Lessons Learned

as reported by

The Core State Injury Program Grantees

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Disease Control and Prevention
Coordinating Center for Environmental Health and Injury Prevention
National Center for Injury Prevention and Control

Compiled and edited by Joseph W. Russel, Public Health Advisor, Division of Injury Response (DIR), National Center for Injury Prevention and Control (NCIPC). Special appreciation is expressed to John Seggerson, Angela Marr, Kelly Sarmiento, the NCIPC/DIR Program Team, and the Core State Injury Grantees for their valuable contributions to this brochure.

Lessons Learned about Core State Injury and Surveillance Programs

Reported by the

Core State Injury Program Grantees

Over a five-year period (2000–2005), the Centers for Disease Control and Prevention (CDC), National Center for Injury Prevention and Control (NCIPC), funded 28 state health departments* to develop, implement, and evaluate core injury prevention and surveillance programs. At the conclusion of the five year period, states were asked to share with CDC and other states, *lessons learned* during the implementation of these programs. The *lessons learned* were submitted to CDC in the state's "Final Progress Report." The NCIPC Division of Injury Response aggregated and synthesized the *lessons learned,* which are presented in this brochure. They provide useful tips to help state health departments and their partners in planning and conducting injury prevention activities.

The *lessons learned* in this brochure are sorted into eight categories: Collect, Analyze, and Report Injury Data; Implementation and Evaluation; Organizational Strength; Staffing; Funding; Establishing Partnerships, Advisory Groups, and an Injury Strategic Plan; Providing Technical Support and Training; and Affect of Advocacy, Education, and Program Visibility on Public Policy.

* Alabama, Arizona, Arkansas, Colorado, Delaware, Georgia, Hawaii, Illinois, Indiana, Kansas, Massachusetts, Michigan, Minnesota, Nebraska, Nevada, New Hampshire, New Mexico, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Rhode Island, Utah, Vermont, Washington, West Virginia, and Wisconsin.

Collect, Analyze, and Report Injury Data

State health departments are important providers and consumers of public health data and collect information on injury and death from county health departments, local jurisdictions, clinics, and hospitals. The states share this information with national and federal agencies, such as CDC, and also use injury data to understand local trends, assess injury prevention needs at community levels, select proven or promising interventions, measure whether or not the interventions are effective, and help guide professionals in selecting injury prevention strategies to target the groups that need them the most.

Collect Injury Data

There are many sources of information about injuries, including: hospital emergency department records, vital records (death statistics), hospital discharge data, crime reports, and spinal cord and traumatic brain injury registries. Some injury data systems involve counting actual events (deaths and nonfatal injuries), or aspects of the injury (causes, location, and severity). Other data collection efforts seek information on contributing factors (e.g. seatbelt use, impaired driving, and violence) that place individuals at risk for an injury.

Lessons Learned

- Surveillance is the structure upon which injury prevention activities should be designed and evaluated.
- National guidelines on injury-related definitions and categories are useful for reporting, collecting, and analyzing injury data.
- Small start-up or "pilot" projects may be valuable ways to educate partners about the importance of quality data assessment, as well as development and refinement of data sets to support best-practice strategies in injury prevention.
- Injury planners should take into account that primary databases used for injury data analyses (e.g. vital records, hospital inpatient, and emergency department) are usually not available until 18 to 24 months after the end of the year (the delay of vital records is related to the final determination of the cause of death). Hospital and emergency departments may require formal processes for release of the data and also intensive review to ensure data accuracy.
- Hospital and emergency departments should follow standardized protocols for ensuring accuracy prior to releasing data. Hospitals should designate a contact person in the medical records department to facilitate data collection efforts and also maintain a record of cases reviewed but not entered into the database.
- Health departments should provide oversight for the collection and reporting of injury data to ensure that hospitals, emergency departments and others follow standard protocols (i.e., review of submitted data for quality assurance as well as periodic site visits, followed by confirmation of site visits, thank-you letters, and a list of missing medical records).
- When health departments and their partners wish to conduct a special study and expand the injury surveillance system to incorporate additional priority injury areas (e.g., suicide/attempts), it is helpful to obtain a health department commissioner's mandate to report those conditions for the special study.

Analyze Injury Data

Health department epidemiologic expertise is utilized to analyze injury data for completeness and accuracy, injury trends, and injury prevention planning and evaluation purposes. Routine evaluations of data quality help programs improve not only their own systems, but also their contributions to larger national efforts.

