

Chronic Diseases, Substance Use/Mental Health

City of Laredo Health Department

Laredo, Texas

Assignment Description

The City of Laredo Health Department is recruiting a CSTE fellow to participate in the chronic disease (Healthy Living) and substance use/mental health (Behavioral Health) programs. This individual will support these programs through complex epidemiological (surveillance, disease, monitoring, and reporting) work, in particular monitoring chronic diseases and mental health distribution in Laredo, TX. The fellow will collaborate with other epidemiologists and health educators to plan, develop, coordinate, and conduct community needs assessment in the City of Laredo. Additionally, the fellow will collaborate with the vital statistics program and conduct chronic disease surveillance and monitor and sustain morbidity and mortality data related to chronic diseases and substance use related deaths. The fellow will analyze morbidity and mortality data and generate reports for internal use and distribution. The fellow's work will involve assisting in the design, implementation, and analysis of preventive care in chronic diseases, substance abuse and mental health in collaboration with the healthy living program and behavioral health program.

Day-to-Day Activities

The fellow will join a team of epidemiologists, nutritionists, licensed professional counselors and vital statistics staff and perform data collection of mortality data, chronic diseases, substance abuse and mental health. The fellow will perform data analysis, generate reports, perform public health surveillance, perform disease control, public health preparedness, calculate figures and amounts such as proportions and percentages and probabilities of disease events, manage and direct public health programs, services, and personnel, read, analyze, and interpret general business periodicals, professional journals, technical procedures, or governmental regulations. The fellow will write reports, business correspondence, and procedure manuals, present information and respond to questions from groups of managers, study group members, parents, and the general public, develop surveys, parental consents and lead focus groups with input from principal investigator.

The fellow will disseminate project summary information to the public and recruit suggestions for intervention strategies by the community, perform basic editorial functions including layout, proofreading, editing, and copywriting, establish and maintain effective relationships with persons from a variety of backgrounds.

The fellow will meet weekly with mentors and discuss successes, goals and issues.

Potential Projects

Surveillance Activity Chronic Disease and Mental Health/Substance Use Mortality Surveillance

The vital statistic program receives all death certificate data for the City of Laredo, a population of 261,639. This fellow will collect mortality data, enter it into our database and analyze chronic disease and substance use related deaths. With the collaboration of epidemiologists, the fellow will generate reports, trends and an in-depth analysis of chronic disease and substance use mortality distribution. Chronic disease mortality burden will include heart related and renal related diseases. Substance use related deaths will include drug intoxication related deaths and mental health deaths will include gunshot wounds and death by asphyxiation. Analysis will include geographic distribution, age, gender and previous medical history.

Major Project Chronic Disease Morbidity Surveillance

The Chronic Disease Morbidity project will primarily collect data from the syndromic surveillance program ESSENCE. The ESSENCE program receives data from one of the local emergency departments and will be a source of data collection. The fellow will use chief complaints to search the ESSENCE database for chronic disease related admissions. The fellow will be trained by the epidemiology department on use, navigation and query searches to conduct surveillance. The fellow will analyze the data for the generation of reports and awareness of chronic disease morbidity in the City of Laredo. The City of Laredo's Health Department Healthy Living Program uses evaluation based methods to monitor patient progress and improvement in controlling diabetes. This program will also serve as data collection for the chronic disease morbidity surveillance project.

Additional Project Substance Abuse Distribution and Morbidity

The Substance Abuse Distribution and Mortality project will primarily collect data, conduct surveillance, and analyze data for generation of reports and awareness of substance abuse prevalence and mortality in Laredo, TX. The ESSENCE program receives data from one of the local emergency departments and will be a source of data collection. The fellow will use chief complaints to search the ESSENCE database for substance use related admissions. The City of Laredo Health Department will also work with the fire and police departments on data sharing regarding substance use and overdose calls. The fellow will work closely with the Fire and Police Departments to collect data concerning the geographic distribution of calls specific to substance use/overdoses and gather data on gender, age, homelessness status and socioeconomic status. This data will be gathered and analyzed for presentations and reports.

Additional Project Mental Health Morbidity and Management

The Mental Health Morbidity and Management project will primarily collect data, conduct surveillance, and analyze data for generation of reports and awareness of mental health prevalence in Webb county. The ESSENCE program receives data from one of the local emergency departments and will be a source of data collection. The fellow will use chief complaints to search the ESSENCE database for mental health related admissions. The fellow will also work closely with the behavioral health department to gather

data on mental health diseases and prevalence data. The fellow will also work closely with the vital statistic, fire and police departments to gather data related on suicides in the Webb county area. These departments will provide insight on past 911 calls to develop a pattern or history. The behavioral health program will provide guidance on mental health disparities and diseases and will be mentor the fellow through the surveillance and analysis process.

Preparedness Role

The fellow will attend incident management trainings, participate in public health emergency drills and exercises as a section chief. Annually, the City of Laredo hosts Operation Lone Star. This is a full scale exercise that tests our capabilities in providing medical countermeasures as a border town with Mexico. This exercise sees up to 800 people a day and provides services such as medical, immunizations, dental, vision, nutrition and mental health services. The fellow will form part of the incident command structure. The fellow will also obtain pertinent preparedness certifications and conduct annual CASPER's for mental health and substance abuse awareness.

Additional Activities

The fellow may also be involved in other chronic epidemiology activities such as:

- Assessment of breast cancer burden
- The spatial distribution of cardiovascular disease in obese individuals to identify pockets of need for directing appropriate resources
- Develop a database for childhood obesity and determine the state of obesity in children.

Mentors

Primary Richard Chamberlain DrPH(c), MPH, RS
Assistant Director

Secondary Amelia Solis MS
PHEP/Epi Supervisor