



# Safe Communities: An Approach to Reduce Traffic Injuries

In 1995, the National Highway Traffic Safety Administration distributed a short summary, "Putting It Together: A Model for Integrating Injury Control System Elements," describing how prevention, acute care, and rehabilitation need to work together to make progress in reducing injuries. This injury control approach has application to traffic safety. One way to get the injury control system components to work together to reduce injuries is through a Safe Communities approach. This paper discusses the Safe Communities concept as a strategy for addressing motor vehicle injuries at the local level.

## Background

The past several decades have witnessed dramatic advances in medical care and shifts in health behaviors. Despite these advances, injuries remain a major health care problem, and the leading cause of death for persons from age 1 to 44. Fatalities, however, are only a small part of the total injury picture. For each injury-related death, there are 19 injury hospitalizations and over 300 injuries that require medical attention. Each year, one in four Americans will have a potentially preventable injury serious enough to require medical care. These injuries account for almost 10 percent of all physician office visits and 38 percent of all emergency department visits. For an individual, these injuries vastly diminish quality of life. For society, injuries pose a significant drain on the health care system, incurring huge treatment, acute care, and rehabilitation costs. Motor vehicle injuries, in particular, are the leading cause of all injury deaths and the leading cause of death for each age from 6 through 28. Motor vehicle-related injuries are the principal cause of on-the-job fatalities, and the third largest cause of all deaths in the United States: only heart attacks and cancer kill more people. However, far more people are injured and survive motor vehicle crashes than die in these crashes. In 1995, for example, while more than 41,500 persons were killed in motor-vehicle related crashes, over 3.4 million were injured in police-reported crashes; an even greater number utilized emergency departments. These injured persons often require medical care and many require long-term care. The economic costs of these injuries are enormous, costing this country over \$150.5 billion each year in economic costs and \$17 billion in medical costs.

The vast majority of these injuries and deaths are not acts of fate, but are predictable and preventable. Injury patterns, including traffic-related injury patterns, vary by age group, gender, and cultural group. There are also seasonal and geographic patterns to injury. Once the cause of injuries is identified, interventions can be designed to address the cause and reduce the number of injuries.

## Community-Based Approaches: Illustrations from Traffic Safety

American traffic safety advocates have traditionally worked in partnerships with many organizations and groups to achieve a successful, long, and established history in preventing and reducing traffic-related injuries and fatalities. For over 15 years, community-based traffic safety programs have been and remain an effective means for identifying local crash problems and providing local solutions.

**Community Traffic Safety Programs (CTSPs)** were an outgrowth of the successful occupant protection and anti-drunk driving programs of the 1970s and 1980s. Historically, CTSPs combined two or more traffic safety countermeasures or interventions to address such local problems as impaired driving and infrequent use of child safety seats and safety belts. Over time, in various combinations that were appropriate to a specific community, citizen advocacy groups, law enforcement, business, public health agencies, education, the courts, and the media combined efforts by forming coalitions with elected officials and other community leaders to develop solutions to local traffic safety problems.

A variation on CTSPs emerged in the early 1990s with **Corridor Safety Improvement Programs (CSIPs)**. CSIPs addressed a variety of traffic safety concerns along a roadway corridor and emphasized engineering improvements to reduce crashes along the roadway.

The hybrid **Corridor/Community Traffic Safety Program (C/CTSP)** combines the best elements of both programs and incorporates a multi-disciplinary approach to highway safety to maximize traffic safety benefits and efficiently use resources. C/CTSPs have been organized within the public sector, often within a police or public health agency, or as a separate arm of regional, county, or city government. Most have a task force or advisory committee comprised of representatives from several public and private sector agencies, as well as community citizens.

## A New Generation of Community Programs

### The Origins of Safe Communities Approaches

The Safe Communities concept began in Sweden in the mid-1970s when a community health care unit selected injuries as one of its projects for preventive health care. The objectives of the “accident” prevention project were to (1) reduce injury rates and eliminate causes of injuries; (2) motivate citizens to assume responsibility for injury prevention; (3) obtain program buy in and acceptance from citizens as well as local government and community institutions; and (4) evaluate program results through data collection on injuries as well as awareness and attitude surveys.

