

# *What U.S. Adoption of AACN Means*

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## Agenda:

- Description of the Challenge
- Status of 911 & Efforts to Date
- Emergency Medical Services & Efforts to Date



## **National 911 Program**



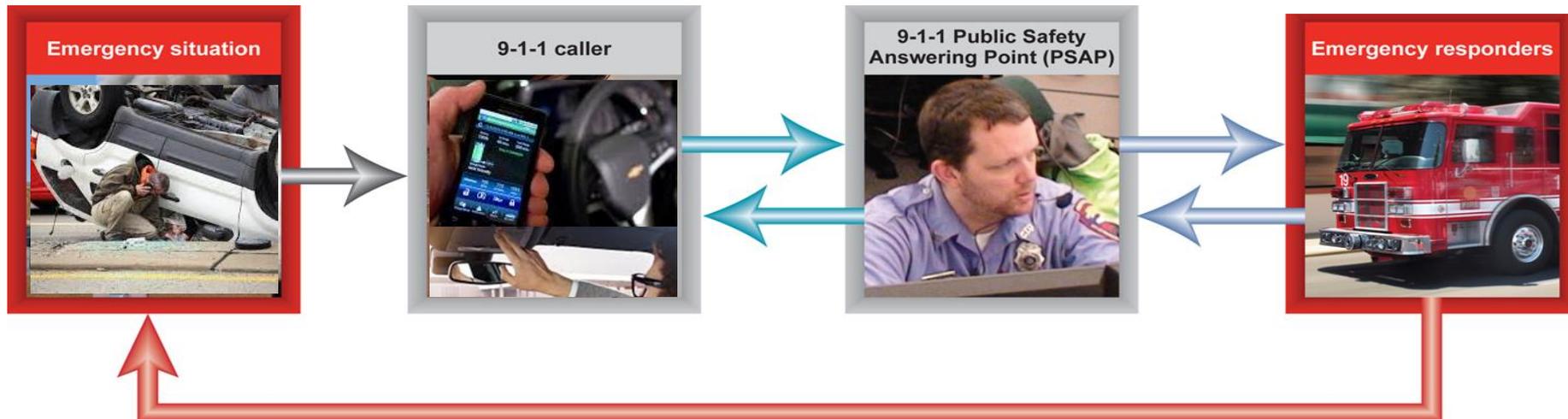
Mission: To provide Federal leadership and coordination in supporting and promoting optimal 911 services. This Federal "home" for 911 plays a critical role by coordinating 911 efforts, creating 911 resources, and administering the 911 Grant Program.

## **EMS Program**



Mission: To reduce death and disability by providing leadership and coordination to the EMS community in assessing, planning, developing and promoting comprehensive, evidence-based EMS and 911 systems.

# *More Complicated than other Auto-“centric” Issues*



## To be successful, must be adopted by:

- 1) Auto Industry
- 2) 911 Community
- 3) Emergency Medical Services & Trauma Services

# *The U.S. 911 System*

- More than 240 million calls per year
- 70-80% of calls from Cell Phones
- 6,000-7,000 Public Safety Answering Points (PSAPs)
  - 66-75% are small (2-5 seats)
  - <10% are very large (e.g., NYC, Chicago)
- Very decentralized governance and operation (state/local)
- Protocol driven – (opportunity\*\*\*)



## *Transition of the 911 System*

Legacy 911	Next Generation 911
Virtually all calls are voice callers via telephones using analog lines to access PSAP.	Voice, text, or video information, from many types of communication devices, sent over IP networks
Most information transferred via voice, very limited data capability	Advanced data sharing is automatically performed
Callers routed through legacy selective routers, limited forwarding / backup ability	Physical location of PSAP becomes immaterial, callers routed automatically based on geographic location, enhanced backup and resiliency
Only back-up: PSAP next door (maybe) Connection to other PSAPs: None	Multiple back-up possibilities Connection to all other PSAPs
Limited ability to handle overflow situations, callers could receive a busy signal	PSAPs able to control call congestion treatment, including dynamically rerouting callers



## ***Status of Next Generation 911 Deployment***

<b>Data Element</b>	<b>2011 Data by Reporting States</b>	<b>2013 Data by Reporting States</b>	<b>2014 Data by Reporting States</b>	<b>2015 Data by Reporting States</b>
<b>Statewide NG911 Plan Adopted</b>	9 of 27	15 of 39	19 of 42	<b>20 of 46</b>
<b>Statewide Request for Proposal Released</b>	Not Reported	13 of 36	18 of 42	<b>19 of 46</b>
<b>State Contract Has Been Awarded</b>	Not Reported	13 of 29	16 of 42	<b>18 of 46</b>
<b>Statewide Installation and Testing</b>	Not Reported	9 of 30	11 of 42	<b>17 of 46</b>

