Injury

Utah Department of Health, Violence and Injury Prevention Program

Salt Lake City, Utah

Assignment Description

The fellow would be placed in the Utah Department of Health, Division of Disease Control and Prevention (DCP), Bureau of Health Promotion (BHP), Violence and Injury Prevention Program (VIPP). The DCP also includes the Bureau of Epidemiology, Utah Public Health Laboratory, and the Office of the Medical Examiner, all of which work closely with the VIPP. The BHP includes programs related to chronic disease prevention in addition to VIPP.

The VIPP partners with local health departments (LHDs) and other key stakeholders through and Injury Community Implementation Board to establish injury prevention priorities, strengthen local injury prevention program capacity, develop community-based injury prevention projects, and implement evidence-based programs. The VIPP has undertaken a strategic planning process that addresses priority areas through a shared risk and protective factor approach. As a result, the program identified five “super” factors that would impact multiple violence and injury prevention topics. They include: 1) Encouraging social norms that promote safety and health, 2) Improving access and utilization to physical and behavioral health care, 3) Enhancing the physical environment to improve safe and healthy living, 4) Improving the socioeconomic conditions for Utahns, 5) Promoting individual, family, and community connectedness.

Target areas of focus include child maltreatment, infant sleep, school-related injuries, motor vehicle crashes, suicides, teen dating violence, prescription drug overdoses, sexual assault and family violence, and falls.

The VIPP has a staff of 29 comprised of epidemiologists, research analysts, subject matter experts, public information specialists, and administrative support. It is broken up into two areas - Policy and Programs and Epidemiology, which is what drives the work of the program. The fellow would become part of the epidemiology team and have the opportunity to use various public health data to determine appropriate indicators for the identified super factors. Projects will be tailored to align with the interests of the fellow, with a focus on violence and injury shared risk and protective factors.

Day-to-Day Activities

The fellow will participate in all program-wide activities for the VIPP and receive administrative support from the supporting staff. They will be able to engage in the following day-to-day activities:

- Plan and manage projects, write project plans, recommendations, and/or findings
- Participate in workgroup meetings and staff meetings and provide regular updates on projects
- Organize and conduct surveys and/or studies
- Work with injury epidemiologists to lead the development of research questions and appropriate data collection tools
• Write technical reports, articles or related material based on research, investigation or analysis
• Facilitates the use of research data to improve existing programs and utilization of resources
• Analyzes, summarizes and/or reviews data; reports findings, interprets results and/or makes recommendations
• Writes or drafts technical reports, articles or related material based on research, investigation or analysis
• Develops educational materials and speaks to state or community groups
• Answers technical questions regarding data, trends or results from studies
• Provide input into and lead various projects, including study design, data collection, analyses, interpretation, and dissemination via reports and presentations
• Develop and maintain data sets, link data sets, clean and analyze complex data sets
• Prepare, contribute to, and review manuscripts for publication
• Participate in professional development opportunities through webinars and in-person trainings
• Participate in national, state, and local committees and workgroups
• Participate in strategic planning activities for the VIPP and the BHP Primary Prevention Workgroup

Potential Projects

Surveillance Activity  
Making the Transition from ICD-9-CM to ICD-10-CM in Utah's Indicator Based Information System for Public Health

Utah's Indicator-Based Information System for Public Health (IBIS-PH) is Utah's public health data resource. It includes publications, indicator reports, and dataset queries, particularly an injury module to allow for injury specific queries. Currently, the data in the module are consistent with the injury case definitions found in the Consensus Recommendations for Using Hospital Discharge Data for Injury Surveillance (2003) developed by the State and Territorial Injury Program Directors Association (STIPDA) Injury Surveillance Workgroup. Since the transition from ICD-9-CM to ICD-10-CM during the 4th quarter of 2015, the hospital discharge dataset has not been updated in the system to allow queries beyond 2014, which used the previous ICD-9-CM surveillance case definitions for injury hospitalizations. The CSTE Injury ICD-10-CM Transition Workgroup has endorsed the surveillance case definition for injury hospitalizations outlined in the National Health Statistics Report number 125 titled "An Updated International Classification of Disease, 10th Revision, Clinical Modification (ICD-10-CM) Surveillance Case Definition for Injury Hospitalizations" (Hedegaard & Johnson, 2019). The fellow would take the lead in making the transition from ICD-9-CM to ICD-10-CM in IBIS-PH. The fellow would work closely with the Office of Public Health Assessment and VIPP's injury epidemiologists.

