

Behavioral Health-SAMHSA, Maternal and Child Health

Wyoming Department of Health, Public Health Division, Public Health Sciences Section

Cheyenne, Wyoming

Assignment Description

The fellow will be housed in the Public Health Sciences Section (PHSS) within the Public Health Division at WDH. This section contains the Chronic Disease/MCH Epidemiology Unit, Infectious Disease Epidemiology Unit, Communicable Disease Unit, and WY Public Health Laboratory. Nearly all WDH epidemiologists are in the PHSS. The units are responsible for surveillance, investigation, and control of the respective public health focus areas. WDH has programs targeted at the surveillance and control of infectious disease, terrorism preparedness and response, cancer, diabetes, cardiovascular disease, behavioral health, substance abuse, injuries, and maternal-child health. Compared to other states, the Wyoming Department of Health is a small health department, which offers the opportunity to interact with a large variety of programs. WY has few local formal public health departments, thereby providing opportunity for direct fellow involvement in a wide variety of public health issues at the local level. The fellow will also have the opportunity to learn about how the Tribal Health Departments interact with the state. The fellowship is primarily focused on Behavioral Health, including substance abuse and suicide, but will include projects related to Maternal Child Health, specifically where there is overlap in behavioral health and MCH such as: NAS, substance use among women reproductive age, and overdose deaths among women of reproductive age (including pregnant and postpartum), postpartum depression, and substance use and mental health among youth and young adults. There is flexibility such that the fellow will also have options of pursuing specific projects of interest. This position affords the opportunity for the fellow to gain a well-rounded experience in public health.

Day-to-Day Activities

The CSTE fellow will be incorporated into the day-to-day Department functioning. This position provides experience communicating with the public, healthcare providers, local level health departments, tribal health partners, community organizations, other government agency representatives, and the media. The fellow will have the opportunity to work with and provide epidemiologic expertise for the Prescription Drug/Opioid Overdose-Related Death and State Targeted Response to the Opioid Crisis Grants. The fellow will also become familiar with the state MCH/Title V programming, including methods for priority selection, data collection, monitoring and reporting. Other routine activities would include:

- Participation in the following meetings: Public Health Rounds (weekly); Epidemiology Workgroup (monthly); weekly staff meetings; monthly epidemiology/vital records workgroup meetings; the State Epidemiologic Outcomes Workgroup meetings (6 times yearly).
- Participation in state coalitions including the Prescription Abuse Stakeholders, Opioid Abuse Response Council, Infant Mortality Prevention team, Wyoming Injury Prevention Coalition, Wyoming Collaborative Improvement and Innovation Networks related to Infant Mortality and Newborn Metabolic Screening;
- Attend weekly progress meeting with mentors;
- Work with program managers to understand the use of epidemiology in program implementation and evaluation;
- Participate in public health webinars as applicable

Potential Projects

Surveillance Activity Surveillance of Neonatal Abstinence Syndrome in Wyoming

Neonatal abstinence syndrome (NAS) is an emerging issue related to the opioid epidemic that has long-term implications for neonatal and maternal health, access to treatment for substance use disorders, and health care costs. The goal of this project is to establish NAS surveillance in Wyoming. Our fellow will calculate the rates of NAS among discharged neonates born in Wyoming and complete an analysis of the rate over time and by location using hospital discharge data. Our fellow will have the opportunity to complete a data linkage project linking hospital discharge data with birth certificate data to complete a more detailed analysis. The fellow will use the linked dataset to examine differences in NAS rates by demographic and economic variables as well as maternal and infant outcomes. Medical record review will be used to verify rates calculated using claims data. Establishing NAS surveillance is critical for fully understanding the burden of opioid use and for targeting substance abuse prevention efforts in Wyoming. The fellow will have the opportunity to lead this project.

