SAFE STATES

ESTABLISHING INJURY AND VIOLENCE SURVEILLANCE SYSTEMS POSITION STATEMENT

Safe States Alliance supports the establishment and maintenance of federal and state based injury and violence surveillance systems including analysis and dissemination of results by:

- Collaborating and supporting federal agencies and states in establishing, maintaining, improving, analyzing and disseminating results from injury and violence surveillance systems.
- Encouraging the use of several national data systems useful for injury and violence surveillance including, but not limited to, the relevant data systems detailed in Tables 1-3.
- Recommending 14 injuries and risk factors and 11 data sets[1] continue to be the minimal core data collected by states, with additional consideration for other areas, such as non-fatal assaults and violence.
- Encouraging the expansion of states' access to hospital and emergency department data.
- Encouraging the linkage of relevant data sets.

Background

Injury and violence surveillance is the ongoing, systematic collection, analysis, interpretation, and dissemination of data to stimulate public health action to reduce injury-related morbidity, mortality, and disability[2]. These data are extremely useful tools for health departments to understand the magnitude of injuries and violence, identify risk and protective factors, identify at-risk populations, and target and evaluate prevention policies and interventions. They are the basis for informing our communities about injuries and guide the choice of intervention options.

The Safe States Alliance has played a key role in the development of injury and violence indicators, definitions and data sources, and has a large stake in promoting the development of injury and violence surveillance at the state and local level. The Consensus Recommendations for Injury Surveillance in State Health Departments provides a detailed guide for states in developing, sustaining, and enhancing their standardized injury and violence prevention surveillance systems. Eleven core data sets (Table 1) have been identified that provide information about 14 major injury risks (Table 2) that represent a high burden of mortality and morbidity. Most of these databases are either operated independently by each state, such as vital records, hospital discharge data, emergency department, emergency medical services (EMS) and medical examiner/coroner databases; or the state participates individually in a nationally managed data system, such as the Behavioral Risk Factors Surveillance System (BRFSS), Youth Risk Behavior Surveillance System (YRBSS) or Child Death Review, as well as the death data sets in the National Vital Records System managed through the National Center for Health Statistics.

The use of standardized injury and violence surveillance data is critical so that comparisons or aggregations can be made across states and territories and to guide states as they design injury and

[1] Safe States Alliance. Consensus Recommendations for Injury Surveillance in State Health Departments. September 2007.
[2] Horan J, Mallonee S. Injury Surveillance. Epidemiology Rev 2003;25:24-52.

violence surveillance systems and interventions. Linking data sets has also become increasingly important to get a comprehensive understanding of injury and violence events.

A dissemination plan is a critical part the system and states should strive to have the data available electronically at the state and local level. Adequate capacity to collect, analyze and disseminate the data in each state is essential. This requires each to have appropriately trained staff in injury surveillance and epidemiology.

Safe States Alliance promotes the use of national data systems as well as state and local data systems. Several nationally collected data systems are very useful for injury and violence surveillance (see Tables 1-3). As additional data has become available it can be used by states[3] to drive prevention policies and activities.

For additional information:

Safe States Alliance, http://www.safestates.org

Centers for Disease Control and Prevention. Updated Guidelines for Evaluating Public Health Surveillance Systems, Recommendations from the Guidelines Working Group. MMWR 2001;50(RR13). http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5013a1.htm

Council for State and Territorial Epidemiologists, http://www.cste.org

Table 1. Core Data Sets

Core Data Sets
Behavior Risk Factor Surveillance System (BFRSS)
Child Death Review
Emergency Department (ED)
Emergency Medical Services (EMS)
Fatality Analysis Reporting System (FARS)
Hospital Discharge Data (HDD)
Medical Examiner
National Occupant Protection Use Survey (NOPUS)
Uniform Crime Reporting system (UCR)
Vital Records Deaths Statistics
Youth Risk Behavioral Surveillance System (YRBSS)

[3] References to "states" encompasses all U.S. states, the District of Columbia and territories.