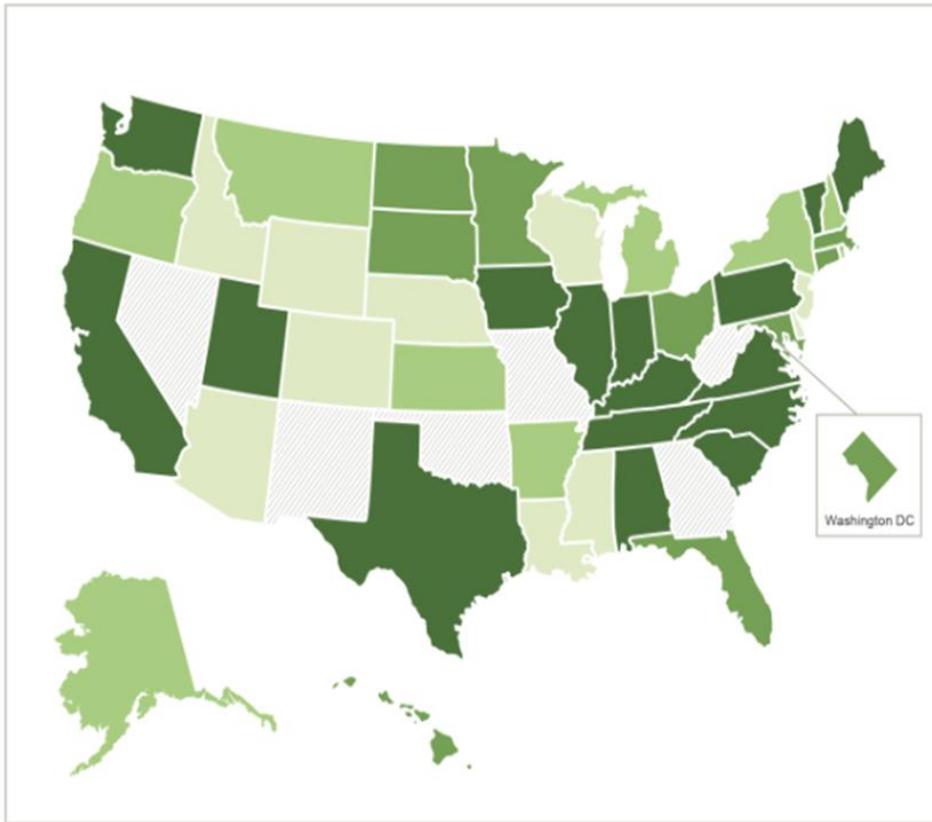


## Percentage of PSAPs States that are connected to Operational Emergency Services IP Network

Of the 45 reporting States:

- 10 States have 100% of PSAPs connected
- 10 States have some of PSAPs connected
- 19 States do not have PSAPs connected
- 6 States are “unknown” - State did not respond to this data element.

# Operational Next Generation 911 Components



- American Samoa
- Guam
- Northern Mariana Islands
- Puerto Rico
- US Minor Outlying Islands
- US Virgin Islands

