Lesson 5-2: Soft Tissue Injuries.
- Demonstrate the cognitive objectives of Lesson 5-3: Musculoskeletal Care.
- Demonstrate the cognitive objectives of Lesson 5-4: Injuries to the Head and Spine.

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- Demonstrate the affective objectives of Lesson 5-1: Bleeding and Shock.
- Demonstrate the affective objectives of Lesson 5-3: Musculoskeletal Care.
- Demonstrate the affective objectives of Lesson 5-4: Injuries to the Head and Spine.

PSYCHOMOTOR OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- Demonstrate the psychomotor objectives of Lesson 5-1: Bleeding and Shock.
- Demonstrate the psychomotor objectives of Lesson 5-2: Soft Tissue Injuries.
- Demonstrate the psychomotor objectives of Lesson 5-3: Musculoskeletal Care.

- Demonstrate the psychomotor objectives of Lesson 5-4: Injuries to the Head and Spine.

Lesson 5-6 Evaluation

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- Demonstrate knowledge of the cognitive objectives of Lesson 5-1: Bleeding and Shock.
- Demonstrate knowledge of the cognitive objectives of Lesson 5-2: Soft Tissue Injuries.
- Demonstrate knowledge of the cognitive objectives of Lesson 5-3: Musculoskeletal Care.
- Demonstrate knowledge of the cognitive objectives of Lesson 5-4: Injuries to the Head and Spine.

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- Demonstrate knowledge of the affective objectives of Lesson 5-1: Bleeding and Shock.
- Demonstrate knowledge of the affective objectives of Lesson 5-3: Musculoskeletal Care.
- Demonstrate knowledge of the affective objectives of Lesson 5-4: Injuries to the Head and Spine.

PSYCHOMOTOR OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- Demonstrate knowledge of the psychomotor objectives of Lesson 5-1: Bleeding and Shock.
- Demonstrate knowledge of the psychomotor objectives of Lesson 5-2: Soft Tissue Injuries.
- Demonstrate knowledge of the psychomotor objectives of Lesson 5-3: Musculoskeletal Care.
- Demonstrate knowledge of the psychomotor objectives of Lesson 5-4: Injuries to the Head and Spine.

MODULE 6 INFANTS AND CHILDREN

Lesson 6-1 Infants and Children

COGNITIVE OBJECTIVES

- 6-1.1 Identify the developmental considerations for the following age groups:(C-1)
- infants
 - toddlers
 - pre-school
 - school age
 - adolescent
- 6-1.2 Describe differences in anatomy and physiology of the infant, child and adult patient. (C-1)
- 6-1.3 Differentiate the response of the ill or injured infant or child (age specific) from that of an adult. (C-3)
- 6-1.4 Indicate various causes of respiratory emergencies. (C-1)
- 6-1.5 Differentiate between respiratory distress and respiratory failure. (C-3)
- 6-1.6 List the steps in the management of foreign body airway obstruction. (C-1)
- 6-1.7 Summarize emergency medical care strategies for respiratory distress and respiratory failure. (C-1)
- 6-1.8 Identify the signs and symptoms of shock (hypoperfusion) in the infant and child patient. (C-1)
- 6-1.9 Describe the methods of determining end organ perfusion in the infant and child patient. (C-1)
- 6-1.10 State the usual cause of cardiac arrest in infants and children versus adults. (C-1)
- 6-1.11 List the common causes of seizures in the infant and child patient. (C-1)
- 6-1.12 Describe the management of seizures in the infant and child patient. (C-1)
- 6-1.13 Differentiate between the injuries patterns in adults, infants, and children. (C-3)
- 6-1.14 Discuss the field management of the infant and child trauma patient. (C-1)
- 6-1.15 Summarize the indicators of possible child abuse and neglect. (C-1)
- 6-1.16 Describe the medical legal responsibilities in suspected child abuse. (C-1)
- 6-1.17 Recognize need for EMT-Basic debriefing following a difficult infant or child transport. (C-1)
- EB 6-1.18 Define the following terms:
- a. pyrexia
 - b. pyrogen
 - c. antipyretic
- EB 6-1.19 Discuss the benefits to and potential harm fever may have on the body.
- EB 6-1.20 List possible sources of fever in children.
- EB 6-1.21 Discuss the signs and symptoms commonly found in febrile children.
- EB 6-1.22 Describe the indications, contraindications, precautions, and side effects of common oral antipyretic medications.
- EB 6-1.23 Describe the forms and dosages of common oral antipyretic medications.

- EB 6-1.24 Describe necessary elements to be documented concerning the administration of oral antipyretics.

AFFECTIVE OBJECTIVES

- 6-1.25 Explain the rationale for having knowledge and skills appropriate for dealing with the infant and child patient. (A-3)
- 6-1.26 Attend to the feelings of the family when dealing with an ill or injured infant or child. (A-1)
- 6-1.27 Understand the provider's own response (emotional) to caring for infants or children. (A-1)
- EB 6-1.28 Explain the rationale for administration of oral antipyretics in pediatric patients with a fever.

PSYCHOMOTOR OBJECTIVES

- 6-1.29 Demonstrate the techniques of foreign body airway obstruction removal in the infant. (P-1, 2)
- 6-1.30 Demonstrate the techniques of foreign body airway obstruction removal in the child. (P-1, 2)
- 6-1.31 Demonstrate the assessment of the infant and child. (P-1, 2)
- 6-1.32 Demonstrate bag-valve-mask artificial ventilations for the infant. (P-1, 2)
- 6-1.33 Demonstrate bag-valve-mask artificial ventilations for the child. (P-1, 2)
- 6-1.34 Demonstrate oxygen delivery for the infant and child. (P-1, 2)
- EB 6-1.35 Demonstrate the assessment and documentation of patient response to antipyretics.

Lesson 6-2 Practical Skills Lab

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- Demonstrate the cognitive objectives of Lesson 6-1: Infants and Children.

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- Demonstrate the affective objectives of Lesson 6-1: Infants and Children.

PSYCHOMOTOR OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- Demonstrate the psychomotor objectives of Lesson 6-1: Infants and Children.

Lesson 6-3 Evaluation

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- Demonstrate knowledge of the cognitive objectives of Lesson 6-1: Infants and Children

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- Demonstrate knowledge of the affective objectives of Lesson 6-1: Infants and Children.

PSYCHOMOTOR OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- Demonstrate knowledge of the psychomotor objectives of Lesson 6-1: Infants and Children.

MODULE 7 AMBULANCE OPERATIONS

Lesson 7-1 Ambulance Operations

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 7-1.1 Discuss the medical and non-medical equipment needed to respond to a call. (C-1)
- 7-1.2 List the phases of an ambulance call. (C-1)
- 7-1.3 Describe the general provisions of state laws relating to the operation of the ambulance and privileges in any or all of the following categories:(C-1)
 - Speed
 - Warning lights
 - Sirens
 - Right-of-way
 - Parking
 - Turning
- 7-1.4 List contributing factors to unsafe driving conditions. (C-1)
- 7-1.5 Describe the considerations that should be given to:
 - Request for escorts.
 - Following an escort vehicle
 - Intersections(C-1)
- 7-1.6 Discuss "Due Regard for Safety of All Others" while operating an emergency vehicle. (C-1)
- 7-1.7 State what information is essential in order to respond to a call. (C-1)
- 7-1.8 Discuss various situations that may affect response to a call. (C-1)
- 7-1.9 Differentiate between the various methods of moving a patient to the unit based upon injury or illness. (C-3)
- 7-1.10 Apply the components of the essential patient information in a written report. (C-2)
- 7-1.11 Summarize the importance of preparing the unit for the next response. (C-1)
- 7-1.12 Identify what is essential for completion of a call. (C-1)
- 7-1.13 Distinguish among the terms cleaning, disinfection, high-level disinfection, and sterilization. (C-3)
- 7-1.14 Describe how to clean or disinfect items following patient care. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 7-1.15 Explain the rationale for appropriate report of patient information. (A-3)
- 7-1.16 Explain the rationale for having the unit prepared to respond. (A-3)

PSYCHOMOTOR OBJECTIVES

No psychomotor objectives identified.

Lesson 7-2 Gaining Access

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 7-2.1 Describe the purpose of extrication. (C-1)
- 7-2.2 Discuss the role of the EMT-Basic in extrication. (C-1)
- 7-2.3 Identify what equipment for personal safety is required for the EMT-Basic. (C-1)
- 7-2.4 Define the fundamental components of extrication. (C-1)
- 7-2.5 State the steps that should be taken to protect the patient during extrication. (C-1)
- 7-2.6 Evaluate various methods of gaining access to the patient. (C-3)
- 7-2.7 Distinguish between simple and complex access. (C-3)

AFFECTIVE OBJECTIVES

No affective objectives identified.

PSYCHOMOTOR OBJECTIVES

No psychomotor objectives identified.

Lesson 7-3 Overviews

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 7-3.1 Explain the EMT-Basic's role during a call involving hazardous materials. (C-1)
- 7-3.2 Describe what the EMT-Basic should do if there is reason to believe that there is a hazard at the scene. (C-1)
- 7-3.3 Describe the actions that an EMT-Basic should take to ensure bystander safety. (C-1)
- 7-3.4 State the role the EMT-Basic should perform until appropriately trained personnel arrive at the scene of a hazardous materials situation. (C-1)
- 7-3.5 Break down the steps to approaching a hazardous situation. (C-1)
- 7-3.6 Discuss the various environmental hazards that affect EMS. (C-1)
- 7-3.7 Describe the criteria for a multiple-casualty situation. (C-1)
- 7-3.8 Evaluate the role of the EMT-Basic in the multiple-casualty situation. (C-3)
- 7-3.9 Summarize the components of basic triage. (C-1)
- 7-3.10 Define the role of the EMT-Basic in a disaster operation. (C-1)
- 7-3.11 Describe basic concepts of incident management. (C-1)
- 7-3.12 Explain the methods for preventing contamination of self, equipment and facilities. (C-1)
- 7-3.13 Review the local mass casualty incident plan. (C-1)

AFFECTIVE OBJECTIVES

No affective objectives identified.

PSYCHOMOTOR OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 7-3.16 Given a scenario of a mass casualty incident, perform triage. (P-2)

Lesson 7-4 Evaluation

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- Demonstrate knowledge of the cognitive objectives of Lesson 7-1: Ambulance Operations
- Demonstrate knowledge of the cognitive objectives of Lesson 7-2: Gaining Access
- Demonstrate knowledge of the cognitive objectives of Lesson 7-3: Overviews

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- Demonstrate knowledge of the affective objectives of Lesson 7-1: Ambulance Operations

PSYCHOMOTOR OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- Demonstrate proficiency in the psychomotor objectives of Lesson 7-3: Overviews

MODULE G – GEORGIA SPECIFIC

Lesson G-1 Response to WMD Events

8.1 Emergency Medical Response to Weapons of Mass Destruction

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 8.10 Recognize the patient experiencing exposure to a Weapon of Mass Destruction, to include chemicals and radiation.
- 8.11 Describe the emergency medical care of the patient experiencing exposure to a Weapon of Mass Destruction.
- 8.12 List signs/symptoms associated with Weapons of Mass Destruction.
- 8.13 State the medication forms, dose, administration, action, and contraindications for the Mark I kit, Potassium Iodide, and Amyl Nitrite.
- 8.14 Differentiate between the general category of those patients exposed to a Weapon of Mass Destruction and those requiring immediate medical care, including immediate use of the Mark I kit, Potassium Iodide, and Amyl Nitrite.

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 8.15 Explain the rationale for administering the Mark I kit, Potassium Iodide, and Amyl Nitrite.

PSYCHOMOTOR OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 8.16 Demonstrate the emergency medical care of the patient exposed to a Weapon of Mass Destruction.
- 8.17 Demonstrate the use of a Mark I Kit, Potassium Iodide, and Amyl Nitrite.
- 8.18 Perform the necessary steps required to provide a patient with a Mark I Kit, Potassium Iodide, and Amyl Nitrite.
- 8.19 Demonstrate the assessment and documentation of patient response to a Weapon of Mass Destruction.
- 8.20 Demonstrate the proper disposal of the Mark I Kit.

Lesson G-2 CPR & AED

- 9.1 The student shall successfully complete cardiopulmonary resuscitation Healthcare Provider level objectives that are consistent with current American Heart Association standards.

Lesson G-3 Geriatrics

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 10.1 Define the term “elderly”
- 10.2 State the leading cause of death in the elderly
- 10.3 Describe the physiologic changes of aging.
- 10.4 Describe the following basics of patient assessment for the elderly:
 - 10.5 Scene size up
 - 10.6 Initial Assessment
 - 10.7 Focused history and physical exam
 - 10.8 Describe the trauma assessment in the elderly.
 - 10.9 Describe communication basics used with an elderly patient.
 - 10.10 Describe the process of gathering patient information for the elderly.
 - 10.11 Describe the acute illness assessment for the following conditions:
 - Cardiovascular emergencies
 - Dyspnea / Respiratory emergencies
 - Syncope
 - Altered mental status
 - Acute abdomen
- 10.12 Define elder abuse.
- 10.13 Discuss the causes of elder abuse.

Lesson G-4 Evaluation

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- Demonstrate knowledge of the cognitive objectives of Lesson G-1: Response to WMD Events
- Demonstrate knowledge of the cognitive objectives of Lesson G-2: CPR & AED
- Demonstrate knowledge of the cognitive objectives of Lesson G-3: Geriatrics

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- Demonstrate knowledge of the affective objectives of Lesson G-1: Response to WMD Events

PSYCHOMOTOR OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- Demonstrate proficiency in the psychomotor objectives of Lesson G-1: Response to WMD Events

MODULE C – Clinical

EMT-Basic Clinical Procedures Requirements With Accompanying Psychomotor Objectives

ALL clinical objectives must be completed. A minimum of 8 hours and 5 patient contacts in a clinical setting is required. However, it may take more than the minimum of 8 hours or 5 patient contacts to complete all the clinical objectives. ALL clinical objectives must be completed the number of times listed in brackets []. The spreadsheet may be utilized as a check-sheet for the clinical objectives.

Lesson 1-5 Baseline Vital Signs and SAMPLE History

- 1-5.32 Demonstrate the skills involved in assessment of breathing. (P-1, 2) [5]
- 1-5.33 Demonstrate the skills associated with obtaining a pulse. (P-1, 2) [5]
- 1-5.34 Demonstrate the skills associated with assessing the skin color, temperature, condition, and capillary refill in infants and children. (P-1, 2) [5]
- 1-5.35 Demonstrate the skills associated with assessing the pupils. (P-1, 2) [5]
- 1-5.36 Demonstrate the skills associated with obtaining blood pressure. (P-1, 2) [5]
- 1-5.37 Demonstrate the skills that should be used to obtain information from the patient, family, or bystanders at the scene. (P-1, 2) [5]

Lesson 1-6 Lifting and Moving Patients

- 1-6.14 Working with a partner, prepare each of the following devices for use, transfer a patient to the device, properly position the patient on the device, move the device to the ambulance and load the patient into the ambulance:
 - Wheeled ambulance stretcher [2]
 - Portable ambulance stretcher
 - Stair chair
 - Scoop stretcher
 - Long spine board
 - Basket stretcher
 - Flexible stretcher (P-1,2)
- 1-6.15 Working with a partner, the EMT-Basic will demonstrate techniques for the transfer of a patient from an ambulance stretcher to a hospital stretcher. (P-1, 2) [2]

Module 2-Airway

Lesson 2-1 Airway

- 2-1.37 Demonstrate the correct operation of oxygen tanks and regulators. (P-1, 2) [1]
- 2-1.38 Demonstrate the use of a nonrebreather face mask and state the oxygen flow requirements needed for its use. (P-1, 2) [1]
- 2-1.39 Demonstrate the use of a nasal cannula and state the flow requirements needed for its use. (P-1, 2) [1]

Module 3-Patient Assessment

Lesson 3-1 Scene Size-Up

- 3-1.9 Observe various scenarios and identify potential hazards. (P-1) [5]

Lesson 3-2 Initial Assessment

- 3-2.22 Demonstrate the techniques for assessing mental status. (P-1, 2) [5]
- 3-2.23 Demonstrate the techniques for assessing the airway. (P-1, 2) [5]
- 3-2.26 Demonstrate the techniques for assessing the patient for external bleeding. (P-1, 2) [5]
- 3-2.28 Demonstrate the ability to prioritize patients. (P-1, 2) [5]

Lesson 3-3 Focused History and Physical Exam-Trauma Patients

- 3-3.8 Demonstrate the rapid trauma assessment that should be used to assess a patient based on mechanism of injury. (P-1, 2) [1]

Lesson 3-4 Focused History and Physical Exam-Medical Patients [1 of two below]

- 3-4.6 Demonstrate the patient care skills that should be used to assist with a patient who is responsive with no known history. (P-1, 2)
- 3-4.7 Demonstrate the patient care skills that should be used to assist with a patient who is unresponsive or has an altered mental status. (P-1, 2)

Lesson 3-5 Detailed Physical Exam

- 3-5.6 Demonstrate the skills involved in performing the detailed physical exam. (P-1, 2) [1]

Lesson 3-6 On-Going Assessment

- 3-6.7 Demonstrate the skills involved in performing the on-going assessment. (P-1, 2) [1]

Lesson 3-7 Communications

- 3-7.11 Perform a simulated, organized, concise radio transmission. (P-2) [1]
- 3-7.12 Perform an organized, concise patient report that would be given to the staff at a receiving facility. (P-2) [1]

Lesson 3-8 Documentation

- 3-8.11 Complete a prehospital care report. (P-2) [5 of school/unofficial forms of documentation]

EMT-Basic Clinical Procedures Requirements

Procedure	1	2	3	4	5
1-5.32 Assessment of Breathing					
1-5.33 Obtaining a Pulse					
1-5.34 Assessment of Skin Color, Temperature, Condition in any Patient Age Groups, and CRT in Pediatrics.					
1-5.35 Assessment of Pupils					
1-5.36 Obtaining a Blood Pressure					
1-5.37 Obtaining a Patient History (SAMPLE)					
1-6.14 Use of a Wheeled Stretcher			X	X	X
1-6.15 Transfer of Patient between Stretcher and Bed			X	X	X
2-1.37 Correct Operation of Oxygen Tank and Regulator		X	X	X	X
2-1.38 Use of Non-Rebreather Mask or 2-1.39 Nasal Cannula		X	X	X	X
3-1.9 Scene Size-Up					
3-2.22 Assessment of Mental Status					
3-2.23 Assessment of Airway					
3-2.26 Assessment for External Bleeding					
3-2.28 Prioritize Patient					
3-3.8 Focused History and Physical Exam-Trauma Patient		X	X	X	X
3-4.6 Focused History and Physical of Responsive Medical Patient or 3-4.7 Unresponsive Medical Patient		X	X	X	X
3-5.6 Detailed Physical Exam		X	X	X	X
3-6.7 Ongoing Assessment		X	X	X	X

3-7.11 Perform Radio Transmission		X	X	X	X
3-7.12 Perform Patient Report at Receiving Facility		X	X	X	X
3-8.11 Complete a Prehospital Patient Care Report as Instructed					

**Requires a minimum of 5 patient contacts and a minimum of 8 clinical hours.

***ER rotations may be used to gain necessary procedures.

Additional Tasks As Performed

Procedure	1	2	3	4	5



Department of Human Resources
Division of Public Health
Office of Emergency Medical Services

Georgia EMS Curricula Standards

EMT-Intermediate

Revised 1/2007

EMT-Intermediate Curriculum Guide by Module

The Pre-requisite or Co-requisite for the EMT-Intermediate Curricula is the completion of the EMT-Basic Curricula Objectives and Requirements. The following objectives are in addition to the EMT-Basic Curricula Objectives and Requirements. Duplicate objectives are not listed twice.

EMT-Basic Curricula	Total hours for EMT-B	132
Module 1	Roles and Responsibilities	2
Module 2	EMS Systems	2
Module 3	Medical/Legal	2
Module 4	Medical Terminology	1
Module 5	Communications	2
Module 6	Patient Assessment	23
Module 7	Airway Management	10
Module 8	Shock	10
Required Clinical		16
	Total hours for EMT-Intermediate	200

[Table of Contents](#)

Module	Page
Module 1 Roles and Responsibilities	2
Module 2 EMS Systems	3
Module 3 Medical/Legal	3
Module 4 Medical Terminology	4
Module 5 Communications	4
Module 6 Patient Assessment	5
Module 7 Airway Management	7
Module 8 Shock	9
Module C Clinical Requirements	13
Clinical Task Table	13

Module 1 - Roles and Responsibilities

- I-1.1 Differentiate the roles and responsibilities of the EMT-Intermediate from other prehospital care providers. [1.1.1, 1.1.2, 1.1.3]
- I-1.2 Define the following terms: [1.1.4, 1.1.9, 1.1.10, 1.1.15]
 - ethics
 - professionalism
 - professional
 - health care professional
 - certification
 - licensure
 - registration
- I-1.3 Describe the differences between ethical behavior and legal requirements. [1.1.5]
- I-1.4 Provide examples of activities that constitute appropriate ethical behavior for an EMT-Intermediate. [1.1.6]
- I-1.5 Identify whether a particular activity is unethical and/or illegal, given certain patient care situations. [1.1.7]
- I-1.6 Identify whether a particular activity is ethical or unethical given certain patient care situations. [1.1.8]
- I-1.7 Identify whether a particular activity is professional or unprofessional given certain patient care situations. [1.1.11]
- I-1.8 Provide examples of activities that constitute appropriate professional behavior for an EMT-Intermediate. [1.1.12]
- I-1.9 Explain EMT-Intermediate licensure, license renewal, and reciprocity requirements in Georgia. [1.1.13]
- I-1.10 Describe the benefits of EMT-Intermediate continuing education. [1.1.14]
- I-1.11 Name and describe current Georgia legislation outlining the scope of prehospital advanced life support. [1.1.16]
- I-1.12 State the reason it is important to keep one's EMT-Intermediate licensure current. [1.1.17]
- I-1.13 State the major purposes of a national association. [1.1.18]
- I-1.14 State the major purposes of a national registration agency. [1.1.19]
- I-1.15 State the major benefits of subscribing to professional journals. [1.1.20]
- I-1.16 State the benefits of EMT-Intermediates teaching in their community. [1.1.21]

Module 2 – EMS Systems

- I-2.1 Define stabilization of patients. [1.2.3]
- I-2.2 Describe the GSA/KKK Ambulance Standards. [1.2.8]
- I-2.3 Define the national standard levels of prehospital provider as defined by curriculum, respectively. [1.2.10]
- I-2.4 Discuss ambulance placement and the parameters that should be utilized in its development, including the differences in urban, suburban, and rural settings. [1.2.10]
- I-2.5 Define protocols and standing orders. [1.2.12]
- I-2.6 Describe the development of protocols. [1.2.13]
- I-2.7 Describe integration of prehospital care into the continuum of total patient care with the emergency department phase of hospital care. [1.2.16]
- I-2.8 Discuss the varying philosophies between the management of medical patients and trauma patients, prehospital. [1.2.20]
- I-2.9 Describe the transition of patient care from the EMT-Intermediate, including: [1.2.21]
 - Transfer of responsibility (legal and medical)
 - Reporting of patient status to physician or nurse.
- I-2.10 Left intentionally blank.
- I-2.11 Left intentionally blank.

Module 3 - Medical/Legal Considerations

- I-3.1 Discuss the significance and scope of the following in relationship to EMT practice: [1.3.1]
 - O.C. G. A. 31-11
 - Good Samaritan Law/Civil Immunity
 - Georgia EMS Statutes
 - Georgia Motor Vehicle Codes
- I-3.2 Define the following: [1.3.2]
 - tort
 - slander
 - informed consent
 - liable
 - assault
 - false imprisonment
- I-3.3 Review the importance of providing accurate documentation (oral and written) in substantiating an incident. [1.3.3]
- I-3.4 Describe the four elements to prove medical liability. [1.3.5]
- I-3.5 Review the conditions under which the use of force, including restraint, is acceptable. [1.3.7]

Module 4 - Medical Terminology

- I-4.1 Define and contrast medical terms. [1.4.1]
- I-4.2 Identify various medical terms given one or more anatomical parts of the body. [1.4.2]
- I-4.3 Identify common medical abbreviations. [1.4.3]
- I-4.4 Identify common root words and determine their meaning. [1.4.4]
- I-4.5 Identify and define common prefixes and suffixes. [1.4.5]
- I-4.6 Locate one or more terms in a medical dictionary. [1.4.6]
- I-4.7 Left intentionally blank.
- I-4.8 Left intentionally blank.

[Reference: Appendix A-Medical Terminology of the US DOT Intermediate 1985 Curriculum for examples of common medical abbreviations, prefixes, and suffixes]

Module 5 - EMS Communications

- I-5.1 Describe the phases necessary to complete a typical EMS event. [1.5.1]
- I-5.2 Identify and differentiate among the following communications systems: [1.5.2]
 - Simplex
 - Multiplex
 - Duplex
 - Trunked
 - Digital communications
 - Cellular telephone
 - Facsimile
 - Computer
- I-5.3 Describe maintenance procedures for the field radio equipment. [1.5.3]
- I-5.4 Describe the position of the antenna on a portable transmitter/receiver that will deliver maximum coverage. [1.5.4]
- I-5.5 Describe an advantage of a repeater system over a nonrepeater system. [1.5.5]
- I-5.6 Describe basic functions and responsibilities of the Federal Communications Commission (FCC). [1.5.6]
- I-5.7 Describe how the Emergency Medical Dispatcher functions as an integral part of the EMS team. [1.5.7]
- I-5.8 Identify the role of Emergency Medical Dispatch in a typical EMS event. [1.5.7]
- I-5.9 List appropriate information to be gathered by the Emergency Medical Dispatcher. [1.5.8]
- I-5.10 Describe the local radio codes/signals. [1.5.9]

- I-5.11 List factors which enhance verbal communications. [1.5.10, 1.5.11]
- I-5.12 Describe the importance of written medical protocols. [1.5.12]
- I-5.13 Describe the procedure of verbal communication of patient information to the hospital. [1.5.13]
- I-5.14 Describe information that should be included in patient assessment information verbally reported to medical direction. [1.5.14]
- I-5.15 Organize a list of patient assessment information in the correct order for electronic transmission to medical direction according to the format used locally. [1.5.15]
- I-5.16 Name five uses of the EMS patient care report. [1.5.16]
- I-5.17 Demonstrate the ability to use a radio. [S1.5.17, S1.5.18]

Module 6 - General Patient Assessment and Initial Management

- I-6.1 Left intentionally blank.
- I-6.2 Left intentionally blank.
- I-6.3 Left intentionally blank.
- I-6.4 Describe orthostatic vital signs and evaluate their usefulness in assessing a patient in shock. [1.6.40]
- I-6.5 Describe the anatomy and function of the following major body systems: Respiratory, circulatory, musculoskeletal, nervous and endocrine. [1.6.20]
- I-6.6 Apply the techniques of physical examination to the medical patient. [1.6.38, 1.6.39]
- I-6.7 Apply the techniques of a physical examination to the trauma patient. [1.6.38, 1.6.39]
- I-6.8 Discuss the reason for performing a focused history and physical exam. [1.6.2, 1.6.42, 1.6.45]
- I-6.9 Describe when and why a detailed physical examination is necessary. [1.6.2, 1.6.42]
- I-6.10 Describe the normal and abnormal assessment findings of the head (including the scalp, skull, face, and skin). [1.6.43]
- I-6.11 Describe the examination of the head (including the scalp, skull, face, and skin). [1.6.43]
- I-6.12 Describe the examination of the neck and cervical spine. [1.6.43]
- I-6.13 Differentiate normal and abnormal assessment findings of the neck and cervical spine. [1.6.43]
- I-6.14 Describe the inspection, palpation, percussion, and auscultation of the chest. [1.6.43]
- I-6.15 Describe the examination of the thorax and ventilation. [1.6.43]
- I-6.16 Describe the examination of the anterior and posterior chest. [1.6.43]
- I-6.17 Differentiate normal and abnormal assessment findings of the chest examination. [1.6.43]

- I-6.18 Describe the examination of the abdomen. [1.6.43]
- I-6.19 Differentiate normal and abnormal assessment findings of the abdomen. [1.6.43]
- I-6.20 Describe the examination of the female external genitalia. [1.6.43]
- I-6.21 Differentiate normal and abnormal assessment findings of the female external genitalia. [1.6.43]
- I-6.22 Describe the examination of the male genitalia. [1.6.43]
- I-6.23 Differentiate normal and abnormal findings of the male genitalia. [1.6.43]
- I-6.24 Describe the examination of the extremities. [1.6.43]
- I-6.25 Differentiate normal and abnormal findings of the extremities. [1.6.43]
- I-6.26 Describe the examination of the peripheral vascular system. [1.6.35]
- I-6.27 Differentiate normal and abnormal findings of the peripheral vascular system. [1.6.35]
- I-6.28 Describe the examination of the nervous system. [1.6.43]
- I-6.29 Differentiate normal and abnormal findings of the nervous system. [1.6.43]
- I-6.30 Identify the general principles regarding the importance of EMS documentation and ways in which documents are used. [1.6.56]
- I-6.31 Develop, execute, and evaluate a treatment plan based on the field impression for the hemorrhage or shock patient. [1.6.48]
- I-6.32 Define the term “cardiac arrest.” [1.6.30]
- I-6.33 Describe the purpose, equipment needed, techniques utilized, complications, and general principles for obtaining a blood sample. [1.6.46]
- I-6.34 Discuss the pathophysiology of injury to the lung, including: [1.6.23]
 - Simple pneumothorax
 - Open pneumothorax
 - Tension pneumothorax
- I-6.35 Discuss the management of lung injuries. [1.6.23]
- I-6.36 Discuss the pathophysiology of diaphragmatic injuries. [1.6.23]
- I-6.37 Discuss the management of diaphragmatic injuries. [1.6.23]
- I-6.38 Discuss the epidemiology and pathophysiology of specific chest wall injuries, including a flail segment. [1.6.23]
- I-6.39 Discuss the management of chest wall injuries. [1.6.23]
- I-6.40 Left intentionally blank.
- I-6.41 Left intentionally blank.

Module 7 - Airway Management and Ventilation

- I-7.1 List factors which cause decreased oxygen concentrations in the blood. [1.76]
- I-7.2 List the factors which increase and decrease carbon dioxide production in the body. [1.75, 1.76, 1.77]
- I-7.3 Describe the measurement of oxygen in the blood. [1.7.3]
- I-7.4 Describe the measurement of carbon dioxide in the blood. [1.7.4]
- I-7.5 Identify types of suction catheters, including hard or rigid catheters and soft catheters. [1.7.12]
- I-7.6 Explain the purpose for suctioning the upper airway. [1.7.9]
- I-7.7 Identify types of suction equipment. [1.7.10, 1.7.11]
- I-7.8 Describe the indications for suctioning the upper airway. [1.7.9]
- I-7.9 Identify special considerations of suctioning the upper airway. [1.7.13]
- EI-7.10 Describe the indications, contraindications, advantages, disadvantages, complications, equipment, and technique for using the following airway devices: [1.7.14, 1.7.15, 1.7.16, 1.7.17]
 - dual lumen airway
 - laryngeal mask airways
- I-7.11 Explain the primary objective of airway maintenance. [GA specific]
- I-7.12 Identify the commonly neglected prehospital skills related to airway. [GA specific]
- I-7.13 Define normal tidal volumes for the adult. [GA specific]
- I-7.14 List the concentration of gases which comprise atmospheric air. [GA specific]
- I-7.15 Define normal respiratory rates for adult, child, and infant. [GA specific]
- I-7.16 Define and differentiate between hypoxia and hypoxemia. [GA specific]
- I-7.17 Describe the modified forms of respiration. [GA specific]
- I-7.18 Define gag reflex. [GA specific]
- I-7.19 List the factors which affect respiratory rate and depth. [1.6.24, 1.6.15]
- I-7.20 Describe the voluntary and involuntary regulation of respiration. [1.6.13]
- I-7.21 Describe causes of upper airway obstruction. [1.6.15]
- I-7.22 Describe the use, advantages, and disadvantages of an oxygen humidifier. [1.6.14]
- I-7.23 Describe the indications, contraindications, advantages, disadvantages, complications, equipment, and technique for using a dual lumen airway. [1.6.32, 1.7.14, 1.7.15, 1.7.16, 1.7.17]
- I-7.24 Explain the relationship between pulmonary circulation and respiration. [1.6.21, 1.6.22]
- EI-7.25 Define the following terms: [GA specific]
 - CPAP
 - BiPAP

- EI-7.26 List several conditions where CPAP and/or BiPAP would be considered. [GA specific]
- EI-7.27 Describe the indications and contraindications for the following: [GA specific]
- CPAP
 - BiPAP
- EI-7.28 Describe the positive and negative effects of CPAP and BiPAP on the body. [GA specific]
- EI-7.29 Describe monitoring the patient on CPAP and BiPAP. [GA specific]
- EI-7.30 Describe the procedure for applying a device capable of providing CPAP and/or BiPAP. [GA specific]
- EI-7.31 Describe the necessary elements needed for documenting the patient assessment and administration of CPAP or BiPAP. [GA specific]
- EI-7.32 Define mechanical ventilation. [GA specific]
- EI-7.33 List several conditions in which mechanical ventilators may be used on patients in their residences. [GA specific]
- EI-7.34 Define ventilator dependent. [GA specific]
- EI-7.35 Define the following ventilator-related terms: [GA specific]
- Volume Cycled Ventilator
 - Pressure Cycled Ventilator
 - Pressure Support Ventilation
 - Positive End Expiratory Pressure
 - Peak Inspiratory Pressure
 - Peak Airway Pressure Alarm
- EI-7.36 Identify components of a home ventilator. [GA specific]
- EI-7.37 Describe common causes of home ventilator alarms. [GA specific]
- EI-7.38 Discuss what actions should be taken if a home ventilator malfunctions. [GA specific]
- EI-7.39 Describe the necessary elements for documenting the monitoring and care provided to a home ventilator patient. [GA specific]
- EI-7.40 Recognize and respond to the feelings that patients requiring CPAP or BiPAP may experience. [GA specific]
- EI-7.41 Explain the rationale for close monitoring of patients transported on home ventilators. [GA specific]
- SI-7.42 Perform body substance isolation (BSI) procedures during basic airway management, advanced airway management, and ventilation. [GA specific]
- SI-7.43 Perform pulse oximetry. [GA specific]
- ESI-7.44 Demonstrate proper insertion of the following airway devices: [S1.6.65, S1.7.23, S1.7.24, S1.7.25, S1.7.26, S1.7.27 and GA specific]
- dual lumen airway
 - laryngeal mask airway
- ESI-7.45 Demonstrate the proper application of a device capable of providing CPAP and/or BiPAP. [GA specific]
- ESI-7.46 Demonstrate the correct assessment, reassessment, and documentation for a patient receiving CPAP and BiPAP. [GA specific]

- ESI-7.47 Label the components of a home ventilator. [GA specific]
ESI-7.48 Demonstrate the correct assessment, reassessment, and documentation for a patient being transported on a home ventilator. [GA specific]

Module 8 – Assessment and Management of Shock

- I-8.1 Define shock based on aerobic and anaerobic metabolism. [1.8.1]
I-8.2 Discuss the prevention of anaerobic metabolism. [1.8.2]
I-8.3 Discuss red blood cell oxygenation in the lungs based on alveolar oxygen levels and transportation across the alveolar capillary wall. [1.8.3]
I-8.4 Discuss tissue oxygenation based on tissue perfusion and release of oxygen. [1.8.4]
I-8.5 Discuss the role played by respiration, inadequate ventilation in the management of shock. [1.8.5]
I-8.6 Describe perfusion and the mechanisms of improvement of cardiac output based on the strength and rate of contractions. [1.8.6]
I-8.7 Discuss the fluid component of the cardiovascular system and the relationship between the volume of the fluid and the size of the container. [1.8.7]
I-8.8 Discuss systemic vascular resistance, the relationship of diastolic pressure to the SVR and the effect of diastolic pressure on coronary circulation. [1.8.8]
I-8.9 Discuss the container size in its relationship to the fluid volume and the effect on blood returning to the heart. [1.8.9]
I-8.10 Discuss body fluids based on total body water, intracellular fluid, and extracellular fluid. [1.8.10]
I-8.11 Identify the significant anions and cations in the body. [1.8.11]
I-8.12 Describe the role of protein. [1.8.12]
I-8.13 Discuss osmosis. Define semi-permeable membranes, and discuss their function. [1.8.13]
I-8.14 Define isotonic fluids, hypotonic fluids, and hypertonic fluids. [1.8.14]
I-8.15 Define and discuss diffusion. [1.8.15]
I-8.16 Define active transport. [1.8.16]
I-8.17 Describe the mechanisms of concentration of electrolytes. [1.8.17]
I-8.18 Define acid-base balance. [1.8.18]
I-8.19 Discuss acid-base balance based on hydrogen ion concentration, pH, and buffer systems. [1.8.19]
I-8.20 Define and discuss the following: [1.8.20]
 - Respiratory acidosis
 - Respiratory alkalosis
 - Metabolic acidosis

- Metabolic alkalosis
- I-8.21 Describe the mechanism of the body response to perfusion change. [1.8.21]
- I-8.22 Identify the role of the baroreceptor. [1.8.22]
- I-8.23 Describe how the actions of the baroreceptor affect blood pressure and perfusion. [1.8.23]
- I-8.24 Describe compensated shock. [1.8.24]
- I-8.25 Describe uncompensated shock, both cardiac and peripheral effects. [1.8.25]
- I-8.26 Discuss the assessment of the patient's perfusion status, based on physical observations within the initial assessment, including pulse, skin, temperature, and capillary refill time. [1.8.26]
- I-8.27 Discuss the relationship of the neurological exam to assessment of hypoperfusion and oxygenation. [1.8.27]
- I-8.28 Describe the information provided by the following in physical examination: pulse, blood pressure, diastolic pressure, systolic pressure, skin color, appearance, temperature, and respiration. [1.8.28]
- I-8.29 Discuss the pathophysiological changes associated with compensated shock. [1.8.29]
- I-8.30 Identify the need for intervention and transport of the patient with compensated shock. [1.8.29]
- I-8.31 Discuss the treatment plan and management of compensated shock. [1.8.29]
- I-8.32 Describe the beneficial and detrimental effects of the pneumatic antishock garment. [1.8.30]
- I-8.33 Describe the indications and contraindications for the pneumatic antishock garment. [1.8.31]
- I-8.34 Discuss fluid replacement, the types of fluid that are available, the benefits and detrimental effects of each. [1.8.32]
- EI-8.35 Discuss how fluid replacement is monitored and controlled, to include intravenous therapy delivery pumps. [1.8.33 and GA specific]
- I-8.36 Discuss the routes of fluid replacement and the advantages and disadvantages of each. [1.8.34]
- EI-8.37 Review the specific anatomy and physiology pertinent to the pharmacology and medication administration of the EMT-Intermediate. [GA specific]
- I-8.38 Discuss the standardization of drugs. [GA specific]
- I-8.39 Differentiate among the chemical, generic (non-proprietary), and trade (proprietary) names of a drug. [GA specific]
- I-8.40 Describe how drugs are classified. [GA specific]
- I-8.41 List the authoritative sources for drug information. [GA specific]
- I-8.42 Discuss special consideration in drug treatment with regard to pregnant, pediatric, and geriatric patients. [GA specific]

- EI-8.43 Discuss the EMT-Intermediate's responsibilities and scope of management pertinent to the administration of medications and maintenance of medications. [GA specific]
- I-8.44 List and describe general properties of drugs. [GA specific]
- I-8.45 List and differentiate routes of drug administration. [GA specific]
- I-8.46 Describe mechanisms of drug action. [GA specific]
- I-8.47 Describe pharmacokinetics, pharmacodynamics, theories of drug action, drug-response relationship, factors altering drug responses, predictable drug responses, iatrogenic drug responses, and unpredictable adverse drug responses. [GA specific]
- I-8.48 Discuss considerations for storing drugs. [GA specific]
- I-8.49 List the components of a drug profile. [GA specific]
- EI-8.50 List and describe drugs which the EMT-Intermediate may administer or maintain in a pharmacological management plan according to local protocol. [GA specific]
- I-8.51 Review the specific anatomy and physiology pertinent to medication administration. [GA specific]
- EI-8.52 Review mathematical principles and equivalents. [GA specific]
- I-8.53 Calculate Dextrose 10% and 25% in Water dilutions from Dextrose 50% in Water for use in pediatric and infant patients with hypoglycemia. [GA specific]
- I-8.54 Differentiate temperature readings between the Centigrade and Fahrenheit scales. [GA specific]
- EI-8.55 Calculate Intravenous infusion rates for intravenous infusion sets and intravenous therapy delivery pumps for adults, infants, and children.
- I-8.56 Discuss legal aspects affecting medication administration. [GA specific]
- I-8.57 Discuss the "six rights" of drug administration and correlate these with the principles of medication administration. [GA specific]
- I-8.58 Discuss medical asepsis and the differences between clean and sterile techniques. [GA specific]
- I-8.59 Describe the use of antiseptics and disinfectants. [GA specific]
- I-8.60 Describe the use of universal precautions and body substance isolation (BSI) procedures when administering a medication. [GA specific]
- I-8.61 Describe the indications, equipment needed, techniques utilized, precautions, and general principles of peripheral venous cannulation. [GA specific]
- EI-8.62 Describe the indications, equipment needed, techniques utilized, precautions, and general principles of intraosseous needle placement and infusion in pediatric and adult patients. [GA specific]
- I-8.63 Describe the indications, equipment needed, techniques utilized, precautions, and general principles of administering medications by the inhalation route. [GA specific]
- I-8.64 Differentiate among the different dosage forms of oral medications. [GA specific]

- I-8.65 Describe the equipment needed and general principles of administering oral medications. [GA specific]
- I-8.66 Differentiate among the different parenteral routes of medication administration. [GA specific]
- I-8.67 Describe the equipment needed, techniques utilized, complications, and general principles for the preparation and administration of parenteral medications. [GA specific]
- I-8.68 Differentiate among the different percutaneous routes of medication administration. [GA specific]
- I-8.69 Describe the purpose, equipment needed, techniques utilized, complications, and general principles for obtaining a blood sample. [GA specific]
- I-8.70 Describe disposal of contaminated items and sharps. [GA specific]
- EI-8.71 Describe the necessary elements for documenting fluid replacement therapy. [GA specific]
- EI-8.72 Describe the necessary elements for documenting the placement of an intravenous access device. [GA specific]
- EI-8.73 Describe the necessary elements for documenting the placement of an intraosseous access device. [GA specific]
- EI-8.74 Describe the necessary elements for documenting the patient assessment and delivery and/or maintenance of medications during transport. [GA specific]
- EI-8.75 Recognize and respond to the feelings patients requiring intravenous fluid therapy and/or medication delivery may experience. [GA specific]
- EI-8.76 Explain the rationale for intraosseous access in a critical pediatric or adult patient. [GA specific]
- SI-8.77 Demonstrate in order of priority the steps of shock resuscitation. [S1.8.35]
- SI-8.78 Demonstrate the use of the pneumatic antishock garment (PASG). [S1.8.36]
- SI-8.79 Demonstrate cannulation of peripheral veins. [S1.8.37]
- SI-8.80 Demonstrate intraosseous needle placement and infusion. [GA specific]
- ESI-8.81 Demonstrate preparation, dilution, and administration of parenteral medications. [GA specific]
- SI-8.82 Perfect disposal of contaminated items and sharps. [GA specific]

Module C - Clinical

EMT-Intermediate Clinical Procedures Requirements With Accompanying Psychomotor Objectives

ALL clinical objectives must be completed. A minimum of 16 hours and 5 patient contacts in a clinical setting is required. However, it may take more than the minimum of 16 hours or 5 patient contacts to complete all the clinical objectives. ALL clinical objectives must be completed the number of times listed in brackets []. The spreadsheet may be utilized as a check-sheet for the clinical objectives. These clinical objectives are in addition to the EMT-Basic Clinical Objectives.

- I-8.79 Demonstrate cannulation of peripheral veins. **[5]**

EMT-Intermediate Clinical Procedures Requirements

Procedure	1	2	3	4	5
I-8.79 Establish a Peripheral IV [5]					

Additional Tasks As Performed

Procedure	1	2	3	4	5

**Requires a minimum of 16 clinical hours.

***ER rotations may be used to gain necessary procedures.



Department of Human Resources
Division of Public Health
Office of Emergency Medical Services

Georgia EMS Curricula Standards

EMT-Paramedic

Revised February 2006

EMT-Paramedic Curriculum Guide by Module

All individuals entering an approved Paramedic Program must be currently licensed as an EMT-B or EMT-I by Georgia, another state, or the National Registry of Emergency Medical Technicians.