Table 2. Core Injuries, Injury Risk Factors and Data Sets for State Injury Surveillance

This table, last updated in a consensus process through an Injury Surveillance Workgroup in 2007, is not inclusive of all injuries/injury risk factors, such assault and other non-firearm-related violence.

Injury/Injury Risk Factor	Vital Records	Hospital Discharge Data	FARS	BRFSS, YRBSS**	Emergency Department	Medical Examiner	Child Death Review	Other
Fall injuries	X	X			(X)	(X)	(X)	(EMS)
Firearm injuries	X	X			(X)	(X)	(X)	(UCR, EMS)
Fire and burn injuries	X	X			(X)	(X)	(X)	(EMS)
Smoke alarm use				BRFSS			(X)	
Homicide	X	X			(X)	(X)	(X)	(UCR)
Motor Vehicle Injuries	X	X	(X)		(X)	(X)	(X)	(EMS)
Alcohol in MV deaths			(X)			(X)		
Self-reported seat belt/ safety seat use				Both				(OPU)
Poisoning	X	X			(X)	(X)	(X)	(EMS)
Submersion injuries	X	X			(X)	(X)	(X)	(EMS)
Suicide	X	X			(X)	(X)	(X)	
Suicide attempts		X		Both	(X)			(EMS)
Traumatic brain injuries	X	X			(X)	(X)	(X)	
Traumatic spinal cord injuries*	(X)	(X)			(X)	(X)	(X)	

() Parentheses indicate data sets that are considered supplementary. All other data sets are considered essential.

* Indicates there are no specific recommendations for traumatic spinal cord injuries (TSCI). Vital records systems have very low predictive value positive in the detection of TSCI. Surveillance systems for TSCI that have been developed in several states have depended on medical record abstraction of hospitalized cases for reliable data collection. Developments of a less costly and less labor-intensive approach would put TSCI surveillance more realistically within reach for all state health departments.

Abbreviations: FARS=Fatality Analysis Reporting System data, BRFSS=Behavioral Risk Factor Surveillance System data, YRBSS=Youth Risk Behavior Surveillance System data, OPU=National Occupant Protection Use Survey data, UCR=Uniform Crime Reporting System data, EMS=emergency medical services data.

**BRFSS and YRBSS data is variable across states and years; injury-related variables should be reviewed annually for inclusion.

From: Consensus Recommendations for Injury Surveillance in State Health Departments. Safe States Alliances [formerly STIPDA], September 2007; p 17

Table 3. Selected Nationally Collected/Managed Data Systems for Use in Injury Surveillance

The table is reviewed regularly to update any changes in data system names and URLs.

Responsible Organization	Data system name	URL
Agency for Healthcare Research and Quality (AHRQ)	Healthcare Cost and Utilization Project (HCUP)	http://www.hcup-us.ahrq.gov
Centers for Disease Control and Prevention -	National Center for Health Statistics (NCHS)	http://www.cdc.gov/nchs then proceed to various mortality, morbidity and health survey databases such as National Vital Statistics System (NVSS) http://www.cdc.gov/nchs/nvss.htm
Centers for Disease Control and Prevention (CDC)	National Violent Death Reporting System (NVDRS)	http://www.cdc.gov/ViolencePrevention/NVDRS/index.html
Centers for Disease Control and Prevention (CDC)	Web-based Injury Statistics Query and Reporting System (**WISQARS**)	http://www.cdc.gov/injury/wisqars/index.html
Consumer Product Safety Commission (CPSC)	National Electronic Injury Surveillance System (NEISS)	http://search.cpsc.gov/query.html?qt=NEISS&charset=iso-8859-1
Human Resources and Services Administration (HRSA), Maternal Child Health Bureau (MCHB)	National Child Death Review Case Reporting System (NCDR-CRS)	http://www.childdeathreview.org/home.htm
National Highway Traffic Safety Administration (NHTSA)	Fatality Analysis Reporting System (FARS]	http://www.nhtsa.gov/FARS
NHTSA, HRSA, CDC	National Emergency Medical Services Information System (NEMSIS)	http://www.nemsis.org