Lessons Learned

- Linking injury databases across state agencies may not be feasible due to the disparities between databases.
- Data analysis procedures should be standardized and documented in order to ensure continuity and minimize duplication of efforts.
- Ongoing quality assurance helps to verify the reliability of data. When quality assurance parameters are built into the data entry system, less time is needed to clean up data.
- Health department injury prevention staff may need to allow extra time if injury-related data is requested from an agency outside of their immediate organization, such as a Health Statistics Office. This is especially true when an outside agency must be relied upon to review and adjust data, finalize data sets, conduct analyses, and prepare the related reports.
- The Health and Hospital Association emergency department data set may be used to monitor less-severe acute or chronic injuries.
- Projects requiring medical record review require extensive staff time and should only be considered when sufficient funding is available ($80,000–$100,000 or more, depending on the project).

Report Injury Data

As with other types of surveillance data, injury data reports have many uses. Sometimes, reports confirm what is expected. However, in other instances, injury data indicate something new and important that may not have been identified. Often data spark a new line of inquiry, as researchers and policymakers may need to seek more information and/or solutions.

Lessons Learned

- Reporting timelines must be coordinated with data availability.
- Data reports should be user-friendly and useful to different audiences.
- Documents always take longer to produce than expected.
- It is important to allow sufficient time for publication approval at the upper management levels.
- Smaller focused bulletins and fact sheets require fewer resources than large, comprehensive state injury reports and are often equally effective.
- If additional injury-related data are desired and funds are available, questions may be added to the state Behavioral Risk Factor Surveillance System survey to obtain the data.

Implementation and Evaluation

Evaluations are important at every stage of intervention design and implementation. In theory, many interventions sound promising. However, between the drawing board and practical application, much can happen. Evaluation built in from the very beginning of every intervention helps managers to understand how and why an intervention worked, or why it did not. For this reason, information and experience gained from failed interventions may become useful tools for researchers and injury prevention program staff, as they are able to adjust current or future interventions so that they will have greater chances of success.

Lessons Learned

- The State and Territorial Injury Prevention Directors Association's, State Technical Assessment Team Review visits are helpful, but require adequate follow-up by the state program staff to ensure that recommendations are implemented.
- Key stakeholder surveys should be utilized, as the results may provide valuable insight into how the injury prevention program is viewed by stakeholders, how services are used, and how satisfied the stakeholders are with program services. Partners should agree on the purpose of the survey, what will be assessed, what survey tools will be used, and how the survey will be conducted, evaluated, and reported.

Organizational Strength

Solid infrastructure and organizational strength indicate a strong foundation of core capacity, leadership, and coordination for systematically addressing the many causes of injury and the populations at risk. Solid organizational strength provides an injury focal point and direction for the many aspects of an effective program and helps to make the best use of limited resources.

Lessons Learned

- Integration of a state's Injury Epidemiology Program with the Injury Prevention Program makes cross-training possible and enhances the development of close working relationships.
- Flexibility within injury surveillance and prevention activities is essential when confronting obstacles, building and strengthening partnerships, and meeting the different needs of the health department and the larger prevention community.
- Involvement of the State Health Director or the Secretary of the State Department of Health and Human Services may enhance the programmatic stature of the state injury program. For example, high level officials can mandate injury surveillance and violence prevention to support public health and they can effectively advocate for enabling legislation for injury surveillance.
- Collaboration across disciplines must be fostered when establishing and composing state-legislated task forces or leadership teams related to injury surveillance and prevention.
- Going from idea to planning to implementation takes time. Injury prevention staff must learn from the experiences of others and methodically persist in building successful programs.

Staffing

Staffing encompasses the workforce of the injury prevention program including full-time, part-time, and volunteer staff.

Lessons Learned

- Staffing of a core injury prevention program should include managerial, epidemiologic, and programmatic skills. Program management and epidemiologists require separate skill sets and more than one person may be needed to perform the duties.
- State injury programs should have staff dedicated specifically to injury-related epidemiology and data collection/analysis.
- Qualified staff must be expeditiously hired and retained. Inability to do this may adversely affect and/or delay implementation of injury prevention activities and achievement of a program's objectives.
- Sustained employment of a full-time state injury program coordinator helps to provide cohesion, build relationships, and support partnership activities.
- Public health professionals trained in injury epidemiology are needed. In many ways, epidemiologists significantly enhance the Injury Prevention Program (i.e., completing data tables that serve as a foundation for injury reports; creating the injury hospitalization module for the Web-based query system; conducting analyses for brief reports and fact sheets; responding to custom data requests; and preparing data tables for CDC's *State Injury Indicators Reports*). Epidemiologists who teach graduate-level courses on injury epidemiology and prevention cannot only train future injury epidemiologists, but may also help identify qualified graduates for health department Injury Prevention Program positions.