**Operational NG911 Systems defined as processing voice calls (ANI & ALI) using IP infrastructure**

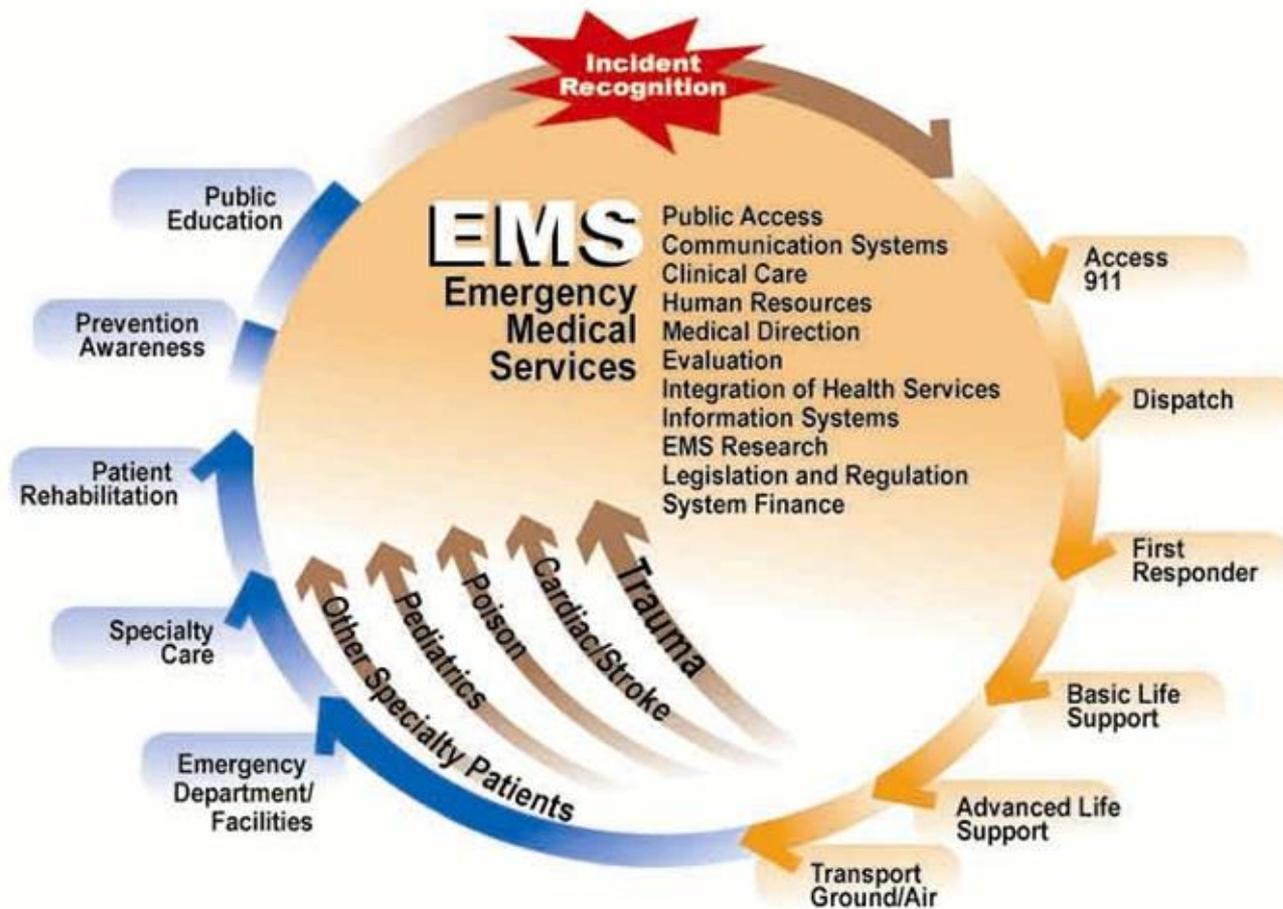
*\*\*States may not have completed implementation statewide*



# ***U.S. EMS System***

- More than 21,000 state licensed local EMS agencies (National EMS Assessment 2011)
- Almost 1 million licensed EMS Professionals (NASEMSO survey 2009)
- 37 million calls for EMS service in 2009, resulting in 28 million transports (NASEMSO, 2009)
- Very decentralized governance and operation (state/local)
- Evidence-based practice & protocols (EMS Medical Directors - ER docs) - (opportunity\*\*\*)
- Trauma System - a subset of the EMS system (Trauma Surgeons)

# The Emergency Medical Services System





## **Guidelines for Field Triage of Injured Patients 2011**

- Step One**            **Vital Signs**  
Blood pressure, Respiratory rate, Level of consciousness
- Step Two**            **Signs of Obvious Injury**  
Penetrating injuries, Chest deformity, 2 long-bone fractures  
Crushed or mangled extremity, Amputation, Pelvis fractures  
Open or depressed skull fracture, Paralysis
- Step Three**         **Mechanism of Injury**  
Falls (Adults: >20 feet; Children: >10 feet),  
High-risk auto crash (>12 inches Intrusion, Ejection,  
Passenger Death, **Vehicle telemetry data consistent with a  
high risk of injury**, Auto vs. pedestrian/bicyclist thrown,  
Motorcycle crash >20 mph
- Step Four**            **Special Considerations**  
Elderly, Children, Burns, Pregnancy, Medical Conditions,\  
EMS judgment