Injury

1) Information about the program area

The Nebraska Office of Epidemiology provides an ideal training opportunity to an Injury Epidemiology Fellow (IEF). The Office's Health Surveillance Section and the Injury Prevention Program collaborate in studying the epidemiology of injuries and in implementing injury prevention and control strategies. This team includes the injury epidemiologist (Secondary Supervisor), a trauma registrar, two statisticians, and the Injury Prevention and SafeKids program coordinators. The state epidemiologist (Primary Supervisor) consults with this team. This group uses multiple databases to study a variety of injury-related issues, and recently published a report, Injury in Nebraska, that details state-specific injury morbidity and mortality. The team actively participates in the Crash Outcome Data Evaluation System (CODES) supported by the National Highway Traffic Safety Administration (NHTSA). The CODES project entails extensive analysis of injury-related data sources to produce epidemiology reports and facts sheets which national, state, and local communities use to achieve their injury research and prevention priorities.

The IEF will work as part of this team. The team members are located in close proximity to each other in various parts of our integrated Health & Human Services agency. The training and skill development of the IEF will be the primary responsibility of the State epidemiologist. All team members will be at the disposal of the IEF to provide expertise in selected aspects of epidemiology and programmatic activities. The fellow will be authorized to access and analyze data sets/surveillance systems in all of these areas.

2) The Fellow's anticipated day-to-day activities

1) Develop an understanding of and familiarity with injury surveillance datasets; 2) Refine data processing and data analysis skills; 3) Understand how to assess surveillance systems; 4) Analyze and interpret data; and 5) Prepare epidemiology reports

3) Examples of potential projects that demonstrate opportunities for data analysis, outbreak field investigations, and opportunities to work on interdisciplinary teams

In addition to understanding ongoing projects and surveillance systems, the IEF will focus on three priority areas

1)Child Maltreatment;

2)Falls Among Older Adults; and

3)Injuries and Death from Residential Fires

Preventing Child Maltreatment

The Office of Family Health recently conducted a comprehensive Maternal and Child Health (MCH) Needs Assessment in which the prevention of child abuse and neglect ranked among the top 10 priority needs. The Office of Family Health is engaged in a number of activities to better understand child maltreatment and to develop effective prevention strategies:

1) Child Death Review Team (CDRT) which reviews child deaths resulting from abuse/neglect as part of its statutory responsibilities. The CDRT played a central role in recent special studies of abuse/neglect deaths on behalf of the Governor's Children's Task Force (2003) and the Child Death Scene Investigation Protocol Committee, a subcommittee of the Governor's Commission for the Protection of Children (2005-2006).

2) The Office of Protection and Safety (OPS) is responsible for child welfare and child protection, including investigations related to child abuse or neglect, assessment of child safety and risk, provision of services to the child, and other family support services as appropriate. In 1998 the agency established a computerized database which includes intake information on all reports received, investigation status and findings, demographic information on alleged victims and other persons involved, and narrative on the incident including the type of neglect or abuse. These data have never been fully exploited for their potential in studying the distribution and determinants of abuse and neglect. The IEF will be expected to obtain and utilize this surveillance system, and will explore the linkage of these reports to other HHSS data sets. These efforts will be expected to result in strategies and policies that prevent/reduce child neglect and abuse.

Preventing Injuries from Falls among Older Adults

Falls are the leading cause of hospitalizations and emergency department visits in Nebraska. Following a comprehensive epidemiological study identifying the patterns of children's falls, the injury team implemented a children's fall prevention program in nine Nebraska communities, and is now evaluating the impact of these prevention programs. The Nebraska Injury Community Planning Group (NICPG) recently identified falls in older adults as a priority. The IEF will be expected to collaborate in a detailed analysis of injury data sets to more fully understand the epidemiology of fall-related injuries in older adults and to use this knowledge to develop strategies for prevention.

Preventing Injuries and Death from Residential Fires

Prevention and reduction of residential fire injuries are an additional priority. NICPG, which includes representation from the State Fire Marshal's Office, is working to identify additional partners and strategies to prevent these injuries. In addition to conducting a detailed analysis of hospital discharge

data, the IEF will work with data from the Fire Marshal's Office to detail the distribution and risk factors of residential fire injuries and deaths.

4) Program or surveillance system evaluation component

The IEF will work as part of Nebraska Injury Surveillance and Prevention team, and will be expected to assess and improve the quality of injury related data. By the completion of this fellowship, the IEF will be expected to be skilled in data processing and analysis, GIS, data linkage, data integration, and data management in real life situations. The IEF will be expected to apply the criteria of "Updated Guidelines for Evaluating Public Health Surveillance Systems" (MMWR, July 27, 2001, Vol. 50 No. RR-13) in an assessment of the Nebraska Hospital Discharge Database.

5) Role of fellow in State Emergency Preparedness plan

The IEF will be expected to respond to acute and emergent problems related to Injury Epidemiology, including emergency response activities related to naturally occurring and intentional events which have actual or potential impact on injury morbidity/mortality. Nebraska's Bioterrorism Preparedness Program offers training and exercises to ensure Nebraska's preparedness in the event of an incident or attack involving biological, chemical, radiological or other agents of bioterrorism. The injury fellow can access this training and participate in the exercises (Terrex).

Assignment Location:	Lincoln, Nebraska
Primary Mentor:	Tom Safranek, MD State Epidemiologist
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