The Paramedic curriculum has identified coursework in anatomy and physiology as either a pre- or co-requisite. A mastery of anatomy and physiology, beyond that covered in the anatomy and physiology review of each section of the curriculum is assumed throughout this curriculum. EMS educational programs have many options to address anatomy and physiology in paramedic education. For programs that have access to formal anatomy and physiology classes, an appropriate level course can be identified as a pre- or co-requisite to paramedic training. For other programs, anatomy and physiology can be front loaded in the paramedic course, or presented throughout the course.

A list of objectives has been derived from many of the currently available resources in anatomy and physiology instruction. All of these objectives were consistently found in allied health educational programs or other non-science curricula. A list of the anatomy and physiology objectives that are considered pre- or co-requisite to paramedic education is found in appendix A. Paramedic programs should select courses or textbooks which cover this level of material.

	Minimum Classroom	Minimum Lab	
Preparatory			
Well being	2	0	
Roles & Responsibilities	2	0	
Illness/Injury	2	0	
Medical/Legal	3	0	
Ethics	1	0	
Pathophysiology	35	0	
Pharmacology	45	0	
Medication Admin.	2	20	
Therapeutic Communications	1	0	
Life Span	3	0	
Module Totals	96	20	116
Airway			
Airway & Ventilation	12	10	
Module Totals	12	10	22
Patient Assessment			
History Taking	2	1	
Techniques of PE	2	2	
Patient Assessment	6	6	
Clinical Decision Making	0	2	
Communications	1	1	
Documentation	2	2	
Module Totals	13	14	27
Trauma			
Trauma Systems/MOI	2	1	

Hemorrhage and Shock	4	1	
Soft Tissue Trauma	2	2	
Burns	3	1	
Head and Face Trauma	4	1	
Spinal Trauma	3	4	
Thoracic Trauma	4	4	
Abdominal Trauma	2	1	
Musculoskeletal Trauma	2	4	
Module Totals	26	19	45

Medical

Pulmonology	12	4	
Cardiology	50	30	
Neurology	8	1	
Endocrinology	4	1	
Allergies & Anaphylaxis	3	1	
Gastroenterology	4	1	
Urology	2	1	
Toxicology	6	1	
Environmental Conditions	4	1	
Infectious & Comm. Disease	4	1	
Behavioral/ Psychiatric	4	1	
Hematology	2	1	
Gynecology	4	1	
Obstetrics	6	2	
Module Totals	113	47	160

Special Considerations

Neonatology	4	1	
Pediatrics	12	2	
Geriatrics	6	3	
Abuse & Assault	1	1	
Pts with Sp. Challenges	3	1	
Acute Interventions in CP Patients	3	2	
Module Totals	29	10	39

Assessment Based Management

Assessment Based Management	2	4	
Module Totals	2	4	6

Operations

Ambulance Operations	0	0	
Medical Incident Command	4	2	
Rescue A & O	2	2	

Hazardous Material Incidents	2	2	
Crime Scene Awareness	1	2	
Response to WMD Events-GA Req.	0	0	
Module Totals	9	8	17

Miscellaneous Classroom Time

Exams & Review	32	30	
Final Testing	4	6	
Misc. Totals	36	36	72

Overall EMT-P Classroom Total **336** **168** **504**

Clinical Rotation

Operating Room	8
Critical Care	16
Pediatrics	16
Labor/Delivery	16
Psychiatric	8
Emergency Room	120
EMS	120
Flex	16
Total Clinical Hours	320

Total EMT-P Course Hours	EMT- Paramedic 824	Total 824
---------------------------------	-----------------------------------	----------------------

****Please note that inclusion in the minimum standards curriculum does not necessarily reflect current GA Paramedic Scope of Practice. Please refer to the current GA Paramedic Scope of Practice for approved skills.**

****Please note that the Paramedic curriculum contains the unit, Response to WMD Events, which is GA specific. Objectives must be covered during the approved Paramedic course; however a minimum number of hours were not specified for these objectives. They may be incorporated in the existing modules or instructors may add additional time to cover them.**

Table of Contents

Module	Page
Preparatory	6
EMS Systems	6
Well-Being of the Paramedic	7
Illness and Injury Prevention	9
Medical/Legal Issues	9
Ethics	11
General Principles of Pathophysiology	12
Pharmacology	13
Venous Access and Medication Administration	14
Therapeutic Communications	15
Life Span Development	16
Airway	17
Airway and Ventilation	17
Patient Assessment	21
History Taking	21
Techniques of Physical Exam	21
Patient Assessment	23
Clinical Decision Making	25
Communications	26
Documentation	27
Trauma	28
Trauma Systems/Mechanism of Injury	28
Hemorrhage and Shock	28
Soft Tissue Injuries	30
Burns	32
Head and Facial Trauma	35
Spinal Trauma	38
Thoracic Trauma	40
Abdominal Trauma	41
Musculoskeletal Trauma	43
Medical	45
Pulmonology	45
Cardiology	46
Neurology	52
Endocrinology	55
Allergy and Anaphylaxis	57
Gastroenterology	57
Renal/Urology	60
Toxicology	61
Hematology	64
Environmental Conditions	65
Infectious Diseases	67
Behavioral/Psychiatric	70
Gynecology	71
Obstetrics	72

Special Considerations	74
Neonatology	74
Pediatrics	76
Geriatrics	80
Abuse and Neglect	83
Patients with Special Needs	84
Acute Interventions for the CC Patient	86
Assessment Based Management	88
Operations	90
Ambulance Operations	90
Medical Incident Command	90
Rescue A & O	92
Hazardous Material Incidents	95
Crime Scene Awareness	97
Response to WMD Events-GA Specific	98
Appendix A	
Anatomy and Physiology Objectives	100
Appendix B	
Clinical Objectives	105
Clinical Tasks	
Clinical Task Chart	107

Preparatory

EMS Systems/Roles and Responsibilities

UNIT TERMINAL OBJECTIVE

- 1-1 At the completion of this unit, the paramedic student will understand his or her roles and responsibilities within an EMS system, and how these roles and responsibilities differ from other levels of providers.

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 1-1.1 Define the following terms: (C-1)
- EMS Systems
 - Licensure
 - Certification
 - Registration
 - Profession
 - Professionalism
 - Health care professional
 - Ethics
 - Peer review
 - Medical direction
 - Protocols
- 1-1.2 Describe key historical events that influenced the development of national Emergency Medical Services (EMS) systems. (C-1)
- 1-1.3 Identify national groups important to the development, education, and implementation of EMS. (C-1)
- 1-1.4 Differentiate among the four nationally recognized levels of EMS training/ education, leading to licensure/ certification/ registration. (C-1)
- 1-1.5 Describe the attributes of a paramedic as a health care professional. (C-1)
- 1-1.6 Describe the recognized levels of EMS training/ education, leading to licensure/ certification in his or her state. (C-1)
- 1-1.7 Explain paramedic licensure/ certification, recertification, and reciprocity requirements in his or her state. (C-1)
- 1-1.8 Evaluate the importance of maintaining one's paramedic license/ certification. (C-3)
- 1-1.9 Describe the benefits of paramedic continuing education. (C-1)
- 1-1.10 List current state requirements for paramedic education in his/ her state. (C-1)
- 1-1.11 Discuss the role of national associations and of a national registry agency. (C-1)
- 1-1.12 Discuss current issues in his/ her state impacting EMS. (C-1)
- 1-1.13 Discuss the roles of various EMS standard setting agencies. (C-1)
- 1-1.14 Identify the standards (components) of an EMS System as defined by the National Highway Traffic Safety Administration. (C-1)
- 1-1.15 Describe how professionalism applies to the paramedic while on and off duty. (C-1)
- 1-1.16 Describe examples of professional behaviors in the following areas: integrity, empathy, self-motivation, appearance and personal hygiene, self-confidence, communications, time management, teamwork and diplomacy, respect, patient advocacy, and careful delivery of service. (C-1)
- 1-1.17 Provide examples of activities that constitute appropriate professional behavior for a paramedic. (C-2)
- 1-1.18 Describe the importance of quality EMS research to the future of EMS. (C-3)
- 1-1.19 Identify the benefits of paramedics teaching in their community. (C-1)
- 1-1.20 Describe what is meant by "citizen involvement in the EMS system." (C-1)
- 1-1.21 Analyze how the paramedic can benefit the health care system by supporting primary care to patients in the out-of-hospital setting. (C-3)
- 1-1.22 List the primary and additional responsibilities of paramedics. (C-1)

- 1-1.23 Describe the role of the EMS physician in providing medical direction. (C-1)
- 1-1.24 Describe the benefits of medical direction, both on-line and off-line. (C-1)
- 1-1.25 Describe the process for the development of local policies and protocols. (C-2)
- 1-1.26 Provide examples of local protocols. (C-1)
- 1-1.27 Discuss prehospital and out-of-hospital care as an extension of the physician. (C-1)
- 1-1.28 Describe the relationship between a physician on the scene, the paramedic on the scene, and the EMS physician providing on-line medical direction. (C-1)
- 1-1.29 Describe the components of continuous quality improvement. (C-1)
- 1-1.30 Analyze the role of continuous quality improvement with respect to continuing medical education and research. (C-3)
- 1-1.31 Define the role of the paramedic relative to the safety of the crew, the patient, and bystanders. (C-1)
- 1-1.32 Identify local health care agencies and transportation resources for patients with special needs. (C-1)
- 1-1.33 Describe the role of the paramedic in health education activities related to illness and injury prevention. (C-1)
- 1-1.34 Describe the importance and benefits of research. (C-2)
- 1-1.35 Explain the EMS provider's role in data collection. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 1-1.38 Assess personal practices relative to the responsibility for personal safety, the safety of the crew, the patient, and bystanders. (A-3)
- 1-1.39 Serve as a role model for others relative to professionalism in EMS. (A-3)
- 1-1.40 Value the need to serve as the patient advocate inclusive of those with special needs, alternate life styles and cultural diversity. (A-3)
- 1-1.41 Defend the importance of continuing medical education and skills retention. (A-3)
- 1-1.42 Advocate the need for supporting and participating in research efforts aimed at improving EMS systems. (A-3)
- 1-1.43 Assess personal attitudes and demeanor that may distract from professionalism. (A-3)
- 1-1.44 Value the role that family dynamics plays in the total care of patients. (A-3)
- 1-1.45 Advocate the need for injury prevention, including abusive situations. (A-1)
- 1-1.46 Exhibit professional behaviors in the following areas: integrity, empathy, self-motivation, appearance and personal hygiene, self-confidence, communications, time management, teamwork and diplomacy, respect, patient advocacy, and careful delivery of service. (A-2)

PSYCHOMOTOR OBJECTIVES

None identified for this unit.

The Well-Being of the Paramedic

UNIT TERMINAL OBJECTIVE

- 1-2 At the completion of this unit, the paramedic student will understand and value the importance of personal wellness in EMS and serve as a healthy role model for peers.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 1-2.1 Discuss the concept of wellness and its benefits. (C-1)
- 1-2.2 Define the components of wellness. (C-1)
- 1-2.3 Describe the role of the paramedic in promoting wellness. (C-1)
- 1-2.4 Discuss the components of wellness associated with proper nutrition. (C-1)
- 1-2.5 List principles of weight control. (C-1)
- 1-2.6 Discuss how cardiovascular endurance, muscle strength, and flexibility contribute to physical fitness. (C-2)

- 1-2.7 Describe the impact of shift work on circadian rhythms. (C-1)
- 1-2.8 Discuss how periodic risk assessments and knowledge of warning signs contribute to cancer and cardiovascular disease prevention. (C-1)
- 1-2.9 Differentiate proper from improper body mechanics for lifting and moving patients in emergency and non-emergency situations. (C-3)
- 1-2.10 Describe the problems that a paramedic might encounter in a hostile situation and the techniques used to manage the situation. (C-1)
- 1-2.11 Given a scenario involving arrival at the scene of a motor vehicle collision, assess the safety of the scene and propose ways to make the scene safer. (C-3)
- 1-2.12 List factors that contribute to safe vehicle operations. (C-1)
- 1-2.13 Describe the considerations that should be given to: (C-1)
 - a. Using escorts
 - b. Adverse environmental conditions
 - c. Using lights and siren
 - d. Proceeding through intersections
 - e. Parking at an emergency scene
- 1-2.14 Discuss the concept of "due regard for the safety of all others" while operating an emergency vehicle. (C-1)
- 1-2.15 Describe the equipment available for self-protection when confronted with a variety of adverse situations. (C-1)
- 1-2.16 Describe the benefits and methods of smoking cessation. (C-1)
- 1-2.17 Describe the three phases of the stress response. (C-1)
- 1-2.18 List factors that trigger the stress response. (C-1)
- 1-2.19 Differentiate between normal/ healthy and detrimental reactions to anxiety and stress. (C-3)
- 1-2.20 Describe the common physiological and psychological effects of stress. (C-1)
- 1-2.21 Identify causes of stress in EMS. (C-1)
- 1-2.22 Describe behavior that is a manifestation of stress in patients and those close to them and how these relate to paramedic stress. (C-1)
- 1-2.23 Identify and describe the defense mechanisms and management techniques commonly used to deal with stress. (C-1)
- 1-2.24 Describe the components of critical incident stress management (CISM). (C-1)
- 1-2.25 Provide examples of situations in which CISM would likely be beneficial to paramedics. (C-1)
- 1-2.26 Given a scenario involving a stressful situation, formulate a strategy to help cope with the stress. (C-3)
- 1-2.27 Describe the stages of the grieving process (Kubler-Ross). (C-1)
- 1-2.28 Describe the needs of the paramedic when dealing with death and dying. (C-1)
- 1-2.29 Describe the unique challenges for paramedics in dealing with the needs of children and other special populations related to their understanding or experience of death and dying. (C-1)
- 1-2.30 Discuss the importance of universal precautions and body substance isolation practices. (C-1)
- 1-2.31 Describe the steps to take for personal protection from airborne and bloodborne pathogens. (C-1)
- 1-2.32 Given a scenario in which equipment and supplies have been exposed to body substances, plan for the proper cleaning, disinfection, and disposal of the items. (C-3)
- 1-2.33 Explain what is meant by an exposure and describe principles for management. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 1-2.34 Advocate the benefits of working toward the goal of total personal wellness. (A-2)
- 1-2.35 Serve as a role model for other EMS providers in regard to a total wellness lifestyle. (A-3)
- 1-2.36 Value the need to assess his/ her own lifestyle. (A-2)
- 1-2.37 Challenge his/ herself to each wellness concept in his/ her role as a paramedic. (A-3)
- 1-2.38 Defend the need to treat each patient as an individual, with respect and dignity. (A-2)
- 1-2.39 Assess his/ her own prejudices related to the various aspects of cultural diversity. (A-3)
- 1-2.40 Improve personal physical well-being through achieving and maintaining proper body weight, regular exercise and proper nutrition. (A-3)
- 1-2.41 Promote and practice stress management techniques. (A-3)

- 1-2.42 Defend the need to respect the emotional needs of dying patients and their families. (A-3)
- 1-2.43 Advocate and practice the use of personal safety precautions in all scene situations. (A-3)
- 1-2.44 Advocate and serve as a role model for other EMS providers relative to body substance isolation practices. (A-3)

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 1-2.45 Demonstrate safe methods for lifting and moving patients in emergency and non-emergency situations. (P-2)
- 1-2.46 Demonstrate the proper procedures to take for personal protection from disease. (P-2)

Illness and Injury Prevention

UNIT TERMINAL OBJECTIVE

- 1-3 At the completion of this unit, the paramedic student will be able to integrate the implementation of primary injury prevention activities as an effective way to reduce death, disabilities and health care costs.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 1.3-1 Describe the incidence, morbidity and mortality of unintentional and alleged unintentional events. (C-1)
- 1.3-2 Identify the human, environmental, and socioeconomic impact of unintentional and alleged unintentional events. (C-1)
- 1.3-3 Identify health hazards and potential crime areas within the community. (C-1)
- 1.3-4 Identify local municipal and community resources available for physical, socioeconomic crises. (C-1)
- 1.3-5 List the general and specific environmental parameters that should be inspected to assess a patient's need for preventative information and direction. (C-1)
- 1.3-6 Identify the role of EMS in local municipal and community prevention programs. (C-1)
- 1.3-7 Identify the local prevention programs that promote safety for all age populations. (C-2)
- 1.3-8 Identify patient situations where the paramedic can intervene in a preventative manner. (C-1)
- 1.3-9 Document primary and secondary injury prevention data. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 1.3-10 Value and defend tenets of prevention in terms of personal safety and wellness. (A-3)
- 1.3-11 Value and defend tenets of prevention for patients and communities being served. (A-3)
- 1.3-12 Value the contribution of effective documentation as one justification for funding of prevention programs. (A-3)
- 1.3-13 Value personal commitment to success of prevention programs. (A-3)

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 1.3-14 Demonstrate the use of protective equipment appropriate to the environment and scene. (P-3)

Medical/Legal Issues

UNIT TERMINAL OBJECTIVE

- 1-4 At the completion of this unit, the paramedic student will understand the legal issues that impact decisions made in the out-of-hospital environment.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 1-4.1 Differentiate between legal and ethical responsibilities. (C-2)

- 1-4.2 Describe the basic structure of the legal system in the United States. (C-1)
- 1-4.3 Differentiate between civil and criminal law as it pertains to the paramedic. (C-1)
- 1-4.4 Identify and explain the importance of laws pertinent to the paramedic. (C-1)
- 1-4.5 Differentiate between licensure and certification as they apply to the paramedic. (C-1)
- 1-4.6 List the specific problems or conditions encountered while providing care that a paramedic is required to report, and identify in each instance to whom the report is to be made. (C-1)
- 1-4.7 Define the following terms: (C-1)
 - a. Abandonment
 - b. Advance directives
 - c. Assault
 - d. Battery
 - e. Breach of duty
 - f. Confidentiality
 - g. Consent (expressed, implied, informed, and involuntary)
 - h. Do not resuscitate (DNR) orders
 - i. Duty to act
 - j. Emancipated minor
 - k. False imprisonment
 - l. Immunity
 - m. Liability
 - n. Libel
 - o. Minor
 - p. Negligence
 - q. Proximate cause
 - r. Scope of practice
 - s. Slander
 - t. Standard of care
 - u. Tort
- 1-4.8 Differentiate between the scope of practice and the standard of care for paramedic practice. (C-3)
- 1-4.9 Discuss the concept of medical direction, including off-line medical direction and on-line medical direction, and its relationship to the standard of care of a paramedic. (C-1)
- 1-4.10 Describe the four elements that must be present in order to prove negligence. (C-1)
- 1-4.11 Given a scenario in which a patient is injured while a paramedic is providing care, determine whether the four components of negligence are present. (C-2)
- 1-4.12 Given a scenario, demonstrate patient care behaviors that would protect the paramedic from claims of negligence. (C-3)
- 1-4.13 Explain the concept of liability as it might apply to paramedic practice, including physicians providing medical direction and paramedic supervision of other care providers. (C-2)
- 1-4.14 Discuss the legal concept of immunity, including Good Samaritan statutes and governmental immunity, as it applies to the paramedic. (C-1)
- 1-4.15 Explain the importance and necessity of patient confidentiality and the standards for maintaining patient confidentiality that apply to the paramedic. (C-1)
- 1-4.16 Differentiate among expressed, informed, implied, and involuntary consent. (C-2)
- 1-4.17 Given a scenario in which a paramedic is presented with a conscious patient in need of care, describe the process used to obtain consent. (C-2)
- 1-4.18 Identify the steps to take if a patient refuses care. (C-1)
- 1-4.19 Given a scenario, demonstrate appropriate patient management and care techniques in a refusal of care situation. (C-3)
- 1-4.20 Describe what constitutes abandonment. (C-1)
- 1-4.21 Identify the legal issues involved in the decision not to transport a patient, or to reduce the level of care being provided during transportation. (C-1)
- 1-4.22 Describe how hospitals are selected to receive patients based on patient need and hospital capability and the role of the paramedic in such selection. (C-1)

- 1-4.23 Differentiate between assault and battery and describe how to avoid each. (C-2)
- 1-4.24 Describe the conditions under which the use of force, including restraint, is acceptable. (C-1)
- 1-4.25 Explain the purpose of advance directives relative to patient care and how the paramedic should care for a patient who is covered by an advance directive. (C-1)
- 1-4.26 Discuss the responsibilities of the paramedic relative to resuscitation efforts for patients who are potential organ donors. (C-1)
- 1-4.27 Describe the actions that the paramedic should take to preserve evidence at a crime or accident scene. (C-1)
- 1-4.28 Describe the importance of providing accurate documentation (oral and written) in substantiating an incident. (C-1)
- 1-4.29 Describe the characteristics of a patient care report required to make it an effective legal document. (C-1)
- 1-4.30 Given a scenario, prepare a patient care report, including an appropriately detailed narrative. (C-2)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 1-4.31 Advocate the need to show respect for the rights and feelings of patients. (A-3)
- 1-4.32 Assess his/ her personal commitment to protecting patient confidentiality. (A-3)
- 1-4.33 Given a scenario involving a new employee, explain the importance of obtaining consent for adults and minors. (A-2)
- 1-4.34 Defend personal beliefs about withholding or stopping patient care. (A-3)
- 1-4.35 Defend the value of advance medical directives. (A-3)

PSYCHOMOTOR OBJECTIVES

None identified for this unit.

Ethics

UNIT TERMINAL OBJECTIVE

- 1-5 At the completion of this unit, the paramedic student will understand the role that ethics plays in decision making in the out-of-hospital environment.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 1-5.1 Define ethics. (C-1)
- 1-5.2 Distinguish between ethical and moral decisions. (C-3)
- 1-5.3 Identify the premise that should underlie the paramedic's ethical decisions in out-of hospital care. (C-1)
- 1-5.4 Analyze the relationship between the law and ethics in EMS. (C-3)
- 1-5.5 Compare and contrast the criteria that may be used in allocating scarce EMS resources. (C-3)
- 1-5.6 Identify the issues surrounding the use of advance directives, in making a prehospital resuscitation decision. (C-1)
- 1-5.7 Describe the criteria necessary to honor an advance directive in your state. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 1-5.8 Value the patient's autonomy in the decision-making process. (A-2)
- 1-5.9 Defend the following ethical positions: (A-3)
 - a. The paramedic is accountable to the patient.
 - b. The paramedic is accountable to the medical director.
 - c. The paramedic is accountable to the EMS system.
 - d. The paramedic is accountable for fulfilling the standard of care.
- 1-5.10 Given a scenario, defend or challenge a paramedic's actions concerning a patient who is treated against his/ her wishes. (A-3)
- 1-5.11 Given a scenario, defend a paramedic's actions in a situation where a physician orders

therapy the paramedic feels to be detrimental to the patient's best interests. (A-3)

PSYCHOMOTOR OBJECTIVES

None identified for this unit.

General Principles of Pathophysiology

UNIT TERMINAL OBJECTIVE

1-6 At the completion of this unit, the paramedic student will be able to apply the general concepts of pathophysiology for the assessment and management of emergency patients.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 1-6.1 Discuss cellular adaptation. (C-1)
- 1-6.2 Describe cellular injury and cellular death. (C-1)
- 1-6.3 Describe the factors that precipitate disease in the human body. (C-1)
- 1-6.4 Describe the cellular environment. (C-1)
- 1-6.5 Discuss analyzing disease risk. (C-1)
- 1-6.6 Describe environmental risk factors. (C-1)
- 1-6.7 Discuss combined effects and interaction among risk factors. (C-1)
- 1-6.8 Describe aging as a risk factor for disease. (C-1)
- 1-6.9 Discuss familial diseases and associated risk factors. (C-1)
- 1-6.10 Discuss hypoperfusion. (C-1)
- 1-6.11 Define cardiogenic, hypovolemic, neurogenic, anaphylactic and septic shock. (C-1)
- 1-6.12 Describe multiple organ dysfunction syndrome. (C-1)
- 1-6.13 Define the characteristics of the immune response. (C-1)
- 1-6.14 Discuss induction of the immune system. (C-1)
- 1-6.15 Discuss fetal and neonatal immune function. (C-1)
- 1-6.16 Discuss aging and the immune function in the elderly. (C-1)
- 1-6.17 Describe the inflammation response. (C-1)
- 1-6.18 Discuss the role of mast cells as part of the inflammation response. (C-1)
- 1-6.19 Describe the plasma protein system. (C-1)
- 1-6.20 Discuss the cellular components of inflammation. (C-1)
- 1-6.21 Describe the systemic manifestations of the inflammation response. (C-1)
- 1-6.22 Describe the resolution and repair from inflammation. (C-1)
- 1-6.23 Discuss the effect of aging on the mechanisms of self-defense. (C-1)
- 1-6.24 Discuss hypersensitivity. (C-1)
- 1-6.25 Describe deficiencies in immunity and inflammation. (C-1)
- 1-6.26 Describe homeostasis as a dynamic steady state. (C-1)
- 1-6.27 List types of tissue. (C-1)
- 1-6.28 Describe the systemic manifestations that result from cellular injury. (C-1)
- 1-6.29 Describe neuroendocrine regulation. (C-1)
- 1-6.30 Discuss the inter-relationships between stress, coping, and illness. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 1-6.31 Advocate the need to understand and apply the knowledge of pathophysiology to patient assessment and treatment. (A-2)

PSYCHOMOTOR OBJECTIVES

None identified for this unit.

Pharmacology

UNIT TERMINAL OBJECTIVE

- 1-7 At the completion of this unit, the paramedic student will be able to integrate pathophysiological principles of pharmacology and the assessment findings to formulate a field impression and implement a pharmacologic management plan.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 1-7.1 Describe historical trends in pharmacology. (C-1)
- 1-7.2 Differentiate among the chemical, generic (nonproprietary), and trade (proprietary) names of a drug. (C-3)
- 1-7.3 List the four main sources of drug products. (C-1)
- 1-7.4 Describe how drugs are classified. (C-1)
- 1-7.5 List the authoritative sources for drug information. (C-1)
- 1-7.6 List legislative acts controlling drug use and abuse in the United States. (C-1)
- 1-7.7 Differentiate among Schedule I, II, III, IV, and V substances. (C-3)
- 1-7.8 List examples of substances in each schedule. (C-1)
- 1-7.9 Discuss standardization of drugs. (C-1)
- 1-7.10 Discuss investigational drugs, including the Food and Drug Administration (FDA) approval process and the FDA classifications for newly approved drugs. (C-1)
- 1-7.11 Discuss special consideration in drug treatment with regard to pregnant, pediatric and geriatric patients. (C-1)
- 1-7.12 Discuss the paramedic's responsibilities and scope of management pertinent to the administration of medications. (C-1)
- 1-7.13 Review the specific anatomy and physiology pertinent to pharmacology with additional attention to autonomic pharmacology. (C-1)
- 1-7.14 List and describe general properties of drugs. (C-1)
- 1-7.15 List and describe liquid and solid drug forms. (C-1)
- 1-7.16 List and differentiate routes of drug administration. (C-3)
- 1-7.17 Differentiate between enteral and parenteral routes of drug administration. (C-3)
- 1-7.18 Describe mechanisms of drug action. (C-1)
- 1-7.19 List and differentiate the phases of drug activity, including the pharmaceutical, pharmacokinetic, and pharmacodynamic phases. (C-3)
- 1-7.20 Describe the process called pharmacokinetics, pharmacodynamics, including theories of drug action, drug-response relationship, factors altering drug responses, predictable drug responses, iatrogenic drug responses, and unpredictable adverse drug responses. (C-1)
- 1-7.21 Differentiate among drug interactions. (C-3)
- 1-7.22 Discuss considerations for storing and securing medications. (C-1)
- 1-7.23 List the component of a drug profile by classification. (C-1)
- 1-7.24 List and describe drugs that the paramedic may administer according to local protocol. (C-1)
- 1-7.25 Integrate pathophysiological principles of pharmacology with patient assessment. (C-3)
- 1-7.26 Synthesize patient history information and assessment findings to form a field impression. (C-3)
- 1-7.27 Synthesize a field impression to implement a pharmacologic management plan. (C-3)
- 1-7.28 Assess the pathophysiology of a patient's condition by identifying classifications of drugs. (C-3)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 1-7.29 Serve as a model for obtaining a history by identifying classifications of drugs. (A-3)
- 1-7.30 Defend the administration of drugs by a paramedic to affect positive therapeutic affect. (A-3)
- 1-7.31 Advocate drug education through identification of drug classifications. (A-3)

PSYCHOMOTOR OBJECTIVES

None identified for this unit.

Venous Access and Medication Administration**UNIT TERMINAL OBJECTIVE**

- 1-8 At the completion of this unit, the paramedic student will be able to safely and precisely access the venous circulation and administer medications.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 1-8.1 Review the specific anatomy and physiology pertinent to medication administration. (C-1)
- 1-8.2 Review mathematical principles. (C-1)
- 1-8.3 Review mathematical equivalents. (C-1)
- 1-8.4 Differentiate temperature readings between the Centigrade and Fahrenheit scales. (C-3)
- 1-8.5 Discuss formulas as a basis for performing drug calculations. (C-1)
- 1-8.6 Discuss applying basic principles of mathematics to the calculation of problems associated with medication dosages. (C-1)
- 1-8.7 Describe how to perform mathematical conversions from the household system to the metric system. (C-1)
- 1-8.8 Describe the indications, equipment needed, technique used, precautions, and general principles of peripheral venous or external jugular cannulation. (C-1)
- 1-8.9 Describe the indications, equipment needed, technique used, precautions, and general principles of intraosseous needle placement and infusion. (C-1)
- 1-8.10 Discuss legal aspects affecting medication administration. (C-1)
- 1-8.11 Discuss the "six rights" of drug administration and correlate these with the principles of medication administration. (C-1)
- 1-8.12 Discuss medical asepsis and the differences between clean and sterile techniques. (C-1)
- 1-8.13 Describe use of antiseptics and disinfectants. (C-1)
- 1-8.14 Describe the use of universal precautions and body substance isolation (BSI) procedures when administering a medication. (C-1)
- 1-8.15 Differentiate among the different dosage forms of oral medications. (C-3)
- 1-8.16 Describe the equipment needed and general principles of administering oral medications. (C-3)
- 1-8.17 Describe the indications, equipment needed, techniques used, precautions, and general principles of administering medications by the inhalation route. (C-3)
- 1-8.18 Describe the indications, equipment needed, techniques used, precautions, and general principles of administering medications by the gastric tube. (C-3)
- 1-8.19 Describe the indications, equipment needed, techniques used, precautions, and general principles of rectal medication administration. (C-3)
- 1-8.20 Differentiate among the different parenteral routes of medication administration. (C-3)
- 1-8.21 Describe the equipment needed, techniques used, complications, and general principles for the preparation and administration of parenteral medications. (C-1)
- 1-8.22 Differentiate among the different percutaneous routes of medication administration. (C-3)
- 1-8.23 Describe the purpose, equipment needed, techniques used, complications, and general principles for obtaining a blood sample. (C-1)
- 1-8.24 Describe disposal of contaminated items and sharps. (C-1)
- 1-8.25 Synthesize a pharmacologic management plan including medication administration. (C-3)
- 1-8.26 Integrate pathophysiological principles of medication administration with patient management. (C-3)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 1-8.27 Comply with paramedic standards of medication administration. (A-1)
- 1-8.28 Comply with universal precautions and body substance isolation (BSI). (A-1)

- 1-8.29 Defend a pharmacologic management plan for medication administration. (A-3)
- 1-8.30 Serve as a model for medical asepsis. (A-3)
- 1-8.31 Serve as a model for advocacy while performing medication administration. (A-3)
- 1-8.32 Serve as a model for disposing contaminated items and sharps. (A-3)

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 1-8.33 Use universal precautions and body substance isolation (BSI) procedures during medication administration. (P-2)
- 1-8.34 Demonstrate cannulation of peripheral or external jugular veins. (P-2)
- 1-8.35 Demonstrate intraosseous needle placement and infusion. (P-2)
- 1-8.36 Demonstrate clean technique during medication administration. (P-3)
- 1-8.37 Demonstrate administration of oral medications. (P-2)
- 1-8.38 Demonstrate administration of medications by the inhalation route. (P-2)
- 1-8.39 Demonstrate administration of medications by the gastric tube. (P-2)
- 1-8.40 Demonstrate rectal administration of medications. (P-2)
- 1-8.41 Demonstrate preparation and administration of parenteral medications. (P-2)
- 1-8.42 Demonstrate preparation and techniques for obtaining a blood sample. (P-2)
- 1-8.43 Perfect disposal of contaminated items and sharps. (P-3)

Therapeutic Communications

UNIT TERMINAL OBJECTIVE

- 1-9 At the completion of this unit, the paramedic student will be able to integrate the principles of therapeutic communication to effectively communicate with any patient while providing care.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 1-9.1 Define communication. (C-1)
- 1-9.2 Identify internal and external factors that affect a patient/ bystander interview conducted by a paramedic. (C-1)
- 1-9.3 Restate the strategies for developing patient rapport. (C-1)
- 1-9.4 Provide examples of open-ended and closed or direct questions. (C-1)
- 1-9.5 Discuss common errors made by paramedics when interviewing patients. (C-1)
- 1-9.6 Identify the nonverbal skills that are used in patient interviewing. (C-1)
- 1-9.7 Restate the strategies to obtain information from the patient. (C-1)
- 1-9.8 Summarize the methods to assess mental status based on interview techniques. (C-1)
- 1-9.9 Discuss the strategies for interviewing a patient who is unmotivated to talk. (C-1)
- 1-9.10 Differentiate the strategies a paramedic uses when interviewing a patient who is hostile compared to one who is cooperative. (C-3)
- 1-9.11 Summarize developmental considerations of various age groups that influence patient interviewing. (C-1)
- 1-9.12 Restate unique interviewing techniques necessary to employ with patients who have special needs. (C-1)
- 1-9.13 Discuss interviewing considerations used by paramedics in cross-cultural communications. (C-1)

AFFECTIVE OBJECTIVES

- 1-9.14 Serve as a model for an effective communication process. (A-3)
- 1-9.15 Advocate the importance of external factors of communication. (A-2)
- 1-9.16 Promote proper responses to patient communication. (A-2)
- 1-9.17 Exhibit professional non-verbal behaviors. (A-2)
- 1-9.18 Advocate development of proper patient rapport. (A-2)
- 1-9.19 Value strategies to obtain patient information. (A-2)
- 1-9.20 Exhibit professional behaviors in communicating with patients in special situations. (A-3)
- 1-9.21 Exhibit professional behaviors in communication with patient from different cultures. (A-3)

PSYCHOMOTOR OBJECTIVES

None identified for this unit.

Life Span Development**UNIT TERMINAL OBJECTIVE**

1-10 At the completion of this unit, the paramedic student will be able to integrate the physiological, psychological, and sociological changes throughout human development with assessment and communication strategies for patients of all ages.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 1-10.1 Compare the physiological and psychosocial characteristics of an infant with those of an early adult. (C-3)
- 1-10.2 Compare the physiological and psychosocial characteristics of a toddler with those of an early adult. (C-3)
- 1-10.3 Compare the physiological and psychosocial characteristics of a pre-school child with those of an early adult. (C-3)
- 1-10.4 Compare the physiological and psychosocial characteristics of a school-aged child with those of an early adult. (C-3)
- 1-10.5 Compare the physiological and psychosocial characteristics of an adolescent with those of an early adult. (C-3)
- 1-10.6 Summarize the physiological and psychosocial characteristics of an early adult. (C-3)
- 1-10.7 Compare the physiological and psychosocial characteristics of a middle aged adult with those of an early adult. (C-3)
- 1-10.8 Compare the physiological and psychosocial characteristics of a person in late adulthood with those of an early adult. (C-3)

AFFECTIVE OBJECTIVES

1-10.9 Value the uniqueness of infants, toddlers, pre-school, school aged, adolescent, early adulthood, middle aged, and late adulthood physiological and psychosocial characteristics. (A-3)

PSYCHOMOTOR OBJECTIVES

None identified for this unit

Airway

Airway Management and Ventilation

UNIT TERMINAL OBJECTIVE

- 2-1 At the completion of this unit, the paramedic student will be able to establish and/ or maintain a patent airway, oxygenate, and ventilate a patient.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 2-1.1 Explain the primary objective of airway maintenance. (C-1)
- 2-1.2 Identify commonly neglected prehospital skills related to airway. (C-1)
- 2-1.3 Identify the anatomy of the upper and lower airway. (C-1)
- 2-1.4 Describe the functions of the upper and lower airway. (C-1)
- 2-1.5 Explain the differences between adult and pediatric airway anatomy. (C-1)
- 2-1.6 Define gag reflex. (C-1)
- 2-1.7 Explain the relationship between pulmonary circulation and respiration. (C-3)
- 2-1.8 List the concentration of gases that comprise atmospheric air. (C-1)
- 2-1.9 Describe the measurement of oxygen in the blood. (C-1)
- 2-1.10 Describe the measurement of carbon dioxide in the blood. (C-1)
- 2-1.11 Describe peak expiratory flow. (C-1)
- 2-1.12 List factors that cause decreased oxygen concentrations in the blood. (C-1)
- 2-1.13 List the factors that increase and decrease carbon dioxide production in the body. (C-1)
- 2-1.14 Define atelectasis. (C-1)
- 2-1.15 Define FiO₂. (C-1)
- 2-1.16 Define and differentiate between hypoxia and hypoxemia. (C-1)
- 2-1.17 Describe the voluntary and involuntary regulation of respiration. (C-1)
- 2-1.18 Describe the modified forms of respiration. (C-1)
- 2-1.19 Define normal respiratory rates and tidal volumes for the adult, child, and infant. (C-1)
- 2-1.20 List the factors that affect respiratory rate and depth. (C-1)
- 2-1.21 Explain the risk of infection to EMS providers associated with ventilation. (C-3)
- 2-1.22 Define pulsus paradoxes. (C-1)
- 2-1.23 Define and explain the implications of partial airway obstruction with good and poor air exchange. (C-1)
- 2-1.24 Define complete airway obstruction. (C-1)
- 2-1.25 Describe causes of upper airway obstruction. (C-1)
- 2-1.26 Describe causes of respiratory distress. (C-1)
- 2-1.27 Describe manual airway maneuvers. (C-1)
- 2-1.28 Describe the Sellick (cricoid pressure) maneuver. (C-1)
- 2-1.29 Describe complete airway obstruction maneuvers. (C-1)
- 2-1.30 Explain the purpose for suctioning the upper airway. (C-1)
- 2-1.31 Identify types of suction equipment. (C-1)
- 2-1.32 Describe the indications for suctioning the upper airway. (C-3)
- 2-1.33 Identify types of suction catheters, including hard or rigid catheters and soft catheters. (C-1)
- 2-1.34 Identify techniques of suctioning the upper airway. (C-1)
- 2-1.35 Identify special considerations of suctioning the upper airway. (C-1)
- 2-1.36 Describe the indications, contraindications, advantages, disadvantages, complications, equipment and technique of tracheobronchial suctioning in the intubated patient. (C-3)
- 2-1.37 Describe the use of an oral and nasal airway. (C-1)
- 2-1.38 Identify special considerations of tracheobronchial suctioning in the intubated patient. (C-1)
- 2-1.39 Define gastric distention. (C-1)
- 2-1.40 Describe the indications, contraindications, advantages, disadvantages, complications, equipment and technique for inserting a nasogastric tube and orogastric tube. (C-1)
- 2-1.41 Identify special considerations of gastric decompression. (C-1)
- 2-1.42 Describe the indications, contraindications, advantages, disadvantages, complications,

- and technique for inserting an oropharyngeal and nasopharyngeal airway (C-1)
- 2-1.43 Describe the indications, contraindications, advantages, disadvantages, complications, and technique for ventilating a patient by: (C-1)
- Mouth-to-mouth
 - Mouth-to-nose
 - Mouth-to-mask
 - One person bag-valve-mask
 - Two person bag-valve-mask
 - Three person bag-valve-mask
 - Flow-restricted, oxygen-powered ventilation device
- 2-1.44 Explain the advantage of the two person method when ventilating with the bag-valve-mask. (C1)
- 2-1.45 Compare the ventilation techniques used for an adult patient to those used for pediatric patients. (C-3)
- 2-1.46 Describe indications, contraindications, advantages, disadvantages, complications, and technique for ventilating a patient with an automatic transport ventilator (ATV). (C-1)
- 2-1.47 Explain safety considerations of oxygen storage and delivery. (C-1)
- 2-1.48 Identify types of oxygen cylinders and pressure regulators (including a high-pressure regulator and a therapy regulator). (C-1)
- 2-1.49 List the steps for delivering oxygen from a cylinder and regulator. (C-1)
- 2-1.50 Describe the use, advantages and disadvantages of an oxygen humidifier. (C-1)
- 2-1.51 Describe the indications, contraindications, advantages, disadvantages, complications, liter flow range, and concentration of delivered oxygen for supplemental oxygen delivery devices. (C-3)
- 2-1.52 Define, identify and describe a tracheostomy, stoma, and tracheostomy tube. (C-1)
- 2-1.53 Define, identify, and describe a laryngectomy. (C-1)
- 2-1.54 Define how to ventilate with a patient with a stoma, including mouth-to-stoma and bag-valve-mask-to-stoma ventilation. (C-1)
- 2-1.55 Describe the special considerations in airway management and ventilation for patients with facial injuries. (C-1)
- 2-1.56 Describe the special considerations in airway management and ventilation for the pediatric patient. (C-1)
- 2-1.57 Differentiate endotracheal intubation from other methods of advanced airway management. (C-3)
- 2-1.58 Describe the indications, contraindications, advantages, disadvantages and complications of endotracheal intubation. (C-1)
- 2-1.59 Describe laryngoscopy for the removal of a foreign body airway obstruction. (C-1)
- 2-1.60 Describe the indications, contraindications, advantages, disadvantages, complications, equipment, and technique for direct laryngoscopy. (C-1)
- 2-1.61 Describe visual landmarks for direct laryngoscopy. (C-1)
- 2-1.62 Describe use of cricoid pressure during intubation. (C-1)
- 2-1.63 Describe indications, contraindications, advantages, disadvantages, complications, equipment and technique for digital endotracheal intubation. (C-1)
- 2-1.64 Describe the indications, contraindications, advantages, disadvantages, complications, equipment and technique for using a dual lumen airway. (C-3)
- 2-1.65 Describe the indications, contraindications, advantages, disadvantages, complications and equipment for rapid sequence intubation with neuromuscular blockade. (C-1)
- 2-1.66 Identify neuromuscular blocking drugs and other agents used in rapid sequence intubation. (C-1)
- 2-1.67 Describe the indications, contraindications, advantages, disadvantages, complications and equipment for sedation during intubation. (C-1)
- 2-1.68 Identify sedative agents used in airway management. (C-1)
- 2-1.69 Describe the indications, contraindications, advantages, disadvantages, complications, equipment and technique for nasotracheal intubation. (C-1)
- 2-1.70 Describe the indications, contraindications, advantages, disadvantages and complications for performing an open cricothyrotomy. (C-3)
- 2-1.71 Describe the equipment and technique for performing an open cricothyrotomy. (C-1)

- 2-1.72 Describe the indications, contraindications, advantages, disadvantages, complications, equipment and technique for translaryngeal catheter ventilation (needle cricothyrotomy). (C-3)
- 2-1.73 Describe methods of assessment for confirming correct placement of an endotracheal tube. (C-1)
- 2-1.74 Describe methods for securing an endotracheal tube. (C-1)
- 2-1.75 Describe the indications, contraindications, advantages, disadvantages, complications, equipment and technique for extubation. (C-1)
- 2-1.76 Describe methods of endotracheal intubation in the pediatric patient. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 2-1.77 Defend the need to oxygenate and ventilate a patient. (A-1)
- 2-1.78 Defend the necessity of establishing and/ or maintaining patency of a patient's airway. (A-1)
- 2-1.79 Comply with standard precautions to defend against infectious and communicable diseases. (A-1)

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 2-1.80 Perform body substance isolation (BSI) procedures during basic airway management, advanced airway management, and ventilation. (P-2)
- 2-1.81 Perform pulse oximetry. (P-2)
- 2-1.82 Perform end-tidal CO₂ detection. (P-2)
- 2-1.83 Perform peak expiratory flow testing. (P-2)
- 2-1.84 Perform manual airway maneuvers, including: (P-2)
 - a. Opening the mouth
 - b. Head-tilt/ chin-lift maneuver
 - c. Jaw-thrust without head-tilt maneuver
 - d. Modified jaw-thrust maneuver
- 2-1.85 Perform manual airway maneuvers for pediatric patients, including: (P-2)
 - a. Opening the mouth
 - b. Head-tilt/ chin-lift maneuver
 - c. Jaw-thrust without head-tilt maneuver
 - d. Modified jaw-thrust maneuver
- 2-1.86 Perform the Sellick maneuver (cricoid pressure). (P-2)
- 2-1.87 Perform complete airway obstruction maneuvers, including: (P-2)
 - a. Heimlich maneuver
 - b. Finger sweep
 - c. Chest thrusts
 - d. Removal with Magill forceps
- 2-1.88 Demonstrate suctioning the upper airway by selecting a suction device, catheter and technique. (P-2)
- 2-1.89 Perform tracheobronchial suctioning in the intubated patient by selecting a suction device, catheter and technique. (P-2)
- 2-1.90 Demonstrate insertion of a nasogastric tube. (P-2)
- 2-1.91 Demonstrate insertion of an orogastric tube. (P-2)
- 2-1.92 Perform gastric decompression by selecting a suction device, catheter and technique. (P-2)
- 2-1.93 Demonstrate insertion of an oropharyngeal airway. (P-2)
- 2-1.94 Demonstrate insertion of a nasopharyngeal airway. (P-2)
- 2-1.95 Demonstrate ventilating a patient by the following techniques: (P-2)
 - a. Mouth-to-mask ventilation
 - b. One person bag-valve-mask
 - c. Two person bag valve-mask
 - d. Three person bag-valve-mask
 - e. Flow-restricted, oxygen-powered ventilation device
 - f. Automatic transport ventilator

- g. Mouth-to-stoma
 - h. Bag-valve-mask-to-stoma ventilation
- 2-1.96 Ventilate a pediatric patient using the one and two person techniques. (P-2)
- 2-1.97 Perform ventilation with a bag-valve-mask with an in-line small-volume nebulizer. (P-2)
- 2-1.98 Perform oxygen delivery from a cylinder and regulator with an oxygen delivery device. (P-2)
- 2-1.99 Perform oxygen delivery with an oxygen humidifier. (P-2)
- 2-1.100 Deliver supplemental oxygen to a breathing patient using the following devices: nasal cannula, simple face mask, partial rebreather mask, non-rebreather mask, and venturi mask (P-2)
- 2-1.101 Perform stoma suctioning. (P-2)
- 2-1.102 Perform retrieval of foreign bodies from the upper airway. (P-2)
- 2-1.103 Perform assessment to confirm correct placement of the endotracheal tube. (P-2)
- 2-1.104 Intubate the trachea by the following methods: (P-2)
- a. Orotracheal intubation
 - b. Nasotracheal intubation
 - c. Multi-lumen airways
 - d. Digital intubation
 - e. Transillumination
 - f. Open cricothyrotomy
- 2-1.105 Adequately secure an endotracheal tube. (P-1)
- 2-1.106 Perform endotracheal intubation in the pediatric patient. (P-2)
- 2-1.107 Perform transtracheal catheter ventilation (needle cricothyrotomy). (P-2)
- 2-1.108 Perform extubation. (P-2)
- 2-1.109 Perform replacement of a tracheostomy tube through a stoma. (P-2)

Patient Assessment

History Taking

UNIT TERMINAL OBJECTIVE

- 3-1 At the completion of this unit, the paramedic student will be able to use the appropriate techniques to obtain a medical history from a patient.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 3-1.1 Describe the techniques of history taking. (C-1)
- 3-1.2 Discuss the importance of using open ended questions. (C-1)
- 3-1.3 Describe the use of facilitation, reflection, clarification, empathetic responses, confrontation, and interpretation. (C-1)
- 3-1.4 Differentiate between facilitation, reflection, clarification, sympathetic responses, confrontation, and interpretation. (C-3)
- 3-1.5 Describe the structure and purpose of a health history. (C-1)
- 3-1.6 Describe how to obtain a comprehensive health history. (C-1)
- 3-1.7 List the components of a comprehensive history of an adult patient. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 3-1.8 Demonstrate the importance of empathy when obtaining a health history. (A-1)
- 3-1.9 Demonstrate the importance of confidentiality when obtaining a health history. (A-1)

PSYCHOMOTOR OBJECTIVES

None identified for this unit.