Surveillance Evaluation  
Validating the use of Syndromic Surveillance for Violence and Injury

When public health syndromic surveillance first started gaining traction many years ago, the fundamental objective was to identify illness clusters early, before diagnoses were confirmed and reported to public health agencies, and to mobilize a rapid response, thereby reducing morbidity and mortality. We would like to evaluate its use for the following: 1. Monitor population health by further
describing the near real-time impact of violence and injury incidences; 2. Inform public health service delivery by detecting, estimating, and assessing the morbidity and mortality during incidents or events of public health concern; and 3. Inform intervention, policy and health education development and evaluation by characterizing the contributing factors and outcomes of violence and injury related hospitalizations and health disparities.

VIPP historically focused data analysis efforts using mortality data from death certificates and medical examiner records; morbidity data through hospital discharge and emergency department data sets; survey data through the BRFSS, YRBS, and Prevention Needs Assessment. Only recently has VIPP begun using syndromic surveillance data for overdoses and suicide. VIPP would like to explore the utility of using syndromic surveillance data for other violence and injury related topics such as traumatic brain injuries, falls, sexual violence, intimate partner violence, child maltreatment, overall injury, overall violence etc. This will allow VIPP to develop syndromic surveillance data standards for these injuries in addition to providing the opportunity to respond to emerging health threats (for example injuries related to electronic scooters).

**Major Project: Identifying Appropriate Indicators for VIPP's Super Factors**

In 2018, Utah had the 19th highest injury death rate in the United States. Injury includes a wide range of health topics, from unintentional injuries, such as car crashes and falls, to intentional injuries, such as assault and suicide. The consequences of injury are not just physical. Many people who suffer an injury may also have mental health and financial problems that can last a lifetime. The good news is that many injuries are preventable. From seat belts to violence prevention programs, injury prevention saves lives. The VIPP has undertaken a strategic planning process that addresses priority areas through a shared risk and protective factor approach. Prevention science tells us that there are social determinants that play a significant role in our health and safety. These determinants, or risk and protective factors, are the keys to figuring out how to address community health and safety issues. The greater the number of risk factors, the greater the chances of adverse outcomes over the lifespan. VIPP has identified five “super” factors that would impact multiple violence and injury prevention topics. They include: 1. Encouraging social norms that promote safety and health, 2. Improving access and utilization to physical and behavioral health care, 3. Enhancing the physical environment to improve safe and healthy living, 4. Improving the socioeconomic conditions for Utahns, and 5. Promoting individual, family, and community connectedness. As VIPP finalizes its strategic plan, it is necessary to identify appropriate indicators to monitor the impact of the approach over time. Utah’s BRFSS includes questions related to social determinants of health which can be explored for this project.

**Preparedness Role**

The culture of preparedness is extremely important to the UDOH as the nation experiences nontraditional responses, like the Opioid crisis. The Fellow will have the opportunity to work across the UDOH, with the Bureau of EMS and Preparedness within the Division of Family Health and Preparedness through planning, training, and exercises as well as real world events such as communicable disease outbreaks, natural disasters, and environmental health exposures. The Preparedness Program has
worked to recruit and train staff through the development of the Emergency Response Team (ERT) to provide their skills and expertise in the event of an activation of the Department Operations Center and to ensure the UDOH has built resource depth. The Fellow will also have the opportunity to work with the State Epidemiologist, EIS officer, Preparedness Epidemiologist, and other CDC field assignees to assist in preparedness and response through the use of epidemiological methods and tools. In addition, public health preparedness is a large crosscutting field and the Fellow will have the opportunity to apply their interests and work with the Populations with Access and Functional Needs Coordinator or the Department of Human Services, Disaster Behavioral Health Response Team.

**Mentors**

**Primary**
Anna Fondario MPH  
Program Manager

**Secondary**
Angela Dunn MD  
State Epidemiologist