Funding

Funding is important for ongoing injury prevention activities. The common themes centered on funding include: the need for resources to sustain the injury program, limited resources, lack of state support, and the need for political support.

Lessons Learned

- States cannot rely on CDC resources alone to advance an injury prevention agenda. Dedicated state funds and political support are essential to sustain program infrastructure and core functions.
- Additional funds needed to further develop a state injury prevention program are often difficult to obtain due to budget constraints.
- Coordination of injury prevention activities can be complicated by funding "silos" and funding agencies' requirements.
- Injury programs compete for funding with high-powered programs (i.e. pandemic flu, bioterrorism, infectious diseases, and laboratories); injury programs need to identify opportunities to collaborate with outside programs and share resources.
- CDC's grants are small compared with the significant resources needed to develop, implement, and sustain injury prevention programs. Funding limitations affect a program's ability to expand injury surveillance, for example, to develop the Crash Outcome Data Evaluation System and the National Violent Death Reporting System. Small, supplemental grants can yield results when efforts are strategically focused.
- CDC funding has helped the states to effectively use data to assess the magnitude of injury and risk factors, identify gaps in knowledge and program coverage, and plan prevention initiatives.

Establishing Partnerships, Advisory Groups, and an Injury Strategic Plan

State injury prevention program staff collaborate with internal and external partners who assist with fulfilling the mission, vision, and values associated with injury prevention activities, such as the development of an advisory group and the development of a state injury prevention plan. Injury prevention programs and staff collaborate with other offices or areas that have a stake in injury prevention, as no one program or agency has enough resources and expertise to adequately prevent injuries in isolation. Collaboration helps integrate injury prevention into the work of other departments and organizations and helps ensure that scarce resources are used wisely.

Partnerships

Potential internal and external partners may include: offices within the state health department (such as Maternal and Child Health, Occupational Health, and Epidemiology), other state agencies (e.g. Justice, Law Enforcement, Education, and Transportation), advocacy groups, hospitals, professional groups (e.g. EMS providers, emergency department nurses and physicians, and police officers), county health departments and local jurisdictions, community-based and statewide organizations, federal agencies, and other national organizations.

Lessons Learned

- Injury prevention is much broader than any one agency and requires cooperation among multiple agencies and associations.
- Partners are vital to advancing an injury program. They can be powerful advocates for programs and critical issues. Often, colleagues outside the state system are the most influential advocates.
- An effective planning partner may not be the best partner for implementation. Cultivating partners with various strengths is important and takes time.
- Figure out who your partners should be; identify potential prevention strategies; and bring the partners together.
- Promotion and development of sustainable injury prevention coalitions must be viewed as long-term goals and be approached with great flexibility and creativity given the distance coalition members often must travel within the state, as well as potential language barriers among members. Coordination with multiple groups/organizations and cultivating partnerships takes time.
- An in-depth assessment of an injury issue may have great influence. When injury reports are generated from well-documented assessments and potential partners are educated about the issue, interest is sparked and prevention initiatives can be developed. Ultimately, such an assessment enhances a state's ability to evaluate its prevention strategies and obtain resources to support the launch of interventions at the community level.
- It is important to collaborate with state academic institutions and research centers that have established interests in injury surveillance and prevention.
- Inter-state collaboration is needed to standardize injury surveillance methods and practices.
- Because injury prevention is multifaceted, states should not act unilaterally in prevention and control efforts. Instead, states should collaborate and coordinate efforts with partners.
- Collaboration will function more efficiently when guided by a detailed memorandum of understanding, will help to cultivate better working relationships among partner agencies, and yield better results.
- Local collaboration may be solicited and enhanced when injury prevention staff and epidemiologists train local and regional injury prevention partners and providers.

Advisory Groups

Internal and external partners compose state injury prevention Advisory Groups. An Advisory Group is responsible for promoting the vision and values of a state injury prevention program, developing or updating the state injury prevention plan, and implementing injury prevention activities. Advisory Groups maximize the talents and strengths of the membership and each year they work on new projects with specific goals and objectives in mind.