Techniques of Physical Examination

UNIT TERMINAL OBJECTIVE

- 3-2 At the completion end of this unit, the paramedic student will be able to explain the pathophysiological significance of physical exam findings.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 3-2.1 Define the terms inspection, palpation, percussion, auscultation. (C-1)
- 3-2.2 Describe the techniques of inspection, palpation, percussion, and auscultation. (C-1)
- 3-2.3 Describe the evaluation of mental status. (C-1)
- 3-2.4 Evaluate the importance of a general survey. (C-3)
- 3-2.5 Describe the examination of skin, hair and nails. (C-1)
- 3-2.6 Differentiate normal and abnormal findings of the assessment of the skin. (C-3)
- 3-2.7 Distinguish the importance of abnormal findings of the assessment of the skin. (C-3)
- 3-2.8 Describe the examination of the head and neck. (C-1)
- 3-2.9 Differentiate normal and abnormal findings of the scalp examination. (C-3)
- 3-2.10 Describe the normal and abnormal assessment findings of the skull. (C-1)
- 3-2.11 Describe the assessment of visual acuity. (C-1)
- 3-2.12 Explain the rationale for the use of an ophthalmoscope. (C-1)
- 3-2.13 Describe the examination of the eyes. (C-1)
- 3-2.14 Distinguish between normal and abnormal assessment findings of the eyes. (C-3)
- 3-2.15 Explain the rationale for the use of an otoscope. (C-1)
- 3-2.16 Describe the examination of the ears. (C-1)
- 3-2.17 Differentiate normal and abnormal assessment findings of the ears. (C-3)
- 3-2.18 Describe the examination of the nose. (C-1)
- 3-2.19 Differentiate normal and abnormal assessment findings of the nose. (C-3)

- 3-2.20 Describe the examination of the mouth and pharynx. (C-1)
- 3-2.21 Differentiate normal and abnormal assessment findings of the mouth and pharynx. (C-3)
- 3-2.22 Describe the examination of the neck. (C-1)
- 3-2.23 Differentiate normal and abnormal assessment findings the neck. (C-3)
- 3-2.24 Describe the survey of the thorax and respiration. (C-1)
- 3-2.25 Describe the examination of the posterior chest. (C-1)
- 3-2.26 Describe percussion of the chest. (C-1)
- 3-2.27 Differentiate the percussion notes and their characteristics. (C-3)
- 3-2.28 Differentiate the characteristics of breath sounds. (C-3)
- 3-2.29 Describe the examination of the anterior chest. (C-1)
- 3-2.30 Differentiate normal and abnormal assessment findings of the chest examination. (C-3)
- 3-2.31 Describe special examination techniques related to the assessment of the chest. (C-1)
- 3-2.32 Describe the examination of the arterial pulse including rate, rhythm, and amplitude. (C-1)
- 3-2.33 Distinguish normal and abnormal findings of arterial pulse. (C-3)
- 3-2.34 Describe the assessment of jugular venous pressure and pulsations. (C-1)
- 3-2.35 Distinguish normal and abnormal examination findings of jugular venous pressure and pulsations. (C-3)
- 3-2.36 Describe the examination of the heart and blood vessels. (C-1)
- 3-2.37 Differentiate normal and abnormal assessment findings of the heart and blood vessels. (C-3)
- 3-2.38 Describe the auscultation of the heart. (C-1)
- 3-2.39 Differentiate the characteristics of normal and abnormal findings associated with the auscultation of the heart. (C-3)
- 3-2.40 Describe special examination techniques of the cardiovascular examination. (C-1)
- 3-2.41 Describe the examination of the abdomen. (C-1)
- 3-2.42 Differentiate normal and abnormal assessment findings of the abdomen. (C-3)
- 3-2.43 Describe auscultation of the abdomen. (C-1)
- 3-2.44 Distinguish normal and abnormal findings of the auscultation of the abdomen. (C-3)
- 3-2.45 Describe the examination of the female genitalia. (C-1)
- 3-2.46 Differentiate normal and abnormal assessment findings of the female genitalia. (C-3)
- 3-2.47 Describe the examination of the male genitalia. (C-1)
- 3-2.48 Differentiate normal and abnormal findings of the male genitalia. (C-3)
- 3-2.49 Describe the examination of the anus and rectum. (C-3)
- 3-2.50 Distinguish between normal and abnormal findings of the anus and rectum. (C-3)
- 3-2.51 Describe the examination of the peripheral vascular system. (C-1)
- 3-2.52 Differentiate normal and abnormal findings of the peripheral vascular system. (C-3)
- 3-2.53 Describe the examination of the musculoskeletal system. (C-1)
- 3-2.54 Differentiate normal and abnormal findings of the musculoskeletal system. (C-3)
- 3-2.55 Describe the examination of the nervous system. (C-1)
- 3-2.56 Differentiate normal and abnormal findings of the nervous system. (C-3)
- 3-2.57 Describe the assessment of the cranial nerves. (C-1)
- 3-2.58 Differentiate normal and abnormal findings of the cranial nerves. (C-3)
- 3-2.59 Describe the general guidelines of recording examination information. (C-1)
- 3-2.60 Discuss the considerations of examination of an infant or child. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 3-2.61 Demonstrate a caring attitude when performing physical examination skills. (A-3)
- 3-2.62 Discuss the importance of a professional appearance and demeanor when performing physical examination skills. (A-1)
- 3-2.63 Appreciate the limitations of conducting a physical exam in the out-of-hospital environment. (A-2)

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 3-2.64 Demonstrate the examination of skin, hair and nails. (P-2)
- 3-2.65 Demonstrate the examination of the head and neck. (P-2)

- 3-2.66 Demonstrate the examination of the eyes. (P-2)
- 3-2.67 Demonstrate the examination of the ears. (P-2)
- 3-2.68 Demonstrate the assessment of visual acuity. (P-2)
- 3-2.69 Demonstrate the examination of the nose. (P-2)
- 3-2.70 Demonstrate the examination of the mouth and pharynx. (P-2)
- 3-2.71 Demonstrate the examination of the neck. (P-2)
- 3-2.72 Demonstrate the examination of the thorax and ventilation. (P-2)
- 3-2.73 Demonstrate the examination of the posterior chest. (P-2)
- 3-2.74 Demonstrate auscultation of the chest. (P-2)
- 3-2.75 Demonstrate percussion of the chest. (P-2)
- 3-2.76 Demonstrate the examination of the anterior chest. (P-2)
- 3-2.77 Demonstrate special examination techniques related to the assessment of the chest. (P-2)
- 3-2.78 Demonstrate the examination of the arterial pulse including location, rate, rhythm, and amplitude. (P-2)
- 3-2.79 Demonstrate the assessment of jugular venous pressure and pulsations. (P-2)
- 3-2.80 Demonstrate the examination of the heart and blood vessels. (P-2)
- 3-2.81 Demonstrate special examination techniques of the cardiovascular examination. (P-2)
- 3-2.82 Demonstrate the examination of the abdomen. (P-2)
- 3-2.83 Demonstrate auscultation of the abdomen. (P-2)
- 3-2.84 Demonstrate the external visual examination of the female genitalia. (P-2)
- 3-2.85 Demonstrate the examination of the male genitalia. (P-2)
- 3-2.86 Demonstrate the examination of the peripheral vascular system. (P-2)
- 3-2.87 Demonstrate the examination of the musculoskeletal system. (P-2)
- 3-2.88 Demonstrate the examination of the nervous system. (P-2)

Patient Assessment

UNIT TERMINAL OBJECTIVE

- 3-3 At the end of this unit, the paramedic student will be able to integrate the principles of history taking and techniques of physical exam to perform a patient assessment.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 3-3.1 Recognize hazards/ potential hazards. (C-1)
- 3-3.2 Describe common hazards found at the scene of a trauma and a medical patient. (C-1)
- 3-3.3 Determine hazards found at the scene of a medical or trauma patient. (C-2)
- 3-3.4 Differentiate safe from unsafe scenes. (C-3)
- 3-3.5 Describe methods to making an unsafe scene safe. (C-1)
- 3-3.6 Discuss common mechanisms of injury/ nature of illness. (C-1)
- 3-3.7 Predict patterns of injury based on mechanism of injury. (C-2)
- 3-3.8 Discuss the reason for identifying the total number of patients at the scene. (C-1)
- 3-3.9 Organize the management of a scene following size-up. (C-3)
- 3-3.10 Explain the reasons for identifying the need for additional help or assistance. (C-1)
- 3-3.11 Summarize the reasons for forming a general impression of the patient. (C-1)
- 3-3.12 Discuss methods of assessing mental status. (C-1)
- 3-3.13 Categorize levels of consciousness in the adult, infant and child. (C-3)
- 3-3.14 Differentiate between assessing the altered mental status in the adult, child and infant patient. (C-3)
- 3-3.15 Discuss methods of assessing the airway in the adult, child and infant patient. (C-1)
- 3-3.16 State reasons for management of the cervical spine once the patient has been determined to be a trauma patient. (C-1)
- 3-3.17 Analyze a scene to determine if spinal precautions are required. (C-3)
- 3-3.18 Describe methods used for assessing if a patient is breathing. (C-1)
- 3-3.19 Differentiate between a patient with adequate and inadequate minute ventilation. (C-3)
- 3-3.20 Distinguish between methods of assessing breathing in the adult, child and infant patient. (C-3)
- 3-3.21 Compare the methods of providing airway care to the adult, child and infant patient. (C-3)

- 3-3.22 Describe the methods used to locate and assess a pulse. (C-1)
- 3-3.23 Differentiate between locating and assessing a pulse in an adult, child and infant patient. (C-3)
- 3-3.24 Discuss the need for assessing the patient for external bleeding. (C-1)
- 3-3.25 Describe normal and abnormal findings when assessing skin color. (C-1)
- 3-3.26 Describe normal and abnormal findings when assessing skin temperature. (C-1)
- 3-3.27 Describe normal and abnormal findings when assessing skin condition. (C-1)
- 3-3.28 Explain the reason for prioritizing a patient for care and transport. (C-1)
- 3-3.29 Identify patients who require expeditious transport. (C-3)
- 3-3.30 Describe the evaluation of patient's perfusion status based on findings in the initial assessment. (C-1)
- 3-3.31 Describe orthostatic vital signs and evaluate their usefulness in assessing a patient in shock. (C-1)
- 3-3.32 Apply the techniques of physical examination to the medical patient. (C-1)
- 3-3.33 Differentiate between the assessment that is performed for a patient who is unresponsive or has an altered mental status and other medical patients requiring assessment. (C-3)
- 3-3.34 Discuss the reasons for reconsidering the mechanism of injury. (C-1)
- 3-3.35 State the reasons for performing a rapid trauma assessment. (C-1)
- 3-3.36 Recite examples and explain why patients should receive a rapid trauma assessment. (C-1)
- 3-3.37 Apply the techniques of physical examination to the trauma patient. (C-1)
- 3-3.38 Describe the areas included in the rapid trauma assessment and discuss what should be evaluated. (C-1)
- 3-3.39 Differentiate cases when the rapid assessment may be altered in order to provide patient care. (C-3)
- 3-3.40 Discuss the reason for performing a focused history and physical exam. (C-1)
- 3-3.41 Describe when and why a detailed physical examination is necessary. (C-1)
- 3-3.42 Discuss the components of the detailed physical exam in relation to the techniques of examination. (C-1)
- 3-3.43 State the areas of the body that are evaluated during the detailed physical exam. (C-1)
- 3-3.44 Explain what additional care should be provided while performing the detailed physical exam. (C-1)
- 3-3.45 Distinguish between the detailed physical exam that is performed on a trauma patient and that of the medical patient. (C-3)
- 3-3.46 Differentiate patients requiring a detailed physical exam from those who do not. (C-3)
- 3-3.47 Discuss the reasons for repeating the initial assessment as part of the on-going assessment. (C-1)
- 3-3.48 Describe the components of the on-going assessment. (C-1)
- 3-3.49 Describe trending of assessment components. (C-1)
- 3-3.50 Discuss medical identification devices/ systems. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 3-3.51 Explain the rationale for crew members to evaluate scene safety prior to entering. (A-2)
- 3-3.52 Serve as a model for others explaining how patient situations affect your evaluation of mechanism of injury or illness. (A-3)
- 3-3.53 Explain the importance of forming a general impression of the patient. (A-1)
- 3-3.54 Explain the value of performing an initial assessment. (A-2)
- 3-3.55 Demonstrate a caring attitude when performing an initial assessment. (A-3)
- 3-3.56 Attend to the feelings that patients with medical conditions might be experiencing. (A-1)
- 3-3.57 Value the need for maintaining a professional caring attitude when performing a focused history and physical examination. (A-3)
- 3-3.58 Explain the rationale for the feelings that these patients might be experiencing. (A-3)
- 3-3.59 Demonstrate a caring attitude when performing a detailed physical examination. (A-3)
- 3-3.60 Explain the value of performing an on-going assessment. (A-2)
- 3-3.61 Recognize and respect the feelings that patients might experience during assessment. (A-1)
- 3-3.62 Explain the value of trending assessment components to other health professionals who assume care of the patient. (A-2)

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 3-3.63 Observe various scenarios and identify potential hazards. (P-1)
- 3-3.64 Demonstrate the scene-size-up. (P-2)
- 3-3.65 Demonstrate the techniques for assessing mental status. (P-2)
- 3-3.66 Demonstrate the techniques for assessing the airway. (P-2)
- 3-3.67 Demonstrate the techniques for assessing if the patient is breathing. (P-2)
- 3-3.68 Demonstrate the techniques for assessing if the patient has a pulse. (P-2)
- 3-3.69 Demonstrate the techniques for assessing the patient for external bleeding. (P-2)
- 3-3.70 Demonstrate the techniques for assessing the patient's skin color, temperature, and condition. (P-2)
- 3-3.71 Demonstrate the ability to prioritize patients. (P-2)
- 3-3.72 Using the techniques of examination, demonstrate the assessment of a medical patient. (P-2)
- 3-3.73 Demonstrate the patient care skills that should be used to assist with a patient who is responsive with no known history. (P-2)
- 3-3.74 Demonstrate the patient care skills that should be used to assist with a patient who is unresponsive or has an altered mental status. (P-2)
- 3-3.75 Perform a rapid medical assessment. (P-2)
- 3-3.76 Perform a focused history and physical exam of the medical patient. (P-2)
- 3-3.77 Using the techniques of physical examination, demonstrate the assessment of a trauma patient. (P-2)
- 3-3.78 Demonstrate the rapid trauma assessment used to assess a patient based on mechanism of injury. (P-2)
- 3-3.79 Perform a focused history and physical exam on a non-critically injured patient. (P-2)
- 3-3.80 Perform a focused history and physical exam on a patient with life-threatening injuries. (P-2)
- 3-3.81 Perform a detailed physical examination. (P-2)
- 3-3.82 Demonstrate the skills involved in performing the on-going assessment. (P-2)

Clinical Decision Making

UNIT TERMINAL OBJECTIVE

- 3-4 At the end of this unit, the paramedic student will be able to apply a process of clinical decision making to use the assessment findings to help form a field impression.

COGNITIVE OBJECTIVES

At the end of this unit, the paramedic student will be able to:

- 3-4.1 Compare the factors influencing medical care in the out-of-hospital environment to other medical settings. (C-2)
- 3-4.2 Differentiate between critical life-threatening, potentially life-threatening, and non life-threatening patient presentations. (C-3)
- 3-4.3 Evaluate the benefits and shortfalls of protocols, standing orders and patient care algorithms. (C-3)
- 3-4.4 Define the components, stages and sequences of the critical thinking process for paramedics. (C-1)
- 3-4.5 Apply the fundamental elements of critical thinking for paramedics. (C-2)
- 3-4.6 Describe the effects of the fright or flight response and the positive and negative effects on a paramedic's decision making. (C-1)
- 3-4.7 Summarize the basics of putting it all together: Read the patient, Read the scene, React, Reevaluate, Revise the management plan, Review performance. (C-1)

AFFECTIVE OBJECTIVES

At the end of this unit, the paramedic student will be able to:

- 3-4.8 Defend the position that clinical decision making is the cornerstone of effective paramedic practice. (A-3)
- 3-4.9 Practice facilitating behaviors when thinking under pressure. (A-1)

PSYCHOMOTOR OBJECTIVES

None identified for this unit.

Communications

UNIT TERMINAL OBJECTIVE

- 3-5 At the completion of this unit, the paramedic student will be able to follow an accepted format for dissemination of patient information in verbal form, either in person or over the radio.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 3-5.1 Identify the importance of communications when providing EMS. (C-1)
- 3-5.2 Identify the role of verbal, written, and electronic communications in the provision of EMS. (C-1)
- 3-5.3 Describe the phases of communications necessary to complete a typical EMS event. (C-1)
- 3-5.4 Identify the importance of proper terminology when communicating during an EMS event. (C-1)
- 3-5.5 Identify the importance of proper verbal communications during an EMS event. (C-1)
- 3-5.6 List factors that impede effective verbal communications. (C-1)
- 3-5.7 List factors which enhance verbal communications. (C-1)
- 3-5.8 Identify the importance of proper written communications during an EMS event. (C-1)
- 3-5.9 List factors which impede effective written communications. (C-1)
- 3-5.10 List factors which enhance written communications. (C-1)
- 3-5.11 Recognize the legal status of written communications related to an EMS event. (C-1)
- 3-5.12 State the importance of data collection during an EMS event. (C-1)
- 3-5.13 Identify technology used to collect and exchange patient and/ or scene information electronically. (C-1)
- 3-5.14 Recognize the legal status of patient medical information exchanged electronically. (C-1)
- 3-5.15 Identify the components of the local EMS communications system and describe their function and use. (C-1)
- 3-5.16 Identify and differentiate among the following communications systems: (C-3)
- a. Simplex
 - b. Multiplex
 - c. Duplex
 - d. Trunked
 - e. Digital communications
 - f. Cellular telephone
 - g. Facsimile
 - h. Computer
- 3-5.17 Identify the components of the local dispatch communications system and describe their function and use. (C-1)
- 3-5.18 Describe the functions and responsibilities of the Federal Communications Commission. (C-1)
- 3-5.19 Describe how an EMS dispatcher functions as an integral part of the EMS team. (C-1)
- 3-5.20 List appropriate information to be gathered by the Emergency Medical Dispatcher. (C-1)
- 3-5.21 Identify the role of Emergency Medical Dispatch in a typical EMS event. (C-1)
- 3-5.22 Identify the importance of pre-arrival instructions in a typical EMS event. (C-1)
- 3-5.23 Describe the purpose of verbal communication of patient information to the hospital. (C-1)
- 3-5.24 Describe information that should be included in patient assessment information verbally reported to medical direction. (C-1)
- 3-5.25 Diagram a basic model of communications. (C-3)
- 3-5.26 Organize a list of patient assessment information in the correct order for electronic transmission to medical direction according to the format used locally. (C-3)

AFFECTIVE OBJECTIVES

At the end of this unit, the paramedic student will be able to:

- 3-5.27 Show appreciation for proper terminology when describing a patient or patient condition. (A-2)

PSYCHOMOTOR OBJECTIVES

At the end of this unit, the paramedic student will be able to:

- 3-5.28 Demonstrate the ability to use the local dispatch communications system. (P-1)
- 3-5.29 Demonstrate the ability to use a radio. (P-1)

3-5.30 Demonstrate the ability to use the biotelemetry equipment used locally. (P-1)

Documentation

UNIT TERMINAL OBJECTIVE

3-6 At the completion of this unit, the paramedic student will be able to effectively document the essential elements of patient assessment, care and transport.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 3-6.1 Identify the general principles regarding the importance of EMS documentation and ways in which documents are used. (C-1)
- 3-6.2 Identify and use medical terminology correctly. (C-1)
- 3-6.3 Recite appropriate and accurate medical abbreviations and acronyms. (C-1)
- 3-6.4 Record all pertinent administrative information. (C-1)
- 3-6.5 Explain the role of documentation in agency reimbursement. (C-1)
- 3-6.6 Analyze the documentation for accuracy and completeness, including spelling. (C-3)
- 3-6.7 Identify and eliminate extraneous or nonprofessional information. (C-1)
- 3-6.8 Describe the differences between subjective and objective elements of documentation. (C-1)
- 3-6.9 Evaluate a finished document for errors and omissions. (C-3)
- 3-6.10 Evaluate a finished document for proper use and spelling of abbreviations and acronyms. (C-3)
- 3-6.11 Evaluate the confidential nature of an EMS report. (C-3)
- 3-6.12 Describe the potential consequences of illegible, incomplete, or inaccurate documentation. (C-1)
- 3-6.13 Describe the special considerations concerning patient refusal of transport. (C-3)
- 3-6.14 Record pertinent information using a consistent narrative format. (C-3)
- 3-6.15 Explain how to properly record direct patient or bystander comments. (C-1)
- 3-6.16 Describe the special considerations concerning mass casualty incident documentation. (C-1)
- 3-6.17 Apply the principles of documentation to computer charting, as access to this technology becomes available. (C-2)
- 3-6.18 Identify and record the pertinent, reportable clinical data of each patient interaction. (C-1)
- 3-6.19 Note and record pertinent negative clinical findings. (C-1)
- 3-6.20 Correct errors and omissions, using proper procedures as defined under local protocol. (C-1)
- 3-6.21 Revise documents, when necessary, using locally-approved procedures. (C-1)
- 3-6.22 Assume responsibility for self-assessment of all documentation. (C-3)
- 3-6.23 Demonstrate proper completion of an EMS event record used locally. (C-3)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 3-6.24 Advocate among peers the relevance and importance of properly completed documentation. (A-3)
- 3-6.25 Resolve the common negative attitudes toward the task of documentation. (A-3)

PSYCHOMOTOR OBJECTIVES

None identified for this unit.

Trauma

Trauma Systems and Mechanisms of Injury

UNIT TERMINAL OBJECTIVE

- 4-1 At the completion of this unit, the Paramedic student will be able to integrate the principles of kinematics to enhance the patient assessment and predict the likelihood of injuries based on the patient's mechanism of injury.

COGNITIVE OBJECTIVES

At the completion of this unit, the Paramedic student will be able to:

- 4-1.1 List and describe the components of a comprehensive trauma system. (C-1)
- 4-1.2 Describe the role of and differences between levels of trauma centers. (C-3)
- 4-1.3 Describe the criteria for transport to a trauma center. (C-1)
- 4-1.4 Describe the criteria and procedure for air medical transport. (C-1)
- 4-1.5 Define energy and force as they relate to trauma. (C-1)
- 4-1.6 Define laws of motion and energy and understand the role that increased speed has on injuries. (C-1)
- 4-1.7 Describe each type of impact and its effect on unrestrained victims (e.g., down and under, up and over, compression, deceleration). (C-1)
- 4-1.8 Describe the pathophysiology of the head, spine, thorax, and abdomen that result from the above forces. (C-1)
- 4-1.9 List specific injuries and their causes as related to interior and exterior vehicle damage. (C-1)
- 4-1.10 Describe the kinematics of penetrating injuries. (C-1)
- 4-1.11 List the motion and energy considerations of mechanisms other than motor vehicle crashes. (C-1)
- 4-1.12 Define the role of kinematics as an additional tool for patient assessment. (C-1)

AFFECTIVE OBJECTIVES

None identified for this unit.

PSYCHOMOTOR OBJECTIVES

None identified for this unit.

Hemorrhage and Shock

UNIT TERMINAL OBJECTIVE

- 4-2 the completion of this unit, the paramedic student will be able to integrate pathophysiological principles and assessment findings to formulate a field impression and implement the treatment plan for the patient with shock or hemorrhage.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 4-2.1 Describe the epidemiology, including the morbidity/ mortality and prevention strategies, for shock and hemorrhage. (C-1)
- 4-2.2 Discuss the anatomy and physiology of the cardiovascular system. (C-1)
- 4-2.3 Predict shock and hemorrhage based on mechanism of injury. (C-1)
- 4-2.4 Discuss the various types and degrees of shock and hemorrhage. (C-1)
- 4-2.5 Discuss the pathophysiology of hemorrhage and shock. (C-1)
- 4-2.6 Discuss the assessment findings associated with hemorrhage and shock. (C-1)
- 4-2.7 Identify the need for intervention and transport of the patient with hemorrhage or shock. (C-1)
- 4-2.8 Discuss the treatment plan and management of hemorrhage and shock. (C-1)
- 4-2.9 Discuss the management of external hemorrhage. (C-1)
- 4-2.10 Differentiate between controlled and uncontrolled hemorrhage. (C-3)
- 4-2.11 Differentiate between the administration rate and amount of IV fluid in a patient with

- controlled versus uncontrolled hemorrhage. (C-3)
- 4-2.12 Relate internal hemorrhage to the pathophysiology of compensated and decompensated hemorrhagic shock. (C-3)
 - 4-2.13 Relate internal hemorrhage to the assessment findings of compensated and decompensated hemorrhagic shock. (C-3)
 - 4-2.14 Discuss the management of internal hemorrhage. (C-1)
 - 4-2.15 Define shock based on aerobic and anaerobic metabolism. (C-1)
 - 4-2.16 Describe the incidence, morbidity, and mortality of shock. (C-1)
 - 4-2.17 Describe the body's physiologic response to changes in perfusion. (C-1)
 - 4-2.18 Describe the effects of decreased perfusion at the capillary level. (C-1)
 - 4-2.19 Discuss the cellular ischemic phase related to hemorrhagic shock. (C-1)
 - 4-2.20 Discuss the capillary stagnation phase related to hemorrhagic shock. (C-1)
 - 4-2.21 Discuss the capillary washout phase related to hemorrhagic shock. (C-1)
 - 4-2.22 Discuss the assessment findings of hemorrhagic shock. (C-1)
 - 4-2.23 Relate pulse pressure changes to perfusion status. (C-3)
 - 4-2.24 Relate orthostatic vital sign changes to perfusion status. (C-3)
 - 4-2.25 Define compensated and decompensated hemorrhagic shock. (C-1)
 - 4-2.26 Discuss the pathophysiological changes associated with compensated shock. (C-1)
 - 4-2.27 Discuss the assessment findings associated with compensated shock. (C-1)
 - 4-2.28 Identify the need for intervention and transport of the patient with compensated shock. (C-1)
 - 4-2.29 Discuss the treatment plan and management of compensated shock. (C-1)
 - 4-2.30 Discuss the pathophysiological changes associated with decompensated shock. (C-1)
 - 4-2.31 Discuss the assessment findings associated with decompensated shock. (C-1)
 - 4-2.32 Identify the need for intervention and transport of the patient with decompensated shock. (C-1)
 - 4-2.33 Discuss the treatment plan and management of the patient with decompensated shock. (C-1)
 - 4-2.34 Differentiate between compensated and decompensated shock. (C-3)
 - 4-2.35 Relate external hemorrhage to the pathophysiology of compensated and decompensated hemorrhagic shock. (C-3)
 - 4-2.36 Relate external hemorrhage to the assessment findings of compensated and decompensated hemorrhagic shock. (C-3)
 - 4-2.37 Differentiate between the normotensive, hypotensive, or profoundly hypotensive patient. (C-3)
 - 4-2.38 Differentiate between the administration of fluid in the normotensive, hypotensive, or profoundly hypotensive patient. (C-3)
 - 4-2.39 Discuss the physiologic changes associated with the pneumatic anti-shock garment (PASG). (C-1)
 - 4-2.40 Discuss the indications and contraindications for the application and inflation of the PASG. (C-1)
 - 4-2.41 Apply epidemiology to develop prevention strategies for hemorrhage and shock. (C-1)
 - 4-2.42 Integrate the pathophysiological principles to the assessment of a patient with hemorrhage or shock. (C-3)
 - 4-2.43 Synthesize assessment findings and patient history information to form a field impression for the patient with hemorrhage or shock. (C-3)
 - 4-2.44 Develop, execute and evaluate a treatment plan based on the field impression for the hemorrhage or shock patient. (C-3)

AFFECTIVE OBJECTIVES

None identified for this unit.

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 4-2.45 Demonstrate the assessment of a patient with signs and symptoms of hemorrhagic shock. (P-2)
- 4-2.46 Demonstrate the management of a patient with signs and symptoms of hemorrhagic shock. (P-2)
- 4-2.47 Demonstrate the assessment of a patient with signs and symptoms of compensated hemorrhagic shock. (P-2)
- 4-2.48 Demonstrate the management of a patient with signs and symptoms of compensated hemorrhagic shock. (P-2)
- 4-2.49 Demonstrate the assessment of a patient with signs and symptoms of decompensated hemorrhagic shock. (P-2)

- 4-2.50 Demonstrate the management of a patient with signs and symptoms of decompensated hemorrhagic shock. (P-2)
- 4-2.51 Demonstrate the assessment of a patient with signs and symptoms of external hemorrhage. (P-2)
- 4-2.52 Demonstrate the management of a patient with signs and symptoms of external hemorrhage. (P-2)
- 4-2.53 Demonstrate the assessment of a patient with signs and symptoms of internal hemorrhage. (P-2)
- 4-2.54 Demonstrate the management of a patient with signs and symptoms of internal hemorrhage. (P-2)

Soft Tissue Trauma

UNIT TERMINAL OBJECTIVE

- 4-3 At the completion of this unit, the paramedic student will be able to integrate pathophysiological principles and the assessment findings to formulate a field impression and implement the treatment plan for the patient with soft tissue trauma.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 4-3.1 Describe the incidence, morbidity, and mortality of soft tissue injuries. (C-1)
- 4-3.2 Describe the layers of the skin, specifically: (C-1)
 - a. Epidermis and dermis (cutaneous)
 - b. Superficial fascia (subcutaneous)
 - c. Deep fascia
- 4-3.3 Identify the major functions of the integumentary system. (C-1)
- 4-3.4 Identify the skin tension lines of the body. (C-1)
- 4-3.5 Predict soft tissue injuries based on mechanism of injury. (C-1)
- 4-3.6 Discuss the pathophysiology of wound healing, including: (C-1)
 - a. Hemostasis
 - b. Inflammation phase
 - c. Epithelialization
 - d. Neovascularization
 - e. Collagen synthesis
- 4-3.7 Discuss the pathophysiology of soft tissue injuries. (C-2)
- 4-3.8 Differentiate between the following types of closed soft tissue injuries: (C-3)
 - a. Contusion
 - b. Hematoma
 - c. Crush injuries
- 4-3.9 Discuss the assessment findings associated with closed soft tissue injuries. (C-1)
- 4-3.10 Discuss the management of a patient with closed soft tissue injuries. (C-2)
- 4-3.11 Discuss the pathophysiology of open soft tissue injuries.
- 4-3.12 Differentiate between the following types of open soft tissue injuries: (C-3)
 - a. Abrasions
 - b. Lacerations
 - c. Major arterial lacerations
 - d. Avulsions
 - e. Impaled objects
 - f. Amputations
 - g. Incisions
 - h. Crush injuries
 - i. Blast injuries
 - j. Penetrations/ punctures
- 4-3.13 Discuss the incidence, morbidity, and mortality of blast injuries. (C-1)
- 4-3.14 Predict blast injuries based on mechanism of injury, including: (C-2)
 - a. Primary
 - b. Secondary
 - c. Tertiary
- 4-3.15 Discuss types of trauma including: (C-1)
 - a. Blunt

- b. Penetrating
 - c. Barotrauma
 - d. Burns
- 4-3.16 Discuss the pathophysiology associated with blast injuries. (C-1)
- 4-3.17 Discuss the effects of an explosion within an enclosed space on a patient. (C-1)
- 4-3.18 Discuss the assessment findings associated with blast injuries. (C-1)
- 4-3.19 Identify the need for rapid intervention and transport of the patient with a blast injury. (C-1)
- 4-3.20 Discuss the management of a patient with a blast injury. (C1)
- 4-3.21 Discuss the incidence, morbidity, and mortality of crush injuries. (C-1)
- 4-3.22 Define the following conditions: (C-1)
- a. Crush injury
 - b. Crush syndrome
 - c. Compartment syndrome
- 4-3.23 Discuss the mechanisms of injury in a crush injury. (C-1)
- 4-3.24 Discuss the effects of reperfusion and rhabdomyolysis on the body. (C-1)
- 4-3.25 Discuss the assessment findings associated with crush injuries. (C-1)
- 4-3.26 Identify the need for rapid intervention and transport of the patient with a crush injury. (C-1)
- 4-3.27 Discuss the management of a patient with a crush injury. (C1)
- 4-3.28 Discuss the pathophysiology of hemorrhage associated with soft tissue injuries, including: (C-2)
- a. Capillary
 - b. Venous
 - c. Arterial
- 4-3.29 Discuss the assessment findings associated with open soft tissue injuries. (C-1)
- 4-3.30 Discuss the assessment of hemorrhage associated with open soft tissue injuries. (C-1)
- 4-3.31 Differentiate between the various management techniques for hemorrhage control of open soft tissue injuries, including: (C-3)
- a. Direct pressure
 - b. Elevation
 - c. Pressure dressing
 - d. Pressure point
 - e. Tourniquet application
- 4-3.32 Differentiate between the types of injuries requiring the use of an occlusive versus non-occlusive dressing. (C-3)
- 4-3.33 Identify the need for rapid assessment, intervention and appropriate transport for the patient with a soft tissue injury. (C-2)
- 4-3.34 Discuss the management of the soft tissue injury patient. (C-2)
- 4-3.35 Define and discuss the following: (C-1)
- a. Dressings
 1. Sterile
 2. Non-sterile
 3. Occlusive
 4. Non-occlusive
 5. Adherent
 6. Non-adherent
 7. Absorbent
 8. Non-absorbent
 9. Wet
 10. Dry
 - b. Bandages
 1. Absorbent
 2. Non-absorbent
 3. Adherent
 4. Non-adherent
 - c. Tourniquet
- 4-3.36 Predict the possible complications of an improperly applied dressing, bandage, or tourniquet. (C-2)

- 4-3.37 Discuss the assessment of wound healing. (C-1)
- 4-3.38 Discuss the management of wound healing. (C-1)
- 4-3.39 Discuss the pathophysiology of wound infection. (C-1)
- 4-3.40 Discuss the assessment of wound infection. (C-1)
- 4-3.41 Discuss the management of wound infection. (C-1)
- 4-3.42 Integrate pathophysiological principles to the assessment of a patient with a soft tissue injury. (C-3)
- 4-3.43 Formulate treatment priorities for patients with soft tissue injuries in conjunction with: (C-3)
 - a. Airway/ face/ neck trauma
 - b. Thoracic trauma (open/ closed)
 - c. Abdominal trauma
- 4-3.44 Synthesize assessment findings and patient history information to form a field impression for the patient with soft tissue trauma. (C-3)
- 4-3.45 Develop, execute, and evaluate a treatment plan based on the field impression for the patient with soft tissue trauma. (C-3)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 4-3.46 Defend the rationale explaining why immediate life-threats must take priority over wound closure. (A-3)
- 4-3.47 Defend the management regimens for various soft tissue injuries. (A-3)
- 4-3.48 Defend why immediate life-threatening conditions take priority over soft tissue management. (A-3)
- 4-3.49 Value the importance of a thorough assessment for patients with soft tissue injuries. (A-3)
- 4-3.50 Attend to the feelings that the patient with a soft tissue injury may experience. (A-2)
- 4-3.51 Appreciate the importance of good follow-up care for patients receiving sutures. (A-2)
- 4-3.52 Understand the value of the written report for soft tissue injuries, in the continuum of patient care. (A-2)

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 4-3.53 Demonstrate the assessment and management of a patient with signs and symptoms of soft tissue injury, including: (P-2)
 - a. Contusion
 - b. Hematoma
 - c. Crushing
 - d. Abrasion
 - e. Laceration
 - f. Avulsion
 - g. Amputation
 - h. Impaled object
 - i. Penetration/ puncture
 - j. Blast

Burns

UNIT TERMINAL OBJECTIVE

- 4-4 At the completion of this unit, the paramedic student will be able to integrate pathophysiological principles and the assessment findings to formulate a field impression and implement the management plan for the patient with a burn injury.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 4-4.1 Describe the anatomy and physiology pertinent to burn injuries. (C-1)
- 4-4.2 Describe the epidemiology, including incidence, mortality/ morbidity, risk factors, and prevention strategies for the patient with a burn injury. (C-1)
- 4-4.3 Describe the pathophysiological complications and systemic complications of a burn

- injury. (C-1)
- 4-4.4 Identify and describe types of burn injuries, including a thermal burn, an inhalation burn, a chemical burn, an electrical burn, and a radiation exposure. (C-1)
 - 4-4.5 Identify and describe the depth classifications of burn injuries, including a superficial burn, a partial-thickness burn, a full-thickness burn, and other depth classifications described by local protocol. (C-1)
 - 4-4.6 Identify and describe methods for determining body surface area percentage of a burn injury including the "rules of nines," the "rules of palms," and other methods described by local protocol. (C-1)
 - 4-4.7 Identify and describe the severity of a burn including a minor burn, a moderate burn, a severe burn, and other severity classifications described by local protocol. (C-1)
 - 4-4.8 Differentiate criteria for determining the severity of a burn injury between a pediatric patient and an adult patient. (C-3)
 - 4-4.9 Describe special considerations for a pediatric patient with a burn injury. (C-1)
 - 4-4.10 Discuss considerations which impact management and prognosis of the burn injured patient. (C-1)
 - 4-4.11 Discuss mechanisms of burn injuries. (C-1)
 - 4-4.12 Discuss conditions associated with burn injuries, including trauma, blast injuries, airway compromise, respiratory compromise, and child abuse. (C-1)
 - 4-4.13 Describe the management of a burn injury, including airway and ventilation, circulation, pharmacological, non-pharmacological, transport considerations, psychological support/ communication strategies, and other management described by local protocol. (C-1)
 - 4-4.14 Describe the epidemiology of a thermal burn injury. (C-1)
 - 4-4.15 Describe the specific anatomy and physiology pertinent to a thermal burn injury. (C-1)
 - 4-4.16 Describe the pathophysiology of a thermal burn injury. (C-1)
 - 4-4.17 Identify and describe the depth classifications of a thermal burn injury. (C-1)
 - 4-4.18 Identify and describe the severity of a thermal burn injury. (C-1)
 - 4-4.19 Describe considerations which impact management and prognosis of the patient with a thermal burn injury. (C-1)
 - 4-4.20 Discuss mechanisms of burn injury and conditions associated with a thermal burn injury. (C-1)
 - 4-4.21 Describe the management of a thermal burn injury, including airway and ventilation, circulation, pharmacological, non-pharmacological, transport considerations, and psychological support/ communication strategies. (C-1)
 - 4-4.22 Describe the epidemiology of an inhalation burn injury. (C-1)
 - 4-4.23 Describe the specific anatomy and physiology pertinent to an inhalation burn injury. (C-1)
 - 4-4.24 Describe the pathophysiology of an inhalation burn injury. (C-1)
 - 4-4.25 Differentiate between supraglottic and infraglottic inhalation injuries. (C-3)
 - 4-4.26 Identify and describe the depth classifications of an inhalation burn injury. (C-1)
 - 4-4.27 Identify and describe the severity of an inhalation burn injury. (C-1)
 - 4-4.28 Describe considerations which impact management and prognosis of the patient with an inhalation burn injury. (C-1)
 - 4-4.29 Discuss mechanisms of burn injury and conditions associated with an inhalation burn injury. (C-1)
 - 4-4.30 Describe the management of an inhalation burn injury, including airway and ventilation, circulation, pharmacological, non-pharmacological, transport considerations, and psychological support/ communication strategies. (C-1)
 - 4-4.31 Describe the epidemiology of a chemical burn injury and a chemical burn injury to the eye. (C-1)
 - 4-4.32 Describe the specific anatomy and physiology pertinent to a chemical burn injury and a chemical burn injury to the eye. (C-1)
 - 4-4.33 Describe the pathophysiology of a chemical burn injury, including types of chemicals and their burning processes and a chemical burn injury to the eye. (C-1)
 - 4-4.34 Identify and describe the depth classifications of a chemical burn injury. (C-1)

