

Health Priority: Intentional and Unintentional Injuries and Violence

Objective 5: Injury Surveillance System (Template)

Long-term (2010) Subcommittee Outcome Objective:

By 2010, combine or coordinate existing data systems into a surveillance system.

Wisconsin Baseline	Wisconsin Sources and Year
None, this is a developmental objective.	Not applicable.

Federal/National Baseline	Federal/National Sources and Year
Twelve states had statewide hospital emergency department surveillance systems that collected data on external causes of injury in 1998.	External Cause of Injury Survey, American Public Health Association, September 1998.
Twenty-three states collected data on external causes of injury through hospital discharge data systems in 1998.	External Cause of Injury Survey, American Public Health Association.

Related USDHHS Healthy People 2010 Objectives			
Chapter	Goal	Objective Number	Objective Statement
15 – Injury and Violence Prevention	Reduce injuries, disabilities, and deaths due to unintentional injuries and violence.	15-10	Increase the number of States and the District of Columbia with statewide emergency department surveillance systems that collect data on external causes of injury.
		15-11	Increase the number of States and the District of Columbia that collect data on external causes of injury through hospital discharge data systems.

Definitions	
Term	Definition
Injury surveillance system	A method to collect, analyze, and interpret injury data and then disseminate the findings to positively impact program activities.

Rationale:

An injury surveillance system is a method to collect, analyze, and interpret injury data and then disseminate the findings to all interested parties. The system utilizes relationships between people, organizations, and data to use injury information in identifying priorities and then designing, implementing, and evaluating injury prevention and control programs and activities. Information from the injury surveillance system needs to be widely disseminated to positively impact program activities.

Injuries are the leading cause of death for persons ages 1 to 44 (Centers for Disease Control, Web-based Injury Statistics Query and Reporting System data 1998). Injury deaths account for 53 percent of all deaths in this age group. Statistics show injuries are the leading cause of years of productive life

lost (Centers for Disease Control and Prevention, Web-based Injury Statistics Query and Reporting System data 1998). Based on 1998 Wisconsin causes of death, injury deaths result in more years of productive life lost than any other cause and, in fact, are equal to the years lost due to heart disease and cancer combined.

Wisconsin currently has all 11 of the essential injury data sets that have been identified by Centers for Disease Control and Prevention (Vital records, hospital discharge, Fatality Analysis Reporting System, Behavioral Risk Factor Surveillance System, emergency departments, medical examiners, child death review, National Occupant Protection Use Survey, Uniform Crime Reporting, and emergency medical services). Unfortunately, utilizing data across the 11 data systems is difficult. Since injury is a major health issue and the number of deaths and serious injuries can be altered, it would be extremely helpful to maximize usage of the data by integrating data from all 11 systems.

Coordinated data collection and sharing of data would allow the following to occur:

- Development of common data elements so similar analysis could be performed because all data systems are using the same definitions and elements.
- Economies of scale in collecting, analyzing, and disseminating injury information.
- Utilization of technology advancements to make optimal use of existing data, including the identification of factors that contribute to the cause of the injury.

Outcomes:

Short-term Outcome Objectives (2002-2004)

- By 2002, educate and influence the 3 “Ps” on the issue - Policymakers (e.g., state, county, local); direct care Providers; and the general Public.
- By 2002, research and evaluate data sources for overlap. Data managers and stakeholders agree to develop a common data set, identify and develop common data elements, and begin data collection.
- By 2002, agreements are made to access data so analysts from various organizations can look at issues and barriers.
- By 2002, convene annual meeting of partners to update members on the status of a surveillance system and to discuss and put in place agreements to share data and consolidate data collection efforts.
- By 2003, develop and deliver training for professionals to accomplish the following:
 - To familiarize them with existing data
 - To understand the benefits of collection and use of common data elements
 - To understand the benefits of sharing data
 - To establish uniform reporting criteria
- By 2003, develop and distribute educational materials to targets and to the general public. Provide data to communities and decision makers so more people are aware of and using the data by applying data analysis to programs.

Inputs: (*What we invest – staff, volunteers, time money, technology, equipment, etc.*)

- Department of Health and Family Services, Bureau of Emergency Medical Services and Injury Prevention, and Bureau of Health Care Information; Department of Transportation, Center for Health Systems Research and Analysis, Wisconsin Health and Hospital Association; Department of Justice; and coroners must research and evaluate data sources for overlap. Data managers and stakeholders must agree to

develop a common data set, identify and develop common data elements, and begin data collection.

- Key data managers and stakeholders will need to agree that the goal of an injury surveillance system transcends specific, individual databases.
- Department of Health and Family Services, Bureau of Emergency Medical Services and Injury Prevention staff and the Bureau of Health Care Information must meet and agree to share data and work towards a more uniform data system that meets multiple data needs.
- Department of Health and Family Services, Bureau of Emergency Medical Services and Injury Prevention, and Bureau of Health Care Information; Department of Transportation; University of Wisconsin-Madison; Medical College of Wisconsin; Center for Health Systems Research and Analysis; and other interested parties will need to develop and implement an educational campaign to raise awareness and educate and influence policymakers (e.g., state, county local), direct care providers, and the general public about injury data collection, analysis, and applied use for program functions. These same groups will also need to develop and deliver training for professionals to educate them on the surveillance system and how it influences their work.

Note: Lead for facilitation – Department of Health and Family Services, Bureau of Emergency Medical Services and Injury Prevention has authority in sec. 255.20, Wis. Stats., to maintain an injury prevention program that includes data collection and surveillance. The grant-funded epidemiologist in the Bureau of Emergency Medical Services and Injury Prevention will do data analysis and work with the Bureau of Health Information to make use of existing data.