From this initial “project,” the Safe Communities concept spread to other Swedish communities and is now sponsored under the auspices of the World Health Organization (WHO). The idea behind this international movement is that communities undertake a systematic approach to address all injuries. In doing

so, an interdisciplinary coalition responsible for injury prevention is established. In addition, Safe Community programs are citizen-based, document the frequency and causes of injury, cover all ages and all injuries, design interventions to address high risk groups and vulnerable populations, and are long-term (rather than short-term) in their focus.

## Applications to Traffic Safety

Safe Communities also makes sense in the United States. However, in the American approach to the Safe Communities concept, the immediate goal is not to develop programs to be sponsored by WHO, but rather to use the Safe Communities concept to initiate a new generation of community programs that address traffic-related injuries within the context of all injuries. Some communities have had successful C/CTSPs in place and will be able to build on their existing structure. These communities are in a unique position to go beyond traditional approaches to traffic safety problems by identifying their other injury problems and thereby entering a new era of implementing solutions. Some C/CTSPs are already incorporating characteristics of a Safe Community within their existing program. For them, a transition to a Safe Community is within easy reach. Other communities will start from scratch. Between these two extremes is a continuum of community programs incorporating a Safe Communities concept.

Although communities have the option to select one or more injury prevention priorities, starting with one may be more practical. Beginning with traffic safety makes sense because (1) it is manageable; (2) it is often the largest part of a community's injury problem; (3) proven countermeasure strategies are readily available; and (4) it is possible to retrieve accessible data to document the problems and measure the impact of program strategies. Including traffic safety within the larger injury problem (1) allows traffic safety professionals to leverage resources and share strategies and ideas with others who are working similar problems; and (2) enhances the visibility of existing programs — such as Campaign Safe and Sober — designed to achieve national, state and local traffic safety goals.

## What are Safe Communities?

### Defining Characteristics

Safe Communities and C/CTSPs share many common elements, such as coalition building, problem identification, task forces and/or advisory committees, combining resources, and implementing solutions to address problems. However, there are also differences. As the Safe Communities concept addresses **all** injuries, traffic safety becomes positioned within the context of the entire injury problem. In addition, Safe Communities emphasizes the need for coordination among prevention, acute care, and rehabilitation efforts.

**Analysis of data from multiple sources** is critical because Safe Communities expands problem identification beyond just fatalities to include injuries as well as the medical and financial outcomes of injuries. Police crash reports tell only part of the story, so new databases need to be accessed. Medical records completed at the scene, en route, at the emergency department, during and after admission to the hospital, at the time of rehabilitation or death, and by insurance companies

become sources of data that can provide information on the type and severity of injury and the cost of treatment. By examining multiple sources of data, communities can better understand the magnitude and consequences of the traffic injury problem and monitor progress in reducing the problem.

Some communities may be able to link data sources. In such cases, linkage of the crash record with injury data sources makes it possible to identify the medical and financial consequences of specific vehicle, crash, and human factors for those persons involved in motor vehicle crashes. Because the linked data are person-specific and include everyone involved, specific populations at risk can be identified, matched to the most effective countermeasures, and measured to determine reductions in injuries and costs. Linked data can be used to make resource allocation decisions for those countermeasures that will have the most impact on reducing not only injuries but also health care costs.

Whether linking data or analyzing different data sources, the use of different databases requires the collaboration of the owners and users of the data being linked. This collaboration strengthens the expanded partnerships which are necessary to support the Safe Communities process.

**Expanded partnerships** are important to solve local injury problems effectively through comprehensive and collaborative strategies. Traffic safety advocates have long recognized that traffic problems are too complex and resources too limited for them to solve in isolation. As a result, over the years, the traffic safety community has worked with law enforcement, local government, schools, courts, business, health departments, and community and advocacy organizations to reduce traffic injuries. Safe Communities continues to work with these existing partners, but also seeks to expand the partnership base to actively involve the medical, acute care, and rehabilitation communities. These groups, which have traditionally been focused on treating disease, need to be engaged as integral partners in preventing injuries.