- 4-4.35 Identify and describe the severity of a chemical burn injury. (C-1)
- 4-4.36 Describe considerations which impact management and prognosis of the patient with a chemical burn injury and a chemical burn injury to the eye. (C-1)
- 4-4.37 Discuss mechanisms of burn injury and conditions associated with a chemical burn injury. (C-1)
- 4-4.38 Describe the management of a chemical burn injury and a chemical burn injury to the eye, including airway and ventilation, circulation, pharmacological, non-pharmacological, transport considerations, and psychological support/ communication strategies. (C-1)
- 4-4.39 Describe the epidemiology of an electrical burn injury. (C-1)
- 4-4.40 Describe the specific anatomy and physiology pertinent to an electrical burn injury. (C-1)
- 4-4.41 Describe the pathophysiology of an electrical burn injury. (C-1)
- 4-4.42 Identify and describe the depth classifications of an electrical burn injury. (C-1)
- 4-4.43 Identify and describe the severity of an electrical burn injury. (C-1)
- 4-4.44 Describe considerations which impact management and prognosis of the patient with an electrical burn injury. (C-1)
- 4-4.45 Discuss mechanisms of burn injury and conditions associated with an electrical burn injury. (C-1)
- 4-4.46 Describe the management of an electrical burn injury, including airway and ventilation, circulation, pharmacological, non-pharmacological, transport considerations, and psychological support/ communication strategies. (C-1)
- 4-4.47 Describe the epidemiology of a radiation exposure. (C-1)
- 4-4.48 Describe the specific anatomy and physiology pertinent to a radiation exposure. (C-1)
- 4-4.49 Describe the pathophysiology of a radiation exposure, including the types and characteristics of ionizing radiation. (C-1)
- 4-4.50 Identify and describe the depth classifications of a radiation exposure. (C-1)
- 4-4.51 Identify and describe the severity of a radiation exposure. (C-1)
- 4-4.52 Describe considerations which impact management and prognosis of the patient with a radiation exposure. (C-1)
- 4-4.53 Discuss mechanisms of burn injury associated with a radiation exposure. (C-1)
- 4-4.54 Discuss conditions associated with a radiation exposure. (C-1)
- 4-4.55 Describe the management of a radiation exposure, including airway and ventilation, circulation, pharmacological, non-pharmacological, transport considerations, and psychological support/ communication strategies. (C-1)
- 4-4.56 Integrate pathophysiological principles to the assessment of a patient with a thermal burn injury. (C-3)
- 4-4.57 Integrate pathophysiological principles to the assessment of a patient with an inhalation burn injury. (C-3)
- 4-4.58 Integrate pathophysiological principles to the assessment of a patient with a chemical burn injury. (C-3)
- 4-4.59 Integrate pathophysiological principles to the assessment of a patient with an electrical burn injury. (C-3)
- 4-4.60 Integrate pathophysiological principles to the assessment of a patient with a radiation exposure. (C-3)
- 4-4.61 Synthesize patient history information and assessment findings to form a field impression for the patient with a thermal burn injury. (C-3)
- 4-4.62 Synthesize patient history information and assessment findings to form a field impression for the patient with an inhalation burn injury. (C-3)
- 4-4.63 Synthesize patient history information and assessment findings to form a field impression for the patient with a chemical burn injury. (C-3)
- 4-4.64 Synthesize patient history information and assessment findings to form a field impression for the patient with an electrical burn injury. (C-3)
- 4-4.65 Synthesize patient history information and assessment findings to form a field impression for the patient with a radiation exposure. (C-3)
- 4-4.66 Develop, execute and evaluate a management plan based on the field impression for the patient with a thermal burn injury. (C-3)
- 4-4.67 Develop, execute and evaluate a management plan based on the field impression for the patient with an inhalation burn injury. (C-3)

- 4-4.68 Develop, execute and evaluate a management plan based on the field impression for the patient with a chemical burn injury. (C-3)
- 4-4.69 Develop, execute and evaluate a management plan based on the field impression for the patient with an electrical burn injury. (C-3)
- 4-4.70 Develop, execute and evaluate a management plan based on the field impression for the patient with a radiation exposure. (C-3)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 4-4.71 Value the changes of a patient's self-image associated with a burn injury. (A-2)
- 4-4.72 Value the impact of managing a burn injured patient. (A-2)
- 4-4.73 Advocate empathy for a burn injured patient. (A-2)
- 4-4.74 Assess safety at a burn injury incident. (A-3)
- 4-4.75 Characterize mortality and morbidity based on the pathophysiology and assessment findings of a patient with a burn injury. (A-3)
- 4-4.76 Value and defend the sense of urgency in burn injuries. (A-3)
- 4-4.77 Serve as a model for universal precautions and body substance isolation (BSI). (A-3)

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 4-4.78 Take body substance isolation procedures during assessment and management of patients with a burn injury. (P-2)
- 4-4.79 Perform assessment of a patient with a burn injury. (P-2)
- 4-4.80 Perform management of a thermal burn injury, including airway and ventilation, circulation, pharmacological, non-pharmacological, transport considerations, psychological support/ communication strategies, and other management described by local protocol. (P-2)
- 4-4.81 Perform management of an inhalation burn injury, including airway and ventilation, circulation, pharmacological, non-pharmacological, transport considerations, psychological support/ communication strategies, and other management described by local protocol. (P-2)
- 4-4.82 Perform management of a chemical burn injury, including airway and ventilation, circulation, pharmacological, non-pharmacological, transport considerations, psychological support/ communication strategies, and other management described by local protocol. (P-2)
- 4-4.83 Perform management of an electrical burn injury, including airway and ventilation, circulation, pharmacological, non-pharmacological, transport considerations, psychological support/ communication strategies, and other management described by local protocol. (P-2)
- 4-4.84 Perform management of a radiation exposure, including airway and ventilation, circulation, pharmacological, non-pharmacological, transport considerations, psychological support/ communication strategies, and other management described by local protocol. (P-2)

Head and Facial Trauma

UNIT TERMINAL OBJECTIVE

- 4-5 At the completion of this unit, the paramedic student will be able to integrate pathophysiological principles and the assessment findings to formulate a field impression and implement a treatment plan for the trauma patient with a suspected head injury.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 4-5.1 Describe the incidence, morbidity, and mortality of facial injuries. (C-1)
- 4-5.2 Explain facial anatomy and relate physiology to facial injuries. (C-1)
- 4-5.3 Predict facial injuries based on mechanism of injury. (C-1)

- 4-5.4 Predict other injuries commonly associated with facial injuries based on mechanism of injury. (C-2)
- 4-5.5 Differentiate between the following types of facial injuries, highlighting the defining characteristics of each: (C-3)
 - a. Eye
 - b. Ear
 - c. Nose
 - d. Throat
 - e. Mouth
- 4-5.6 Integrate pathophysiological principles to the assessment of a patient with a facial injury. (C-3)
- 4-5.7 Differentiate between facial injuries based on the assessment and history. (C-3)
- 4-5.8 Formulate a field impression for a patient with a facial injury based on the assessment findings. (C-3)
- 4-5.9 Develop a patient management plan for a patient with a facial injury based on the field impression. (C-3)
- 4-5.10 Explain the pathophysiology of eye injuries. (C-1)
- 4-5.11 Relate assessment findings associated with eye injuries to pathophysiology. (C-3)
- 4-5.12 Integrate pathophysiological principles to the assessment of a patient with an eye injury. (C-3)
- 4-5.13 Formulate a field impression for a patient with an eye injury based on the assessment findings. (C-3)
- 4-5.14 Develop a patient management plan for a patient with an eye injury based on the field impression. (C-3)
- 4-5.15 Explain the pathophysiology of ear injuries. (C-1)
- 4-5.16 Relate assessment findings associated with ear injuries to pathophysiology. (C-3)
- 4-5.17 Integrate pathophysiological principles to the assessment of a patient with an ear injury. (C-3)
- 4-5.18 Formulate a field impression for a patient with an ear injury based on the assessment findings. (C-3)
- 4-5.19 Develop a patient management plan for a patient with an ear injury based on the field impression. (C-3)
- 4-5.20 Explain the pathophysiology of nose injuries. (C-1)
- 4-5.21 Relate assessment findings associated with nose injuries to pathophysiology. (C-3)
- 4-5.22 Integrate pathophysiological principles to the assessment of a patient with a nose injury. (C-3)
- 4-5.23 Formulate a field impression for a patient with a nose injury based on the assessment findings. (C-3)
- 4-5.24 Develop a patient management plan for a patient with a nose injury based on the field impression. (C-3)
- 4-5.25 Explain the pathophysiology of throat injuries. (C-1)
- 4-5.26 Relate assessment findings associated with throat injuries to pathophysiology. (C-3)
- 4-5.27 Integrate pathophysiological principles to the assessment of a patient with a throat injury. (C-3)
- 4-5.28 Formulate a field impression for a patient with a throat injury based on the assessment findings. (C-3)
- 4-5.29 Develop a patient management plan for a patient with a throat injury based on the field impression. (C-3)
- 4-5.30 Explain the pathophysiology of mouth injuries. (C-1)
- 4-5.31 Relate assessment findings associated with mouth injuries to pathophysiology. (C-3)
- 4-5.32 Integrate pathophysiological principles to the assessment of a patient with a mouth injury. (C-3)
- 4-5.33 Formulate a field impression for a patient with a mouth injury based on the assessment findings. (C-3)
- 4-5.34 Develop a patient management plan for a patient with a mouth injury based on the field impression. (C-3)
- 4-5.35 Describe the incidence, morbidity, and mortality of head injures. (C-1)

- 4-5.36 Explain anatomy and relate physiology of the CNS to head injuries. (C-1)
- 4-5.37 Predict head injuries based on mechanism of injury. (C-2)
- 4-5.38 Distinguish between head injury and brain injury. (C-3)
- 4-5.39 Explain the pathophysiology of head/ brain injuries. (C-1)
- 4-5.40 Explain the concept of increasing intracranial pressure (ICP). (C-1)
- 4-5.41 Explain the effect of increased and decreased carbon dioxide on ICP. (C-1)
- 4-5.42 Define and explain the process involved with each of the levels of increasing ICP. (C-1)
- 4-5.43 Relate assessment findings associated with head/ brain injuries to the pathophysiologic process. (C-3)
- 4-5.44 Classify head injuries (mild, moderate, severe) according to assessment findings. (C-2)
- 4-5.45 Identify the need for rapid intervention and transport of the patient with a head/ brain injury. (C-1)
- 4-5.46 Describe and explain the general management of the head/ brain injury patient, including pharmacological and non-pharmacological treatment. (C-1)
- 4-5.47 Analyze the relationship between carbon dioxide concentration in the blood and management of the airway in the head/ brain injured patient. (C-3)
- 4-5.48 Explain the pathophysiology of diffuse axonal injury. (C-1)
- 4-5.49 Relate assessment findings associated with concussion, moderate and severe diffuse axonal injury to pathophysiology. (C-3)
- 4-5.50 Develop a management plan for a patient with a moderate and severe diffuse axonal injury. (C-3)
- 4-5.51 Explain the pathophysiology of skull fracture. (C-1)
- 4-5.52 Relate assessment findings associated with skull fracture to pathophysiology. (C-3)
- 4-5.53 Develop a management plan for a patient with a skull fracture. (C-3)
- 4-5.54 Explain the pathophysiology of cerebral contusion. (C-1)
- 4-5.55 Relate assessment findings associated with cerebral contusion to pathophysiology. (C-3)
- 4-5.56 Develop a management plan for a patient with a cerebral contusion. (C-3)
- 4-5.57 Explain the pathophysiology of intracranial hemorrhage, including: (C-1)
 - a. Epidural
 - b. Subdural
 - c. Intracerebral
 - d. Subarachnoid
- 4-5.58 Relate assessment findings associated with intracranial hemorrhage to pathophysiology, including: (C-3)
 - a. Epidural
 - b. Subdural
 - c. Intracerebral
 - d. Subarachnoid
- 4-5.59 Develop a management plan for a patient with an intracranial hemorrhage, including: (C-1)
 - a. Epidural
 - b. Subdural
 - c. Intracerebral
 - d. Subarachnoid
- 4-5.60 Describe the various types of helmets and their purposes. (C-1)
- 4-5.61 Relate priorities of care to factors determining the need for helmet removal in various field situations including sports related incidents. (C-3)
- 4-5.62 Develop a management plan for the removal of a helmet for a head injured patient. (C-3)
- 4-5.63 Integrate the pathophysiological principles to the assessment of a patient with head/ brain injury. (C-3)
- 4-5.64 Differentiate between the types of head/ brain injuries based on the assessment and history. (C-3)
- 4-5.65 Formulate a field impression for a patient with a head/ brain injury based on the assessment findings. (C-3)
- 4-5.66 Develop a patient management plan for a patient with a head/ brain injury based on the field impression. (C-3)

AFFECTIVE OBJECTIVES

None identified for this unit.

PSYCHOMOTOR OBJECTIVES

None identified for this unit.

Spinal Trauma**UNIT TERMINAL OBJECTIVE**

4-6 At the completion of this unit, the paramedic student will be able to integrate pathophysiological principles and the assessment findings to formulate a field impression and implement a treatment plan for the patient with a suspected spinal injury.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 4-6.1 Describe the incidence, morbidity, and mortality of spinal injuries in the trauma patient. (C-1)
- 4-6.2 Describe the anatomy and physiology of structures related to spinal injuries. (C-1)
 - a. Cervical
 - b. Thoracic
 - c. Lumbar
 - d. Sacrum
 - e. Coccyx
 - f. Head
 - g. Brain
 - h. Spinal cord
 - i. Nerve tract(s)
 - j. Dermatomes
- 4-6.3 Predict spinal injuries based on mechanism of injury. (C-2)
- 4-6.4 Describe the pathophysiology of spinal injuries. (C-1)
- 4-6.5 Explain traumatic and non-traumatic spinal injuries. (C-1)
- 4-6.6 Describe the assessment findings associated with spinal injuries. (C-1)
- 4-6.7 Describe the management of spinal injuries. (C-1)
- 4-6.8 Identify the need for rapid intervention and transport of the patient with spinal injuries. (C-1)
- 4-6.9 Integrate the pathophysiological principles to the assessment of a patient with a spinal injury. (C-3)
- 4-6.10 Differentiate between spinal injuries based on the assessment and history. (C-3)
- 4-6.11 Formulate a field impression based on the assessment findings. (C-3)
- 4-6.12 Develop a patient management plan based on the field impression. (C-3)
- 4-6.13 Describe the pathophysiology of traumatic spinal injury related to: (C-1)
 - a. Spinal shock
 - b. Spinal neurogenic shock
 - c. Quadriplegia/ paraplegia
 - d. Incomplete cord injury/ cord syndromes:
 - 1. Central cord syndrome
 - 2. Anterior cord syndrome
 - 3. Brown-Sequard syndrome
- 4-6.14 Describe the assessment findings associated with traumatic spinal injuries. (C-1)
- 4-6.15 Describe the management of traumatic spinal injuries. (C-1)
- 4-6.16 Integrate pathophysiological principles to the assessment of a patient with a traumatic spinal injury. (C-3)
- 4-6.17 Differentiate between traumatic and non-traumatic spinal injuries based on the assessment and history. (C-3)
- 4-6.18 Formulate a field impression for traumatic spinal injury based on the assessment findings. (C-3)
- 4-6.19 Develop a patient management plan for traumatic spinal injury based on the field

- impression. (C-3)
- 4-6.20 Describe the pathophysiology of non-traumatic spinal injury, including: (C-1)
 - a. Low back pain
 - b. Herniated intervertebral disk
 - c. Spinal cord tumors
 - 4-6.21 Describe the assessment findings associated with non-traumatic spinal injuries. (C-1)
 - 4-6.22 Describe the management of non-traumatic spinal injuries. (C-1)
 - 4-6.23 Integrate pathophysiological principles to the assessment of a patient with non-traumatic spinal injury. (C-3)
 - 4-6.24 Differentiate between traumatic and non-traumatic spinal injuries based on the assessment and history. (C-3)
 - 4-6.25 Formulate a field impression for non-traumatic spinal injury based on the assessment findings. (C-3)
 - 4-6.26 Develop a patient management plan for non-traumatic spinal injury based on the field impression. (C-3)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 4-6.27 Advocate the use of a thorough assessment when determining the proper management modality for spine injuries. (A-3)
- 4-6.28 Value the implications of failing to properly immobilize a spine injured patient. (A-2)

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 4-6.29 Demonstrate a clinical assessment to determine the proper management modality for a patient with a suspected traumatic spinal injury. (P-1)
- 4-6.30 Demonstrate a clinical assessment to determine the proper management modality for a patient with a suspected non-traumatic spinal injury. (P-1)
- 4-6.31 Demonstrate immobilization of the urgent and non-urgent patient with assessment findings of spinal injury from the following presentations: (P-1)
 - a. Supine
 - b. Prone
 - c. Semi-prone
 - d. Sitting
 - e. Standing
- 4-6.32 Demonstrate documentation of suspected spinal cord injury to include: (P-1)
 - a. General area of spinal cord involved
 - b. Sensation
 - c. Dermatomes
 - d. Motor function
 - e. Area(s) of weakness
- 4-6.33 Demonstrate preferred methods for stabilization of a helmet from a potentially spine injured patient. (P-1)
- 4-6.34 Demonstrate helmet removal techniques. (P-1)
- 4-6.35 Demonstrate alternative methods for stabilization of a helmet from a potentially spine injured patient. (P-1)
- 4-6.36 Demonstrate documentation of assessment before spinal immobilization. (P-1)
- 4-6.37 Demonstrate documentation of assessment during spinal immobilization. (P-1)
- 4-6.38 Demonstrate documentation of assessment after spinal immobilization. (P-1)

Thoracic Trauma

UNIT TERMINAL OBJECTIVE

- 4-7 At the completion of this unit, the paramedic student will be able to integrate pathophysiological principles and the assessment findings to formulate a field impression and implement a treatment plan for a patient with a thoracic injury.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 4-7.1 Describe the incidence, morbidity, and mortality of thoracic injuries in the trauma patient. (C-1)
- 4-7.2 Discuss the anatomy and physiology of the organs and structures related to thoracic injuries. (C-1)
- 4-7.3 Predict thoracic injuries based on mechanism of injury. (C-2)
- 4-7.4 Discuss the types of thoracic injuries. (C-1)
- 4-7.5 Discuss the pathophysiology of thoracic injuries. (C-1)
- 4-7.6 Discuss the assessment findings associated with thoracic injuries. (C-1)
- 4-7.7 Discuss the management of thoracic injuries. (C-1)
- 4-7.8 Identify the need for rapid intervention and transport of the patient with thoracic injuries. (C-1)
- 4-7.9 Discuss the pathophysiology of specific chest wall injuries, including: (C-1)
- a. Rib fracture
 - b. Flail segment
 - c. Sternal fracture
- 4-7.10 Discuss the assessment findings associated with chest wall injuries. (C-1)
- 4-7.11 Identify the need for rapid intervention and transport of the patient with chest wall injuries. (C-1)
- 4-7.12 Discuss the management of chest wall injuries. (C-1)
- 4-7.13 Discuss the pathophysiology of injury to the lung, including: (C-1)
- a. Simple pneumothorax
 - b. Open pneumothorax
 - c. Tension pneumothorax
 - d. Hemothorax
 - e. Hemopneumothorax
 - f. Pulmonary contusion
- 4-7.14 Discuss the assessment findings associated with lung injuries. (C-1)
- 4-7.15 Discuss the management of lung injuries. (C-1)
- 4-7.16 Identify the need for rapid intervention and transport of the patient with lung injuries. (C-1)
- 4-7.17 Discuss the pathophysiology of myocardial injuries, including: (C-1)
- a. Pericardial tamponade
 - b. Myocardial contusion
 - c. Myocardial rupture
- 4-7.18 Discuss the assessment findings associated with myocardial injuries. (C-1)
- 4-7.19 Discuss the management of myocardial injuries. (C-1)
- 4-7.20 Identify the need for rapid intervention and transport of the patient with myocardial injuries. (C-1)
- 4-7.21 Discuss the pathophysiology of vascular injuries, including injuries to: (C-1)
- a. Aorta
 - b. Vena cava
 - c. Pulmonary arteries/ veins
- 4-7.22 Discuss the assessment findings associated with vascular injuries. (C-1)
- 4-7.23 Discuss the management of vascular injuries. (C-1)
- 4-7.24 Identify the need for rapid intervention and transport of the patient with vascular injuries. (C-1)
- 4-7.25 Discuss the pathophysiology of diaphragmatic injuries. (C-1)
- 4-7.26 Discuss the assessment findings associated with diaphragmatic injuries. (C-1)
- 4-7.27 Discuss the management of diaphragmatic injuries. (C-1)

- 4-7.28 Identify the need for rapid intervention and transport of the patient with diaphragmatic injuries. (C-1)
- 4-7.29 Discuss the pathophysiology of esophageal injuries. (C-1)
- 4-7.30 Discuss the assessment findings associated with esophageal injuries. (C-1)
- 4-7.31 Discuss the management of esophageal injuries. (C-1)
- 4-7.32 Identify the need for rapid intervention and transport of the patient with esophageal injuries. (C-1)
- 4-7.33 Discuss the pathophysiology of tracheo-bronchial injuries. (C-1)
- 4-7.34 Discuss the assessment findings associated with tracheo-bronchial injuries. (C-1)
- 4-7.35 Discuss the management of tracheo-bronchial injuries. (C-1)
- 4-7.36 Identify the need for rapid intervention and transport of the patient with tracheo-bronchial injuries. (C-1)
- 4-7.37 Discuss the pathophysiology of traumatic asphyxia. (C-1)
- 4-7.38 Discuss the assessment findings associated with traumatic asphyxia. (C-1)
- 4-7.39 Discuss the management of traumatic asphyxia. (C-1)
- 4-7.40 Identify the need for rapid intervention and transport of the patient with traumatic asphyxia. (C-1)
- 4-7.41 Integrate the pathophysiological principles to the assessment of a patient with thoracic injury. (C-1)
- 4-7.42 Differentiate between thoracic injuries based on the assessment and history. (C-3)
- 4-7.43 Formulate a field impression based on the assessment findings. (C-3)
- 4-7.44 Develop a patient management plan based on the field impression. (C-3)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 4-7.45 Advocate the use of a thorough assessment to determine a differential diagnosis and treatment plan for thoracic trauma. (A-3)
- 4-7.46 Advocate the use of a thorough scene survey to determine the forces involved in thoracic trauma. (A-3)
- 4-7.47 Value the implications of failing to properly diagnose thoracic trauma. (A-2)
- 4-7.48 Value the implications of failing to initiate timely interventions to patients with thoracic trauma. (A-2)

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 4-7.49 Demonstrate a clinical assessment for a patient with suspected thoracic trauma. (P-1)
- 4-7.50 Demonstrate the following techniques of management for thoracic injuries: (P-1)
 - a. Needle decompression
 - b. Fracture stabilization
 - c. Elective intubation
 - d. ECG monitoring
 - e. Oxygenation and ventilation

Abdominal Trauma

UNIT TERMINAL OBJECTIVE

- 4-8 At the completion of this unit, the paramedic student will be able to integrate pathophysiologic principles and the assessment findings to formulate a field impression and implement the treatment plan for the patient with suspected abdominal trauma.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 4-8.1 Describe the epidemiology, including the morbidity/mortality and prevention strategies for a patient with abdominal trauma. (C-1)
- 4-8.2 Describe the anatomy and physiology of organs and structures related to abdominal injuries. (C-1)

- 4-8.3 Predict abdominal injuries based on blunt and penetrating mechanisms of injury. (C-2)
- 4-8.4 Describe open and closed abdominal injuries. (C-1)
- 4-8.5 Explain the pathophysiology of abdominal injuries. (C-1)
- 4-8.6 Describe the assessment findings associated with abdominal injuries. (C-1)
- 4-8.7 Identify the need for rapid intervention and transport of the patient with abdominal injuries based on assessment findings. (C-1)
- 4-8.8 Describe the management of abdominal injuries. (C-1)
- 4-8.9 Integrate the pathophysiological principles to the assessment of a patient with abdominal injury. (C-3)
- 4-8.10 Differentiate between abdominal injuries based on the assessment and history. (C-3)
- 4-8.11 Formulate a field impression for patients with abdominal trauma based on the assessment findings. (C-3)
- 4-8.12 Develop a patient management plan for patients with abdominal trauma based on the field impression. (C-3)
- 4-8.13 Describe the epidemiology, including the morbidity/ mortality and prevention strategies for solid organ injuries. (C-1)
- 4-8.14 Explain the pathophysiology of solid organ injuries. (C-1)
- 4-8.15 Describe the assessment findings associated with solid organ injuries. (C-1)
- 4-8.16 Describe the treatment plan and management of solid organ injuries. (C-1)
- 4-8.17 Describe the epidemiology, including the morbidity/ mortality and prevention strategies for hollow organ injuries. (C-1)
- 4-8.18 Explain the pathophysiology of hollow organ injuries. (C-1)
- 4-8.19 Describe the assessment findings associated with hollow organ injuries. (C-1)
- 4-8.20 Describe the treatment plan and management of hollow organ injuries. (C-1)
- 4-8.21 Describe the epidemiology, including the morbidity/ mortality and prevention strategies for abdominal vascular injuries. (C-1)
- 4-8.22 Explain the pathophysiology of abdominal vascular injuries. (C-1)
- 4-8.23 Describe the assessment findings associated with abdominal vascular injuries. (C-1)
- 4-8.24 Describe the treatment plan and management of abdominal vascular injuries. (C-1)
- 4-8.25 Describe the epidemiology, including the morbidity/ mortality and prevention strategies for pelvic fractures. (C-1)
- 4-8.26 Explain the pathophysiology of pelvic fractures. (C-1)
- 4-8.27 Describe the assessment findings associated with pelvic fractures. (C-1)
- 4-8.28 Describe the treatment plan and management of pelvic fractures. (C-1)
- 4-8.29 Describe the epidemiology, including the morbidity/ mortality and prevention strategies for other related abdominal injuries. (C-1)
- 4-8.30 Explain the pathophysiology of other related abdominal injuries. (C-1)
- 4-8.31 Describe the assessment findings associated with other related abdominal injuries. (C-1)
- 4-8.32 Describe the treatment plan and management of other related abdominal injuries. (C-1)
- 4-8.33 Apply the epidemiologic principles to develop prevention strategies for abdominal injuries. (C-2)
- 4-8.34 Integrate the pathophysiological principles to the assessment of a patient with abdominal injuries. (C-3)
- 4-8.35 Differentiate between abdominal injuries based on the assessment and history. (C-3)
- 4-8.36 Formulate a field impression based upon the assessment findings for a patient with abdominal injuries. (C-3)
- 4-8.37 Develop a patient management plan for a patient with abdominal injuries, based upon field impression. (C-3)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 4-8.38 Advocate the use of a thorough assessment to determine a differential diagnosis and treatment plan for abdominal trauma. (A-3)
- 4-8.39 Advocate the use of a thorough scene survey to determine the forces involved in abdominal trauma. (A-3)
- 4-8.40 Value the implications of failing to properly diagnose abdominal trauma and initiate timely

interventions to patients with abdominal trauma. (A-2)

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 4-8.41 Demonstrate a clinical assessment to determine the proper treatment plan for a patient with suspected abdominal trauma. (P-1)
- 4-8.42 Demonstrate the proper use of PASG in a patient with suspected abdominal trauma. (P-1)
- 4-8.43 Demonstrate the proper use of PASG in a patient with suspected pelvic fracture. (P-1)

Musculoskeletal Trauma

UNIT TERMINAL OBJECTIVE

- 4-9 At the completion of this unit, the paramedic student will be able to integrate pathophysiological principles and the assessment findings to formulate a field impression and implement the treatment plan for the patient with a musculoskeletal injury.

COGNITIVE OBJECTIVE

At the completion of this unit, the paramedic student will be able to:

- 4-9.1 Describe the incidence, morbidity, and mortality of musculoskeletal injuries. (C-1)
- 4-9.2 Discuss the anatomy and physiology of the musculoskeletal system. (C-1)
- 4-9.3 Predict injuries based on the mechanism of injury, including: (C-3)
 - a. Direct
 - b. Indirect
 - c. Pathologic
- 4-9.4 Discuss the types of musculoskeletal injuries: (C-1)
 - a. Fracture (open and closed)
 - b. Dislocation/ fracture
 - c. Sprain
 - d. Strain
- 4-9.5 Discuss the pathophysiology of musculoskeletal injuries. (C-1)
- 4-9.6 Discuss the assessment findings associated with musculoskeletal injuries. (C-1)
- 4-9.7 List the six "P"s of musculoskeletal injury assessment. (C-1)
- 4-9.8 List the primary signs and symptoms of extremity trauma. (C-1)
- 4-9.9 List other signs and symptoms that can indicate less obvious extremity injury. (C-1)
- 4-9.10 Discuss the need for assessment of pulses, motor and sensation before and after splinting. (C-1)
- 4-9.11 Identify the need for rapid intervention and transport when dealing with musculoskeletal injuries. (C-1)
- 4-9.12 Discuss the management of musculoskeletal injuries. (C-1)
- 4-9.13 Discuss the general guidelines for splinting. (C-1)
- 4-9.14 Explain the benefits of cold application for musculoskeletal injury. (C-1)
- 4-9.15 Explain the benefits of heat application for musculoskeletal injury. (C-1)
- 4-9.16 Describe age associated changes in the bones. (C-1)
- 4-9.17 Discuss the pathophysiology of open and closed fractures. (C-1)
- 4-9.18 Discuss the relationship between volume of hemorrhage and open or closed fractures. (C-3)
- 4-9.19 Discuss the assessment findings associated with fractures. (C-1)
- 4-9.20 Discuss the management of fractures. (C-1)
- 4-9.21 Discuss the usefulness of the pneumatic anti-shock garment (PASG) in the management of fractures. (C-1)
- 4-9.22 Describe the special considerations involved in femur fracture management. (C-1)
- 4-9.23 Discuss the pathophysiology of dislocations. (C-1)
- 4-9.24 Discuss the assessment findings of dislocations. (C-1)
- 4-9.25 Discuss the out-of-hospital management of dislocation/ fractures, including splinting and realignment. (C-1)
- 4-9.26 Explain the importance of manipulating a knee dislocation/ fracture with an absent distal

- pulse. (C-1)
- 4-9.27 Describe the procedure for reduction of a shoulder, finger or ankle dislocation/ fracture. (C-1)
 - 4-9.28 Discuss the pathophysiology of sprains. (C-1)
 - 4-9.29 Discuss the assessment findings of sprains. (C-1)
 - 4-9.30 Discuss the management of sprains. (C-1)
 - 4-9.31 Discuss the pathophysiology of strains. (C-1)
 - 4-9.32 Discuss the assessment findings of strains. (C-1)
 - 4-9.33 Discuss the management of strains. (C-1)
 - 4-9.34 Discuss the pathophysiology of a tendon injury. (C-1)
 - 4-9.35 Discuss the assessment findings of tendon injury. (C-1)
 - 4-9.36 Discuss the management of a tendon injury. (C-1)
 - 4-9.37 Integrate the pathophysiological principles to the assessment of a patient with a musculoskeletal injury. (C-3)
 - 4-9.38 Differentiate between musculoskeletal injuries based on the assessment findings and history. (C-3)
 - 4-9.39 Formulate a field impression of a musculoskeletal injury based on the assessment findings. (C-3)
 - 4-9.40 Develop a patient management plan for the musculoskeletal injury based on the field impression. (C-3)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 4-9.41 Advocate the use of a thorough assessment to determine a working diagnosis and treatment plan for musculoskeletal injuries. (A-3)
- 4-9.42 Advocate for the use of pain management in the treatment of musculoskeletal injuries. (A-3)

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 4-9.43 Demonstrate a clinical assessment to determine the proper treatment plan for a patient with a suspected musculoskeletal injury. (P-1)
- 4-9.44 Demonstrate the proper use of fixation, soft and traction splints for a patient with a suspected fracture. (P-1)

Medical

Pulmonary

UNIT TERMINAL OBJECTIVE

- 5-1 At the completion of this unit, the paramedic student will be able to integrate pathophysiological principles and assessment findings to formulate a field impression and implement the treatment plan for the patient with respiratory problems.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 5-1.1 Discuss the epidemiology of pulmonary diseases and conditions. (C-1)
- 5-1.2 Identify and describe the function of the structures located in the upper and lower airway. (C-1)
- 5-1.3 Discuss the physiology of ventilation and respiration. (C-1)
- 5-1.4 Identify common pathological events that affect the pulmonary system. (C-1)
- 5-1.5 Discuss abnormal assessment findings associated with pulmonary diseases and conditions. (C-1)
- 5-1.6 Compare various airway and ventilation techniques used in the management of pulmonary diseases. (C-3)
- 5-1.7 Review the pharmacological preparations that paramedics use for management of respiratory diseases and conditions. (C-1)
- 5-1.8 Review the pharmacological preparations used in managing patients with respiratory diseases that may be prescribed by physicians. (C-1)
- 5-1.9 Review the use of equipment used during the physical examination of patients with complaints associated with respiratory diseases and conditions. (C-1)
- 5-1.10 Identify the epidemiology, anatomy, physiology, pathophysiology, assessment findings, and management for the following respiratory diseases and conditions: (C-1)
 - a. Adult respiratory distress syndrome
 - b. Bronchial asthma
 - c. Chronic bronchitis
 - d. Emphysema
 - e. Pneumonia
 - f. Pulmonary edema
 - g. Pulmonary thromboembolism
 - h. Neoplasms of the lung
 - i. Upper respiratory infections
 - j. Spontaneous pneumothorax
 - k. Hyperventilation syndrome

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 5-1.11 Recognize and value the assessment and treatment of patients with respiratory diseases. (A-2)
- 5-1.12 Indicate appreciation for the critical nature of accurate field impressions of patients with respiratory diseases and conditions. (A-2)

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 5-1.13 Demonstrate proper use of airway and ventilation devices. (P-1)
- 5-1.14 Conduct a history and patient assessment for patients with pulmonary diseases and conditions. (P-1)
- 5-1.15 Demonstrate the application of a CPAP/ BiPAP unit. (P-1)

Cardiology

UNIT TERMINAL OBJECTIVE

- 5-2 At the completion of this unit, the paramedic student will be able to integrate pathophysiological principles and assessment findings to formulate a field impression and implement the treatment plan for the patient with cardiovascular disease.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 5-2.1 Describe the incidence, morbidity and mortality of cardiovascular disease. (C-1)
- 5-2.2 Discuss prevention strategies that may reduce the morbidity and mortality of cardiovascular disease. (C-1)
- 5-2.3 Identify the risk factors most predisposing to coronary artery disease. (C-1)
- 5-2.4 Describe the anatomy of the heart, including the position in the thoracic cavity, layers of the heart, chambers of the heart, and location and function of cardiac valves. (C-1)
- 5-2.5 Identify the major structures of the vascular system. (C-1)
- 5-2.6 Identify the factors affecting venous return. (C-1)
- 5-2.7 Identify and define the components of cardiac output. (C-1)
- 5-2.8 Identify phases of the cardiac cycle. (C-1)
- 5-2.9 Identify the arterial blood supply to any given area of the myocardium. (C-1)
- 5-2.10 Compare and contrast the coronary arterial distribution to the major portions of the cardiac conduction system. (C-3)
- 5-2.11 Identify the structure and course of all divisions and subdivisions of the cardiac conduction system. (C-1)
- 5-2.12 Identify and describe how the heart's pacemaking control, rate, and rhythm are determined. (C-2)
- 5-2.13 Explain the physiological basis of conduction delay in the AV node. (C-3)
- 5-2.14 Define the functional properties of cardiac muscle. (C-1)
- 5-2.15 Define the events comprising electrical potential. (C-1)
- 5-2.16 List the most important ions involved in myocardial action potential and their primary function in this process. (C-2)
- 5-2.17 Describe the events involved in the steps from excitation to contraction of cardiac muscle fibers. (C-1)
- 5-2.18 Describe the clinical significance of Starling's law. (C-3)
- 5-2.19 Identify the structures of the autonomic nervous system (ANS). (C-1)
- 5-2.20 Identify the effect of the ANS on heart rate, rhythm and contractility. (C-1)
- 5-2.21 Define and give examples of positive and negative inotropism, chronotropism and dromotropism. (C-2)
- 5-2.22 Discuss the pathophysiology of cardiac disease and injury. (C-1)
- 5-2.23 Identify and describe the details of inspection, auscultation and palpation specific to the cardiovascular system. (C-1)
- 5-2.24 Define pulse deficit, pulsus paradoxus and pulsus alternans. (C-1)
- 5-2.25 Identify the normal characteristics of the point of maximal impulse (PMI). (C-1)
- 5-2.26 Identify and define the heart sounds. (C-1)
- 5-2.27 Relate heart sounds to hemodynamic events in the cardiac cycle. (C-2)
- 5-2.28 Describe the differences between normal and abnormal heart sounds. (C-2)
- 5-2.29 Identify and describe the components of the focused history as it relates to the patient with cardiovascular compromise. (C-1)
- 5-2.30 Explain the purpose of ECG monitoring. (C-1)
- 5-2.31 Describe how ECG wave forms are produced. (C-2)
- 5-2.32 Correlate the electrophysiological and hemodynamic events occurring throughout the entire cardiac cycle with the various ECG wave forms, segments and intervals. (C-2)
- 5-2.33 Identify how heart rates, durations, and amplitudes may be determined from ECG recordings. (C-3)

- 5-2.34 Relate the cardiac surfaces or areas represented by the ECG leads. (C-2)
- 5-2.35 Given an ECG, identify the arrhythmia. (C-3)
- 5-2.36 Identify the limitations to the ECG. (C-1)
- 5-2.37 Differentiate among the primary mechanisms responsible for producing cardiac arrhythmias. (C-1)
- 5-2.38 Describe a systematic approach to the analysis and interpretation of cardiac arrhythmias. (C-2)
- 5-2.39 Describe the arrhythmias originating in the sinus node, the AV junction, the atria, and the ventricles. (C-3)
- 5-2.40 Describe the arrhythmias originating or sustained in the AV junction. (C-3)
- 5-2.41 Describe the abnormalities originating within the bundle branch system. (C-3)
- 5-2.42 Describe the process of differentiating wide QRS complex tachycardias. (C-3)
- 5-2.43 Recognize the pitfalls in the differentiation of wide QRS complex tachycardias. (C-1)
- 5-2.44 Describe the conditions of pulseless electrical activity. (C-3)
- 5-2.45 Describe the phenomena of reentry, aberration and accessory pathways. (C-1)
- 5-2.46 Identify the ECG changes characteristically produced by electrolyte imbalances and specify the clinical implications. (C-2)
- 5-2.47 Identify patient situations where ECG rhythm analysis is indicated. (C-1)
- 5-2.48 Recognize the changes on the ECG that may reflect evidence of myocardial ischemia and injury. (C-1)
- 5-2.49 Recognize the limitations of the ECG in reflecting evidence of myocardial ischemia and injury. (C-1)
- 5-2.50 Correlate abnormal ECG findings with clinical interpretation. (C-2)
- 5-2.51 Identify the major therapeutic objectives in the treatment of the patient with any arrhythmia. (C-1)
- 5-2.52 Identify the major mechanical, pharmacological and electrical therapeutic interventions. (C-3)
- 5-2.53 Based on field impressions, identify the need for rapid intervention for the patient in cardiovascular compromise. (C-3)
- 5-2.54 Describe the incidence, morbidity and mortality associated with myocardial conduction defects. (C-1)
- 5-2.55 Identify the clinical indications for transcutaneous and permanent artificial cardiac pacing. (C-1)
- 5-2.56 Describe the components and the functions of a transcutaneous pacing system. (C-1)
- 5-2.57 Explain what each setting and indicator on a transcutaneous pacing system represents and how the settings may be adjusted. (C-2)
- 5-2.58 Describe the techniques of applying a transcutaneous pacing system. (C-1)
- 5-2.59 Describe the characteristics of an implanted pacemaking system. (C-1)
- 5-2.60 Describe artifacts that may cause confusion when evaluating the ECG of a patient with a pacemaker. (C-2)
- 5-2.61 List the possible complications of pacing. (C-3)
- 5-2.62 List the causes and implications of pacemaker failure. (C-2)
- 5-2.63 Identify additional hazards that interfere with artificial pacemaker function. (C-1)
- 5-2.64 Recognize the complications of artificial pacemakers as evidenced on ECG. (C-2)
- 5-2.65 Describe the epidemiology, morbidity and mortality, and pathophysiology of angina pectoris. (C-1)
- 5-2.66 List and describe the assessment parameters to be evaluated in a patient with angina pectoris. (C-1)
- 5-2.67 Identify what is meant by the OPQRST of chest pain assessment. (C-3)
- 5-2.68 List other clinical conditions that may mimic signs and symptoms of coronary artery disease and angina pectoris. (C-1)
- 5-2.69 Identify the ECG findings in patients with angina pectoris. (C-3)
- 5-2.70 Identify the paramedic responsibilities associated with management of the patient with angina pectoris. (C-2)
- 5-2.71 Based on the pathophysiology and clinical evaluation of the patient with chest pain, list the anticipated clinical problems according to their life-threatening potential. (C-3)

- 5-2.72 Describe the epidemiology, morbidity and mortality of myocardial infarction. (C-1)
- 5-2.73 List the mechanisms by which an MI may be produced by traumatic and non-traumatic events. (C-2)
- 5-2.74 Identify the primary hemodynamic changes produced in myocardial infarction. (C-1)
- 5-2.75 List and describe the assessment parameters to be evaluated in a patient with a suspected myocardial infarction. (C-1)
- 5-2.76 Identify the anticipated clinical presentation of a patient with a suspected acute myocardial infarction. (C-3)
- 5-2.77 Differentiate the characteristics of the pain/ discomfort occurring in angina pectoris and acute myocardial infarction. (C-2)
- 5-2.78 Identify the ECG changes characteristically seen during evolution of an acute myocardial infarction. (C-2)
- 5-2.79 Identify the most common complications of an acute myocardial infarction. (C-3)
- 5-2.80 List the characteristics of a patient eligible for thrombolytic therapy. (C-2)
- 5-2.81 Describe the "window of opportunity" as it pertains to reperfusion of a myocardial injury or infarction. (C-3)
- 5-2.82 Based on the pathophysiology and clinical evaluation of the patient with a suspected acute myocardial infarction, list the anticipated clinical problems according to their life-threatening potential. (C-3)
- 5-2.83 Specify the measures that may be taken to prevent or minimize complications in the patient suspected of myocardial infarction. (C-3)
- 5-2.84 Describe the most commonly used cardiac drugs in terms of therapeutic effect and dosages, routes of administration, side effects and toxic effects. (C-3)
- 5-2.85 Describe the epidemiology, morbidity and mortality of heart failure. (C-1)
- 5-2.86 Define the principle causes and terminology associated with heart failure. (C-1)
- 5-2.87 Identify the factors that may precipitate or aggravate heart failure. (C-3)
- 5-2.88 Describe the physiological effects of heart failure. (C-2)
- 5-2.89 Define the term "acute pulmonary edema" and describe its relationship to left ventricular failure. (C-3)
- 5-2.90 Define preload, afterload and left ventricular end-diastolic pressure and relate each to the pathophysiology of heart failure. (C-3)
- 5-2.91 Differentiate between early and late signs and symptoms of left ventricular failure and those of right ventricular failure. (C-3)
- 5-2.92 Explain the clinical significance of paroxysmal nocturnal dyspnea. (C-1)
- 5-2.93 Explain the clinical significance of edema of the extremities and sacrum. (C-1)
- 5-2.94 List the interventions prescribed for the patient in acute congestive heart failure. (C-2)
- 5-2.95 Describe the most commonly used pharmacological agents in the management of congestive heart failure in terms of therapeutic effect, dosages, routes of administration, side effects and toxic effects. (C-1)
- 5-2.96 Define the term "cardiac tamponade". (C-1)
- 5-2.97 List the mechanisms by which cardiac tamponade may be produced by traumatic and non-traumatic events. (C-2)
- 5-2.98 Identify the limiting factor of pericardial anatomy that determines intrapericardiac pressure. (C-1)
- 5-2.99 Identify the clinical criteria specific to cardiac tamponade. (C-2)
- 5-2.100 Describe how to determine if pulsus paradoxus, pulsus alternans or electrical alternans is present. (C-2)
- 5-2.101 Identify the paramedic responsibilities associated with management of a patient with cardiac tamponade. (C-2)
- 5-2.102 Describe the incidence, morbidity and mortality of hypertensive emergencies. (C-1)
- 5-2.103 Define the term "hypertensive emergency". (C-1)
- 5-2.104 Identify the characteristics of the patient population at risk for developing a hypertensive emergency. (C-1)
- 5-2.105 Explain the essential pathophysiological defect of hypertension in terms of Starling's law of the heart. (C-3)
- 5-2.106 Identify the progressive vascular changes associate with sustained hypertension. (C-1)

