Substance Abuse

Assignment Description

As in the U.S., alcohol and other substance abuse are major contributors to premature mortality in Washington. Alcohol and substance abuse contribute to almost half of Washington's motor vehicle crash deaths, a priority focus area of the Centers for Disease Control and Prevention. The Washington State Department of Health (WS-DOH) works to reduce motor vehicle crash deaths through its work with the Traffic Safety Commission.

We currently have an even stronger focus, however, on preventing deaths from misuse of prescription pain medication. In Washington the annual number of deaths from unintentional poisoning, 90% of which is from misuse of prescription pain medication, exceeds the number of deaths from motor vehicle crashes. Substance abuse prevention is also important in our efforts to prevent and control other types of injuries, including those from interpersonal violence, as well as both chronic and communicable diseases.

Preventing substance abuse is also crucial for healthy birth outcomes. While WS-DOH recognizes prevention and treatment of substance abuse as an important public health issue, we have had limited resources to apply to substance abuse epidemiology.

To expand WS-DOH epidemiology capacity, the Offices of Non-Infectious Conditions Epidemiology (NICE) and Community Health Systems (CHS) propose mentoring a Substance Abuse Fellow. These offices have been involved in different aspects of substance abuse epidemiology for many years, often working collaboratively. In addition to expanding substance abuse epidemiology capacity, the Fellow would have the opportunity to work on specific projects designed to prevent substance abuse.

Day-to- Day Activities

Day-to-day activities include working with supervisors, coworkers, and external partners to plan surveillance, epidemiology and evaluation projects; analyzing and interpreting data; and preparing, reviewing and presenting findings. The projects selected will be dictated by the Fellow's goals and interests.

Much of a typical day would be devoted to learning to work with datasets of varying sizes and complexity, linking data files, and managing and analyzing data. The Fellow would also gain experience in synthesizing results and presenting results to diverse audiences, developing skills in written and oral communication and learning how to develop data-based policy recommendations.

The Fellow will have learning opportunities offered regularly by the University of Washington's Alcohol and Drug Abuse Institute (ADAI) and by the Department of Behavioral Health and Recovery (DBHR). NICE and CHS collaborate regularly with ADAI and DBHR, affording the Fellow additional opportunities for involvement. CHS has also been participating in several national workgroups on misuse of prescription pain medication, including the CSTE Substance Abuse and Overdose Subcommittees and the Emerging Opioid Oversight Surveillance Group sponsored by the Substance Abuse and Mental Health Services

Administration (SAMHSA). The Fellow will have the opportunity to get involved with these activities and entities, and to gain perspective, experience, and understanding of substance abuse-related issues as they are discussed at the state, and national levels. In addition to substance abuse related activities, the Fellow will have the opportunity to work with epidemiologists in one of two local health departments for investigations of communicable disease, if required by CSTE.

Potential Projects include:

The Fellow could select from the following initial projects. Additional projects would be included depending on the Fellow's interest, the need for such work by WS-DOH, and CSTE requirements.

1. The WS-DOH is scheduled to update the alcohol and drug abuse chapters of the Health of Washington State (http://www.doh.wa.gov/HWs/RPF2007.shtm), beginning in July 2011. The Fellow could take a lead role in this update including using CDC's Alcohol-Related Disease Impact system to assess alcohol attributable mortality in Washington, and using the Behavioral Risk Factor Surveillance System and the Health Youth Survey (HYS) to assess current substance abuse in Washington.

2. The HYS is Washington's school-based survey that combines CDC's Youth Risk Behavior Survey with SAMHSA's Monitoring the Future. Data from the survey will be available in March 2011. The Fellow could evaluate the 2010 HYS as a surveillance system including an analysis of potential bias of responses to the drug and alcohol questions due to school or student non-response. The Fellow could also work with DBRH to develop and conduct HYS analyses to inform actions to prevent youth alcohol and drug use. This work could include linking the HYS data to the Profiles survey that monitors school policies and programs related to substance abuse.

3. Using hospital discharge and death data, the Fellow could assess trends for overdose deaths and hospitalizations involving prescription pain medication to identify areas of the state and sub-populations at high risk. The Fellow would present results to partners, such as local health departments and law enforcement, to inform prevention activities.

4. The Fellow could evaluate the effectiveness of a program to limit doctor shopping for prescription opiates among frequent emergency department (ED) users. This evaluation would include assessing rates of frequent ED users before and after implementing a program that notifies physicians if a person has visited EDs participating in the program four or more times in one month.

5. In 2009 and 2010, Washington State added questions to the Behavioral Risk Factor Surveillance System (BRFSS) on alcohol, marijuana and prescription pain medication use to get high. The Fellow could analyze these data for inclusion in the Health of Washington State (see item 1) and other reports developed by WS-DOH or DBHR. The Fellow could also evaluate BRFSS as a surveillance system for collecting this information. An evaluation might include a comparison of landline and cell phone respondents.

6. The Fellow could use the mother-infant linked hospitalization file to identify the primary maternal diagnoses for women with infants with drug withdrawal. There has been almost a three-fold increase in the rate of infants with drug withdrawal since 2000 in Washington State.

Preparedness Role

NICE supports several WS-DOH programs in responding to natural disasters, pandemics, and industrial or terrorist events. Last year, NICE provided assistance with several components of the H1N1 influenza surveillance. For example, our EIS Officer received training to use and evaluate data for rapid influenza tests reported by laboratories and local health jurisdictions. In the absence of a real emergency, the Fellow can participate in table top exercises and receive training in handling emergency medical materials and in staffing the public emergency call center.

Assignment Location:	Olympia, Washington
Primary Mentor:	Juliet VanEenwyk, PhD, MS State Epidemiologist- Non-infectious conditions Washington State Department of Health
Secondary Mentor:	Jennifer Sabel, PhD Epidemiologist Washington State Department of Health