Surveillance Evaluation Evaluation of Overdose Death Surveillance

Death certificates are the primary source of overdose death data in Wyoming. Quality overdose death surveillance data is critical for identifying the types of drugs causing death, the methods of overdose deaths, and at-risk populations, and is essential for targeting prevention activities. Wyoming recently passed legislation expanding the use of naloxone to prevent opioid overdose deaths and is in the process of implementing training and surveillance procedures. Overdose death surveillance, however, has never been evaluated in Wyoming. Using the CDC Guidelines for evaluating a surveillance system, our fellow will complete an evaluation of Wyoming's overdose death surveillance, with a focus on quality of cause-of-death data and timeliness. In the completion of the project, the fellow will have the opportunity to collaborate with the Wyoming Vital Statistics Services, coroners, and law enforcement to conduct the evaluation. The goal of the project is to improve the data quality and timeliness of overdose death surveillance to inform prevention activities.

Major Project Mental Health and Substance Use indicators in Wyoming

In 2015 a CSTE workgroup developed a set of 18 Substance Abuse and Mental Health (SA/MH) indicators across the domains of Alcohol, Other Drugs, and Mental Health for state, territorial, local and tribal surveillance. The indicators have not been calculated in Wyoming and offer the opportunity to build the state's capacity for mental health and substance use surveillance. Our fellow will calculate the indicators for Wyoming, and develop a report and/or dashboard to communicate the data with programs and stakeholders. This project allows the fellow experience in working with multiple public health data systems, and the project will be conducted through a lens of health equity. The indicators will allow Wyoming's prevention and control programs to better target interventions to improve health equity and allow opportunities for program evaluation. Of the 18 indicators, four are derived from death records collected by vital statistics; three are derived from hospital discharge and emergency department visit data sets; two are derived from the Behavioral Risk Factor Surveillance System; two are derived from the Youth Risk Behavior Surveillance System; five are based on published National Survey of Drug Use and Health data; one is based on the Drug Enforcement Agency's ARCOS database of prescription opioid sales; and one is based on CDC's Alcohol Policy Information System.

Additional Development of Wyoming Suicide Review Team Project

Wyoming's age-adjusted suicide rate in 2015 was the highest in the nation at 28.24 per 100,000. WDH recently expanded its Injury Prevention Program to include resources specific to intentional injury, and a primary goal of the program is to develop a statewide Suicide Review Team to better understand suicide in Wyoming and develop prevention strategies. For this project, the fellow will provide epidemiologic support to the Injury Prevention Program in forming a Suicide Review Team. The fellow will have the opportunity to collaborate with subject matter experts from CDC, CSTE and substance abuse epidemiologists from other states. This project will give the fellow the opportunity to collaborate closely within WDH as well as with external stakeholders, including health care providers, community mental health organizations, law enforcement, and educators.

Preparedness Role

The fellow will have the opportunity to participate in emergency preparedness trainings such as: Incident Command System, Advanced Burn Life Support, Basic Disaster Life Support and/or Advanced Disaster Life Support. The fellow will be able to participate in healthcare coalition planning, and in hospital and/or EMS based preparedness exercises. There will also be opportunities for involvement in Biological Terrorism Agent (BTA) related investigation activities. In the event of an incident, the fellow will have the opportunity to participate in ICS activities especially as they relate to the MCH population and mental health. Previous fellows and EIS officers have contributed to H1N1 response, Ebola planning, and the Jurisdictional Risk Assessment.

Additional Activities

The fellow may be involved in development and creation of surveillance reports around marijuana (from BRFSS and PRAMS), substance use among teens, postpartum depression and adolescent suicide attempts. The fellow may also have the opportunity to assist the MCH and MCH Epidemiology Programs in the development of maternal mortality review (including review of suicide and overdose deaths). The fellow will also have the opportunity to assist the state with the Title V MCH Needs Assessment, which is undertaken every 5 years.

Mentors

Primary	Ashley Busacker PhD Senior Epidemiology Advisory, Maternal and Child Health Assignee
Secondary	Alexia Harrist MD, PhD State Epidemiologist