- 5-2.107 Describe the clinical features of the patient in a hypertensive emergency. (C-3)
- 5-2.108 Rank the clinical problems of patients in hypertensive emergencies according to their sense of urgency. (C-3)
- 5-2.109 From the priority of clinical problems identified, state the management responsibilities for the patient with a hypertensive emergency. (C-2)
- 5-2.110 Identify the drugs of choice for hypertensive emergencies, rationale for use, clinical precautions and disadvantages of selected antihypertensive agents. (C-3)
- 5-2.111 Correlate abnormal findings with clinical interpretation of the patient with a hypertensive emergency. (C-3)
- 5-2.112 Define the term "cardiogenic shock". (C-1)
- 5-2.113 Describe the major systemic effects of reduced tissue perfusion caused by cardiogenic shock. (C-3)
- 5-2.114 Explain the primary mechanisms by which the heart may compensate for a diminished cardiac output and describe their efficiency in cardiogenic shock. (C-3)
- 5-2.115 Differentiate progressive stages of cardiogenic shock. (C-3)
- 5-2.116 Identify the clinical criteria for cardiogenic shock. (C-1)
- 5-2.117 Describe the characteristics of patients most likely to develop cardiogenic shock. (C-3)
- 5-2.118 Describe the most commonly used pharmacological agents in the management of cardiogenic shock in terms of therapeutic effects, dosages, routes of administration, side effects and toxic effects. (C-2)
- 5-2.119 Correlate abnormal findings with clinical assessment of the patient in cardiogenic shock. (C-3)
- 5-2.120 Identify the paramedic responsibilities associated with management of a patient in cardiogenic shock. (C-2)
- 5-2.121 Define the term "cardiac arrest". (C-1)
- 5-2.122 Identify the characteristics of patient population at risk for developing cardiac arrest from cardiac causes. (C-1)
- 5-2.123 Identify non-cardiac causes of cardiac arrest. (C-1)
- 5-2.124 Describe the arrhythmias seen in cardiac arrest. (C-3)
- 5-2.125 Identify the critical actions necessary in caring for the patient with cardiac arrest. (C-3)
- 5-2.126 Explain how to confirm asystole using the 3-lead ECG. (C-1)
- 5-2.127 Define the terms defibrillation and synchronized cardioversion. (C-1)
- 5-2.128 Specify the methods of supporting the patient with a suspected ineffective implanted defibrillation device. (C-2)
- 5-2.129 Describe the most commonly used pharmacological agents in the managements of cardiac arrest in terms of therapeutic effects. (C-3)
- 5-2.130 Identify resuscitation. (C-1)
- 5-2.131 Identify circumstances and situations where resuscitation efforts would not be initiated. (C-1)
- 5-2.132 Identify and list the inclusion and exclusion criteria for termination of resuscitation efforts. (C-1)
- 5-2.133 Identify communication and documentation protocols with medical direction and law enforcement used for termination of resuscitation efforts. (C-1)
- 5-2.134 Describe the incidence, morbidity and mortality of vascular disorders. (C-1)
- 5-2.135 Describe the pathophysiology of vascular disorders. (C-1)
- 5-2.136 List the traumatic and non-traumatic causes of vascular disorders. (C-1)
- 5-2.137 Define the terms "aneurysm", "claudication" and "phlebitis". (C-1)
- 5-2.138 Identify the peripheral arteries most commonly affected by occlusive disease. (C-1)
- 5-2.139 Identify the major factors involved in the pathophysiology of aortic aneurysm. (C-1)
- 5-2.140 Recognize the usual order of signs and symptoms that develop following peripheral artery occlusion. (C-3)
- 5-2.141 Identify the clinical significance of claudication and presence of arterial bruits in a patient with peripheral vascular disorders. (C-3)
- 5-2.142 Describe the clinical significance of unequal arterial blood pressure readings in the arms. (C-3)
- 5-2.143 Recognize and describe the signs and symptoms of dissecting thoracic or abdominal aneurysm. (C-3)
- 5-2.144 Describe the significant elements of the patient history in a patient with vascular disease. (C-2)
- 5-2.145 Identify the hemodynamic effects of vascular disorders. (C-1)

- 5-2.146 Identify the complications of vascular disorders. (C-1)
- 5-2.147 Identify the Paramedic's responsibilities associated with management of patients with vascular disorders. (C-2)
- 5-2.148 Develop, execute and evaluate a treatment plan based on the field impression for the patient with vascular disorders. (C-3)
- 5-2.149 Differentiate between signs and symptoms of cardiac tamponade, hypertensive emergencies, cardiogenic shock, and cardiac arrest. (C-3)
- 5-2.150 Based on the pathophysiology and clinical evaluation of the patient with chest pain, characterize the clinical problems according to their life-threatening potential. (C-3)
- 5-2.151 Apply knowledge of the epidemiology of cardiovascular disease to develop prevention strategies. (C-3)
- 5-2.152 Integrate pathophysiological principles into the assessment of a patient with cardiovascular disease. (C-3)
- 5-2.153 Apply knowledge of the epidemiology of cardiovascular disease to develop prevention strategies. (C-3)
- 5-2.154 Integrate pathophysiological principles into the assessment of a patient with cardiovascular disease. (C-3)
- 5-2.155 Synthesize patient history, assessment findings and ECG analysis to form a field impression for the patient with cardiovascular disease. (C-3)
- 5-2.156 Integrate pathophysiological principles to the assessment of a patient in need of a pacemaker. (C-1)
- 5-2.157 Synthesize patient history, assessment findings and ECG analysis to form a field impression for the patient in need of a pacemaker. (C-3)
- 5-2.158 Develop, execute, and evaluate a treatment plan based on field impression for the patient in need of a pacemaker. (C-3)
- 5-2.159 Based on the pathophysiology and clinical evaluation of the patient with chest pain, characterize the clinical problems according to their life-threatening potential. (C-3)
- 5-2.160 Integrate pathophysiological principles to the assessment of a patient with chest pain. (C-3)
- 5-2.161 Synthesize patient history, assessment findings and ECG analysis to form a field impression for the patient with angina pectoris. (C-3)
- 5-2.162 Develop, execute and evaluate a treatment plan based on the field impression for the patient with chest pain. (C-3)
- 5-2.163 Integrate pathophysiological principles to the assessment of a patient with a suspected myocardial infarction. (C-3)
- 5-2.164 Synthesize patient history, assessment findings and ECG analysis to form a field impression for the patient with a suspected myocardial infarction. (C-3)
- 5-2.165 Develop, execute and evaluate a treatment plan based on the field impression for the suspected myocardial infarction patient. (C-3)
- 5-2.166 Integrate pathophysiological principles to the assessment of the patient with heart failure. (C-3)
- 5-2.167 Synthesize assessment findings and patient history information to form a field impression of the patient with heart failure. (C-3)
- 5-2.168 Develop, execute, and evaluate a treatment plan based on the field impression for the heart failure patient. (C-3)
- 5-2.169 Integrate pathophysiological principles to the assessment of a patient with cardiac tamponade. (C-3)
- 5-2.170 Synthesize assessment findings and patient history information to form a field impression of the patient with cardiac tamponade. (C-3)
- 5-2.171 Develop, execute and evaluate a treatment plan based on the field impression for the patient with cardiac tamponade. (C-3)
- 5-2.172 Integrate pathophysiological principles to the assessment of the patient with a hypertensive emergency. (C-3)
- 5-2.173 Synthesize assessment findings and patient history information to form a field impression of the patient with a hypertensive emergency. (C-3)
- 5-2.174 Develop, execute and evaluate a treatment plan based on the field impression for

- the patient with a hypertensive emergency. (C-3)
- 5-2.175 Integrate pathophysiological principles to the assessment of the patient with cardiogenic shock. (C-3)
- 5-2.176 Synthesize assessment findings and patient history information to form a field impression of the patient with cardiogenic shock. (C-3)
- 5-2.177 Develop, execute, and evaluate a treatment plan based on the field impression for the patient with cardiogenic shock. (C-3)
- 5-2.178 Integrate the pathophysiological principles to the assessment of the patient with cardiac arrest. (C-3)
- 5-2.179 Synthesize assessment findings to formulate a rapid intervention for a patient in cardiac arrest. (C-3)
- 5-2.180 Synthesize assessment findings to formulate the termination of resuscitative efforts for a patient in cardiac arrest. (C-3)
- 5-2.181 Integrate pathophysiological principles to the assessment of a patient with vascular disorders. (C-3)
- 5-2.182 Synthesize assessment findings and patient history to form a field impression for the patient with vascular disorders. (C-3)
- 5-2.183 Integrate pathophysiological principles to the assessment and field management of a patient with chest pain. (C-3)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 5-2.184 Value the sense of urgency for initial assessment and intervention in the patient with cardiac compromise. (A-3)
- 5-2.185 Value and defend the sense of urgency necessary to protect the window of opportunity for reperfusion in the patient with suspected myocardial infarction. (A-3)
- 5-2.186 Defend patient situations where ECG rhythm analysis is indicated. (A-3)
- 5-2.187 Value and defend the application of transcutaneous pacing system. (A-3)
- 5-2.188 Value and defend the urgency in identifying pacemaker malfunction. (A-3)
- 5-2.189 Based on the pathophysiology and clinical evaluation of the patient with acute myocardial infarction, characterize the clinical problems according to their life-threatening potential. (A-3)
- 5-2.190 Defend the measures that may be taken to prevent or minimize complications in the patient with a suspected myocardial infarction. (A-3)
- 5-2.191 Defend the urgency based on the severity of the patient's clinical problems in a hypertensive emergency. (A-3)
- 5-2.192 From the priority of clinical problems identified, state the management responsibilities for the patient with a hypertensive emergency. (A-3)
- 5-2.193 Value and defend the urgency in rapid determination of and rapid intervention of patients in cardiac arrest. (A-3)
- 5-2.194 Value and defend the possibility of termination of resuscitative efforts in the out-of-hospital setting. (A-3)
- 5-2.195 Based on the pathophysiology and clinical evaluation of the patient with vascular disorders, characterize the clinical problems according to their life-threatening potential. (A-3)
- 5-2.196 Value and defend the sense of urgency in identifying peripheral vascular occlusion. (A-3)
- 5-2.197 Value and defend the sense of urgency in recognizing signs of aortic aneurysm. (A-3)

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 5-2.198 Demonstrate how to set and adjust the ECG monitor settings to varying patient situations. (P-3)
- 5-2.199 Demonstrate a working knowledge of various ECG lead systems. (P-3)
- 5-2.200 Demonstrate how to record an ECG. (P-2)
- 5-2.201 Perform, document and communicate a cardiovascular assessment. (P-1)
- 5-2.202 Set up and apply a transcutaneous pacing system. (P-3)

- 5-2.203 Given the model of a patient with signs and symptoms of heart failure, position the patient to afford comfort and relief. (P-2)
- 5-2.204 Demonstrate how to determine if pulsus paradoxus, pulsus alternans or electrical alternans is present. (P-2)
- 5-2.205 Demonstrate satisfactory performance of psychomotor skills of basic and advanced life support techniques according to the current American Heart Association Standards and Guidelines, including: (P-3)
- Cardiopulmonary resuscitation
 - Defibrillation
 - Synchronized cardioversion
 - Transcutaneous pacing
- 5-2.206 Complete a communication patch with medical direction and law enforcement used for termination of resuscitation efforts. (P-1)
- 5-2.207 Demonstrate how to evaluate major peripheral arterial pulses. (P-1)

Neurology

UNIT TERMINAL OBJECTIVE

- 5-3 At the completion of this unit, the paramedic student will be able to integrate pathophysiological principles and assessment findings to formulate a field impression and implement the treatment plan for the patient with a neurological problem.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 5-3.1 Describe the incidence, morbidity and mortality of neurological emergencies. (C-1)
- 5-3.2 Identify the risk factors most predisposing to the nervous system. (C-1)
- 5-3.3 Discuss the anatomy and physiology of the organs and structures related to nervous system. (C-1)
- 5-3.4 Discuss the pathophysiology of non-traumatic neurologic emergencies. (C-1)
- 5-3.5 Discuss the assessment findings associated with non-traumatic neurologic emergencies. (C-1)
- 5-3.6 Identify the need for rapid intervention and the transport of the patient with non-traumatic emergencies. (C-1)
- 5-3.7 Discuss the management of non-traumatic neurological emergencies. (C-1)
- 5-3.8 Discuss the pathophysiology of coma and altered mental status. (C-1)
- 5-3.9 Discuss the assessment findings associated with coma and altered mental status. (C-1)
- 5-3.10 Discuss the management/ treatment plan of coma and altered mental status. (C-1)
- 5-3.11 Describe the epidemiology, including the morbidity/ mortality and prevention strategies, for seizures. (C-1)
- 5-3.12 Discuss the pathophysiology of seizures. (C-1)
- 5-3.13 Discuss the assessment findings associated with seizures. (C-1)
- 5-3.14 Define seizure. (C-1)
- 5-3.15 Describe and differentiate the major types of seizures. (C-3)
- 5-3.16 List the most common causes of seizures. (C-1)
- 5-3.17 Describe the phases of a generalized seizure. (C-1)
- 5-3.18 Discuss the pathophysiology of syncope. (C-1)
- 5-3.19 Discuss the assessment findings associated with syncope. (C-1)
- 5-3.20 Discuss the management/ treatment plan of syncope. (C-1)
- 5-3.21 Discuss the pathophysiology of headache. (C-1)
- 5-3.22 Discuss the assessment findings associated with headache. (C-1)
- 5-3.23 Discuss the management/ treatment plan of headache. (C-1)
- 5-3.24 Describe the epidemiology, including the morbidity/ mortality and prevention strategies, for neoplasms. (C-1)
- 5-3.25 Discuss the pathophysiology of neoplasms. (C-1)
- 5-3.26 Describe the types of neoplasms. (C-1)
- 5-3.27 Discuss the assessment findings associated with neoplasms. (C-1)

- 5-3.28 Discuss the management/ treatment plan of neoplasms. (C-1)
- 5-3.29 Define neoplasms. (C-1)
- 5-3.30 Recognize the signs and symptoms related to neoplasms. (C-1)
- 5-3.31 Correlate abnormal assessment findings with clinical significance in the patient with neoplasms. (C-3)
- 5-3.32 Differentiate among the various treatment and pharmacological interventions used in the management of neoplasms. (C-3)
- 5-3.33 Integrate the pathophysiological principles and the assessment findings to formulate a field impression and implement a treatment plan for the patient with neoplasms. (C-3)
- 5-3.34 Describe the epidemiology, including the morbidity/ mortality and prevention strategies, for abscess. (C-1)
- 5-3.35 Discuss the pathophysiology of abscess. (C-1)
- 5-3.36 Discuss the assessment findings associated with abscess. (C-1)
- 5-3.37 Discuss the management/ treatment plan of abscess. (C-1)
- 5-3.38 Define abscess. (C-1)
- 5-3.39 Recognize the signs and symptoms related to abscess. (C-1)
- 5-3.40 Correlate abnormal assessment findings with clinical significance in the patient with abscess. (C-3)
- 5-3.41 Differentiate among the various treatment and pharmacological interventions used in the management of abscess. (C-3)
- 5-3.42 Integrate the pathophysiological principles and the assessment findings to formulate a field impression and implement a treatment plan for the patient with abscess. (C-3)
- 5-3.43 Describe the epidemiology, including the morbidity/ mortality and prevention strategies, for stroke and intracranial hemorrhage. (C-1)
- 5-3.44 Discuss the pathophysiology of stroke and intracranial hemorrhage. (C-1)
- 5-3.45 Describe the types of stroke and intracranial hemorrhage. (C-1)
- 5-3.46 Discuss the assessment findings associated with stroke and intracranial hemorrhage. (C-1)
- 5-3.47 Discuss the management/ treatment plan of stroke and intracranial hemorrhage. (C-1)
- 5-3.48 Define stroke and intracranial hemorrhage. (C-1)
- 5-3.49 Recognize the signs and symptoms related to stroke and intracranial hemorrhage. (C-1)
- 5-3.50 Correlate abnormal assessment findings with clinical significance in the patient with stroke and intracranial hemorrhage. (C-3)
- 5-3.51 Differentiate among the various treatment and pharmacological interventions used in the management of stroke and intracranial hemorrhage. (C-3)
- 5-3.52 Integrate the pathophysiological principles and the assessment findings to formulate a field impression and implement a treatment plan for the patient with stroke and intracranial hemorrhage. (C-3)
- 5-3.53 Describe the epidemiology, including the morbidity/ mortality and prevention strategies, for transient ischemic attack. (C-3)
- 5-3.54 Discuss the pathophysiology of transient ischemic attack. (C-1)
- 5-3.55 Discuss the assessment findings associated with transient ischemic attack. (C-1)
- 5-3.56 Discuss the management/ treatment plan of transient ischemic attack. (C-1)
- 5-3.57 Define transient ischemic attack. (C-1)
- 5-3.58 Recognize the signs and symptoms related to transient ischemic attack. (C-1)
- 5-3.59 Correlate abnormal assessment findings with clinical significance in the patient with transient ischemic attack. (C-3)
- 5-3.60 Differentiate among the various treatment and pharmacological interventions used in the management of transient ischemic attack. (C-3)
- 5-3.61 Integrate the pathophysiological principles and the assessment findings to formulate a field impression and implement a treatment plan for the patient with transient ischemic attack. (C-3)
- 5-3.62 Describe the epidemiology, including the morbidity/ mortality and prevention strategies, for degenerative neurological diseases. (C-1)
- 5-3.63 Discuss the pathophysiology of degenerative neurological diseases. (C-1)

- 5-3.64 Discuss the assessment findings associated with degenerative neurological diseases. (C-1)
- 5-3.65 Discuss the management/ treatment plan of degenerative neurological diseases. (C-1)
- 5-3.66 Define the following: (C-1)
 - a. Muscular dystrophy
 - b. Multiple sclerosis
 - c. Dystonia
 - d. Parkinson's disease
 - e. Trigeminal neuralgia
 - f. Bell's palsy
 - g. Amyotrophic lateral sclerosis
 - h. Peripheral neuropathy
 - i. Myoclonus
 - j. Spina bifida
 - k. Poliomyelitis
- 5-3.67 Recognize the signs and symptoms related to degenerative neurological diseases. (C-1)
- 5-3.68 Correlate abnormal assessment findings with clinical significance in the patient with degenerative neurological diseases. (C-3)
- 5-3.69 Differentiate among the various treatment and pharmacological interventions used in the management of degenerative neurological diseases. (C-3)
- 5-3.70 Integrate the pathophysiological principles and the assessment findings to formulate a field impression and implement a treatment plan for the patient with degenerative neurological diseases. (C-3)
- 5-3.71 Integrate the pathophysiological principles of the patient with a neurological emergency. (C-3)
- 5-3.72 Differentiate between neurological emergencies based on assessment findings. (C-3)
- 5-3.73 Correlate abnormal assessment findings with the clinical significance in the patient with neurological complaints. (C-3)
- 5-3.74 Develop a patient management plan based on field impression in the patient with neurological emergencies. (C-3)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 5-3.75 Characterize the feelings of a patient who regains consciousness among strangers. (A-2)
- 5-3.76 Formulate means of conveying empathy to patients whose ability to communicate is limited by their condition. (A-3)

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 5-3.77 Perform an appropriate assessment of a patient with coma or altered mental status. (P-3)
- 5-3.78 Perform a complete neurological examination as part of the comprehensive physical examination of a patient with coma or altered mental status. (P-3)
- 5-3.79 Appropriately manage a patient with coma or altered mental status, including the administration of oxygen, oral glucose, 50% dextrose and narcotic reversal agents. (P-3)
- 5-3.80 Perform an appropriate assessment of a patient with syncope. (P-3)
- 5-3.81 Appropriately manage a patient with syncope. (P-3)
- 5-3.82 Perform an appropriate assessment of a patient with seizures. (P-3)
- 5-3.83 Appropriately manage a patient with seizures, including the administration of diazepam or lorazepam. (P3)
- 5-3.84 Perform an appropriate assessment of a patient with stroke and intracranial hemorrhage or TIA. (P-3)
- 5-3.85 Appropriately manage a patient with stroke and intracranial hemorrhage or TIA. (P-3)
- 5-3.86 Demonstrate an appropriate assessment of a patient with a chief complaint of weakness. (P-3)

Endocrinology

UNIT TERMINAL OBJECTIVE

- 5-4 At the completion of this unit, the paramedic student will be able to integrate pathophysiological principles and assessment findings to formulate a field impression and implement a treatment plan for the patient with an endocrine problem.

COGNITIVE OBJECTIVE

At the completion of this unit, the paramedic student will be able to:

- 5-4.1 Describe the incidence, morbidity and mortality of endocrinologic emergencies. (C-1)
- 5-4.2 Identify the risk factors most predisposing to endocrinologic disease. (C-1)
- 5-4.3 Discuss the anatomy and physiology of organs and structures related to endocrinologic diseases. (C-1)
- 5-4.4 Review the pathophysiology of endocrinologic emergencies. (C-1)
- 5-4.5 Discuss the general assessment findings associated with endocrinologic emergencies. (C-1)
- 5-4.6 Identify the need for rapid intervention of the patient with endocrinologic emergencies. (C-1)
- 5-4.7 Discuss the management of endocrinologic emergencies. (C-1)
- 5-4.8 Describe osmotic diuresis and its relationship to diabetes. (C-1)
- 5-4.9 Describe the pathophysiology of adult onset diabetes mellitus. (C-1)
- 5-4.10 Describe the pathophysiology of juvenile onset diabetes mellitus. (C-1)
- 5-4.11 Describe the effects of decreased levels of insulin on the body. (C-1)
- 5-4.12 Correlate abnormal findings in assessment with clinical significance in the patient with a diabetic emergency. (C-3)
- 5-4.13 Discuss the management of diabetic emergencies. (C-1)
- 5-4.14 Integrate the pathophysiological principles and the assessment findings to formulate a field impression and implement a treatment plan for the patient with a diabetic emergency. (C-3)
- 5-4.15 Differentiate between the pathophysiology of normal glucose metabolism and diabetic glucose metabolism. (C-3)
- 5-4.16 Describe the mechanism of ketone body formation and its relationship to ketoacidosis. (C-1)
- 5-4.17 Discuss the physiology of the excretion of potassium and ketone bodies by the kidneys. (C-1)
- 5-4.18 Describe the relationship of insulin to serum glucose levels. (C-1)
- 5-4.19 Describe the effects of decreased levels of insulin on the body. (C-1)
- 5-4.20 Describe the effects of increased serum glucose levels on the body. (C-1)
- 5-4.21 Discuss the pathophysiology of hypoglycemia. (C-1)
- 5-4.22 Discuss the utilization of glycogen by the human body as it relates to the pathophysiology of hypoglycemia. (C-3)
- 5-4.23 Describe the actions of epinephrine as it relates to the pathophysiology of hypoglycemia. (C-3)
- 5-4.24 Recognize the signs and symptoms of the patient with hypoglycemia. (C-1)
- 5-4.25 Describe the compensatory mechanisms utilized by the body to promote homeostasis relative to hypoglycemia. (C-1)
- 5-4.26 Describe the management of a responsive hypoglycemic patient. (C-1)
- 5-4.27 Correlate abnormal findings in assessment with clinical significance in the patient with hypoglycemia. (C-1)
- 5-4.28 Discuss the management of the hypoglycemic patient. (C-1)
- 5-4.29 Integrate the pathophysiological principles and the assessment findings to formulate a field impression and implement a treatment plan for the patient with hypoglycemia. (C-3)
- 5-4.30 Discuss the pathophysiology of hyperglycemia. (C-1)
- 5-4.31 Recognize the signs and symptoms of the patient with hyperglycemia. (C-1)
- 5-4.32 Describe the management of hyperglycemia. (C-1)
- 5-4.33 Correlate abnormal findings in assessment with clinical significance in the patient with hyperglycemia. (C-3)
- 5-4.34 Discuss the management of the patient with hyperglycemia. (C-1)
- 5-4.35 Integrate the pathophysiological principles and the assessment findings to formulate a field impression and implement a treatment plan for the patient with hyperglycemia. (C-3)

- 5-4.36 Discuss the pathophysiology of nonketotic hyperosmolar coma. (C-1)
- 5-4.37 Recognize the signs and symptoms of the patient with nonketotic hyperosmolar coma. (C-1)
- 5-4.38 Describe the management of nonketotic hyperosmolar coma. (C-1)
- 5-4.39 Correlate abnormal findings in assessment with clinical significance in the patient with nonketotic hyperosmolar coma. (C-3)
- 5-4.40 Integrate the pathophysiological principles and the assessment findings to formulate a field impression and implement a treatment plan for the patient with nonketotic hyperosmolar coma. (C-3)
- 5-4.41 Discuss the management of the patient with hyperglycemia. (C-1)
- 5-4.42 Integrate the pathophysiological principles and the assessment findings to formulate a field impression and implement a treatment plan for the patient with hyperglycemia. (C-3)
- 5-4.43 Discuss the pathophysiology of diabetic ketoacidosis. (C-1)
- 5-4.44 Recognize the signs and symptoms of the patient with diabetic ketoacidosis. (C-1)
- 5-4.45 Describe the management of diabetic ketoacidosis. (C-1)
- 5-4.46 Correlate abnormal findings in assessment with clinical significance in the patient with diabetic ketoacidosis. (C-3)
- 5-4.47 Discuss the management of the patient with diabetic ketoacidosis. (C-1)
- 5-4.48 Integrate the pathophysiological principles and the assessment findings to formulate a field impression and implement a treatment plan for the patient with diabetic ketoacidosis. (C-3)
- 5-4.49 Discuss the pathophysiology of thyrotoxicosis. (C-1)
- 5-4.50 Recognize signs and symptoms of the patient with thyrotoxicosis. (C-1)
- 5-4.51 Describe the management of thyrotoxicosis. (C-1)
- 5-4.52 Correlate abnormal findings in assessment with clinical significance in the patient with thyrotoxicosis. (C-3)
- 5-4.53 Discuss the management of the patient with thyrotoxicosis. (C-1)
- 5-4.54 Integrate the pathophysiological principles and the assessment findings to formulate a field impression and implement a treatment plan for the patient with thyrotoxicosis. (C-3)
- 5-4.55 Discuss the pathophysiology of myxedema. (C-1)
- 5-4.56 Recognize signs and symptoms of the patient with myxedema. (C-1)
- 5-4.57 Describe the management of myxedema. (C-1)
- 5-4.58 Correlate abnormal findings in assessment with clinical significance in the patient with myxedema. (C-3)
- 5-4.59 Discuss the management of the patient with myxedema. (C-1)
- 5-4.60 Integrate the pathophysiological principles and the assessment findings to formulate a field impression and implement a treatment plan for the patient with myxedema. (C-3)
- 5-4.61 Discuss the pathophysiology of Cushing's syndrome. (C-1)
- 5-4.62 Recognize signs and symptoms of the patient with Cushing's syndrome. (C-1)
- 5-4.63 Describe the management of Cushing's syndrome. (C-1)
- 5-4.64 Correlate abnormal findings in assessment with clinical significance in the patient with Cushing's syndrome. (C-3)
- 5-4.65 Discuss the management of the patient with Cushing's syndrome. (C-1)
- 5-4.66 Integrate the pathophysiological principles and the assessment findings to formulate a field impression and implement a treatment plan for the patient with Cushing's syndrome. (C-3)
- 5-4.67 Discuss the pathophysiology of adrenal insufficiency. (C-1)
- 5-4.68 Recognize signs and symptoms of the patient with adrenal insufficiency. (C-1)
- 5-4.69 Describe the management of adrenal insufficiency. (C-1)
- 5-4.70 Correlate abnormal findings in assessment with clinical significance in the patient with adrenal insufficiency. (C-3)
- 5-4.71 Discuss the management of the patient with adrenal insufficiency. (C-1)
- 5-4.72 Integrate the pathophysiological principles and the assessment findings to formulate a field impression and implement a treatment plan for the patient with adrenal insufficiency. (C-3)
- 5-4.73 Integrate the pathophysiological principles to the assessment of a patient with an endocrinological emergency. (C-3)
- 5-4.74 Differentiate between endocrine emergencies based on assessment and history. (C-3)
- 5-4.75 Correlate abnormal findings in the assessment with clinical significance in the patient with

- endocrinologic emergencies. (C-3)
 5-4.76 Develop a patient management plan based on field impression in the patient with an endocrinologic emergency. (C-3)

AFFECTIVE OBJECTIVES

None identified for this unit.

PSYCHOMOTOR OBJECTIVES

None identified for this unit.

Allergies and Anaphylaxis**UNIT TERMINAL OBJECTIVE**

- 5-5 At the completion of this unit, the paramedic student will be able to integrate pathophysiological principles and assessment findings to formulate a field impression and implement a treatment plan for the patient with an allergic or anaphylactic reaction.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 5-5.1 Define allergic reaction. (C-1)
 5-5.2 Define anaphylaxis. (C-1)
 5-5.3 Describe the incidence, morbidity and mortality of anaphylaxis. (C-1)
 5-5.4 Identify the risk factors most predisposing to anaphylaxis. (C-1)
 5-5.5 Discuss the anatomy and physiology of the organs and structures related to anaphylaxis. (C-1)
 5-5.6 Describe the prevention of anaphylaxis and appropriate patient education. (C-1)
 5-5.7 Discuss the pathophysiology of allergy and anaphylaxis. (C-1)
 5-5.8 Describe the common methods of entry of substances into the body. (C-1)
 5-5.9 Define natural and acquired immunity. (C-1)
 5-5.10 Define antigens and antibodies. (C-1)
 5-5.11 List common antigens most frequently associated with anaphylaxis. (C-1)
 5-5.12 Discuss the formation of antibodies in the body. (C-1)
 5-5.13 Describe physical manifestations in anaphylaxis. (C-1)
 5-5.14 Differentiate manifestations of an allergic reaction from anaphylaxis. (C-3)
 5-5.15 Recognize the signs and symptoms related to anaphylaxis. (C-1)
 5-5.16 Differentiate among the various treatment and pharmacological interventions used in the management of anaphylaxis. (C-3)
 5-5.17 Integrate the pathophysiological principles of the patient with anaphylaxis. (C-3)
 5-5.18 Correlate abnormal findings in assessment with the clinical significance in the patient with anaphylaxis. (C3)
 5-5.19 Develop a treatment plan based on field impression in the patient with allergic reaction and anaphylaxis. (C-3)

AFFECTIVE OBJECTIVES

None identified for this unit.

PSYCHOMOTOR OBJECTIVES

None identified for this unit.

Gastroenterology**UNIT TERMINAL OBJECTIVE**

- 5-6 At the completion of this unit, the paramedic student will be able to integrate pathophysiological principles and assessment findings to formulate a field impression

and implement the treatment plan for the patient with a gastroenterologic problem.

COGNITIVE OBJECTIVE

At the conclusion of this unit, the paramedic student will be able to:

- 5-6.1 Describe the incidence, morbidity and mortality of gastrointestinal emergencies. (C-1)
- 5-6.2 Identify the risk factors most predisposing to gastrointestinal emergencies. (C-1)
- 5-6.3 Discuss the anatomy and physiology of the organs and structures related to gastrointestinal diseases. (C-1)
- 5-6.4 Discuss the pathophysiology of inflammation and its relationship to acute abdominal pain. (C-1)
- 5-6.5 Define somatic pain as it relates to gastroenterology. (C-1)
- 5-6.6 Define visceral pain as it relates to gastroenterology. (C-1)
- 5-6.7 Define referred pain as it relates to gastroenterology. (C-1)
- 5-6.8 Differentiate between hemorrhagic and non-hemorrhagic abdominal pain. (C-3)
- 5-6.9 Discuss the signs and symptoms of local inflammation relative to acute abdominal pain. (C-1)
- 5-6.10 Discuss the signs and symptoms of peritoneal inflammation relative to acute abdominal pain. (C-1)
- 5-6.11 List the signs and symptoms of general inflammation relative to acute abdominal pain. (C-1)
- 5-6.12 Based on assessment findings, differentiate between local, peritoneal and general inflammation as they relate to acute abdominal pain. (C-3)
- 5-6.13 Describe the questioning technique and specific questions the paramedic should ask when gathering a focused history in a patient with abdominal pain. (C-1)
- 5-6.14 Describe the technique for performing a comprehensive physical examination on a patient complaining of abdominal pain. (C-1)
- 5-6.15 Define upper gastrointestinal bleeding. (C-1)
- 5-6.16 Discuss the pathophysiology of upper gastrointestinal bleeding. (C-1)
- 5-6.17 Recognize the signs and symptoms related to upper gastrointestinal bleeding. (C-1)
- 5-6.18 Describe the management for upper gastrointestinal bleeding. (C-1)
- 5-6.19 Integrate pathophysiological principles and assessment findings to formulate a field impression and implement a treatment plan for the patient with upper GI bleeding. (C-3)
- 5-6.20 Define lower gastrointestinal bleeding. (C-1)
- 5-6.21 Discuss the pathophysiology of lower gastrointestinal bleeding. (C-1)
- 5-6.22 Recognize the signs and symptoms related to lower gastrointestinal bleeding. (C-1)
- 5-6.23 Describe the management for lower gastrointestinal bleeding. (C-1)
- 5-6.24 Integrate pathophysiological principles and assessment findings to formulate a field impression and implement a treatment plan for the patient with lower GI bleeding. (C-3)
- 5-6.25 Define acute gastroenteritis. (C-1)
- 5-6.26 Discuss the pathophysiology of acute gastroenteritis. (C-1)
- 5-6.27 Recognize the signs and symptoms related to acute gastroenteritis. (C-1)
- 5-6.28 Describe the management for acute gastroenteritis. (C-1)
- 5-6.29 Integrate pathophysiological principles and assessment findings to formulate a field impression and implement a treatment plan for the patient with acute gastroenteritis. (C-3)
- 5-6.30 Define colitis. (C-1)
- 5-6.31 Discuss the pathophysiology of colitis. (C-1)
- 5-6.32 Recognize the signs and symptoms related to colitis. (C-1)
- 5-6.33 Describe the management for colitis. (C-1)
- 5-6.34 Integrate pathophysiological principles and assessment findings to formulate a field impression and implement a treatment plan for the patient with colitis. (C-3)
- 5-6.35 Define gastroenteritis. (C-1)
- 5-6.36 Discuss the pathophysiology of gastroenteritis. (C-1)
- 5-6.37 Recognize the signs and symptoms related to gastroenteritis. (C-1)

- 5-6.38 Describe the management for gastroenteritis. (C-1)
- 5-6.39 Integrate pathophysiological principles and assessment findings to formulate a field impression and implement a treatment plan for the patient with gastroenteritis. (C-3)
- 5-6.40 Define diverticulitis. (C-1)
- 5-6.41 Discuss the pathophysiology of diverticulitis. (C-1)
- 5-6.42 Recognize the signs and symptoms related to diverticulitis. (C-1)
- 5-6.43 Describe the management for diverticulitis. (C-1)
- 5-6.44 Integrate pathophysiological principles and assessment findings to formulate a field impression and implement a treatment plan for the patient with diverticulitis. (C-3)
- 5-6.45 Define appendicitis. (C-1)
- 5-6.46 Discuss the pathophysiology of appendicitis. (C-1)
- 5-6.47 Recognize the signs and symptoms related to appendicitis. (C-1)
- 5-6.48 Describe the management for appendicitis. (C-1)
- 5-6.49 Integrate pathophysiological principles and assessment findings to formulate a field impression and implement a treatment plan for the patient with appendicitis. (C-3)
- 5-6.50 Define peptic ulcer disease. (C-1)
- 5-6.51 Discuss the pathophysiology of peptic ulcer disease. (C-1)
- 5-6.52 Recognize the signs and symptoms related to peptic ulcer disease. (C-1)
- 5-6.53 Describe the management for peptic ulcer disease. (C-1)
- 5-6.54 Integrate pathophysiological principles and assessment findings to formulate a field impression and implement a treatment plan for the patient with peptic ulcer disease. (C-3)
- 5-6.55 Define bowel obstruction. (C-1)
- 5-6.56 Discuss the pathophysiology of bowel obstruction. (C-1)
- 5-6.57 Recognize the signs and symptoms related to bowel obstruction. (C-1)
- 5-6.58 Describe the management for bowel obstruction. (C-1)
- 5-6.59 Integrate pathophysiological principles and assessment findings to formulate a field impression and implement a treatment plan for the patient with bowel obstruction. (C-3)
- 5-6.60 Define Crohn's disease. (C-1)
- 5-6.61 Discuss the pathophysiology of Crohn's disease. (C-1)
- 5-6.62 Recognize the signs and symptoms related to Crohn's disease. (C-1)
- 5-6.63 Describe the management for Crohn's disease. (C-1)
- 5-6.64 Integrate pathophysiological principles and assessment findings to formulate a field impression and implement a treatment plan for the patient with Crohn's disease. (C-3)
- 5-6.65 Define pancreatitis. (C-1)
- 5-6.66 Discuss the pathophysiology of pancreatitis. (C-1)
- 5-6.67 Recognize the signs and symptoms related to pancreatitis. (C-1)
- 5-6.68 Describe the management for pancreatitis. (C-1)
- 5-6.69 Integrate pathophysiological principles and assessment findings to formulate a field impression and implement a treatment plan for the patient with pancreatitis. (C-3)
- 5-6.70 Define esophageal varices. (C-1)
- 5-6.71 Discuss the pathophysiology of esophageal varices. (C-1)
- 5-6.72 Recognize the signs and symptoms related to esophageal varices. (C-1)
- 5-6.73 Describe the management for esophageal varices. (C-1)
- 5-6.74 Integrate pathophysiological principles and assessment findings to formulate a field impression and implement a treatment plan for the patient with esophageal varices. (C-3)
- 5-6.75 Define hemorrhoids. (C-1)
- 5-6.76 Discuss the pathophysiology of hemorrhoids. (C-1)
- 5-6.77 Recognize the signs and symptoms related to hemorrhoids. (C-1)
- 5-6.78 Describe the management for hemorrhoids. (C-1)
- 5-6.79 Integrate pathophysiological principles and assessment findings to formulate a field impression and implement a treatment plan for the patient with hemorrhoids. (C-3)
- 5-6.80 Define cholecystitis. (C-1)
- 5-6.81 Discuss the pathophysiology of cholecystitis. (C-1)

- 5-6.82 Recognize the signs and symptoms related to cholecystitis. (C-1)
- 5-6.83 Describe the management for cholecystitis. (C-1)
- 5-6.84 Integrate pathophysiological principles and assessment findings to formulate a field impression and implement a treatment plan for the patient with cholecystitis. (C-3)
- 5-6.85 Define acute hepatitis. (C-1)
- 5-6.86 Discuss the pathophysiology of acute hepatitis. (C-1)
- 5-6.87 Recognize the signs and symptoms related to acute hepatitis. (C-1)
- 5-6.88 Describe the management for acute hepatitis. (C-1)
- 5-6.89 Integrate pathophysiological principles and assessment findings to formulate a field impression and implement a treatment plan for the patient with acute hepatitis. (C-3)
- 5-6.90 Integrate pathophysiological principles of the patient with a gastrointestinal emergency. (C-3)
- 5-6.91 Differentiate between gastrointestinal emergencies based on assessment findings. (C-3)
- 5-6.92 Correlate abnormal findings in the assessment with the clinical significance in the patient with abdominal pain. (C-3)
- 5-6.93 Develop a patient management plan based on field impression in the patient with abdominal pain. (C-3)

AFFECTIVE OBJECTIVES

None identified for this unit.

PSYCHOMOTOR OBJECTIVES

None identified for this unit.

Renal/Urology

UNIT TERMINAL OBJECTIVE

- 5-7 At the completion of this unit, the paramedic student will be able to integrate pathophysiological principles and the assessment findings to formulate a field impression and implement a treatment plan for the patient with a renal or urologic problem.

COGNITIVE OBJECTIVES

At the conclusion of this unit, the paramedic student will be able to :

- 5-7.1 Describe the incidence, morbidity, mortality, and risk factors predisposing to urological emergencies. (C-1)
- 5-7.2 Discuss the anatomy and physiology of the organs and structures related to urogenital diseases. (C-1)
- 5-7.3 Define referred pain and visceral pain as it relates to urology. (C-1)
- 5-7.4 Describe the questioning technique and specific questions the paramedic should utilize when gathering a focused history in a patient with abdominal pain. (C-1)
- 5-7.5 Describe the technique for performing a comprehensive physical examination of a patient complaining of abdominal pain. (C-1)
- 5-7.6 Define acute renal failure. (C-1)
- 5-7.7 Discuss the pathophysiology of acute renal failure. (C-1)
- 5-7.8 Recognize the signs and symptoms related to acute renal failure. (C-1)
- 5-7.9 Describe the management for acute renal failure. (C-1)
- 5-7.10 Integrate pathophysiological principles and assessment findings to formulate a field impression and implement a treatment plan for the patient with acute renal failure. (C-3)
- 5-7.11 Define chronic renal failure. (C-1)
- 5-7.12 Discuss the pathophysiology of chronic renal failure. (C-1)
- 5-7.13 Recognize the signs and symptoms related to chronic renal failure. (C-1)
- 5-7.14 Describe the management for chronic renal failure. (C-1)
- 5-7.15 Integrate pathophysiological principles and assessment findings to formulate a field impression and implement a treatment plan for the patient with chronic renal failure. (C-3)

- 5-7.16 Define renal dialysis. (C-1)
- 5-7.17 Discuss the common complication of renal dialysis. (C-1)
- 5-7.18 Define renal calculi. (C-1)
- 5-7.19 Discuss the pathophysiology of renal calculi. (C-1)
- 5-7.20 Recognize the signs and symptoms related to renal calculi. (C-1)
- 5-7.21 Describe the management for renal calculi. (C-1)
- 5-7.22 Integrate pathophysiological principles and assessment findings to formulate a field impression and implement a treatment plan for the patient with renal calculi. (C-3)
- 5-7.23 Define urinary tract infection. (C-1)
- 5-7.24 Discuss the pathophysiology of urinary tract infection. (C-1)
- 5-7.25 Recognize the signs and symptoms related to urinary tract infection. (C-1)
- 5-7.26 Describe the management for a urinary tract infection. (C-1)
- 5-7.27 Integrate pathophysiological principles and assessment findings to formulate a field impression and implement a treatment plan for the patient with a urinary tract infection. (C-3)
- 5-7.28 Apply the epidemiology to develop prevention strategies for urological emergencies. (C-2)
- 5-7.29 Integrate pathophysiological principles to the assessment of a patient with abdominal pain. (C-3)
- 5-7.30 Synthesize assessment findings and patient history information to accurately differentiate between pain of a urogenital emergency and that of other origins. (C-3)
- 5-7.31 Develop, execute, and evaluate a treatment plan based on the field impression made in the assessment. (C-3)

AFFECTIVE OBJECTIVES

None identified for this unit.

PSYCHOMOTOR OBJECTIVES

None identified for this unit.