Lessons Learned

- Collaboration with partner agencies and organizations via an Advisory Group is extremely useful in developing programs and reports. When an Advisory Group drives the planning process, the resulting "buy-in" among partners can have significant political implications.
- An Advisory Group's role and purpose must be clearly defined. Partners must have a clear understanding of how their input will be used.
- Often, the direction taken by the Advisory Group will depend on its current leadership and members in attendance at a meeting.
- It is important for the Advisory Group to meet regularly. It helps to promote attendance when a partner organization is able to provide lunches for the Advisory Group meetings.
- It is helpful to have the Advisory Group involved early on in the development of a state's injury strategic plan and other injury reports and strategies.
- Members of the Advisory Group understandably come to the table with their own specific organizational injury issues and individual time constraints. However, Advisory Group members may be willing to participate on work groups that address topics of mutual interest. Convening large groups to develop a document will have the best chance of success if smaller sub-committee groups are formed to focus on specific tasks.
- Since it is impossible to address all injury related issues, it may be reasonable to focus efforts on a few priority areas that are common among a large percentage of group members.
- Travel distance may obstruct participation of individual Advisory Group members. This may be resolved by identifying travel funds or by utilizing conference calls, teleconferences, and/or regional meetings.

Injury Strategic Plan

The injury strategic plan normally includes a mission statement, a description of long-term goals and objectives, and strategies for achieving the goals and objectives set forth. The strategic plan may also identify external factors that could affect achievement of long-term goals.

Lessons Learned

- The process of developing a state injury strategic plan is time consuming and labor intensive.
- It is important to maintain momentum after completing the state's injury strategic plan in order to offset the challenges of moving into the implementation phase.

Providing Technical Support and Training

Federal and state injury prevention program staff may provide consultation and support related to the collection, analysis, and dissemination of data from surveillance systems, building and sustaining coalitions and meaningful partnerships, and designing and evaluating programs and interventions. State injury prevention staff often provide training to other state and local professionals, such as those in collaborating agencies (e.g. local health departments, emergency medical services providers, hospitals, coalitions, highway safety, and education), local professionals who deal with injury risk factors and consequences in their own work (e.g., emergency medical technicians, police, nurses, counselors, fire fighters, and school staff), and the general public.

Lessons Learned

- Sharing information and learning from other states provides practical and valuable information.
- Regularly scheduled conference calls and grantee meetings provide a forum for interaction with other states and CDC staff and are valuable ways to learn about activities in other states.
- State injury prevention staff can improve program quality by sharing best practices, building coalitions, evaluating programs, and offering technical assistance to other state and local agencies.

Affect of Advocacy, Education, and Program Visibility on Public Policy

Policy changes normally represent the culmination of a long process of building a scientific evidence base, working with coalitions of stakeholders to determine the best policy solution to an injury problem, and convincing advocates and policymakers that the policy solution is appropriate and will save lives or reduce injuries.

Lessons Learned

- "Buy-in" at multiple levels of government (state and local level) and at the community level (individual, organizational, and political) is necessary to develop priorities and program support. State injury prevention staff must optimize opportunities to educate stakeholders (insurance companies, private businesses, professional associations, non-profit agencies, etc.) about how injury prevention can benefit and improve the health of their stakeholders and communities. Legislative staffers and other policymakers must be informed about injury prevention activities and updated when new data become available. For example, state injury prevention program staff may review and recommend proposed legislation, provide oral testimony on issues relevant to injury prevention, offer findings from surveillance data to help identify injury problems within the state, as well as assess legislation from other states.
- Businesses benefit by establishing injury prevention policies that can reduce absenteeism when workers follow injury prevention practices at both home and work.
- Legislation is an integral component of a successful injury prevention program. State health departments often rely on partners (i.e. nongovernmental agencies, businesses, medical and professional organizations, and advocacy groups) to move legislation forward.

- Injury program staff and partners should be willing to promote injury surveillance legislation, data collection initiatives, and violence prevention programs related to education, law enforcement, public health, and bio-terrorism preparedness. Promotion of injury prevention initiatives may be done via websites, public service announcements, and marketing campaigns developed by the state's injury Advisory Group.
- Statewide educational initiatives such as conferences or symposiums should be planned at the onset of a project to encourage widespread participation.
- Program visibility and timely dissemination of injury-related information can be increased by establishing a website for unintentional injuries and violence.
- Program visibility is essential to acquiring resources. Continual efforts to increase public awareness and education are essential in keeping injury prevention at the forefront of a state's agenda.

Conclusion

The above *lessons learned* represent important experience gained by state injury prevention program staff and their partners in designing and implementing injury prevention efforts. These *lessons learned* provide valuable information, which can help states learn from each other and build upon experiences of other state injury programs.

Reference

State and Territorial Injury Prevention Directors Association. *Safe States, 2003 Edition*. Atlanta (GA): State and Territorial Injury Prevention Directors Association; 2003.