Safe Communities enlists business and employers as full partners in community injury prevention activities. Employers need to understand how traffic-related injuries contribute to their overall costs, and how participation in community-wide injury prevention efforts can help them reduce their own costs due to motor vehicle injuries. Through partnerships and collaboration, Safe Communities spreads program ownership and delivery systems throughout the community. Finally, Safe Communities provides an opportunity for traditional traffic safety partners — such as law enforcement and schools — to understand better the linkages among risk-taking behaviors. For example, individuals who commit traffic offenses may also be involved with other kinds of problem or illegal behaviors.

<b>New Thinking About Community Programs</b>	
<b>Current Program Emphasis</b>	<b>Evolving Program Emphasis</b>
Reducing fatalities	Reducing fatal and non-fatal injuries and health care and social costs
Traffic safety as the objective	Traffic safety integrated into broader injury control efforts
Prevention-based solutions	Systems-based solutions (integration of

	prevention, acute care, rehabilitation)
Agency-based delivery system	Community/citizen ownership
Traditional traffic safety partners	Adds new or expanded health, injury, business, and government partners
Administrative evaluation	Impact evaluation/cost benefit analysis

**Citizen involvement and input** are essential to establish community priorities for identified problems. Town meetings are routinely used to solicit citizen input and feedback about community injury problems. Individual citizens are actively involved identifying, designing, and implementing solutions to their injury problems. Citizens actively participate in problem identification, assume responsibility and ownership for shaping solutions, and share in both the successes and challenges of their program.

An **integrated and comprehensive injury control system** is used, incorporating prevention, acute care, and rehabilitation as active and essential participants in solving community injury problems. This is the crux of the Safe Communities approach, and often one or more of these groups have not traditionally been involved in addressing community traffic injury problems. Involvement of the three component groups will not happen overnight or in every community, but it is something to strive for over time.

A focus on data linkage, expanded partnerships, citizen involvement in setting priorities, and integrated and comprehensive injury control defines Safe Communities. The Safe Communities approach represents an evolutionary (rather than revolutionary) way in which community programs are established and managed. This “shift” is summarized in the table above. Community partners participate as equals in developing solutions, sharing success, assuming programming risks, planning for self-sufficiency, and building a community infrastructure and process for continual improvement of community life through reduction of traffic-related injuries, fatalities, and costs.

## On the Road to Safe Communities

What can existing community programs do to move towards Safe Communities? One approach may be to revisit community programs, keeping in mind the “defining characteristics” of Safe Communities as discussed above. Existing programs have advantages: an infrastructure to implement programs, resources, established relationships, and credibility in the community. These programs may also have the disadvantage of being “set” in the way they do business; however, they can also broaden their scope to include Safe Community concepts. One way to start is by posing the following questions:

- ▶ How could a community traffic safety coalition be expanded to position traffic safety within the broader injury problem?
- ▶ What kinds of additional data are needed to understand traffic injuries and

their costs better?

- ▶ How would a community go about securing these additional data?
- ▶ What would it take to expand partnerships, and what do we want the “new” partners to do?
- ▶ How do “new” partners interface with existing partners?
- ▶ How can citizens be actively involved in setting priorities, program design and program implementation?

A community without a currently existing CTSP, CSIP, or C/CTSP can incorporate the Safe Communities approach to injury control from the inception of a new program. A catalyst for starting a Safe Community can come from anywhere in the community. In this case, while a community would still start with basic coalition building, it would build a coalition addressing all injuries. Traffic safety would become one component of this new coalition. The coalition would identify data sources to determine the community’s injury problems. Citizens, as part of the coalition, would then design and implement solutions for addressing the identified problems.

Every community interested in meeting the challenges of injury control has a variety of options. A community may want to add incrementally to existing programs or may determine to begin a new program by initiating all of the Safe Community elements. Because each community is unique, the determination must be made at the local level. The constantly expanding partnerships that have sustained the traffic safety movement for almost three decades will see new alliances and new ways to prevent injuries where they happen — at the local level.