Toxicology

UNIT TERMINAL OBJECTIVE

- 5-8 At the completion of this unit, the paramedic student will be able to integrate pathophysiological principles and assessment findings to formulate a field impression and implement a treatment plan for the patient with a toxic exposure.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 5-8.1 Describe the incidence, morbidity and mortality of toxic emergencies. (C-1)
- 5-8.2 Identify the risk factors most predisposing to toxic emergencies. (C-1)
- 5-8.3 Discuss the anatomy and physiology of the organs and structures related to toxic emergencies. (C-1)
- 5-8.4 Describe the routes of entry of toxic substances into the body. (C-1)
- 5-8.5 Discuss the role of the Poison Control Center in the United States. (C-1)
- 5-8.6 List the toxic substances that are specific to your region. (C-1)
- 5-8.7 Discuss the pathophysiology of the entry of toxic substances into the body. (C-1)
- 5-8.8 Discuss the assessment findings associated with various toxidromes. (C-1)
- 5-8.9 Identify the need for rapid intervention and transport of the patient with a toxic substance emergency. (C-1)
- 5-8.10 Discuss the management of toxic substances. (C-1)
- 5-8.11 Define poisoning by ingestion. (C-1)
- 5-8.12 List the most common poisonings by ingestion. (C-1)
- 5-8.13 Describe the pathophysiology of poisoning by ingestion. (C-1)
- 5-8.14 Recognize the signs and symptoms related to the most common poisonings by ingestion. (C-1)

- 5-8.15 Correlate the abnormal findings in assessment with the clinical significance in the patient with the most common poisonings by ingestion. (C-1)
- 5-8.16 Differentiate among the various treatments and pharmacological interventions in the management of the most common poisonings by ingestion. (C-3)
- 5-8.17 Discuss the factors affecting the decision to induce vomiting in a patient with ingested poison. (C-1)
- 5-8.18 Integrate pathophysiological principles and the assessment findings to formulate a field impression and implement a treatment plan for the patient with the most common poisonings by ingestion. (C-3)
- 5-8.19 Define poisoning by inhalation. (C-1)
- 5-8.20 List the most common poisonings by inhalation. (C-1)
- 5-8.21 Describe the pathophysiology of poisoning by inhalation. (C-1)
- 5-8.22 Recognize the signs and symptoms related to the most common poisonings by inhalation. (C-1)
- 5-8.23 Correlate the abnormal findings in assessment with the clinical significance in patients with the most common poisonings by inhalation. (C-1)
- 5-8.24 Differentiate among the various treatments and pharmacological interventions in the management of the most common poisonings by inhalation. (C-3)
- 5-8.25 Integrate pathophysiological principles and the assessment findings to formulate a field impression and implement a treatment plan for the patient with the most common poisonings by inhalation. (C-3)
- 5-8.26 Define poisoning by injection. (C-1)
- 5-8.27 List the most common poisonings by injection. (C-1)
- 5-8.28 Describe the pathophysiology of poisoning by injection. (C-1)
- 5-8.29 Recognize the signs and symptoms related to the most common poisonings by injection. (C-1)
- 5-8.30 Correlate the abnormal findings in assessment with the clinical significance in the patient with the most common poisonings by injection. (C-3)
- 5-8.31 Differentiate among the various treatments and pharmacological interventions in the management of the most common poisonings by injection. (C-3)
- 5-8.32 Integrate pathophysiological principles and the assessment findings to formulate a field impression and implement a treatment plan for the patient with the most common poisonings by injection. (C-3)
- 5-8.33 Define poisoning by surface absorption. (C-1)
- 5-8.34 List the most common poisonings by surface absorption. (C-1)
- 5-8.35 Describe the pathophysiology of poisoning by surface absorption. (C-1)
- 5-8.36 Recognize the signs and symptoms related to the most common poisonings by surface absorption. (C1)
- 5-8.37 Correlate the abnormal findings in assessment with the clinical significance in patients with the most common poisonings by surface absorption. (C-3)
- 5-8.38 Differentiate among the various treatments and pharmacological interventions in the management of the most common poisonings by surface absorption. (C-3)
- 5-8.39 Integrate pathophysiological principles and the assessment findings to formulate a field impression and implement a treatment plan for patients with the most common poisonings by surface absorption. (C-3)
- 5-8.40 Define poisoning by overdose. (C-1)
- 5-8.41 List the most common poisonings by overdose. (C-1)
- 5-8.42 Describe the pathophysiology of poisoning by overdose. (C-1)
- 5-8.43 Recognize the signs and symptoms related to the most common poisonings by overdose. (C-1)
- 5-8.44 Correlate the abnormal findings in assessment with the clinical significance in patients with the most common poisonings by overdose. (C-3)
- 5-8.45 Differentiate among the various treatments and pharmacological interventions in the management of the most common poisonings by overdose. (C-3)
- 5-8.46 Integrate pathophysiological principles and the assessment findings to formulate a field

- impression and implement a treatment plan for patients with the most common poisonings by overdose. (C-3)
- 5-8.47 Define drug abuse. (C-1)
- 5-8.48 Discuss the incidence of drug abuse in the United States. (C-1)
- 5-8.49 Define the following terms: (C-1)
- Substance or drug abuse
 - Substance or drug dependence
 - Tolerance
 - Withdrawal
 - Addiction
- 5-8.50 List the most commonly abused drugs (both by chemical name and street names). (C-1)
- 5-8.51 Describe the pathophysiology of commonly used drugs. (C-1)
- 5-8.52 Recognize the signs and symptoms related to the most commonly abused drugs. (C-1)
- 5-8.53 Correlate the abnormal findings in assessment with the clinical significance in patients using the most commonly abused drugs. (C-3)
- 5-8.54 Differentiate among the various treatments and pharmacological interventions in the management of the most commonly abused drugs. (C-3)
- 5-8.55 Integrate pathophysiological principles and the assessment findings to formulate a field impression and implement a treatment plan for patients using the most commonly abused drugs. (C-3)
- 5-8.56 List the clinical uses, street names, pharmacology, assessment finding and management for patient who have taken the following drugs or been exposed to the following substances: (C-1)
- Cocaine
 - Marijuana and cannabis compounds
 - Amphetamines and amphetamine-like drugs
 - Barbiturates
 - Sedative-hypnotics
 - Cyanide
 - Narcotics/ opiates
 - Cardiac medications
 - Caustics
 - Common household substances
 - Drugs abused for sexual purposes/ sexual gratification
 - Carbon monoxide
 - Alcohols
 - Hydrocarbons
 - Psychiatric medications
 - Newer anti-depressants and serotonin syndromes
 - Lithium
 - MAO inhibitors
 - Non-prescription pain medications
 - Nonsteroidal anti-inflammatory agents
 - Salicylates
 - Acetaminophen
 - Theophylline
 - Metals
 - Plants and mushrooms
- 5-8.57 Discuss common causative agents, pharmacology, assessment findings and management for a patient with food poisoning. (C1)
- 5-8.58 Discuss common offending organisms, pharmacology, assessment findings and management for a patient with a bite or sting. (C-1)
- 5-8.59 Integrate pathophysiological principles of the patient with a toxic substance exposure. (C-1)
- 5-8.60 Differentiate between toxic substance emergencies based on assessment findings. (C-3)
- 5-8.61 Correlate abnormal findings in the assessment with the clinical significance in the

- patient exposed to a toxic substance. (C-3)
- 5-8.62 Develop a patient management plan based on field impression in the patient exposed to a toxic substance. (C-3)

AFFECTIVE OBJECTIVES

None identified for this unit.

PSYCHOMOTOR OBJECTIVES

None identified for this unit.

Hematology

UNIT TERMINAL OBJECTIVE

- 5-9 At the completion of this unit, the paramedic student will be able to integrate the pathophysiological principles of the hematopoietic system to formulate a field impression and implement a treatment plan.

COGNITIVE OBJECTIVES

At the completion to this unit, the paramedic student will be able to:

- 5-9.1 Identify the anatomy of the hematopoietic system. (C-1)
- 5-9.2 Describe volume and volume-control related to the hematopoietic system. (C-1)
- 5-9.3 Identify and describe the blood-forming organs. (C-1)
- 5-9.4 Describe normal red blood cell (RBC) production, function and destruction. (C-1)
- 5-9.5 Explain the significance of the hematocrit with respect to red cell size and number. (C-1)
- 5-9.6 Explain the correlation of the RBC count, hematocrit and hemoglobin values. (C-1)
- 5-9.7 Define anemia. (C-1)
- 5-9.8 Describe normal white blood cell (WBC) production, function and destruction. (C-1)
- 5-9.9 Identify the characteristics of the inflammatory process. (C-1)
- 5-9.10 Identify the difference between cellular and humoral immunity. (C-1)
- 5-9.11 Identify alterations in immunologic response. (C-1)
- 5-9.12 Describe the number, normal function, types and life span of leukocytes. (C-1)
- 5-9.13 List the leukocyte disorders. (C-1)
- 5-9.14 Describe platelets with respect to normal function, life span and numbers. (C-1)
- 5-9.15 Describe the components of the hemostatic mechanism. (C-1)
- 5-9.16 Describe the function of coagulation factors, platelets and blood vessels necessary for normal coagulation. (C-1)
- 5-9.17 Describe the intrinsic and extrinsic clotting systems with respect to identification of factor deficiencies in each stage. (C-3)
- 5-9.18 Identify blood groups. (C-1)
- 5-9.19 Describe how acquired factor deficiencies may occur. (C-3)
- 5-9.20 Define fibrinolysis. (C-1)
- 5-9.21 Identify the components of physical assessment as they relate to the hematologic system. (C-1)
- 5-9.22 Describe the pathology and clinical manifestations and prognosis associated with: (C-3)
- a. Anemia
 - b. Leukemia
 - c. Lymphomas
 - d. Polycythemia
 - e. Disseminated intravascular coagulopathy
 - f. Hemophilia
 - g. Sickle cell disease
 - h. Multiple myeloma
- 5-9.23 Integrate pathophysiological principles into the assessment of a patient with hematologic disease. (C-3)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 5-9.24 Value the sense of urgency for initial assessment and interventions for patients with hematologic crises.

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 5-9.25 Perform an assessment of the patient with hematologic disorder. (P-1)

Environmental Conditions

UNIT TERMINAL OBJECTIVE

- 5-10 At the completion of this unit, the paramedic student will be able to integrate pathophysiological principles and assessment findings to formulate a field impression and implement the treatment plan for the patient with an environmentally induced or exacerbated medical or traumatic condition.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 5-10.1 Define "environmental emergency." (C-1)
- 5-10.2 Describe the incidence, morbidity and mortality associated with environmental emergencies. (C-1)
- 5-10.3 Identify risk factors most predisposing to environmental emergencies. (C-1)
- 5-10.4 Identify environmental factors that may cause illness or exacerbate a preexisting illness. (C-1)
- 5-10.5 Identify environmental factors that may complicate treatment or transport decisions. (C-1)
- 5-10.6 List the principal types of environmental illnesses. (C-1)
- 5-10.7 Define "Ahomeostasis" and relate the concept to environmental influences. (C-1)
- 5-10.8 Identify normal, critically high and critically low body temperatures. (C-1)
- 5-10.9 Describe several methods of temperature monitoring. (C-1)
- 5-10.10 Identify the components of the body's thermoregulatory mechanism. (C-1)
- 5-10.11 Describe the general process of thermal regulation, including substances used and wastes generated. (C-1)
- 5-10.12 Describe the body's compensatory process for over heating. (C-1)
- 5-10.13 Describe the body's compensatory process for excess heat loss. (C-1)
- 5-10.14 List the common forms of heat and cold disorders. (C-1)
- 5-10.15 List the common predisposing factors associated with heat and cold disorders. (C-1)
- 5-10.16 List the common preventative measures associated with heat and cold disorders. (C-1)
- 5-10.17 Integrate the pathophysiological principles and complicating factors common to environmental emergencies and discuss differentiating features between emergent and urgent presentations. (C-3)
- 5-10.18 Define heat illness. (C-1)
- 5-10.19 Describe the pathophysiology of heat illness. (C-1)
- 5-10.20 Identify signs and symptoms of heat illness. (C-1)
- 5-10.21 List the predisposing factors for heat illness. (C-1)
- 5-10.22 List measures to prevent heat illness. (C-1)
- 5-10.23 Discuss the symptomatic variations presented in progressive heat disorders. (C-1)
- 5-10.24 Relate symptomatic findings to the commonly used terms: heat cramps, heat exhaustion, and heatstroke. (C-3)
- 5-10.25 Correlate the abnormal findings in assessment with their clinical significance in the patient with heat illness. (C-3)
- 5-10.26 Describe the contribution of dehydration to the development of heat disorders. (C-1)
- 5-10.27 Describe the differences between classical and exertional heatstroke. (C-1)
- 5-10.28 Define fever and discuss its pathophysiologic mechanism. (C-1)
- 5-10.29 Identify the fundamental thermoregulatory difference between fever and heatstroke. (C-1)
- 5-10.30 Discuss how one may differentiate between fever and heatstroke. (C-1)
- 5-10.31 Discuss the role of fluid therapy in the treatment of heat disorders. (C-1)
- 5-10.32 Differentiate among the various treatments and interventions in the management of heat

- disorders. (C-3)
- 5-10.33 Integrate the pathophysiological principles and the assessment findings to formulate a field impression and implement a treatment plan for the patient who has dehydration, heat exhaustion, or heatstroke. (C-3)
- 5-10.34 Define hypothermia. (C-1)
- 5-10.35 Describe the pathophysiology of hypothermia. (C-1)
- 5-10.36 List predisposing factors for hypothermia. (C-1)
- 5-10.37 List measures to prevent hypothermia. (C-1)
- 5-10.38 Identify differences between mild and severe hypothermia. (C-1)
- 5-10.39 Describe differences between chronic and acute hypothermia. (C-1)
- 5-10.40 List signs and symptoms of hypothermia. (C-1)
- 5-10.41 Correlate abnormal findings in assessment with their clinical significance in the patient with hypothermia. (C-3)
- 5-10.42 Discuss the impact of severe hypothermia on standard BCLS and ACLS algorithms and transport considerations. (C-1)
- 5-10.43 Integrate pathophysiological principles and the assessment findings to formulate a field impression and implement a treatment plan for the patient who has either mild or severe hypothermia. (C-3)
- 5-10.44 Define frostbite. (C-1)
- 5-10.45 Define superficial frostbite (frostnip). (C-1)
- 5-10.46 Differentiate between superficial frostbite and deep frostbite. (C-3)
- 5-10.47 List predisposing factors for frostbite. (C-1)
- 5-10.48 List measures to prevent frostbite. (C-1)
- 5-10.49 Correlate abnormal findings in assessment with their clinical significance in the patient with frostbite. (C-3)
- 5-10.50 Differentiate among the various treatments and interventions in the management of frostbite. (C-3)
- 5-10.51 Integrate pathophysiological principles and the assessment findings to formulate a field impression and implement a treatment plan for the patient with superficial or deep frostbite. (C-3)
- 5-10.52 Define near-drowning. (C-1)
- 5-10.53 Describe the pathophysiology of near-drowning. (C-1)
- 5-10.54 List signs and symptoms of near-drowning. (C-1)
- 5-10.55 Describe the lack of significance of fresh versus saltwater immersion, as it relates to near-drowning. (C-3)
- 5-10.56 Discuss the incidence of "wet" versus "dry" drownings and the differences in their management. (C-3)
- 5-10.57 Discuss the complications and protective role of hypothermia in the context of near-drowning. (C-1)
- 5-10.58 Correlate the abnormal findings in assessment with the clinical significance in the patient with near-drowning. (C-3)
- 5-10.59 Differentiate among the various treatments and interventions in the management of near-drowning. (C-3)
- 5-10.60 Integrate pathophysiological principles and assessment findings to formulate a field impression and implement a treatment plan for the near-drowning patient. (C-3)
- 5-10.61 Define self contained underwater breathing apparatus (SCUBA). (C-1)
- 5-10.62 Describe the laws of gasses and relate them to diving emergencies. (C-1)
- 5-10.63 Describe the pathophysiology of diving emergencies. (C-1)
- 5-10.64 Define decompression illness (DCI). (C-1)
- 5-10.65 Identify the various forms of DCI. (C-1)
- 5-10.66 Identify the various conditions that may result from pulmonary over-pressure accidents. (C-1)
- 5-10.67 Differentiate between the various diving emergencies. (C-3)
- 5-10.68 List signs and symptoms of diving emergencies. (C-1)
- 5-10.69 Correlate abnormal findings in assessment with their clinical significance in the patient with a diving related illness. (C-3)

- 5-10.70 Describe the function of the Divers Alert Network (DAN) and how its members may aid in the management of diving related illnesses. (C-1)
- 5-10.71 Differentiate among the various treatments and interventions for the management of diving accidents. (C-3)
- 5-10.72 Describe the specific function and benefit of hyperbaric oxygen therapy for the management of diving accidents. (C-1)
- 5-10.73 Integrate pathophysiological principles and assessment findings to formulate a field impression and implement a management plan for the patient who has had a diving accident. (C-3)
- 5-10.74 Define altitude illness. (C-1)
- 5-10.75 Describe the application of gas laws to altitude illness. (C-2)
- 5-10.76 Describe the etiology and epidemiology of altitude illness. (C-1)
- 5-10.77 List predisposing factors for altitude illness. (C-1)
- 5-10.78 List measures to prevent altitude illness. (C-1)
- 5-10.79 Define acute mountain sickness (AMS). (C-1)
- 5-10.80 Define high altitude pulmonary edema (HAPE). (C-1)
- 5-10.81 Define high altitude cerebral edema (HACE). (C-1)
- 5-10.82 Discuss the symptomatic variations presented in progressive altitude illnesses. (C-1)
- 5-10.83 List signs and symptoms of altitude illnesses. (C-1)
- 5-10.84 Correlate abnormal findings in assessment with their clinical significance in the patient with altitude illness. (C-3)
- 5-10.85 Discuss the pharmacology appropriate for the treatment of altitude illnesses. (C-1)
- 5-10.86 Differentiate among the various treatments and interventions for the management of altitude illness. (C-3)
- 5-10.87 Integrate pathophysiological principles and assessment findings to formulate a field impression and implement a treatment plan for the patient who has altitude illness. (C-1)
- 5-10.88 Integrate the pathophysiological principles of the patient affected by an environmental emergency. (C-3)
- 5-10.89 Differentiate between environmental emergencies based on assessment findings. (C-3)
- 5-10.90 Correlate abnormal findings in the assessment with their clinical significance in the patient affected by an environmental emergency. (C-3)
- 5-10.91 Develop a patient management plan based on the field impression of the patient affected by an environmental emergency. (C-3)

AFFECTIVE OBJECTIVES

None identified for this unit.

PSYCHOMOTOR OBJECTIVES

None identified for this unit.

Infectious and Communicable Diseases**UNIT TERMINAL OBJECTIVE**

- 5-11 At the completion of this unit, the paramedic student will be able to integrate pathophysiological principles and assessment findings to formulate a field impression and implement a management plan for the patient with infectious and communicable diseases.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 5-11.1 Review the specific anatomy and physiology pertinent to infectious and communicable diseases. (C-1)
- 5-11.2 Define specific terminology identified with infectious/ communicable diseases. (C-1)
- 5-11.3 Discuss public health principles relevant to infectious/ communicable disease. (C-1)
- 5-11.4 Identify public health agencies involved in the prevention and management of disease

- outbreaks. (C-1)
- 5-11.5 List and describe the steps of an infectious process. (C-1)
 - 5-11.6 Discuss the risks associated with infection. (C-1)
 - 5-11.7 List and describe the stages of infectious diseases. (C-1)
 - 5-11.8 List and describe infectious agents, including bacteria, viruses, fungi, protozoans, and helminthes (worms). (C-1)
 - 5-11.9 Describe host defense mechanisms against infection. (C-1)
 - 5-11.10 Describe characteristics of the immune system, including the categories of white blood cells, the reticuloendothelial system (RES), and the complement system. (C-1)
 - 5-11.11 Describe the processes of the immune system defenses, to include humoral and cell-mediated immunity. (C-1)
 - 5-11.12 In specific diseases, identify and discuss the issues of personal isolation. (C-1)
 - 5-11.13 Describe and discuss the rationale for the various types of PPE. (C-1)
 - 5-11.14 Discuss what constitutes a significant exposure to an infectious agent. (C-1)
 - 5-11.15 Describe the assessment of a patient suspected of, or identified as having, an infectious/ communicable disease. (C-1)
 - 5-11.16 Discuss the proper disposal of contaminated supplies (sharps, gauze sponges, tourniquets, etc.). (C-1)
 - 5-11.17 Discuss disinfection of patient care equipment, and areas in which care of the patient occurred. (C-1)
 - 5-11.18 Discuss the following relative to HIV - causative agent, body systems affected and potential secondary complications, modes of transmission, the seroconversion rate after direct significant exposure, susceptibility and resistance, signs and symptoms, specific patient management and personal protective measures, and immunization. (C-1)
 - 5-11.19 Discuss Hepatitis A (infectious hepatitis), including the causative agent, body systems affected and potential secondary complications, routes of transmission, susceptibility and resistance, signs and symptoms, patient management and protective measures, and immunization. (C-1)
 - 5-11.20 Discuss Hepatitis B (serum hepatitis), including the causative agent, the organ affected and potential secondary complications, routes of transmission, signs and symptoms, patient management and protective measures, and immunization. (C-1)
 - 5-11.21 Discuss the susceptibility and resistance to Hepatitis B. (C-1)
 - 5-11.22 Discuss Hepatitis C, including the causative agent, the organ affected, routes of transmission, susceptibility and resistance, signs and symptoms, patient management and protective measures, and immunization and control measures. (C-1)
 - 5-11.23 Discuss Hepatitis D (Hepatitis delta virus), including the causative agent, the organ affected, routes of transmission, susceptibility and resistance, signs and symptoms, patient management and protective measures, and immunization and control measures. (C-1)
 - 5-11.24 Discuss Hepatitis E, including the causative agent, the organ affected, routes of transmission, susceptibility and resistance, signs and symptoms, patient management and protective measures, and immunization and control measures. (C-1)
 - 5-11.25 Discuss tuberculosis, including the causative agent, body systems affected and secondary complications, routes of transmission, susceptibility and resistance, signs and symptoms, patient management and protective measures, and immunization and control measures. (C-1)
 - 5-11.26 Discuss meningococcal meningitis (spinal meningitis), including causative organisms, tissues affected, modes of transmission, susceptibility and resistance, signs and symptoms, patient management and protective measures, and immunization and control measures. (C-1)
 - 5-11.27 Discuss other infectious agents known to cause meningitis including streptococcus pneumonia, hemophilus influenza type b, and other varieties of viruses. (C-1)
 - 5-11.28 Discuss pneumonia, including causative organisms, body systems affected, routes of transmission, susceptibility and resistance, signs and symptoms, patient management and protective measures, and immunization. (C-1)

- 5-11.29 Discuss tetanus, including the causative organism, the body system affected, modes of transmission, susceptibility and resistance, signs and symptoms, patient management and protective measures, and immunization. (C-1)
- 5-11.30 Discuss rabies and hantavirus as they apply to regional environmental exposures, including the causative organisms, the body systems affected, routes of transmission, susceptibility and resistance, signs and symptoms, patient management and protective measures, and immunization and control measures. (C-1)
- 5-11.31 Identify pediatric viral diseases. (C-3)
- 5-11.32 Discuss chickenpox, including the causative organism, the body system affected, mode of transmission, susceptibility and resistance, signs and symptoms, patient management and protective measures, and immunization and control measures. (C-1)
- 5-11.33 Discuss mumps, including the causative organism, the body organs and systems affected, mode of transmission, susceptibility and resistance, signs and symptoms, patient management and protective measures, and immunization. (C-1)
- 5-11.34 Discuss rubella (German measles), including the causative agent, the body tissues and systems affected, modes of transmission, susceptibility and resistance, signs and symptoms, patient management and protective measures, and immunization. (C-1)
- 5-11.35 Discuss measles (rubeola, hard measles), including the causative organism, the body tissues, organs, and systems affected, mode of transmission, susceptibility and resistance, signs and symptoms, patient management and protective measures, and immunization. (C-1)
- 5-11.36 Discuss the importance of immunization, and those diseases, especially in the pediatric population, which warrant widespread immunization (MMR). (C-1)
- 5-11.37 Discuss pertussis (whooping cough), including the causative organism, the body organs affected, mode of transmission, susceptibility and resistance, signs and symptoms, patient management and protective measures, and immunization. (C-1)
- 5-11.38 Discuss influenza, including causative organisms, the body system affected, mode of transmission, susceptibility and resistance, signs and symptoms, patient management and protective measures, and immunization. (C-1)
- 5-11.39 Discuss mononucleosis, including the causative organisms, the body regions, organs, and systems affected, modes of transmission, susceptibility and resistance, signs and symptoms, patient management and protective measures, and immunization. (C-1)
- 5-11.40 Discuss herpes simplex type 1, including the causative organism, the body regions and system affected, modes of transmission, susceptibility and resistance, signs and symptoms, patient management and protective measures, and immunization. (C-1)
- 5-11.41 Discuss the characteristics of, and organisms associated with, febrile and afebrile respiratory disease, to include bronchiolitis, bronchitis, laryngitis, croup, epiglottitis, and the common cold. (C-1)
- 5-11.42 Discuss syphilis, including the causative organism, the body regions, organs, and systems affected, modes of transmission, susceptibility and resistance, stages of signs and symptoms, patient management and protective measures, and immunization. (C-1)
- 5-11.43 Discuss gonorrhea, including the causative organism, the body organs and associated structures affected, mode of transmission, susceptibility and resistance, signs and symptoms, patient management and protective measures, and immunization. (C-1)
- 5-11.44 Discuss chlamydia, including the causative organism, the body regions, organs, and systems affected, modes of transmission, susceptibility and resistance, signs and symptoms, patient management and protective measures, and immunization. (C-1)
- 5-11.45 Discuss herpes simplex 2 (genital herpes), including the causative organism, the body regions, tissues, and structures affected, mode of transmission, susceptibility and resistance, signs and symptoms, patient management and protective measures, and immunization. (C-1)
- 5-11.46 Discuss scabies, including the etiologic agent, the body organs affected, modes of transmission, susceptibility and resistance, signs and symptoms, patient management and protective measures, and immunization. (C-1)
- 5-11.47 Discuss lice, including the infesting agents, the body regions affected, modes of transmission and host factors, susceptibility and resistance, signs and symptoms, patient

- management and protective measures, and prevention. (C-1)
- 5-11.48 Describe lyme disease, including the causative organism, the body organs and systems affected, mode of transmission, susceptibility and resistance, phases of signs and symptoms, patient management and control measures, and immunization. (C-1)
- 5-11.49 Discuss gastroenteritis, including the causative organisms, the body system affected, modes of transmission, susceptibility and resistance, signs and symptoms, patient management and protective measures, and immunization. (C-1)
- 5-11.50 Discuss the local protocol for reporting and documenting an infectious/ communicable disease exposure. (C-1)
- 5-11.51 Articulate the pathophysiological principles of an infectious process given a case study of a patient with an infectious/ communicable disease. (C-3)
- 5-11.52 Articulate the field assessment and management, to include safety considerations, of a patient presenting with signs and symptoms suggestive of an infectious/ communicable disease. (C-3)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 5-11.53 Advocate compliance with standards and guidelines by role modeling adherence to universal/ standard precautions and BSI. (A-1)
- 5-11.54 Value the importance of immunization, especially in children and populations at risk. (A-1)
- 5-11.55 Value the safe management of a patient with an infectious/ communicable disease. (A-2)
- 5-11.56 Advocate respect for the feelings of patients, family, and others at the scene of an infectious/ communicable disease. (A-2)
- 5-11.57 Advocate empathy for a patient with an infectious/ communicable disease. (A-2)
- 5-11.58 Value the importance of infectious/ communicable disease control. (A-2)
- 5-11.59 Consistently demonstrate the use of body substance isolation. (A-2)

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 5-11.60 Demonstrate the ability to comply with body substance isolation guidelines. (P-2)
- 5-11.61 Perform an assessment of a patient with an infectious/ communicable disease. (P-2)
- 5-11.62 Effectively and safely manage a patient with an infectious/ communicable disease, including airway and ventilation care, support of circulation, pharmacological intervention, transport considerations, psychological support/ communication strategies, and other considerations as mandated by local protocol. (P-2)

Behavioral and Psychiatric Disorders

UNIT TERMINAL OBJECTIVE

- 5-12 At the end of this unit, the paramedic student will be able to describe and demonstrate safe, empathetic competence in caring for patients with behavioral emergencies.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 5-12.1 Define behavior and distinguish between normal and abnormal behavior. (C-1)
- 5-12.2 Define behavioral emergency. (C-1)
- 5-12.3 Discuss the prevalence of behavior and psychiatric disorders. (C-1)
- 5-12.4 Discuss the factors that may alter the behavior or emotional status of an ill or injured individual. (C-1)
- 5-12.5 Describe the medical legal considerations for management of emotionally disturbed patients. (C-1)
- 5-12.6 Discuss the pathophysiology of behavioral and psychiatric disorders. (C-1)
- 5-12.7 Describe the overt behaviors associated with behavioral and psychiatric disorders. (C-1)
- 5-12.8 Define the following terms: (C-1)
- a. Affect
 - b. Anger

- c. Anxiety
 - d. Confusion
 - e. Depression
 - f. Fear
 - g. Mental status
 - h. Open-ended question
 - i. Posture
- 5-12.9 Describe the verbal techniques useful in managing the emotionally disturbed patient. (C-1)
- 5-12.10 List the reasons for taking appropriate measures to ensure the safety of the patient, paramedic and others. (C-1)
- 5-12.11 Describe the circumstances when relatives, bystanders and others should be removed from the scene. (C-1)
- 5-12.12 Describe the techniques that facilitate the systematic gathering of information from the disturbed patient. (C-1)
- 5-12.13 List situations in which the EMT-P is expected to transport a patient forcibly and against his will. (C-1)
- 5-12.14 Identify techniques for physical assessment in a patient with behavioral problems. (C-1)
- 5-12.15 Describe methods of restraint that may be necessary in managing the emotionally disturbed patient. (C-1)
- 5-12.16 List the risk factors for suicide. (C-1)
- 5-12.17 List the behaviors that may be seen indicating that patient may be at risk for suicide. (C-1)
- 5-12.18 Integrate the pathophysiological principles with the assessment of the patient with behavioral and psychiatric disorders. (C-3)
- 5-12.19 Differentiate between the various behavioral and psychiatric disorders based on the assessment and history. (C-3)
- 5-12.20 Formulate a field impression based on the assessment findings. (C-3)
- 5-12.21 Develop a patient management plan based on the field impressions. (C-3)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 5-12.22 Advocate for empathetic and respectful treatment for individuals experiencing behavioral emergencies. (A-3)

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 5-12.23 Demonstrate safe techniques for managing and restraining a violent patient. (P-1)

Gynecology

UNIT TERMINAL OBJECTIVE

- 5-13 At the end of this unit, the paramedic student will be able to utilize gynecological principles and assessment findings to formulate a field impression and implement the management plan for the patient experiencing a gynecological emergency.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 5-13.1 Review the anatomic structures and physiology of the female reproductive system. (C-1)
- 5-13.2 Identify the normal events of the menstrual cycle. (C-1)
- 5-13.3 Describe how to assess a patient with a gynecological complaint. (C-1)
- 5-13.4 Explain how to recognize a gynecological emergency. (C-1)
- 5-13.5 Describe the general care for any patient experiencing a gynecological emergency. (C-1)
- 5-13.6 Describe the pathophysiology, assessment, and management of specific gynecological emergencies. (C1)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 5-13.7 Value the importance of maintaining a patient=s modesty and privacy while still being able to obtain necessary information. (A-2)
- 5-13.8 Defend the need to provide care for a patient of sexual assault, while still preventing destruction of crime scene information. (A-3)
- 5-13.9 Serve as a role model for other EMS providers when discussing or caring for patients with gynecological emergencies. (A-3)

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 5-13.10 Demonstrate how to assess a patient with a gynecological complaint. (P-2)
- 5-13.11 Demonstrate how to provide care for a patient with: (P-2)
 - a. Excessive vaginal bleeding
 - b. Abdominal pain
 - c. Sexual assault

Obstetrics

UNIT TERMINAL OBJECTIVE

- 5-14 At the completion of this unit, the paramedic student will be able to apply an understanding of the anatomy and physiology of the female reproductive system to the assessment and management of a patient experiencing normal or abnormal labor.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 5-14.1 Review the anatomic structures and physiology of the reproductive system. (C-1)
- 5-14.2 Identify the normal events of pregnancy. (C-1)
- 5-14.3 Describe how to assess an obstetrical patient. (C-1)
- 5-14.4 Identify the stages of labor and the paramedic's role in each stage. (C-1)
- 5-14.5 Differentiate between normal and abnormal delivery. (C-3)
- 5-14.6 Identify and describe complications associated with pregnancy and delivery. (C-1)
- 5-14.7 Identify predelivery emergencies. (C-1)
- 5-14.8 State indications of an imminent delivery. (C-1)
- 5-14.9 Explain the use of the contents of an obstetrics kit. (C-2)
- 5-14.10 Differentiate the management of a patient with predelivery emergencies from a normal delivery. (C-3)
- 5-14.11 State the steps in the predelivery preparation of the mother. (C-1)
- 5-14.12 Establish the relationship between body substance isolation and childbirth. (C-3)
- 5-14.13 State the steps to assist in the delivery of a newborn. (C-1)
- 5-14.14 Describe how to care for the newborn. (C-1)
- 5-14.15 Describe how and when to cut the umbilical cord. (C-1)
- 5-14.16 Discuss the steps in the delivery of the placenta. (C-1)
- 5-14.17 Describe the management of the mother post-delivery. (C-1)
- 5-14.18 Summarize neonatal resuscitation procedures. (C-1)
- 5-14.19 Describe the procedures for handling abnormal deliveries. (C-1)
- 5-14.20 Describe the procedures for handling complications of pregnancy. (C-1)
- 5-14.21 Describe the procedures for handling maternal complications of labor. (C-1)
- 5-14.22 Describe special considerations when meconium is present in amniotic fluid or during delivery. (C-1)
- 5-14.23 Describe special considerations of a premature baby. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 5-14.24 Advocate the need for treating two patients (mother and baby). (A-2)
- 5-14.25 Value the importance of maintaining a patient=s modesty and privacy during assessment and management. (A-2)

- 5-14.26 Serve as a role model for other EMS providers when discussing or performing the steps of childbirth. (A-3)

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 5-14.27 Demonstrate how to assess an obstetric patient. (P-2)
- 5-14.28 Demonstrate how to provide care for a patient with: (P-2)
- a. Excessive vaginal bleeding
 - b. Abdominal pain
 - c. Hypertensive crisis
- 5-14.29 Demonstrate how to prepare the obstetric patient for delivery. (P-2)
- 5-14.30 Demonstrate how to assist in the normal cephalic delivery of the fetus. (P-2)
- 5-14.31 Demonstrate how to deliver the placenta. (P-2)
- 5-14.32 Demonstrate how to provide post-delivery care of the mother. (P-2)
- 5-14.33 Demonstrate how to assist with abnormal deliveries. (P-2)
- 5-14.34 Demonstrate how to care for the mother with delivery complications. (P-2)

Special Considerations

Neonatology

UNIT TERMINAL OBJECTIVE

- 6-1.1 At the completion of this unit, the paramedic student will be able to integrate pathophysiological principles and assessment findings to formulate a field impression and implement a treatment plan for a neonatal patient.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 6-1.2 Define the term newborn. (C-1)
- 6-1.3 Define the term neonate. (C-1)
- 6-1.4 Identify important antepartum factors that can affect childbirth. (C-1)
- 6-1.5 Identify important intrapartum factors that can term the newborn high risk. (C-1)
- 6-1.6 Identify the factors that lead to premature birth and low birth weight newborns. (C-1)
- 6-1.7 Distinguish between primary and secondary apnea. (C-3)
- 6-1.8 Discuss pulmonary perfusion and asphyxia. (C-1)
- 6-1.9 Identify the primary signs utilized for evaluating a newborn during resuscitation. (C-1)
- 6-1.10 Formulate an appropriate treatment plan for providing initial care to a newborn. (C-3)
- 6-1.11 Identify the appropriate use of the Apgar score in caring for a newborn. (C-1)
- 6-1.12 Calculate the Apgar score given various newborn situations. (C-3)
- 6-1.13 Determine when ventilatory assistance is appropriate for a newborn. (C-1)
- 6-1.14 Prepare appropriate ventilation equipment, adjuncts and technique for a newborn. (C-1)
- 6-1.15 Determine when chest compressions are appropriate for a newborn. (C-1)
- 6-1.16 Discuss appropriate chest compression techniques for a newborn. (C-1)
- 6-1.17 Assess patient improvement due to chest compressions and ventilations. (C-1)
- 6-1.18 Determine when endotracheal intubation is appropriate for a newborn. (C-1)
- 6-1.19 Discuss appropriate endotracheal intubation techniques for a newborn. (C-1)
- 6-1.20 Assess patient improvement due to endotracheal intubation. (C-1)
- 6-1.21 Identify complications related to endotracheal intubation for a newborn. (C-1)
- 6-1.22 Determine when vascular access is indicated for a newborn. (C-1)
- 6-1.23 Discuss the routes of medication administration for a newborn. (C-1)
- 6-1.24 Determine when blow-by oxygen delivery is appropriate for a newborn. (C-1)
- 6-1.25 Discuss appropriate blow-by oxygen delivery devices and technique for a newborn. (C-1)
- 6-1.26 Assess patient improvement due to assisted ventilations. (C-1)
- 6-1.27 Determine when an orogastric tube should be inserted during positive-pressure ventilation. (C-1)
- 6-1.28 Discuss the signs of hypovolemia in a newborn. (C-1)
- 6-1.29 Discuss the initial steps in resuscitation of a newborn. (C-1)
- 6-1.30 Assess patient improvement due to blow-by oxygen delivery. (C-1)
- 6-1.31 Discuss the effects maternal narcotic usage has on the newborn. (C-1)
- 6-1.32 Determine the appropriate treatment for the newborn with narcotic depression. (C-1)
- 6-1.33 Discuss appropriate transport guidelines for a newborn. (C-1)
- 6-1.34 Determine appropriate receiving facilities for low and high risk newborns. (C-1)
- 6-1.35 Describe the epidemiology, including the incidence, morbidity/ mortality, risk factors and prevention strategies for meconium aspiration. (C-1)
- 6-1.36 Discuss the pathophysiology of meconium aspiration. (C-1)
- 6-1.37 Discuss the assessment findings associated with meconium aspiration. (C-1)
- 6-1.38 Discuss the management/ treatment plan for meconium aspiration. (C-1)
- 6-1.39 Describe the epidemiology, including the incidence, morbidity/ mortality, risk factors and prevention strategies for apnea in the neonate. (C-1)
- 6-1.40 Discuss the pathophysiology of apnea in the neonate. (C-1)
- 6-1.41 Discuss the assessment findings associated with apnea in the neonate. (C-1)
- 6-1.42 Discuss the management/ treatment plan for apnea in the neonate. (C-1)

- 6-1.43 Describe the epidemiology, pathophysiology, assessment findings, management/ treatment plan for diaphragmatic hernia. (C-1)
- 6-1.44 Describe the epidemiology, including the incidence, morbidity/ mortality and risk factors for bradycardia in the neonate. (C-1)
- 6-1.45 Discuss the pathophysiology of bradycardia in the neonate. (C-1)
- 6-1.46 Discuss the assessment findings associated with bradycardia in the neonate. (C-1)
- 6-1.47 Discuss the management/ treatment plan for bradycardia in the neonate. (C-1)
- 6-1.48 Describe the epidemiology, including the incidence, morbidity/ mortality and risk factors for premature infants
- 6-1.49 Discuss the pathophysiology of premature infants. (C-1)
- 6-1.50 Discuss the assessment findings associated with premature infants. (C-1)
- 6-1.51 Discuss the management/ treatment plan for premature infants. (C-1)
- 6-1.52 Describe the epidemiology, including the incidence, morbidity/ mortality and risk factors for respiratory distress/ cyanosis in the neonate. (C-1)
- 6-1.53 Discuss the pathophysiology of respiratory distress/ cyanosis in the neonate. (C-1)
- 6-1.54 Discuss the assessment findings associated with respiratory distress/ cyanosis in the neonate. (C-1)
- 6-1.55 Discuss the management/ treatment plan for respiratory distress/ cyanosis in the neonate. (C-1)
- 6-1.56 Describe the epidemiology, including the incidence, morbidity/ mortality and risk factors for seizures in the neonate. (C-1)
- 6-1.57 Discuss the pathophysiology of seizures in the neonate. (C-1)
- 6-1.58 Discuss the assessment findings associated with seizures in the neonate. (C-1)
- 6-1.59 Discuss the management/ treatment plan for seizures in the neonate. (C-1)
- 6-1.60 Describe the epidemiology, including the incidence, morbidity/ mortality and risk factors for fever in the neonate. (C-1)
- 6-1.61 Discuss the pathophysiology of fever in the neonate. (C-1)
- 6-1.62 Discuss the assessment findings associated with fever in the neonate. (C-1)
- 6-1.63 Discuss the management/ treatment plan for fever in the neonate. (C-1)
- 6-1.64 Describe the epidemiology, including the incidence, morbidity/ mortality and risk factors for hypothermia in the neonate. (C-1)
- 6-1.65 Discuss the pathophysiology of hypothermia in the neonate. (C-1)
- 6-1.66 Discuss the assessment findings associated with hypothermia in the neonate. (C-1)
- 6-1.67 Discuss the management/ treatment plan for hypothermia in the neonate. (C-1)
- 6-1.68 Describe the epidemiology, including the incidence, morbidity/ mortality and risk factors for hypoglycemia in the neonate. (C-1)
- 6-1.69 Discuss the pathophysiology of hypoglycemia in the neonate. (C-1)
- 6-1.70 Discuss the assessment findings associated with hypoglycemia in the neonate. (C-1)
- 6-1.71 Discuss the management/ treatment plan for hypoglycemia in the neonate. (C-1)
- 6-1.72 Describe the epidemiology, including the incidence, morbidity/ mortality and risk factors for vomiting in the neonate (C-1)
- 6-1.73 Discuss the pathophysiology of vomiting in the neonate. (C-1)
- 6-1.74 Discuss the assessment findings associated with vomiting in the neonate. (C-1)
- 6-1.75 Discuss the management/ treatment plan for vomiting in the neonate. (C-1)
- 6-1.76 Describe the epidemiology, including the incidence, morbidity/ mortality and risk factors for diarrhea in the neonate. (C-1)
- 6-1.77 Discuss the pathophysiology of in diarrhea the neonate. (C-1)
- 6-1.78 Discuss the assessment findings associated with diarrhea in the neonate. (C-1)
- 6-1.79 Discuss the management/ treatment plan for diarrhea in the neonate. (C-1)
- 6-1.80 Describe the epidemiology, including the incidence, morbidity/ mortality and risk factors for common birth injuries in the neonate. (C-1)
- 6-1.81 Discuss the pathophysiology of common birth injuries in the neonate. (C-1)
- 6-1.82 Discuss the assessment findings associated with common birth injuries in the neonate. (C-1)
- 6-1.83 Discuss the management/ treatment plan for common birth injuries in the neonate. (C-1)
- 6-1.84 Describe the epidemiology, including the incidence, morbidity/ mortality and risk factors for cardiac arrest in the neonate. (C-1)

- 6-1.85 Discuss the pathophysiology of cardiac arrest in the neonate. (C-1)
- 6-1.86 Discuss the assessment findings associated with cardiac arrest in the neonate. (C-1)
- 6-1.87 Discuss the management/ treatment plan for cardiac arrest in the neonate. (C-1)
- 6-1.88 Discuss the pathophysiology of post arrest management of the neonate. (C-1)
- 6-1.89 Discuss the assessment findings associated with post arrest situations in the neonate. (C-1)
- 6-1.90 Discuss the management/ treatment plan to stabilize the post arrest neonate. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 6-1.91 Demonstrate and advocate appropriate interaction with a newborn/ neonate that conveys respect for their position in life. (A-3)
- 6-1.92 Recognize the emotional impact of newborn/ neonate injuries/ illnesses on parents/ guardians. (A-1)
- 6-1.93 Recognize and appreciate the physical and emotional difficulties associated with separation of the parent/ guardian and a newborn/ neonate. (A-3)
- 6-1.94 Listen to the concerns expressed by parents/ guardians. (A-1)
- 6-1.95 Attend to the need for reassurance, empathy and compassion for the parent/ guardian. (A-1)

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 6-1.96 Demonstrate preparation of a newborn resuscitation area. (P-2)
- 6-1.97 Demonstrate appropriate assessment technique for examining a newborn. (P-2)
- 6-1.98 Demonstrate appropriate assisted ventilations for a newborn. (P-2)
- 6-1.99 Demonstrate appropriate endotracheal intubation technique for a newborn. (P-2)
- 6-1.100 Demonstrate appropriate meconium aspiration suctioning technique for a newborn. (P-2)
- 6-1.101 Demonstrate appropriate insertion of an orogastric tube. (P-2)
- 6-1.102 Demonstrate needle chest decompression for a newborn or neonate. (P-2)
- 6-1.103 Demonstrate appropriate chest compression and ventilation technique for a newborn. (P-2)
- 6-1.104 Demonstrate appropriate techniques to improve or eliminate endotracheal intubation complications. (P-2)
- 6-1.105 Demonstrate vascular access cannulation techniques for a newborn. (P-2)
- 6-1.106 Demonstrate the initial steps in resuscitation of a newborn. (P-2)
- 6-1.107 Demonstrate blow-by oxygen delivery for a newborn. (P-2)