Outputs: (*What we do – workshops, meetings, product development, training. Who we reach – community residents, agencies, organizations, elected officials, policy leaders, etc.*)

- Development and dissemination of a standardized presentation package and educational materials on the merits and workings of a statewide injury surveillance system.
- Meeting of data stakeholders occurs and agreements are made to share data and consolidate data collection efforts when possible.
- An annual state injury profile is created and disseminated.

Medium-term Outcome Objectives (2005-2007)

- By 2005, Wisconsin will have a functional injury surveillance system in place that allows for easier collection of data, access to data, and analysis in order to affect outcomes.
- By 2006, various data sources all collect and analyze data with common elements (Department of Health and Family Services, Bureau of Emergency Medical Services and Injury Prevention, and Bureau of Health Care Information; Department of Transportation; Center for Health Systems Research and Analysis; Wisconsin Health and Hospital Association; Department of Justice; and coroners).
- By 2007, develop a method to do systematic evaluation of injuries based on the data.
- By 2008, program objectives and decisions are driven by available data and effectiveness of decreasing injuries in a cost-effective way.
- By 2008, agencies collaborate in their use of data to address overarching goals and systemic injury issues.

Inputs: (*What we invest – staff, volunteers, time money, technology, equipment, etc.*)

- An injury data stakeholders group meets on a regular basis to discuss and solve data issues.
- Department of Health and Family Services, Bureau of Emergency Medical Services and Injury Prevention, and Bureau of Health Care Information; Department of Transportation; University of Wisconsin-Madison; Medical College of Wisconsin; and Center for Health Systems Research and Analysis will all collect and analyze data with common elements.
- Department of Health and Family Services, Bureau of Emergency Medical Services and Injury Prevention, and Bureau of Health Care Information; Department of Transportation; Center for Health Systems Research and Analysis; Wisconsin Health and Hospital Association; Department of Justice; and coroners will develop a method to do systematic evaluation of injuries based on the data.
- Injury programs agree that program objectives and decisions are driven by available data and the ability to decrease injuries in a cost-effective way.
- A state injury reduction plan is put in place with clearly articulated objectives that are agreed on and widely disseminated to injury programs statewide.

Outputs: *(What we do – workshops, meetings, product development, training. Who we reach – community residents, agencies, organizations, elected officials, policy leaders, etc.)*

- A user friendly injury data internet site is made available so local programs can analyze their local data to identify needs.
- Injury programs focus their activities based on the state injury reduction plan, state injury profile, and the use of local data that has identified key injury areas.
- Regular meetings of data stakeholders and injury program managers will be ongoing to improve the system.

Long-term Outcome Objectives (2008-2010)

- By 2010, the goal is to combine or coordinate existing data systems into a more functional system.

Inputs: *(What we invest – staff, volunteers, time money, technology, equipment, etc.)*

- Data is collected and analyzed at the local, regional, and state level.

Outputs: *(What we do – workshops, meetings, product development, training. Who we reach – community residents, agencies, organizations, elected officials, policy leaders, etc.)*

- Data indicates impact of statewide injury data system in decreasing injuries and death by concentrating prevention efforts.

Evaluation and Measurement

Success in implementing the system will be marked by attaining the process goals identified in the short- and medium-term objectives. These include creation of a data stakeholders group, formal agreements by data holders, a formal annual evaluation of injury data, and consolidation of data collection methods where possible.

The ultimate evaluation will be to see whether injury data is both more accessible and utilized in determining injury prevention program focus.

Crosswalk to Other Health and System Priorities in Healthiest Wisconsin 2010

Integrated Electronic Data and Information Systems: Use of existing or linkable databases is essential to develop the injury surveillance system. There are currently multiple sources and data platforms where injury data is residing. The development of a single injury database is neither logistically possible nor cost effective. As a result, the emphasis will be on linking existing data to merge the information in various databases.

Significant Linkages to Wisconsin's 12 Essential Public Health Services

Promote community partnerships to identify and solve health problems: Since injury data resides in several places, it is key that partnerships are formed to share and maximize the available information and data.

Create policies and plans that support individual and community health efforts: Injury prevention involves planning by many partners in the community and region. Prominent partners include hospitals, emergency medical services, local health departments, law enforcement departments, traffic safety professionals, and injury prevention specialists. Injury prevention should be part of any broad community health improvement process or plan.

Link people to needed health services: The goal of injury surveillance would be to provide focus to prevention efforts. By effectively targeting programs, health services will be directed for maximum impact.

Evaluate effectiveness, accessibility and quality of personal and population-based health services: A better picture of the causes, circumstances, and numbers of injuries and injury-related deaths will result in efforts to reduce those numbers using measurable outcomes.

Connection to the Three Overarching Goals of Healthiest Wisconsin 2010

Protect and promote health for all: An injury surveillance system will provide needed information in developing and implementing effective injury prevention programs.

Eliminate health disparities: Injury data can be used to first identify and then impact specific disparities that may exist. By identifying injury and death rates that fall outside of a normal range, efforts can be focused to solve the problem.

Transform Wisconsin's public health system: An injury surveillance system involves participation and cooperation by a large number of partners to attain meaningful and timely data.

Key Interventions and/or Strategies Planned:

- Partnership development in sharing of data and development of program focus.
- Focused prevention strategies based on state, regional, and local data and trends.

References:

Centers for Disease Control, Web-based Injury Statistics Query and Reporting System (WISQARS data 1998).

External Cause of Injury Survey, American Public Health Association, September 1998.

U.S. Department of Health and Human Services. (2000). *Healthy People 2010. 2nd ed. With Understanding and Improving Health and Objectives for Improving Health*. 2 vols. Washington, DC:U.S. Government Printing Office.