Pediatrics

UNIT TERMINAL OBJECTIVE

- 6-2.1 At the completion of this unit, the paramedic student will be able to integrate pathophysiological principles and assessment findings to formulate a field impression and implement a treatment plan for the pediatric patient.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 6-2.2 Discuss the paramedic's role in the reduction of infant and childhood morbidity and mortality from acute illness and injury. (C-1)
- 6-2.3 Identify methods/ mechanisms that prevent injuries to infants and children. (C-1)
- 6-2.4 Describe Emergency Medical Services for Children (EMSC). (C-1)
- 6-2.5 Discuss how an integrated EMSC system can affect patient outcome. (C-2)
- 6-2.6 Identify key growth and developmental characteristics of infants and children and their implications. (C-2)
- 6-2.7 Identify key anatomical and physiological characteristics of infants and children and their implications. (C-2)
- 6-2.8 Describe techniques for successful assessment of infants and children. (C-1)
- 6-2.9 Describe techniques for successful treatment of infants and children. (C-1)
- 6-2.10 Identify the common responses of families to acute illness and injury of an infant or child. (C-1)

- 6-2.11 Describe techniques for successful interaction with families of acutely ill or injured infants and children. (C-1)
- 6-2.12 Outline differences in adult and childhood anatomy and physiology. (C-3)
- 6-2.13 Identify "normal" age group related vital signs. (C-1)
- 6-2.14 Discuss the appropriate equipment utilized to obtain pediatric vital signs. (C-1)
- 6-2.15 Determine appropriate airway adjuncts for infants and children. (C-1)
- 6-2.16 Discuss complications of improper utilization of airway adjuncts with infants and children. (C-1)
- 6-2.17 Discuss appropriate ventilation devices for infants and children. (C-1)
- 6-2.18 Discuss complications of improper utilization of ventilation devices with infants and children. (C-1)
- 6-2.19 Discuss appropriate endotracheal intubation equipment for infants and children. (C-1)
- 6-2.20 Identify complications of improper endotracheal intubation procedure in infants and children. (C-1)
- 6-2.21 List the indications and methods for gastric decompression for infants and children. (C-1)
- 6-2.22 Define respiratory distress. (C-1)
- 6-2.23 Define respiratory failure. (C-1)
- 6-2.24 Define respiratory arrest. (C-1)
- 6-2.25 Differentiate between upper airway obstruction and lower airway disease. (C-3)
- 6-2.26 Describe the general approach to the treatment of children with respiratory distress, failure, or arrest from upper airway obstruction or lower airway disease. (C-3)
- 6-2.27 Discuss the common causes of hypoperfusion in infants and children. (C-1)
- 6-2.28 Evaluate the severity of hypoperfusion in infants and children. (C-3)
- 6-2.29 Identify the major classifications of pediatric cardiac rhythms. (C-1)
- 6-2.30 Discuss the primary etiologies of cardiopulmonary arrest in infants and children. (C-1)
- 6-2.31 Discuss age appropriate vascular access sites for infants and children. (C-1)
- 6-2.32 Discuss the appropriate equipment for vascular access in infants and children. (C-1)
- 6-2.33 Identify complications of vascular access for infants and children. (C-1)
- 6-2.34 Describe the primary etiologies of altered level of consciousness in infants and children. (C-1)
- 6-2.35 Identify common lethal mechanisms of injury in infants and children. (C-1)
- 6-2.36 Discuss anatomical features of children that predispose or protect them from certain injuries. (C-1)
- 6-2.37 Describe aspects of infant and children airway management that are affected by potential cervical spine injury. (C-1)
- 6-2.38 Identify infant and child trauma patients who require spinal immobilization. (C-1)
- 6-2.39 Discuss fluid management and shock treatment for infant and child trauma patient. (C-1)
- 6-2.40 Determine when pain management and sedation are appropriate for infants and children. (C-1)
- 6-2.41 Define child abuse. (C-1)
- 6-2.42 Define child neglect. (C-1)
- 6-2.43 Define sudden infant death syndrome (SIDS). (C-1)
- 6-2.44 Discuss the parent/ caregiver responses to the death of an infant or child. (C-1)
- 6-2.45 Define children with special health care needs. (C-1)
- 6-2.46 Define technology assisted children. (C-1)
- 6-2.47 Discuss basic cardiac life support (CPR) guidelines for infants and children. (C-1)
- 6-2.48 Identify appropriate parameters for performing infant and child CPR. (C-1)
- 6-2.49 Integrate advanced life support skills with basic cardiac life support for infants and children. (C-3)
- 6-2.50 Discuss the indications, dosage, route of administration and special considerations for medication administration in infants and children. (C-1)
- 6-2.51 Discuss appropriate transport guidelines for infants and children. (C-1)
- 6-2.52 Discuss appropriate receiving facilities for low and high risk infants and children. (C-1)
- 6-2.53 Describe the epidemiology, including the incidence, morbidity/ mortality, risk factors and prevention strategies for respiratory distress/ failure in infants and children. (C-1)
- 6-2.54 Discuss the pathophysiology of respiratory distress/ failure in infants and children. (C-1)

- 6-2.55 Discuss the assessment findings associated with respiratory distress/ failure in infants and children. (C-1)
- 6-2.56 Discuss the management/ treatment plan for respiratory distress/ failure in infants and children. (C-1)
- 6-2.57 Describe the epidemiology, including the incidence, morbidity/ mortality, risk factors and prevention strategies for hypoperfusion in infants and children. (C-1)
- 6-2.58 Discuss the pathophysiology of hypoperfusion in infants and children. (C-1)
- 6-2.59 Discuss the assessment findings associated with hypoperfusion in infants and children. (C-1)
- 6-2.60 Discuss the management/ treatment plan for hypoperfusion in infants and children. (C-1)
- 6-2.61 Describe the epidemiology, including the incidence, morbidity/ mortality, risk factors and prevention strategies for cardiac dysrhythmias in infants and children. (C-1)
- 6-2.62 Discuss the pathophysiology of cardiac dysrhythmias in infants and children. (C-1)
- 6-2.63 Discuss the assessment findings associated with cardiac dysrhythmias in infants and children. (C-1)
- 6-2.64 Discuss the management/ treatment plan for cardiac dysrhythmias in infants and children. (C-1)
- 6-2.65 Describe the epidemiology, including the incidence, morbidity/ mortality, risk factors and prevention strategies for neurological emergencies in infants and children. (C-1)
- 6-2.66 Discuss the pathophysiology of neurological emergencies in infants and children. (C-1)
- 6-2.67 Discuss the assessment findings associated with neurological emergencies in infants and children. (C-1)
- 6-2.68 Discuss the management/ treatment plan for neurological emergencies in infants and children. (C-1)
- 6-2.69 Describe the epidemiology, including the incidence, morbidity/ mortality, risk factors and prevention strategies for trauma in infants and children. (C-1)
- 6-2.70 Discuss the pathophysiology of trauma in infants and children. (C-1)
- 6-2.71 Discuss the assessment findings associated with trauma in infants and children. (C-1)
- 6-2.72 Discuss the management/ treatment plan for trauma in infants and children. (C-1)
- 6-2.73 Describe the epidemiology, including the incidence, morbidity/ mortality, risk factors and prevention strategies for abuse and neglect in infants and children. (C-1)
- 6-2.74 Discuss the pathophysiology of abuse and neglect in infants and children. (C-1)
- 6-2.75 Discuss the assessment findings associated with abuse and neglect in infants and children. (C-1)
- 6-2.76 Discuss the management/ treatment plan for abuse and neglect in infants and children, including documentation and reporting. (C-1)
- 6-2.77 Describe the epidemiology, including the incidence, morbidity/ mortality, risk factors and prevention strategies for SIDS infants. (C-1)
- 6-2.78 Describe the epidemiology, including the incidence, morbidity/ mortality, risk factors and prevention strategies for children with special health care needs including technology assisted children. (C-1)
- 6-2.79 Discuss the pathophysiology of children with special health care needs including technology assisted children. (C-1)
- 6-2.80 Discuss the assessment findings associated for children with special health care needs including technology assisted children. (C-1)
- 6-2.81 Discuss the management/ treatment plan for children with special health care needs including technology assisted children. (C-1)
- 6-2.82 Describe the epidemiology, including the incidence, morbidity/ mortality, risk factors and prevention strategies for SIDS infants. (C-1)
- 6-2.83 Discuss the pathophysiology of SIDS in infants. (C-1)
- 6-2.84 Discuss the assessment findings associated with SIDS infants. (C-1)
- 6-2.85 Discuss the management/ treatment plan for SIDS in infants. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 6-2.86 Demonstrate and advocate appropriate interactions with the infant/ child that convey an

- understanding of their developmental stage. (A-3)
- 6-2.87 Recognize the emotional dependence of the infant/ child to their parent/ guardian. (A-1)
- 6-2.88 Recognize the emotional impact of the infant/ child injuries and illnesses on the parent/ guardian. (A-1)
- 6-2.89 Recognize and appreciate the physical and emotional difficulties associated with separation of the parent/ guardian of a special needs child (A-3)
- 6-2.90 Demonstrate the ability to provide reassurance, empathy and compassion for the parent/ guardian. (A-1)

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 6-2.91 Demonstrate the appropriate approach for treating infants and children. (P-2)
- 6-2.92 Demonstrate appropriate intervention techniques with families of acutely ill or injured infants and children. (P-2)
- 6-2.93 Demonstrate an appropriate assessment for different developmental age groups. (P-2)
- 6-2.94 Demonstrate an appropriate technique for measuring pediatric vital signs. (P-2)
- 6-2.95 Demonstrate the use of a length-based resuscitation device for determining equipment sizes, drug doses and other pertinent information for a pediatric patient. (P-2)
- 6-2.96 Demonstrate the appropriate approach for treating infants and children with respiratory distress, failure, and arrest. (P-2)
- 6-2.97 Demonstrate proper technique for administering blow-by oxygen to infants and children. (P-2)
- 6-2.98 Demonstrate the proper utilization of a pediatric non-rebreather oxygen mask. (P-2)
- 6-2.99 Demonstrate proper technique for suctioning of infants and children. (P-2)
- 6-2.100 Demonstrate appropriate use of airway adjuncts with infants and children. (P-2)
- 6-2.101 Demonstrate appropriate use of ventilation devices for infants and children. (P-2)
- 6-2.102 Demonstrate endotracheal intubation procedures in infants and children. (P-2)
- 6-2.103 Demonstrate appropriate treatment/ management of intubation complications for infants and children. (P-2)
- 6-2.104 Demonstrate appropriate needle cricothyrotomy in infants and children. (P-2)
- 6-2.105 Demonstrate proper placement of a gastric tube in infants and children. (P-2)
- 6-2.106 Demonstrate an appropriate technique for insertion of peripheral intravenous catheters for infants and children. (P-2)
- 6-2.107 Demonstrate an appropriate technique for administration of intramuscular, inhalation, subcutaneous, rectal, endotracheal and oral medication for infants and children. (P-2)
- 6-2.108 Demonstrate an appropriate technique for insertion of an intraosseous line for infants and children. (P-2)
- 6-2.109 Demonstrate appropriate interventions for infants and children with a partially obstructed airway. (P-2)
- 6-2.110 Demonstrate age appropriate basic airway clearing maneuvers for infants and children with a completely obstructed airway. (P-2)
- 6-2.111 Demonstrate proper technique for direct laryngoscopy and foreign body retrieval in infants and children with a completely obstructed airway. (P-2)
- 6-2.112 Demonstrate appropriate airway and breathing control maneuvers for infant and child trauma patients. (P-2)
- 6-2.113 Demonstrate appropriate treatment of infants and children requiring advanced airway and breathing control. (P-2)
- 6-2.114 Demonstrate appropriate immobilization techniques for infant and child trauma patients. (P-2)
- 6-2.115 Demonstrate treatment of infants and children with head injuries. (P-2)
- 6-2.116 Demonstrate appropriate treatment of infants and children with chest injuries. (P-2)
- 6-2.117 Demonstrate appropriate treatment of infants and children with abdominal injuries. (P-2)
- 6-2.118 Demonstrate appropriate treatment of infants and children with extremity injuries. (P-2)
- 6-2.119 Demonstrate appropriate treatment of infants and children with burns. (P-2)

- 6-2.120 Demonstrate appropriate parent/ caregiver interviewing techniques for infant and child death situations. (P-2)
- 6-2.121 Demonstrate proper infant CPR. (P-2)
- 6-2.122 Demonstrate proper child CPR. (P-2)
- 6-2.123 Demonstrate proper techniques for performing infant and child defibrillation and synchronized cardioversion. (P-2)

Geriatrics

UNIT TERMINAL OBJECTIVE

- 6-3 At the completion of this unit, the paramedic student will be able to integrate the pathophysiological principles and the assessment findings to formulate and implement a treatment plan for the geriatric patient.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 6-3.1 Discuss population demographics demonstrating the rise in elderly population in the U.S. (C-1)
- 6-3.2 Discuss society=s view of aging and the social, financial, and ethical issues facing the elderly. (C-1)
- 6-3.3 Assess the various living environments of elderly patients. (C-3)
- 6-3.4 Describe the local resources available to assist the elderly and create strategies to refer at risk patients to appropriate community services. (C-3)
- 6-3.5 Discuss issues facing society concerning the elderly. (C-1)
- 6-3.6 Discuss common emotional and psychological reactions to aging to include causes and manifestations. (C-1)
- 6-3.7 Apply the pathophysiology of multi-system failure to the assessment and management of medical conditions in the elderly patient. (C-2)
- 6-3.8 Discuss the problems with mobility in the elderly and develop strategies to prevent falls. (C-1)
- 6-3.9 Discuss the implications of problems with sensation to communication and patient assessment. (C-2)
- 6-3.10 Discuss the problems with continence and elimination and develop communication strategies to provide psychological support. (C-3)
- 6-3.11 Discuss factors that may complicate the assessment of the elderly patient. (C-1)
- 6-3.12 Describe principles that should be employed when assessing and communicating with the elderly. (C-1)
- 6-3.13 Compare the assessment of a young patient with that of an elderly patient. (C-3)
- 6-3.14 Discuss common complaints of elderly patients. (C-1)
- 6-3.15 Compare the pharmacokinetics of an elderly patient to that of a young adult. (C-2)
- 6-3.16 Discuss the impact of polypharmacy and medication non-compliance on patient assessment and management. (C-1)
- 6-3.17 Discuss drug distribution, metabolism, and excretion in the elderly patient. (C-1)
- 6-3.18 Discuss medication issues of the elderly including polypharmacy, dosing errors and increased drug sensitivity. (C-1)
- 6-3.19 Discuss the use and effects of commonly prescribed drugs for the elderly patient. (C-1)
- 6-3.20 Discuss the normal and abnormal changes with age of the pulmonary system. (C-1)
- 6-3.21 Describe the epidemiology of pulmonary diseases in the elderly, including incidence, morbidity/ mortality, risk factors, and prevention strategies for patients with pneumonia, chronic obstructive pulmonary diseases and pulmonary embolism. (C-1)
- 6-3.22 Compare and contrast the pathophysiology of pulmonary diseases in the elderly with that of a younger adult, including pneumonia, chronic obstructive pulmonary diseases, and pulmonary embolism. (C-3)
- 6-3.23 Discuss the assessment of the elderly patient with pulmonary complaints, including pneumonia, chronic obstructive pulmonary diseases, and pulmonary embolism. (C-1)
- 6-3.24 Identify the need for intervention and transport of the elderly patient with pulmonary complaints. (C-1)

- 6-3.25 Develop a treatment and management plan of the elderly patient with pulmonary complaints, including pneumonia, chronic obstructive pulmonary diseases, and pulmonary embolism. (C-3)
- 6-3.26 Discuss the normal and abnormal cardiovascular system changes with age. (C-1)
- 6-3.27 Describe the epidemiology for cardiovascular diseases in the elderly, including incidence, morbidity/ mortality, risk factors, and prevention strategies for patients with myocardial infarction, heart failure, dysrhythmias, aneurism, and hypertension. (C-1)
- 6-3.28 Compare and contrast the pathophysiology of cardiovascular diseases in the elderly with that of a younger adult, including myocardial infarction, heart failure, dysrhythmias, aneurism, and hypertension. (C-3)
- 6-3.29 Discuss the assessment of the elderly patient with complaints related to the cardiovascular system, including myocardial infarction, heart failure, dysrhythmias, aneurism, and hypertension. (C-1)
- 6-3.30 Identify the need for intervention and transportation of the elderly patient with cardiovascular complaints. (C-1)
- 6-3.31 Develop a treatment and management plan of the elderly patient with cardiovascular complaints, including myocardial infarction, heart failure, dysrhythmias, aneurism and hypertension. (C-3)
- 6-3.32 Discuss the normal and abnormal changes with age of the nervous system. (C-1)
- 6-3.33 Describe the epidemiology for nervous system diseases in the elderly, including incidence, morbidity/ mortality, risk factors, and prevention strategies for patients with cerebral vascular disease, delirium, dementia, Alzheimer's disease and Parkinson's disease. (C-1)
- 6-3.34 Compare and contrast the pathophysiology of nervous system diseases in the elderly with that of a younger adult, including cerebral vascular disease, delirium, dementia, Alzheimer's disease and Parkinson's disease. (C-3)
- 6-3.35 Discuss the assessment of the elderly patient with complaints related to the nervous system, including cerebral vascular disease, delirium, dementia, Alzheimer's disease and Parkinson's disease. (C-1)
- 6-3.36 Identify the need for intervention and transportation of the patient with complaints related to the nervous system. (C-1)
- 6-3.37 Develop a treatment and management plan of the elderly patient with complaints related to the nervous system, including cerebral vascular disease, delirium, dementia, Alzheimer's disease and Parkinson's disease. (C-3)
- 6-3.38 Discuss the normal and abnormal changes of the endocrine system with age. (C-1)
- 6-3.39 Describe the epidemiology for endocrine diseases in the elderly, including incidence, morbidity/ mortality, risk factors, and prevention strategies for patients with diabetes and thyroid diseases. (C-1)
- 6-3.40 Compare and contrast the pathophysiology of diabetes and thyroid diseases in the elderly with that of a younger adult. (C-3)
- 6-3.41 Discuss the assessment of the elderly patient with complaints related to the endocrine system, including diabetes and thyroid diseases. (C-1)
- 6-3.42 Identify the need for intervention and transportation of the patient with endocrine problems. (C-1)
- 6-3.43 Develop a treatment and management plan of the elderly patient with endocrine problems, including diabetes and thyroid diseases. (C-3)
- 6-3.44 Discuss the normal and abnormal changes of the gastrointestinal system with age. (C-1)
- 6-3.45 Discuss the assessment of the elderly patient with complaints related to the gastrointestinal system. (C-1)
- 6-3.46 Identify the need for intervention and transportation of the patient with gastrointestinal complaints. (C-1)
- 6-3.47 Develop and execute a treatment and management plan of the elderly patient with gastrointestinal problems. (C-3)
- 6-3.48 Discuss the assessment and management of an elderly patient with GI hemorrhage and bowel obstruction. (C-1)
- 6-3.49 Compare and contrast the pathophysiology of GI hemorrhage and bowel obstruction in

- the elderly with that of a young adult. (C-3)
- 6-3.50 Discuss the normal and abnormal changes with age related to toxicology. (C-1)
 - 6-3.51 Discuss the assessment of the elderly patient with complaints related to toxicology. (C-1)
 - 6-3.52 Identify the need for intervention and transportation of the patient with toxicological problems. (C-1)
 - 6-3.53 Develop and execute a treatment and management plan of the elderly patient with toxicological problems. (C-3)
 - 6-3.54 Describe the epidemiology in the elderly, including the incidence, morbidity/ mortality, risk factors, and prevention strategies, for patients with drug toxicity. (C-1)
 - 6-3.55 Compare and contrast the pathophysiology of drug toxicity in the elderly with that of a younger adult. (C-3)
 - 6-3.56 Discuss the assessment findings common in elderly patients with drug toxicity. (C-1)
 - 6-3.57 Discuss the management/ considerations when treating an elderly patient with drug toxicity. (C-1)
 - 6-3.58 Describe the epidemiology for drug and alcohol abuse in the elderly, including incidence, morbidity/ mortality, risk factors, and prevention strategies. (C-1)
 - 6-3.59 Compare and contrast the pathophysiology of drug and alcohol abuse in the elderly with that of a younger adult. (C-3)
 - 6-3.60 Discuss the assessment findings common in elderly patients with drug and alcohol abuse. (C-1)
 - 6-3.61 Discuss the management/ considerations when treating an elderly patient with drug and alcohol abuse. (C-1)
 - 6-3.62 Discuss the normal and abnormal changes of thermoregulation with age. (C-1)
 - 6-3.63 Discuss the assessment of the elderly patient with complaints related to thermoregulation. (C-1)
 - 6-3.64 Identify the need for intervention and transportation of the patient with environmental considerations. (C-1)
 - 6-3.65 Develop and execute a treatment and management plan of the elderly patient with environmental considerations. (C-3)
 - 6-3.66 Compare and contrast the pathophysiology of hypothermia and hyperthermia in the elderly with that of a younger adult. (C-3)
 - 6-3.67 Discuss the assessment findings and management plan for elderly patients with hypothermia and hyperthermia. (C-1)
 - 6-3.68 Discuss the normal and abnormal psychiatric changes of age. (C-1)
 - 6-3.69 Describe the epidemiology of depression and suicide in the elderly, including incidence, morbidity/ mortality, risk factors, and prevention strategies. (C-1)
 - 6-3.70 Compare and contrast the psychiatry of depression and suicide in the elderly with that of a younger adult. (C-3)
 - 6-3.71 Discuss the assessment of the elderly patient with psychiatric complaints, including depression and suicide. (C-1)
 - 6-3.72 Identify the need for intervention and transport of the elderly psychiatric patient. (C-1)
 - 6-3.73 Develop a treatment and management plan of the elderly psychiatric patient, including depression and suicide. (C-3)
 - 6-3.74 Discuss the normal and abnormal changes of the integumentary system with age. (C-1)
 - 6-3.75 Describe the epidemiology for pressure ulcers in the elderly, including incidence, morbidity/ mortality, risk factors, and prevention strategies. (C-1)
 - 6-3.76 Compare and contrast the pathophysiology of pressure ulcers in the elderly with that of a younger adult. (C-3)
 - 6-3.77 Discuss the assessment of the elderly patient with complaints related to the integumentary system, including pressure ulcers. (C-1)
 - 6-3.78 Identify the need for intervention and transportation of the patient with complaints related to the integumentary system. (C-1)
 - 6-3.79 Develop a treatment and management plan of the elderly patient with complaints related to the integumentary system, including pressure ulcers. (C-3)
 - 6-3.80 Discuss the normal and abnormal changes of the musculoskeletal system with age. (C-1)
 - 6-3.81 Describe the epidemiology for osteoarthritis and osteoporosis, including incidence,

- morbidity/ mortality, risk factors, and prevention strategies. (C-1)
- 6-3.82 Compare and contrast the pathophysiology of osteoarthritis and osteoporosis with that of a younger adult. (C-3)
- 6-3.83 Discuss the assessment of the elderly patient with complaints related to the musculoskeletal system, including osteoarthritis and osteoporosis. (C-1)
- 6-3.84 Identify the need for intervention and transportation of the patient with musculoskeletal complaints. (C-1)
- 6-3.85 Develop a treatment and management plan of the elderly patient with musculoskeletal complaints, including osteoarthritis and osteoporosis. (C-3)
- 6-3.86 Describe the epidemiology for trauma in the elderly, including incidence, morbidity/ mortality, risk factors, and prevention strategies for patients with orthopedic injuries, burns and head injuries. (C-1)
- 6-3.87 Compare and contrast the pathophysiology of trauma in the elderly with that of a younger adult, including orthopedic injuries, burns and head injuries. (C-3)
- 6-3.88 Discuss the assessment findings common in elderly patients with traumatic injuries, including orthopedic injuries, burns and head injuries. (C-1)
- 6-3.89 Discuss the management/ considerations when treating an elderly patient with traumatic injuries, including orthopedic injuries, burns and head injuries. (C-1)
- 6-3.90 Identify the need for intervention and transport of the elderly patient with trauma. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 6-3.91 Demonstrate and advocate appropriate interactions with the elderly that conveys respect for their position in life. (A-3)
- 6-3.92 Recognize the emotional need for independence in the elderly while simultaneously attending to their apparent acute dependence. (A-1)
- 6-3.93 Recognize and appreciate the many impediments to physical and emotional well being in the elderly. (A-2)
- 6-3.94 Recognize and appreciate the physical and emotional difficulties associated with being a caretaker of an impaired elderly person, particularly the patient with Alzheimer's disease. (A-3)

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 6-3.95 Demonstrate the ability to assess a geriatric patient. (P-2)
- 6-3.96 Demonstrate the ability to adjust their assessment to a geriatric patient. (P-3)

Abuse and Assault

UNIT TERMINAL OBJECTIVE

- 6-4 At the completion of this unit, the paramedic student will be able to integrate the assessment findings to formulate a field impression and implement a treatment plan for the patient who has sustained abuse or assault.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 6-4.1 Discuss the incidence of abuse and assault. (C-1)
- 6-4.2 Describe the categories of abuse. (C-1)
- 6-4.3 Discuss examples of spouse abuse. (C-1)
- 6-4.4 Discuss examples of elder abuse. (C-1)
- 6-4.5 Discuss examples of child abuse. (C-1)
- 6-4.6 Discuss examples of sexual assault. (C-1)
- 6-4.7 Describe the characteristics associated with the profile of the typical abuser of a spouse. (C-1)
- 6-4.8 Describe the characteristics associated with the profile of the typical abuser of the elder. (C-1)
- 6-4.9 Describe the characteristics associated with the profile of the typical abuser of children. (C-1)
- 6-4.10 Describe the characteristics associated with the profile of the typical assailant of sexual assault. (C-1)

- 6-4.11 Identify the profile of the "at-risk" spouse. (C-1)
- 6-4.12 Identify the profile of the "at-risk" elder. (C-1)
- 6-4.13 Identify the profile of the "at-risk" child. (C-1)
- 6-4.14 Discuss the assessment and management of the abused patient. (C-1)
- 6-4.15 Discuss the legal aspects associated with abuse situations. (C-1)
- 6-4.16 Identify community resources that are able to assist victims of abuse and assault. (C-1)
- 6-4.17 Discuss the documentation associated with abused and assaulted patient. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 6-4.18 Demonstrate sensitivity to the abused patient. (A-1)
- 6-4.19 Value the behavior of the abused patient. (A-2)
- 6-4.20 Attend to the emotional state of the abused patient. (A-1)
- 6-4.21 Recognize the value of non-verbal communication with the abused patient. (A-1)
- 6-4.22 Attend to the needs for reassurance, empathy and compassion with the abused patient. (A-1)
- 6-4.23 Listen to the concerns expressed by the abused patient. (A-1)
- 6-4.24 Listen and value the concerns expressed by the sexually assaulted patient. (A-2)

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 6-4.25 Demonstrate the ability to assess a spouse, elder or child abused patient. (P-1)
- 6-4.26 Demonstrate the ability to assess a sexually assaulted patient. (P-1)

Patients with Special Challenges

UNIT TERMINAL OBJECTIVE

- 6-5 At the completion of this unit the paramedic student will be able to integrate pathophysiological and psychosocial principles to adapt the assessment and treatment plan for diverse patients and those who face physical, mental, social and financial challenges.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 6-5.1 Describe the various etiologies and types of hearing impairments. (C-1)
- 6-5.2 Recognize the patient with a hearing impairment. (C-1)
- 6-5.3 Anticipate accommodations that may be needed in order to properly manage the patient with a hearing impairment. (C-3)
- 6-5.4 Describe the various etiologies of visual impairments. (C-1)
- 6-5.5 Recognize the patient with a visual impairment. (C-1)
- 6-5.6 Anticipate accommodations that may be needed in order to properly manage the patient with a visual impairment. (C-3)
- 6-5.7 Describe the various etiologies and types of speech impairments. (C-1)
- 6-5.8 Recognize the patient with speech impairment. (C-1)
- 6-5.9 Anticipate accommodations that may be needed in order to properly manage the patient with speech impairment. (C-3)
- 6-5.10 Describe the various etiologies of obesity. (C-1)
- 6-5.11 Anticipate accommodations that may be needed in order to properly manage the patient with obesity. (C-3)
- 6-5.12 Describe paraplegia/ quadriplegia. (C-1)
- 6-5.13 Anticipate accommodations that may be needed in order to properly manage the patient with paraplegia/ quadriplegia. (C-3)
- 6-5.14 Define mental illness. (C-1)
- 6-5.15 Describe the various etiologies of mental illness. (C-1)
- 6-5.16 Recognize the presenting signs of the various mental illnesses. (C-1)
- 6-5.17 Anticipate accommodations that may be needed in order to properly manage the patient with a mental illness. (C-3)
- 6-5.18 Define the term developmentally disabled. (C-1)

- 6-5.19 Recognize the patient with a developmental disability. (C-1)
- 6-5.20 Anticipate accommodations that may be needed in order to properly manage the patient with a developmental disability. (C-3)
- 6-5.21 Describe Down=s syndrome. (C-1)
- 6-5.22 Recognize the patient with Down=s syndrome. (C-1)
- 6-5.23 Anticipate accommodations that may be needed in order to properly manage the patient with Down=s syndrome. (C-3)
- 6-5.24 Describe the various etiologies of emotional impairment. (C-1)
- 6-5.25 Recognize the patient with an emotional impairment. (C-1)
- 6-5.26 Anticipate accommodations that may be needed in order to properly manage the patient with an emotional impairment. (C-3)
- 6-5.27 Define emotional/ mental impairment (EMI). (C-1)
- 6-5.28 Recognize the patient with an emotional or mental impairment. (C-1)
- 6-5.29 Anticipate accommodations that may be needed in order to properly manage patients with an emotional or mental impairment. (C-3)
- 6-5.30 Describe the following diseases/ illnesses: (C-1)
 - a. Arthritis
 - b. Cancer
 - c. Cerebral palsy
 - d. Cystic fibrosis
 - e. Multiple sclerosis
 - f. Muscular dystrophy
 - g. Myasthenia gravis
 - h. Poliomyelitis
 - i. Spina bifida
 - j. Patients with a previous head injury
- 6-5.31 Identify the possible presenting sign(s) for the following diseases/ illnesses: (C-1)
 - a. Arthritis
 - b. Cancer
 - c. Cerebral palsy
 - d. Cystic fibrosis
 - e. Multiple sclerosis
 - f. Muscular dystrophy
 - g. Myasthenia gravis
 - h. Poliomyelitis
 - i. Spina bifida
 - j. Patients with a previous head injury
- 6-5.32 Anticipate accommodations that may be needed in order to properly manage the following patients: (C-3)
 - a. Arthritis
 - b. Cancer
 - c. Cerebral palsy
 - d. Cystic fibrosis
 - e. Multiple sclerosis
 - f. Muscular dystrophy
 - g. Myasthenia gravis
 - h. Poliomyelitis
 - i. Spina bifida
 - j. Patients with a previous head injury
- 6-5.33 Define cultural diversity. (C-1)
- 6-5.34 Recognize a patient who is culturally diverse. (C-1)
- 6-5.35 Anticipate accommodations that may be needed in order to properly manage a patient who is culturally diverse. (C-3)
- 6-5.36 Identify a patient that is terminally ill. (C-1)
- 6-5.37 Anticipate accommodations that may be needed in order to properly manage a patient who is terminally ill. (C-3)

- 6-5.38 Identify a patient with a communicable disease. (C-1)
- 6-5.39 Recognize the presenting signs of a patient with a communicable disease. (C-1)
- 6-5.40 Anticipate accommodations that may be needed in order to properly manage a patient with a communicable disease. (C-3)
- 6-5.41 Recognize sign(s) of financial impairments. (C-1)
- 6-5.42 Anticipate accommodations that may be needed in order to properly manage the patient with a financial impairment. (C-3)

AFFECTIVE OBJECTIVES

None identified for this unit.

PSYCHOMOTOR OBJECTIVES

None identified for this unit.

Acute Interventions for the Chronic Care Patient

UNIT TERMINAL OBJECTIVE

- 6-6 At the completion of this unit, the paramedic student will be able to integrate the pathophysiological principles and the assessment findings to formulate a field impression and implement a treatment plan for the acute deterioration of a chronic care patient.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 6-6.1 Compare and contrast the primary objectives of the ALS professional and the home care professional. (C-3)
- 6-6.2 Identify the importance of home health care medicine as related to the ALS level of care. (C-1)
- 6-6.3 Differentiate between the role of EMS provider and the role of the home care provider. (C-3)
- 6-6.4 Compare and contrast the primary objectives of acute care, home care and hospice care. (C-3)
- 6-6.5 Summarize the types of home health care available in your area and the services provided. (C-3)
- 6-6.6 Discuss the aspects of home care that result in enhanced quality of care for a given patient. (C-1)
- 6-6.7 Discuss the aspects of home care that have a potential to become a detriment to the quality of care for a given patient. (C-1)
- 6-6.8 List complications commonly seen in the home care patients which result in their hospitalization. (C-1)
- 6-6.9 Compare the cost, mortality and quality of care for a given patient in the hospital versus the home care setting. (C-3)
- 6-6.10 Discuss the significance of palliative care programs as related to a patient in a home health care setting. (C-1)
- 6-6.11 Define hospice care, comfort care and DNR/ DNAR as they relate to local practice, law and policy. (C-1)
- 6-6.12 List the stages of the grief process and relate them to an individual in hospice care. (C-1)
- 6-6.13 List pathologies and complications typical to home care patients. (C-1)
- 6-6.14 Given a home care scenario, predict complications requiring ALS intervention. (C-3)
- 6-6.15 Given a series of home care scenarios, determine which patients should receive follow-up home care and which should be transported to an emergency care facility. (C-3)
- 6-6.16 Describe airway maintenance devices typically found in the home care environment. (C-1)
- 6-6.17 Describe devices that provide or enhance alveolar ventilation in the home care setting. (C-1)
- 6-6.18 List modes of artificial ventilation and an out-of-hospital situation where each might be employed. (C-1)
- 6-6.19 List vascular access devices found in the home care setting. (C-1)
- 6-6.20 Recognize standard central venous access devices utilized in home health care. (C-1)
- 6-6.21 Describe the basic universal characteristics of central venous catheters. (C-1)
- 6-6.22 Describe the basic universal characteristics of implantable injection devices. (C-1)
- 6-6.23 List devices found in the home care setting that are used to empty, irrigate or deliver nutrition or medication to the GI/ GU tract. (C-1)
- 6-6.24 Describe complications of assessing each of the airway, vascular access, and GI/ GU

- devices described above. (C-1)
- 6-6.25 Given a series of scenarios, demonstrate the appropriate ALS interventions. (C-3)
 - 6-6.26 Given a series of scenarios, demonstrate interaction and support with the family members/ support persons for a patient who has died. (C-3)
 - 6-6.27 Describe common complications with central venous access and implantable drug administration ports in the out-of-hospital setting. (C-1)
 - 6-6.28 Describe the indications and contraindications for urinary catheter insertion in an out-of-hospital setting. (C-1)
 - 6-6.29 Identify the proper anatomy for placement of urinary catheters in males or females. (C-2)
 - 6-6.30 Identify failure of GI/ GU devices found in the home care setting. (C-2)
 - 6-6.31 Identify failure of ventilatory devices found in the home care setting. (C-2)
 - 6-6.32 Identify failure of vascular access devices found in the home care setting. (C-2)
 - 6-6.33 Identify failure of drains. (C-2)
 - 6-6.34 Differentiate between home care and acute care as preferable situations for a given patient scenario. (C-3)
 - 6-6.35 Discuss the relationship between local home care treatment protocols/ SOPs and local EMS Protocols/ SOPs. (C-3)
 - 6-6.36 Discuss differences in individuals' ability to accept and cope with their own impending death. (C-3)
 - 6-6.37 Discuss the rights of the terminally ill. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 6-6.38 Value the role of the home-care professional and understand their role in patient care along the life-span continuum. (A-2)
- 6-6.39 Value the patient's desire to remain in the home setting. (A-2)
- 6-6.40 Value the patient's desire to accept or deny hospice care. (A-2)
- 6-6.41 Value the uses of long term venous access in the home health setting, including but not limited to: (A-2)
 - a. Chemotherapy
 - b. Home pain management
 - c. Nutrition therapy
 - d. Congestive heart therapy
 - e. Antibiotic therapy

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 6-6.42 Observe for an infected or otherwise complicated venous access point. (P-1)
- 6-6.43 Demonstrate proper tracheotomy care. (P-1)
- 6-6.44 Demonstrate the insertion of a new inner cannula and/ or the use of an endotracheal tube to temporarily maintain an airway in a tracheostomy patient. (P-1)
- 6-6.45 Demonstrate proper technique for drawing blood from a central venous line. (P-1)
- 6-6.46 Demonstrate the method of accessing vascular access devices found in the home health care setting. (P-1)

Assessment Based Management

UNIT TERMINAL OBJECTIVE

- 7-1 At the completion of this unit, the paramedic student will be able to integrate the principles of assessment based management to perform an appropriate assessment and implement the management plan for patients with common complaints.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 7-1.1 Explain how effective assessment is critical to clinical decision making. (C-1)
- 7-1.2 Explain how the paramedic's attitude affects assessment and decision making. (C-1)
- 7-1.3 Explain how uncooperative patients affect assessment and decision making. (C-1)
- 7-1.4 Explain strategies to prevent labeling and tunnel vision. (C-1)
- 7-1.5 Develop strategies to decrease environmental distractions. (C-1)
- 7-1.6 Describe how manpower considerations and staffing configurations affect assessment and decision making. (C-1)
- 7-1.7 Synthesize concepts of scene management and choreography to simulated emergency calls. (C-3)
- 7-1.8 Explain the roles of the team leader and the patient care person. (C-1)
- 7-1.9 List and explain the rationale for carrying the essential patient care items. (C-3)
- 7-1.10 When given a simulated call, list the appropriate equipment to be taken to the patient. (C-2)
- 7-1.11 Explain the general approach to the emergency patient. (C-1)
- 7-1.12 Explain the general approach, patient assessment, differentials, and management priorities for patients with the following problems: (C-3)
- a. Chest pain
 - b. Medical and traumatic cardiac arrest
 - c. Acute abdominal pain
 - d. GI bleed
 - e. Altered mental status
 - f. Dyspnea
 - g. Syncope
 - h. Seizures
 - i. Environmental or thermal problem
 - j. Hazardous material or toxic exposure
 - k. Trauma or multi trauma patients
 - l. Allergic reactions
 - m. Behavioral problems
 - n. Obstetric or gynecological problems
 - o. Pediatric patients
- 7-1.13 Describe how to effectively communicate patient information face to face, over the telephone, by radio, and in writing. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 7-1.14 Appreciate the use of scenarios to develop high level clinical decision making skills. (A-2)
- 7-1.15 Defend the importance of considering differentials in patient care. (A-3)
- 7-1.16 Advocate and practice the process of complete patient assessment on all patients. (A-3)
- 7-1.17 Value the importance of presenting the patient accurately and clearly. (A-2)

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 7-1.18 While serving as team leader, choreograph the EMS response team, perform a patient assessment, provide local/ regionally appropriate treatment, present cases verbally and in writing given a moulaged and programmed simulated patient. (P-3)
- 7-1.19 While serving as team leader, assess a programmed patient or mannequin, consider differentials,

make decisions relative to interventions and transportation, provide the interventions, patient packaging and transportation, work as a team and practice various roles for the following common emergencies: (P-3)

- a. Chest pain
- b. Cardiac Arrest
 - 1. Traumatic arrest
 - 2. Medical arrest
- c. Acute abdominal pain
- d. GI bleed
- e. Altered mental status
- f. Dyspnea
- g. Syncope
- h. Seizure
- i. Thermal/ environmental problem
- j. Hazardous materials/ toxicology
- k. Trauma
 - 1. Isolated extremity fracture (tibia/ fibula or radius/ ulna)
 - 2. Femur fracture
 - 3. Shoulder dislocation
 - 4. Clavicular fracture or A-C separation
 - 5. Minor wound (no sutures required, sutures required, and high risk wounds, with tendon and / or nerve injury)
 - 6. Spine injury (no neurologic deficit, with neurologic deficit)
 - 7. Multiple trauma-blunt
 - 8. Penetrating trauma
 - 9. Impaled object
 - 10. Elderly fall
 - 11. Athletic injury
 - 12. Head injury (concussion, subdural/ epidural)
- l. Allergic reactions/ bites/ envenomation
 - 1. Local allergic reaction
 - 2. Systemic allergic reaction
 - 3. Envenomation
- m. Behavioral
 - 1. Mood disorders
 - 2. Schizophrenic and delusional disorders
 - 3. Suicidal
- n. Obstetrics/ gynecology
 - 1. Vaginal bleeding
 - 2. Childbirth (normal and abnormal)
- o. Pediatric
 - 1. Respiratory distress
 - 2. Fever
 - 3. Seizures

Operations

Ambulance Operations

UNIT TERMINAL OBJECTIVE

- 8-1 At the completion of this unit, the paramedic will understand standards and guidelines that help ensure safe and effective ground and air medical transport.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 8-1.1 Identify current local and state standards which influence ambulance design, equipment requirements and staffing of ambulances. (C-1)
- 8-1.2 Discuss the importance of completing an ambulance equipment/ supply checklist. (C-1)
- 8-1.3 Discuss the factors to be considered when determining ambulance stationing within a community. (C-1)
- 8-1.4 Describe the advantages and disadvantages of air medical transport. (C-1)
- 8-1.5 Identify the conditions/ situations in which air medical transport should be considered. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 8-1.6 Assess personal practices relative to ambulance operations which may affect the safety of the crew, the patient and bystanders. (A-3)
- 8-1.7 Serve as a role model for others relative to the operation of ambulances. (A-3)
- 8-1.8 Value the need to serve as the patient advocate to ensure appropriate patient transportation via ground or air. (A-2)

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 8-1.9 Demonstrate how to place a patient in, and remove a patient from, an ambulance. (P-1)

Medical Incident Command

UNIT TERMINAL OBJECTIVE

- 8-2 At the completion of this unit, the paramedic student will be able to integrate the principles of general incident management and multiple casualty incident (MCI) management techniques in order to function effectively at major incidents.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 8-2.1 Explain the need for the incident management system (IMS)/ incident command system (ICS) in managing emergency medical services incidents. (C-1)
- 8-2.2 Define the term multiple casualty incident (MCI). (C-1)
- 8-2.3 Define the term disaster management. (C-1)
- 8-2.4 Describe essential elements of scene size-up when arriving at a potential MCI. (C-1)
- 8-2.5 Describe the role of the paramedics and EMS systems in planning for MCIs and disasters. (C-1)
- 8-2.6 Define the following types of incidents and how they affect medical management: (C-1)
- a. Open or uncontained incident
 - b. Closed or contained incident
- 8-2.7 Describe the functional components of the incident management system in terms of the following: (C-1)
- a. Command
 - b. Finance
 - c. Logistics
 - d. Operations
 - e. Planning

- 8-2.8 Differentiate between singular and unified command and when each is most applicable. (C-3)
- 8-2.9 Describe the role of command. (C-1)
- 8-2.10 Describe the need for transfer of command and procedures for transferring it. (C-1)
- 8-2.11 Differentiate between command procedures used at small, medium and large scale medical incidents. (C-1)
- 8-2.12 Explain the local/ regional threshold for establishing command and implementation of the incident management system including threshold MCI declaration. (C-1)
- 8-2.13 List and describe the functions of the following groups and leaders in an ICS as it pertains to EMS incidents: (C-1)
 - a. Safety
 - b. Logistics
 - c. Rehabilitation (rehab)
 - d. Staging
 - e. Treatment
 - f. Triage
 - g. Transportation
 - h. Extrication/ rescue
 - i. Disposition of deceased (morgue)
 - j. Communications
- 8-2.14 Describe the methods and rationale for identifying specific functions and leaders for these functions in ICS. (C-1)
- 8-2.15 Describe the role of both command posts and emergency operations centers in MCI and disaster management. (C-1)
- 8-2.16 Describe the role of the physician at multiple casualty incidents. (C-1)
- 8-2.17 Define triage and describe the principles of triage. (C-1)
- 8-2.18 Describe the START (simple triage and rapid treatment) method of initial triage. (C-1)
- 8-2.19 Given a list of 20 patients with various multiple injuries, determine the appropriate triage priority with 90% accuracy. (C-3)
- 8-2.20 Given color coded tags and numerical priorities, assign the following terms to each: (C-1)
 - a. Immediate
 - b. Delayed
 - c. Hold
 - d. Deceased
- 8-2.21 Define primary and secondary triage. (C-1)
- 8-2.22 Describe when primary and secondary triage techniques should be implemented. (C-1)
- 8-2.23 Describe the need for and techniques used in tracking patients during multiple casualty incidents. (C-1)
- 8-2.24 Describe techniques used to allocate patients to hospitals and track them. (C-1)
- 8-2.25 Describe modifications of telecommunications procedures during multiple casualty incidents. (C-1)
- 8-2.26 List and describe the essential equipment to provide logistical support to MCI operations to include: (C-1)
 - a. Airway, respiratory and hemorrhage control
 - b. Burn management
 - c. Patient packaging/ immobilization
- 8-2.27 List the physical and psychological signs of critical incident stress. (C-1)
- 8-2.28 Describe the role of critical incident stress management sessions in MCIs. (C-1)
- 8-2.29 Describe the role of the following exercises in preparation for MCIs: (C-1)
 - a. Table top exercises
 - b. Small and large MCI drills

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 8-2.30 Understand the rationale for initiating incident command even at a small MCI event. (A-1)
- 8-2.31 Explain the rationale for having efficient and effective communications as part of an incident command/ management system. (A-1)

- 8-2.32 Explain why common problems of an MCI can have an adverse effect on an entire incident. (A-1)
 8-2.33 Explain the organizational benefits for having standard operating procedures (SOPs) for using the incident management system or incident command system. (A-1)

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 8-2.34 Demonstrate the use of local/ regional triage tagging system used for primary and secondary triage. (P-1)
 8-2.35 Given a simulated tabletop multiple casualty incident, with 5-10 patients: (P-1)
 a. Establish unified or singular command
 b. Conduct a scene assessment
 c. Determine scene objectives
 d. Formulate an incident plan
 e. Request appropriate resources
 f. Determine need for ICS expansion and groups
 g. Coordinate communications and groups leaders
 h. Coordinate outside agencies
 8-2.36 Demonstrate effective initial scene assessment and update (progress) reports. (P-1)
 8-2.37 Given a classroom simulation of a MCI with 5-10 patients, fulfill the role of triage group leader. (P-3)
 8-2.38 Given a classroom simulation of a MCI with 5-10 patients, fulfill the role of treatment group leader. (P-3)
 8-2.39 Given a classroom simulation of a MCI with 5-10 patients, fulfill the role of transportation group leader. (P-3)

Rescue Awareness and Operations

UNIT TERMINAL OBJECTIVE

- 8-3 At the completion of this unit, the paramedic student will be able to integrate the principles of rescue awareness and operations to safely rescue a patient from water, hazardous atmospheres, trenches, highways, and hazardous terrain.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 8-3.1 Define the term rescue. (C-1)
 8-3.2 Explain the medical and mechanical aspects of rescue situations. (C-1)
 8-3.3 Explain the role of the paramedic in delivering care at the site of the injury, continuing through the rescue process and to definitive care. (C-1)
 8-3.4 Describe the phases of a rescue operation. (C-1)
 8-3.5 List and describe the types of personal protective equipment needed to safely operate in the rescue environment to include: (C-1)
 a. Head protection
 b. Eye protection
 c. Hand protection
 d. Personal flotation devices
 e. Thermal protection/ layering systems
 f. High visibility clothing
 g. Specialized footwear
 8-3.6 Explain the differences in risk between moving water and flat water rescue. (C-1)
 8-3.7 Explain the effects of immersion hypothermia on the ability to survive sudden immersion and self rescue. (C-1)
 8-3.8 Explain the phenomenon of the cold protective response in cold water drowning situations. (C-1)
 8-3.9 Identify the risks associated with low head dams and the rescue complexities they pose. (C-1)
 8-3.10 Given a picture of moving water, identify and explain the following features and hazards associated with: (C-2)
 a. Hydraulics

- b. Strainers
- c. Dams/ hydro-electric sites
- 8-3.11 Explain why water entry or go techniques are methods of last resort. (C-1)
- 8-3.12 Explain the rescue techniques associated with reach-throw-row-go. (C-1)
- 8-3.13 Given a list of rescue scenarios, identify the victim survivability profile and which are rescue versus body recovery situations. (C-1)
- 8-3.14 Explain the self rescue position if unexpectedly immersed in moving water. (C-1)
- 8-3.15 Given a series of pictures identify which would be considered "confined spaces" and potentially oxygen deficient. (C-3)
- 8-3.16 Identify the hazards associated with confined spaces and risks posed to potential rescuers to include: (C1)
 - a. Oxygen deficiency
 - b. Chemical/ toxic exposure/ explosion
 - c. Engulfment
 - d. Machinery entrapment
 - e. Electricity
- 8-3.17 Identify components necessary to ensure site safety prior to confined space rescue attempts. (C-1)
- 8-3.18 Identify the poisonous gases commonly found in confined spaces to include: (C-1)
 - a. Hydrogen sulfide (H₂S)
 - b. Carbon dioxide (CO₂)
 - c. Carbon monoxide (CO)
 - d. Low/ high oxygen concentrations (FiO₂)
 - e. Methane (CH₄)
 - f. Ammonia (NH₃)
 - g. Nitrogen dioxide (NO₂)
- 8-3.19 Explain the hazard of cave-in during trench rescue operations. (C-1)
- 8-3.20 Describe the effects of traffic flow on the highway rescue incident including limited access superhighways and regular access highways. (C-1)
- 8-3.21 List and describe the following techniques to reduce scene risk at highway incidents: (C-1)
 - a. Apparatus placement
 - b. Headlights and emergency vehicle lighting
 - c. Cones, flares
 - d. Reflective and high visibility clothing
- 8-3.22 List and describe the hazards associated with the following auto/ truck components: (C-1)
 - a. Energy absorbing bumpers
 - b. Air bag/ supplemental restraint systems
 - c. Catalytic converters and conventional fuel systems
 - d. Stored energy
 - e. Alternate fuel systems
- 8-3.23 Given a diagram of a passenger auto, identify the following structures: (C-1)
 - a. A, B, C, D posts
 - b. Fire wall
 - c. Unibody versus frame designs
- 8-3.24 Describe methods for emergency stabilization using rope, cribbing, jacks, spare tire, and come-a-longs for vehicles found on their: (C-1)
 - a. Wheels
 - b. Side
 - c. Roof
 - d. Inclines
- 8-3.25 Describe the electrical hazards commonly found at highway incidents (above and below ground). (C-1)
- 8-3.26 Explain the difference between tempered and safety glass, identify its locations on a vehicle and how to break it safely. (C-3)
- 8-3.27 Explain typical door anatomy and methods to access through stuck doors. (C-1)
- 8-3.28 Explain SRS or "air bag" systems and methods to neutralize them. (C-1)

- 8-3.29 Define the following terms: (C-1)
 - a. Low angle
 - b. High angle
 - c. Belay
 - d. Rappel
 - e. Scrambling
 - f. Hasty rope slide
- 8-3.30 Describe the procedure for stokes litter packaging for low angle evacuations. (C-1)
- 8-3.31 Explain the procedures for low angle litter evacuation to include: (C-1)
 - a. Anchoring
 - b. Litter/ rope attachment
 - c. Lowering and raising procedures
- 8-3.32 Explain techniques to be used in non-technical litter carries over rough terrain. (C-1)
- 8-3.33 Explain non-technical high angle rescue procedures using aerial apparatus. (C-1)
- 8-3.34 Develop specific skill in emergency stabilization of vehicles and access procedures and an awareness of specific extrication strategies. (C-1)
- 8-3.35 Explain assessment procedures and modifications necessary when caring for entrapped patients. (C-1)
- 8-3.36 List the equipment necessary for an "off road" medical pack. (C-1)
- 8-3.37 Explain specific methods of improvisation for assessment, spinal immobilization and extremity splinting. (C-1)
- 8-3.38 Explain the indications, contraindications and methods of pain control for entrapped patients. (C-1)
- 8-3.39 Explain the need for and techniques of thermal control for entrapped patients. (C-1)
- 8-3.40 Explain the pathophysiology of "crush trauma" syndrome. (C-1)
- 8-3.41 Develop an understanding of the medical issues involved in providing care for a patient in a rescue environment. (C-1)
- 8-3.42 Develop proficiency in patient packaging and evacuation techniques that pertain to hazardous or rescue environments. (C-1)
- 8-3.43 Explain the different types of "stokes" or basket stretchers and the advantages and disadvantages associated with each. (C-1)

AFFECTIVE OBJECTIVES

None identified for this unit.

PSYCHOMOTOR OBJECTIVES

At the completion of this lesson, the paramedic student should be able to:

- 8-3.44 Using cribbing, ropes, lifting devices, spare tires, chains, and hand winches, demonstrate the following stabilization procedures: (P-1)
 - a. Stabilization on all four wheels
 - b. Stabilization on its side
 - c. Stabilization on its roof
 - d. Stabilization on an incline/embankments
- 8-3.45 Using basic hand tools demonstrate the following: (P-1)
 - a. Access through a stuck door
 - b. Access through safety and tempered glass
 - c. Access through the trunk
 - d. Access through the floor
 - e. Roof removal
 - f. Dash displacement/ roll-up
 - g. Steering wheel/ column displacement
 - h. Access through the roof
- 8-3.46 Demonstrate methods of "stokes" packaging for patients being: (P-1)
 - a. Vertically lifted (high angle)
 - b. Horizontally lifted (low angle)
 - c. Carried over rough terrain

- 8-3.47 Demonstrate methods of packaging for patients being vertically lifted without stokes litter stretcher packaging. (P-1)
- 8-3.48 Demonstrate the following litter carrying techniques: (P-1)
 - a. Stretcher lift straps
 - b. "Leap frogging"
 - c. Passing litters over and around obstructions
- 8-3.49 Demonstrate litter securing techniques for patients being evacuated by aerial apparatus. (P-1)
- 8-3.50 Demonstrate in-water spinal immobilization techniques. (P-1)
- 8-3.51 Demonstrate donning and properly adjusting a PFD. (P-1)
- 8-3.52 Demonstrate use of a throw bag. (P-1)

Hazardous Materials Incidents

UNIT TERMINAL OBJECTIVE

- 8-4 At the completion of this unit, the paramedic student will be able to evaluate hazardous materials emergencies, call for appropriate resources, and work in the cold zone.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 8-4.1 Explain the role of the paramedic/ EMS responder in terms of the following: (C-1)
 - a. Incident size-up
 - b. Assessment of toxicologic risk
 - c. Appropriate decontamination methods
 - d. Treatment of semi-decontaminated patients
 - e. Transportation of semi-decontaminated patients
- 8-4.2 Size-up a hazardous materials (haz-mat) incident and determine the following: (C-1)
 - a. Potential hazards to the rescuers, public and environment
 - b. Potential risk of primary contamination to patients
 - c. Potential risk of secondary contamination to rescuers
- 8-4.3 Identify resources for substance identification, decontamination and treatment information including the following: (C-1)
 - a. Poison control center
 - b. Medical control
 - c. Material safety data sheets (MSDS)
 - d. Reference textbooks
 - e. Computer databases (CAMEO)
 - f. CHEMTREC
 - g. Technical specialists
 - h. Agency for toxic substances and disease registry
- 8-4.4 Explain the following terms/ concepts: (C-1)
 - a. Primary contamination risk
 - b. Secondary contamination risk
- 8-4.5 List and describe the following routes of exposure: (C-1)
 - a. Topical
 - b. Respiratory
 - c. Gastrointestinal
 - d. Parenteral
- 8-4.6 Explain the following toxicologic principles: (C-1)
 - a. Acute and delayed toxicity
 - b. Route of exposure
 - c. Local versus systemic effects
 - d. Dose response
 - e. Synergistic effects
- 8-4.7 Explain how the substance and route of contamination alters triage and decontamination methods. (C-1)
- 8-4.8 Explain the limitations of field decontamination procedures. (C-1)

- 8-4.9 Explain the use and limitations of personal protective equipment (PPE) in hazardous material situations. (C-1)
- 8-4.10 List and explain the common signs, symptoms and treatment for the following substances: (C-1)
- Corrosives (acids/ alkalis)
 - Pulmonary irritants (ammonia/ chlorine)
 - Pesticides (carbamates/ organophosphates)
 - Chemical asphyxiants (cyanide/ carbon monoxide)
 - Hydrocarbon solvents (xylene, methylene chloride)
- 8-4.11 Explain the potential risk associated with invasive procedures performed on contaminated patients. (C-1)
- 8-4.12 Given a contaminated patient determine the level of decontamination necessary and: (C-1)
- Level of rescuer PPE
 - Decontamination methods
 - Treatment
 - Transportation and patient isolation techniques
- 8-4.13 Identify local facilities and resources capable of treating patients exposed to hazardous materials. (C-1)
- 8-4.14 Determine the hazards present to the patient and paramedic given an incident involving hazardous materials. (C-2)
- 8-4.15 Define the following and explain their importance to the risk assessment process: (C-1)
- Boiling point
 - Flammable/ explosive limits
 - Flash point
 - Ignition temperature
 - Specific gravity
 - Vapor density
 - Vapor pressure
 - Water solubility
 - Alpha radiation
 - Beta radiation
 - Gamma radiation
- 8-4.16 Define the toxicologic terms and their use in the risk assessment process: (C-1)
- Threshold limit value (TLV)
 - Lethal concentration and doses (LD)
 - Parts per million/ billion (ppm/ ppb)
 - Immediately dangerous to life and health (IDLH)
 - Permissible exposure limit (PEL)
 - Short term exposure limit (TLV-STEL)
 - Ceiling level (TLV-C)
- 8-4.17 Given a specific hazardous material be able to do the following: (C-1)
- Research the appropriate information about its physical and chemical characteristics and hazards
 - Suggest the appropriate medical response
 - Determine risk of secondary contamination
- 8-4.18 Determine the factors which determine where and when to treat a patient to include: (C-1)
- Substance toxicity
 - Patient condition
 - Availability of decontamination
- 8-4.19 Determine the appropriate level of PPE to include: (C-1)
- Types, application, use and limitations
 - Use of chemical compatibility chart
- 8-4.20 Explain decontamination procedures when functioning in the following modes: (C-1)
- Critical patient rapid two step decontamination process
 - Non-critical patient eight step decontamination process
- 8-4.21 Explain specific decontamination procedures. (C-1)

- 8-4.22 Explain the four most common decontamination solutions used to include: (C-1)
- Water
 - Water and tincture of green soap
 - Isopropyl alcohol
 - Vegetable oil
- 8-4.23 Identify the areas of the body difficult to decontaminate to include: (C-1)
- Scalp/ hair
 - Ears/ ear canals
 - Nostrils/Axilla
 - Finger nails
 - Navel
 - Groin/ buttocks/ genitalia
 - Behind knees
 - Between toes/toe nails
- 8-4.24 Explain the medical monitoring procedures material team members to be used both pre and post entry, to include: (C-1)
- Vital signs
 - Body weight
 - General health
 - Neurologic status
 - ECG
- 8-4.25 Explain the factors which influence the heat stress of hazardous material team personnel to include: (C-1)
- Hydration
 - Physical fitness
 - Ambient temperature
 - Activity
 - Level of PPE
 - Duration of activity
- 8-4.26 Explain the documentation necessary for Haz-Mat medical monitoring and rehabilitation operations. (C-1)
- The substance
 - The toxicity and danger of secondary contamination
 - Appropriate PPE and suit breakthrough time
 - Appropriate level of decontamination
 - Appropriate antidote and medical treatment
 - Transportation method
- 8-4.27 Given a simulated hazardous substance, use reference material to determine the appropriate actions. (C-3)
- 8-4.28 Integrate the principles and practices of hazardous materials response in an effective manner to prevent and limit contamination, morbidity, and mortality.

AFFECTIVE OBJECTIVES

None identified for this unit.

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 8-4.29 Demonstrate the donning and doffing of appropriate PPE. (P-1)
- 8-4.30 Set up and demonstrate an emergency two step decontamination process. (P-1)
- 8-4.31 Set up and demonstrate an eight step decontamination process. (P-1)

Crime Scene Awareness**UNIT TERMINAL OBJECTIVE**

- 8-5 At the completion of this unit, the paramedic student will have an awareness of the human hazard of crime and violence and the safe operation at crime scenes and other emergencies.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 8-5.1 Explain how EMS providers are often mistaken for the police. (C-1)
- 8-5.2 Explain specific techniques for risk reduction when approaching the following types of routine EMS scenes: (C-1)
 - a. Highway encounters
 - b. Violent street incidents
 - c. Residences and "dark houses"
- 8-5.3 Describe warning signs of potentially violent situations. (C-1)
- 8-5.4 Explain emergency evasive techniques for potentially violent situations, including: (C-1)
 - a. Threats of physical violence.
 - b. Firearms encounters
 - c. Edged weapon encounters
- 8-5.5 Explain EMS considerations for the following types of violent or potentially violent situations: (C-1)
 - a. Gangs and gang violence
 - b. Hostage/ sniper situations
 - c. Clandestine drug labs
 - d. Domestic violence
 - e. Emotionally disturbed people
 - f. Hostage/ sniper situations
- 8-5.6 Explain the following techniques: (C-1)
 - a. Field "contact and cover" procedures during assessment and care
 - b. Evasive tactics
 - c. Concealment techniques
- 8-5.7 Describe police evidence considerations and techniques to assist in evidence preservation. (C-1)

AFFECTIVE OBJECTIVES

None identified for this unit.

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 8-5.8 Demonstrate the following techniques: (P-1)
 - a. Field contact and cover procedures during assessment and care
 - b. Evasive tactics
 - c. Concealment techniques

Response to WMD Events-Georgia Requirement**UNIT TERMINAL OBJECTIVE**

- 5-15. At the completion of this unit, Emergency Medical Personnel will be able to respond to a Weapons of Mass Destruction event and protect themselves if exposure occurs.

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 5-15.1 Recognize the patient experiencing exposure to a Weapon of Mass Destruction, to include chemicals and radiation.
- 5-15.2 Describe the emergency medical care of the patient experiencing exposure to a Weapon of Mass Destruction.
- 5-15.3 List signs/symptoms associated with Weapons of Mass Destruction.
- 5-15.4 State the medication forms, dose, administration, action, and contraindications for the Mark I kit, Potassium Iodide, and Amyl Nitrite.
- 5-15.5 Differentiate between the general category of those patients exposed to a Weapon of Mass Destruction and those requiring immediate medical care, including immediate use of the Mark I kit, Potassium Iodide, and Amyl Nitrite.

AFFECTIVE OBJECTIVES

5-15.6 Explain the rationale for administering the Mark I kit, Potassium Iodide, and Amyl Nitrite.

PSYCHOMOTOR OBJECTIVES

5-15.7 Demonstrate the emergency medical care of the patient exposed to a Weapon of Mass Destruction.

5-15.8 Demonstrate the use of a Mark I Kit, Potassium Iodide, and Amyl Nitrite.

5-15.9 Perform the necessary steps required to provide a patient with a Mark I Kit, Potassium Iodide, and Amyl Nitrite.

5-15.10 Demonstrate the assessment and documentation of patient response to a Weapon of Mass Destruction.

5-15.11 Demonstrate the proper disposal of the Mark I Kit.

APPENDIX A – Anatomy & Physiology Objectives

The following list of objectives has been derived from many of the currently available resources in anatomy and physiology instruction that are typically part of allied health educational programs or other non-science curricula. The objectives that are listed below are in common with most of these programs. Paramedic education program should select courses or textbooks which cover this level of material. These objectives can be referenced to the 1998 release of the official US DOT Emergency Medical Technician – Paramedic National Standard Curriculum (disk 1, A&P Objectives). The Anatomy and Physiology Objectives can be satisfied in a stand alone course that meets the objectives, or these objectives can be met throughout the course in the pertinent area.

OBJECTIVES:

- AP-1 Define anatomy, physiology, and pathophysiology.
- AP-2 Name the levels of organization of the body and explain each.
- AP-3 Name the organ systems of the body.
- AP-4 Define homeostasis and give an example of a typical homeostatic mechanism.
- AP-5 Describe the anatomical position.
- AP-6 Describe the sagittal, midsagittal, transverse and frontal planes.
- AP-7 Use proper terminology to describe the location of body parts with respect to one another.
- AP-8 Name the body cavities, their membranes and some organs within each cavity.
- AP-9 Explain the four quadrants of the abdomen and name the organs in those areas.
- AP-10 Define matter, element, atom, proton, neutron, and electron.
- AP-11 Using symbols, name some common elements found in the body.
- AP-12 Describe the purpose of ionic, covalent and hydrogen bonds in the body.
- AP-13 Describe what happens in synthesis and decomposition reactions.
- AP-14 Explain the importance of water to the function of the body.
- AP-15 Describe where water is found in the body.
- AP-16 Explain the roles of oxygen and carbon dioxide in cell respiration.
- AP-17 Explain pH and state normal pH ranges in body fluids.
- AP-18 Explain how a buffer system resists major pH changes.
- AP-19 Describe the functions and types of sugars, fats, and proteins.
- AP-20 Explain how enzymes function as catalysts.
- AP-21 Describe the function of DNA, RNA and ATP.
- AP-22 Name the organic molecules that make up the cell membrane and state their functions.
- AP-23 State the arrangement of the molecules in the cell membrane.
- AP-24 State the five functions of proteins in the cell membrane.
- AP-25 Describe the cytoplasm.
- AP-26 Describe how the cell membrane regulates the composition of the cytoplasm.
- AP-27 Explain isotonic, hypotonic, and hypertonic solutions and their effects on the cell.
- AP-28 State the function of the nucleus and chromosomes.
- AP-29 Describe the function of the cell organelles.
- AP-30 Define each of these cellular transport mechanisms and give an example of the role of each in the body:
 - 1. diffusion,
 - 2. osmosis,
 - 3. facilitated diffusion,
 - 4. active transport,
 - 5. filtration,
 - 6. phagocytosis
 - 7. pinocytosis
- AP-31 Describe what happens in mitosis and meiosis and describe the importance of each.
- AP-32 Describe the four major categories of tissues and give general characteristics of each.
- AP-33 Describe the function of epithelial tissue depending on their location.
- AP-34 Describe the functions of connective tissue and relate them to the function of the body or an

- organ system.
- AP-35 Explain the basic differences between smooth, skeletal and cardiac muscle.
- AP-36 Describe in brief nervous tissue.
- AP-37 Name the organs made of nerve tissue.
- AP-38 Describe the location of pleural membranes, pericardial membranes, and the perineum-mesentery.
- AP-39 State the location of mucous membranes and state the function of mucus.
- AP-40 Name some membranes made of connective tissue.
- AP-41 State the three functions of the integumentary system.
- AP-42 Name the two layers of skin.
- AP-43 State the location and function of the stratum corneum and the stratum germinativum.
- AP-44 Describe the function of melanocytes and melanin.
- AP-45 Describe the function of hair and nails.
- AP-46 Describe the functions of the secretions of sebaceous glands, ceruminous glands and eccrine sweat glands.
- AP-47 Describe how the arterioles in the dermis respond to heat, cold, and stress
- AP-48 Name the tissues that make up the subcutaneous tissue and describe their functions
- AP-49 Describe the function of the skeleton
- AP-50 Explain how bones are classified and give an example of each
- AP-51 Describe how the embryonic skeleton is replaced by bone
- AP-52 State the nutrients necessary for bone growth
- AP-53 Name the hormones involved in bone growth and maintenance
- AP-54 Explain what is meant by exercise for bones and explain its importance
- AP-55 Identify the two major subdivisions of the skeleton and list the bones in each area
- AP-56 Explain how joints are classified; give an example of each and describe the movements possible
- AP-57 Describe the parts of a synovial joint and explain their function
- AP-58 Describe muscle structure in terms of muscle cells, tendons and bones
- AP-59 Describe the difference between antagonistic and synergistic muscles
- AP-60 Name the energy sources for muscle contraction and state the simple equation for cell r respiration
- AP-61 Explain the importance of hemoglobin and myoglobin and oxygen debt and lactic acid
- AP-62 Describe the neuromuscular junction and explain the function for each part
- AP-63 Describe the structure of a sarcomere
- AP-64 Explain polarization, depolarization and repolarization in terms of ions and charges
- AP-65 Describe the sliding filament theory of muscle contraction
- AP-66 State the major muscles of the body and their functions
- AP-67 Name the divisions of the nervous system and state the general functions of each
- AP-68 Name the parts of a neuron and the function of each
- AP-69 Explain the importance of Schwann cells in the peripheral nervous system and neuroglia in the central nervous system
- AP-70 Describe the electrical nerve impulse and impulse transmission at the synapse
- AP-71 Describe the types of neurons, nerves and nerve tracts
- AP-72 Explain the importance of stretch reflexes and flexor reflexes
- AP-73 Describe the reflex arc
- AP-74 State the functions of the parts of the brain and locate each part on a diagram
- AP-75 Name the meninges and describe their locations
- AP-76 State the locations and functions of cerebrospinal fluid
- AP-77 Explain the general purpose of sensations
- AP-78 Name the parts of the sensory pathway and the general functions of each part
- AP-79 Describe the characteristics of sensations
- AP-80 Name the cutaneous senses and explain their purpose
- AP-81 Explain referred pain and explain its importance
- AP-82 Explain the importance of proprioception, or muscle sense
- AP-83 Describe the pathways for the senses of smell and taste and explain how these senses are interrelated

- AP-84 Name the parts of the eye and explain their function in sight
- AP-85 Name the parts of the ear and explain their function in hearing
- AP-86 Describe the physiology of equilibrium
- AP-87 Distinguish between endocrine and exocrine glands
- AP-88 Define hormone and prostaglandin
- AP-89 Identify the primary endocrine glands and list the major hormones secreted by each
- AP-90 Explain the roles of positive and negative feedback mechanisms in hormone secretions
- AP-91 Describe the relationship between parathyroid hormone and calcitonin
- AP-92 Describe the relationship between insulin and glucagon
- AP-93 Explain what prostaglandins are made of and state some of their functions
- AP-94 Explain how protein hormones are believed to exert their effects
- AP-95 Explain how steroid hormones are believed to exert their effects
- AP-96 Describe the primary functions of blood
- AP-97 List the formed elements of blood and state the primary functions of each
- AP-98 Name the hemopoietic tissues and the kinds of blood cells each produces
- AP-99 Describe what happens to red blood cells at the end of their life span including the fate of hemoglobin
- AP-100 Explain the ABO and Rh blood types
- AP-101 Name the five kinds of white blood cells and the functions of each
- AP-102 State what platelets are and explain how they are involved in hemostasis
- AP-103 Describe the three stages of blood clotting
- AP-104 Explain how abnormal clotting is prevented in the vascular system
- AP-105 Describe the location of the heart in terms of body cavities and relationship to other structures
- AP-106 Name the chambers of the heart and the vessels that enter or leave each
- AP-107 State the valves of the heart and their function
- AP-108 State how heart sounds are created
- AP-109 Trace the pathway of a blood cell throughout the body
- AP-110 Describe coronary circulation
- AP-111 Describe the cardiac conduction pathway and its relationship to a normal electrocardiogram
- AP-112 Explain stroke volume, cardiac output and Starling's law of the heart
- AP-113 Explain how the nervous system regulates the function of the heart
- AP-114 Describe the structure and function of each of the blood vessels: arteries, veins and capillaries
- AP-115 Describe the exchange of gases that occur at the capillary level
- AP-116 Name the major systemic arteries and the parts of the body they nourish
- AP-117 Name the major systemic veins and the parts of the body they drain of blood
- AP-118 Define blood pressure and state the normal ranges for the systolic and diastolic indices
- AP-119 Describe the functions of the lymphatic system
- AP-120 State how lymph is formed
- AP-121 Describe the system of lymph vessels and explain how lymph is returned to the blood
- AP-122 State the location and function of lymph nodules and nodes
- AP-123 State the location and function of the spleen
- AP-124 Define immunity
- AP-125 Explain the role of the thymus in immunity
- AP-126 Explain the differences between humoral immunity and cell mediated immunity
- AP-127 Compare and contrast the development and function of B cells and T cells
- AP-128 Describe the differences between acquired immunity and genetic immunity
- AP-129 Explain how vaccines work
- AP-130 State the general function of the respiratory system
- AP-131 State the pathway of the respiratory system including nasal cavities, pharynx and larynx
- AP-132 State the function of the turbinates in the nasal cavity
- AP-133 Describe the structure and function of the larynx and the speaking mechanism
- AP-134 State the roles of the visceral and parietal pleura in respiration
- AP-135 State the changes in air pressure within the thoracic cavity during respiration
- AP-136 Explain the diffusion of gases in external and internal respiration
- AP-137 Describe how oxygen and carbon dioxide are transported in the blood
- AP-138 Explain the nervous and chemical mechanisms that regulate respiration

- AP-139 Explain how respiration affects the pH of certain body fluids
- AP-140 Describe the general function of the digestive system and name the major divisions
- AP-141 Identify the accessory organs of digestion
- AP-142 Explain the difference between mechanical and chemical digestion
- AP-143 Describe the structure and function of the teeth and tongue
- AP-144 Explain the function of saliva
- AP-145 Describe the location and function of the pharynx and esophagus
- AP-146 List and describe the four layers of the alimentary canal
- AP-147 Describe the difference in absorption between the large and small intestine
- AP-148 Describe the function of the normal flora in the colon
- AP-149 Define peristalsis
- AP-150 Define chyme
- AP-151 State the normal range of body temperature
- AP-152 Define metabolism, catabolism and anabolism
- AP-153 State the different ways heat is generated and lost in the body
- AP-154 State why the hypothalamus is the thermostat of the body
- AP-155 State what the products of cell respiration are and how the body disposes of them
- AP-156 Describe the metabolic roles of fats, glucose and proteins
- AP-157 Describe basal metabolic rate and the factors that affect it
- AP-158 Define kilocalories
- AP-159 Describe the water compartments and the name for the water in each
- AP-160 Explain how water moves between the compartments
- AP-161 Explain how water is taken in by the body and exits the body
- AP-162 Describe the location and general function of each organ in the urinary system
- AP-163 Name the parts of a nephron
- AP-164 Define glomerular filtration rate
- AP-165 Describe how the kidneys function in maintaining normal blood volume and pressure
- AP-166 Describe how the kidneys help to maintain normal blood pH and electrolyte balance
- AP-167 State the hormones that affect kidney function
- AP-168 Explain the interaction between capillary blood pressure and blood proteins
- AP-169 Describe the characteristics of normal urine
- AP-170 Define diploid and haploid
- AP-171 Describe the difference between spermatogenesis and oogenesis
- AP-172 Define gametes
- AP-173 Name the hormones necessary for the formation of gametes
- AP-174 List the essential and accessory organs of the male and female, give the general function of each
- AP-175 Identify and describe the structures that constitute external genitals in both sexes
- AP-176 Name the parts of a sperm cell
- AP-177 Define endometrium
- AP-178 Briefly describe the life cycle of an oocyte
- AP-179 Describe the menstrual cycle in terms of change in hormone levels and the condition of the endometrium
- AP-180 Beginning with fertilization, describe the major developmental changes during gestation
- AP-181 Describe the structure and function of the placenta and umbilical cord
- AP-182 Describe the difference between fetal circulation/respiration and adult circulation/respiration
- AP-183 State the length of an average gestation period
- AP-184 Describe the states of labor
- AP-185 Describe the major changes that take place in an infant at birth
- AP-186 Explain how microorganisms are named and classified
- AP-187 Describe the distribution of and the benefits of normal flora
- AP-188 Explain what is meant by infectious disease
- AP-189 Describe the different methods by which infectious diseases are spread
- AP-190 List some important infectious diseases
- AP-191 Define genetic disease
- AP-192 Explain how genes can cause disease

- AP-193 Define homologous chromosomes, autosomes, sex chromosomes and genes
- AP-194 Define alleles, genotype, phenotype, homozygous, and heterozygous
- AP-195 Discuss the difference between dominant and recessive traits
- AP-196 List some important genetic diseases

APPENDIX B CLINICAL OBJECTIVES

The following goals must be successfully accomplished within the context of the learning environment. Clinical experiences should occur after the student has demonstrated competence in skills and knowledge in the didactic and laboratory components of the course. If the program is unable to achieve the recommendations on live patients, alternative learning experiences (recently expired patients, animal laboratories, etc.) can be developed. If alternatives to live patient contact are used, the program should consider increasing the number of times the skill must be performed to demonstrate competence.

Programs are encouraged to adjust these recommendations based on thorough program evaluation. For example, if the program finds that graduates perform poorly in airway management skills, they should increase the number of intubations and ventilations required for graduation and monitor the results.

PSYCHOMOTOR SKILLS

The student must demonstrate the ability to safely administer medications.

The student should safely, and while performing all steps of each procedure, properly administer medications at least 15 times to live patients.

The student must demonstrate the ability to safely perform endotracheal intubation.

The student should safely, and while performing all steps of each procedure, successfully intubate at least 5 patients. Patients should be alive or recently expired. Animal laboratory experience may be substituted for human patients.

The student must demonstrate the ability to safely gain venous access in all age group patients.

The student should safely, and while performing all steps of each procedure, successfully access the venous circulation at least 20 times on live patients of various age groups.

The student must demonstrate the ability to effectively ventilate unintubated patients of all age groups.

The student should effectively, and while performing all steps of each procedure, ventilate at least 5 live patients of various age groups.

AGES

The student must demonstrate the ability to perform a comprehensive assessment on pediatric patients.

The student should perform a comprehensive patient assessment on at least 5 (including newborns, infants, toddlers, and school age) pediatric patients.

The student must demonstrate the ability to perform a comprehensive assessment on adult patients.

The student should perform a comprehensive patient assessment on at least 20 adult patients.

The student must demonstrate the ability to perform a comprehensive assessment on geriatric patients.

The student should perform a comprehensive patient assessment on at least 10 geriatric patients.

PATHOLOGIES

The student must demonstrate the ability to perform a comprehensive assessment on obstetric patients.

The student should perform a comprehensive patient assessment on at least 5 obstetric patients.

The student must demonstrate the ability to perform a comprehensive assessment on trauma patients.

The student should perform a comprehensive patient assessment on at least 20 trauma patients.

The student must demonstrate the ability to perform a comprehensive assessment on psychiatric patients.

The student should perform a comprehensive patient assessment on at least 5 psychiatric patients.

COMPLAINTS

The student must demonstrate the ability to perform a comprehensive assessment, formulate and implement a treatment plan for patients with chest pain.

The student should perform a comprehensive patient assessment, formulate and implement a treatment plan on at least 5 patients with chest pain.

The student must demonstrate the ability to perform a comprehensive assessment, formulate and implement a treatment plan for patients with dyspnea/respiratory distress.

The student should perform a comprehensive patient assessment, formulate and implement a treatment plan on at least 5 patients with dyspnea/respiratory distress.

The student must demonstrate the ability to perform a comprehensive assessment, formulate and implement a treatment plan for patients with syncope.

The student should perform a comprehensive patient assessment, formulate and implement a treatment plan on at least 5 patients with syncope.

The student must demonstrate the ability to perform a comprehensive assessment, formulate and implement a treatment plan for patients with abdominal complaints.

The student should perform a comprehensive patient assessment, formulate and implement a treatment plan on at least 5 patients with abdominal complaints (for example: abdominal pain, nausea/vomiting, GI bleeding, gynecological complaint, etc.)

The student must demonstrate the ability to perform a comprehensive assessment, formulate and implement a treatment plan for patients with altered mental status.

The student should perform a comprehensive patient assessment, formulate and implement a treatment plan on at least 5 patients with altered mental status.

TEAM LEADER SKILLS

The student must demonstrate the ability to serve as a team leader in variety of prehospital emergency situations.

The student should serve as the team leader for at least 10 prehospital emergency responses.

Proposed Minimum Paramedic Clinical Requirements

Procedure	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1.1 Medication Administration																x	x	x	x	x
1.2 Endotracheal Intubation						x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
1.3 Venous Access																				
1.4 Ventilate Unintubated patients						x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
1.5 Pediatric Assessments						x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
1.6 Adult Assessments																				
1.7 Geriatric Assessments											x	x	x	x	x	x	x	x	x	x
1.8 Obstetric Assessments						x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
1.9 Trauma Assessments																				
1.10 Psychiatric Assessments						x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
2.1 Chest pain Management						x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
2.2 Respiratory Distress Management						x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
2.3 Syncope Management						x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
2.4 Abdominal Complaint Management						x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
2.5 Altered Mental Status Management						x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
2.6 Prehospital Team Leader Responses											x	x	x	x	x	x	x	x	x	x

 <p>DHR GEORGIA DEPARTMENT OF HUMAN RESOURCES</p>	<p>Department of Human Resources Division of Public Health Office of Emergency Medical Services</p>	<p>Index: R-T-05A Effective: 08/15/2006 Review: 08/15/2007 Page: 1 of 1</p>
---	--	--

CONTINUING EDUCATION APPROVAL REQUEST OUTLINE

This is a resource document for Georgia Department of Human Resources-Rules and Regulations 290-5-30.13: License Renewal for Emergency Medical Services Personnel and OEMS Procedure T-05: Continuing Education for License Renewal. Statewide approval of continuing education must be issued by the State Office of Emergency Medical Services/Trauma. The following information is required in order to review your training and/or educational program prior to approving continuing education content and assignment of credit hours for Georgia licensed EMS personnel. Incomplete proposals will not be reviewed, but will be returned to the applicant.

1. Applicant Name, with contact information, to include email, and office and fax numbers
2. Program Director with contact information, to include e-mail
3. Clinical Director with contact information, to include e-mail
4. Primary contact person, with contact information, to include e-mail
5. A listing of program courses/activities for review (approval is awarded to only the subject topics, modules or subcomponents, activities and/or sections submitted)
6. Request of continuing education hour assignment
 - a. Submission of the continuing education hours requested per topic, module, section, or activity.
7. A sample Certificate of Completion for a course/activity that identifies acceptance or approval of a state or national agency
8. A sample advertisement indicating how our State agency name would be used, if applicable
9. Data collected –
 - a. Student information
 - b. Lesson and exam information
10. Content and Development
 - a. Name or names and qualifications of the developers of the content being submitted for review
 - b. Date of content or course/activity development
 - c. Description of how and when up-dates or relevance of the materials are reviewed
 - d. Objectives of the course/activity
11. Instructor availability, technical support and/or on-line assistance to students
12. Testing and Evaluations
 - a. A description of how students are evaluated at course completion. Successful completion must require no less than 70% success rate on evaluations of material comprehension. Submit policy as presented to students regarding exam requirements.
 - b. Student evaluation of course/activity must be collected. Submit a copy of this evaluation tool.

	Department of Human Resources Division of Public Health Office of Emergency Medical Services	Index: R-T-05B Effective: 08/15/2006 Review: 08/15/2007 Page: 1 of 2
---	---	---

ASSIGNMENT OF CONTINUING EDUCATION HOURS GUIDELINES FOR DISTRIBUTED EDUCATION

This is a resource document for Georgia Department of Human Resources-Rules and Regulations 290-5-30.13: License Renewal for Emergency Medical Services Personnel and OEMS Procedure T-05: Continuing Education for License Renewal. The following are guidelines used by the SOEMS in determining credit hour assignment for continuing education courses/activities offered in the form of distributed learning. Hours will be assigned based on length of presentation, level of difficulty, and time required to complete the assessment. There is obviously a certain level of subjectivity inherent in evaluation of these courses/activities. These guidelines are a measure to increase consistency and standardize the application review process. There are differences anticipated in individual learners that may not be accounted for during the review process. The SOEMS reserves the right to have a reviewer of equal level of training as the targeted learner review the material prior to hour assignment.

- A. Distributive Education Models
 - 1. Print Documents-In instances where the number of written words is known or obtainable, hour assignment will be based on the ability of adults to read between 150 and 250 words per minute. For non-electronic based documents, hours are assigned based on the actual time of the reviewer to read and complete the material and/or activities.
 - 2. Video/DVD and other Visual Media Presentations-Hours are assigned based on the actual running time of the presentation when watched by the reviewer of the materials.
 - 3. On-Line Web-based Presentations-Hours are assigned based on the actual time for the reviewer to complete the course/activity.
 - 4. CD-ROM Presentations-Hours are assigned based on the actual time for the reviewer to complete the course/activity.

- B. Degree of Difficulty-If content is determined to be greater than average level of difficulty and is supported by the objectives of the course/activity, the reviewer may assign 0.5 additional hours of continuing education to allow for this. For example, a course on obtaining a field impression of myocardial infarction using 12 lead electrocardiograms would be rated as more difficult content than how to obtain a field impression of a hip fracture.

- C. Course/Activity Completion Evaluations-These are awarded credit hours based on the number of questions on the assessment. Each question is allotted one (1) minute of time. For example, a ten (10) question assessment would be allotted ten (10) minutes for completion.

- D. Assignment of Total Continuing Education Hours-This is calculated by adding the amount of time to complete the course/activity plus any allowance for increased level of difficulty of the material plus the amount of time required to complete the completion assessment. For example, a video presentation that takes forty-five (45) minutes to watch followed by a fifteen (15) question assessment would be assigned 1.0 hour of continuing education credit.

Georgia Emergency Medical Technician: Basic 24 Hour EMT-Basic Refresher Course

Requires Submission of FORM T-05A: Application for Course Approval-Continuing Education

The following modules are required for the successful completion of an approved 24 Hour Georgia EMT-Basic Refresher Course and are a pre-requisite for the Georgia EMT-Intermediate Refresher Course. Objectives for these modules are located in R-T04C: EMS Curricula Standards for EMS Programs.

Georgia EMT-Basic Refresher	Module	Topic	Hours
	1	Preparatory	1
	2	Airway	4
	3	Patient Assessment	3
	4	Medical/Behavioral	4
	5	Trauma	6
	6	OB, Infants, Children	4
		Verification of all EMT-Basic Practical Skills	2
	Total hours for Georgia EMT-Basic Refresher		24

Emergency Medical Technician: Intermediate 36 Hour EMT-I Refresher Course

Requires Submission of FORM T-05A: Application for Course Approval-Continuing Education

The Pre-requisite for the Georgia EMT-Intermediate Refresher Course is the completion of the 24 hour Georgia EMT-Basic Refresher Course. The following Modules are in addition to the Georgia EMT-Basic Refresher Course. Objectives for these modules are located in R-T04C: EMS Curricula Standards for EMS Programs.

Georgia EMT-Basic Refresher	Total hours for Georgia EMT-Basic	24
Georgia EMT-Intermediate Refresher	Total hours for Georgia EMT-Intermediate	12
	Airway Management and Ventilation (4)	
	General Patient Assessment and Initial Management (4)	
	Assessment and Management of Shock (4)	
	Total hours for Georgia EMT-Intermediate Refresher	36

**Emergency Medical Technician – Paramedic
48 Hour EMT-Paramedic Refresher Course**

Requires Submission of FORM T-05A: Application for Course Approval-Continuing Education

The following modules are required for the successful completion of an approved 48 Hour Georgia EMT-Paramedic Refresher Course. Objectives for these modules are located in R-T04C: EMS Curricula Standards for EMS Programs.

Georgia EMT-Paramedic Refresher	Module Topic	Hours
	Airway, Breathing and Cardiology	16
	Medical Emergencies	8
	Trauma	6
	Obstetrics and Pediatrics	16
	Practical Skills Verification	2
	Total hours for Georgia EMT-Paramedic Refresher	48

Georgia EMT Refresher Course Record

EMT-B Refresher

Module	Module Topic	Hours	Date	Hours	Initial
1	Preparatory	1			
2	Airway	4			
3	Patient Assessment	3			
4	Medical/Behavioral	4			
5	Trauma	6			
6	OB, Infants, Children	4			
	EMT-B Practical Skills	2			
Total Hours for EMT-B Refresher		24			

EMT-I Refresher

Module Topic	Hours	Date	Hours	Initial
Georgia EMT-B Refresher (above)	24	Documented above.		
Airway Management & Ventilation	4			
General Patient Assessment and Initial Management	4			
Assessment and Management of Shock	4			
Total Hours for EMT-I Refresher	36			

EMT-P Refresher

Module Topic	Hours	Date	Hours	Initial
Airway, Breathing, and Cardiology	16			
Medical Emergencies	8			
Trauma	6			
Obstetrics and Pediatrics	16			
Practical Skills Verification	2			
Total Hours for Paramedic Refresher	48			

My signature below verifies completion of required refresher hours to be considered for relicensure for :

Printed name of EMT: _____ Georgia License # & Level: _____

Licensed Instructor's Signature: _____ Instr. # _____ Date: _____

The instructor (not the EMT) must date, assign hours, and initial the highlighted areas above in handwriting only.