

Maternal and Child Health, Chronic Diseases

Arizona Department of Health Services, Division of Prevention Services

Phoenix, Arizona

Assignment Description

The CSTE fellow assigned to the Division of Prevention Services will be housed between the bureaus of Women's and Children's Health and Tobacco and Chronic Disease. The fellow's primary supervisor, Ms. Michelle Sandoval- Rosario is a Lieutenant Commander in the United States Public Health Service and a CDC Senior Epidemiologist assigned to the Arizona Department of Health Services, where she provides technical assistance, capacity, and epidemiology support to prevent and control chronic diseases. Michelle is also a CSTE Fellow alum, class of 2008.

The fellow's secondary supervisors Ms. Julia Wacloff and Ms. Enid Quintana Torres are trained epidemiologists housed within the Bureau of Women's and Children's Health. Ms. Wacloff serves as the Chief for the Office of Oral Health while Ms. Quintana Torres serves as the Epidemiology Program Manager for the Pregnancy Risk Assessment Monitoring System, commonly known as PRAMS. The fellow's two primary assignments will include evaluating PRAMS and establishing an oral and chronic disease population survey with families of kindergarteners and 3rd graders known as the 'Healthy Bodies, Healthy Smiles' survey. These two surveillance projects make DPH a quality host site with ample opportunities for a fellow to further their development and professional growth. The fellow will be considered a peer in matters related to epidemiology, evaluation, and public health surveillance and will become a critical member to the success of the projects, working hand in hand with public health professionals that will provide weekly mentorship and guidance throughout the project's implementation.

The fellow's assignment are to support the implementation of these projects through public health design; selecting effective methodologies; use of statistical software, and monitoring implementation process measures of each project. In addition, the fellow will have the opportunity to identify projects that are of their interest for the supervisors and mentors to support through mentorship; resource allocation; and partnership linking.

The fellow will also be embedded within the Bureau of Tobacco and Chronic Disease (BTCD). There are currently five programs housed under the BTCD. These include: Tobacco Prevention, Chronic Diseases, HIV Prevention, Cancer Prevention and Control, and the Health Disparities Center.

Day-to-Day Activities

The fellow's day to day activities will be similar to those of agency-hired epidemiologists. The activities are as listed in no order of importance or ranking:

- Conduct epidemiologic investigations used in the prevention and control of chronic diseases, injuries, and other health conditions related to women and children.
- Collect and analyze data to identify community needs prior to related to chronic diseases and
- Develop relationships with chronic disease and maternal and child health organizations across the state.
- Participate in syntheses of epidemiologic and other information to be applied to identifying and/or designing effective health equity related programs and practices.
- Collaborate with other epidemiologist across the agency to develop joint analyses and reports focused on chronic diseases, health equity, and reproductive health.
- Identifying, analyzing, and reporting public health issues and problems.
- Designing, manipulating, and using databases for analysis of health problems to assess the potential public health impact.
- Conducting literature reviews for program planning, preparation of publications, and for evaluation.
- Designing and preparing reports from analyses of surveillance data, literature reviews.
- Participating in writing grants and other funding proposals such as the Title V Block Grant; Public Health Block Grant; and other special projects between the two Bureaus that are of interest to the fellow.

Potential Projects

Surveillance Healthy Bodies Healthy Smiles Surveillance Project Activity

Arizona Department of Health Services, Office of Oral Health (ADHS, OOH) receives funds annually from the Title V Maternal and Child Health (MCH) Block Grant. One priority area of the grant is to measure and monitor the burden of oral disease for elementary school children at a level consistent with the Healthy People 2020 oral health objectives including the prevalence of dental caries experience, untreated dental decay, dental sealants, permanent tooth loss, oral and pharyngeal cancer, destructive periodontal disease, and use of the dental care system. To obtain the required information, ADHS, OOH will conduct the Healthy Smiles Healthy Bodies (HSHB) survey on elementary school children every five years (which coincides with our MCH Needs Assessment). In this five-year cycle, collected data will also be used to measure progress on Healthy People/Healthy Arizona 2020 objectives. The timeline is as follows: survey planning in 2017, conduct the survey in 2018, and analyze and report in 2019. The fellow will be involved with the implementation of the survey, analyze 2015 and 2018 results, and develop report with major findings and recommendations. In addition, the fellow will utilize results to monitor the progress of oral health in Arizona as it relates to the Healthy People 2020 and measure the burden of oral and chronic diseases among children. A written communication plan will also be developed by the fellow, describing the target audience, key messages and detailed information on when and how information will be distributed.

Surveillance Pregnancy Risk Assessment Monitoring System Implementation Evaluation Evaluation

PRAMS (Pregnancy Risk Assessment Monitoring System) is a surveillance project of the Centers for Disease Control and Prevention (CDC) and the Arizona Department of Health. PRAMS collects state-specific, population based data on maternal attitudes and experiences before, during, and shortly after pregnancy. In other state sites PRAMS data has been used to promote policy changes to improve public health outcomes on items such as flu, preconception health, breastfeeding, intimate partner violence prevention, safe sleep, among others. Currently PRAMS is in its first year of implementation at ADHS. The fellow will have a unique opportunity to evaluate the initial implementation of this ambitious surveillance project. ADHS will support PRAMS as part of routine surveillance similar to those of the Behavioral Risk Factor Surveillance System and the Youth Risk Behavior Survey. The fellow will work with the state's PRAMS coordinator in determining the appropriate evaluation while facilitating the fellow access to needed resources to properly evaluate the surveillance system. The fellow will attend all team meetings, monthly CDC meetings, and outreach activities as a PRAMS team member. In addition, the fellow will learn how to establish an effective surveillance system, develop performance indicators to track progress and milestones, revise and/or review protocols for easier implementation, amongst others. The fellow will be encouraged and supported to follow the "CDC Updated Guidelines for Evaluating Public Health Surveillance Systems: Recommendations from the Guidelines Working Group" in this project.

Major Project Tobacco Cessation Among Incarcerated Populations

Smoking tobacco significantly contributes to premature death and accounts for about six million deaths worldwide each year, including deaths from lung cancer, asthma, heart disease, and chronic obstructive pulmonary disease. Despite recent declines in smoking in the United States, incarcerated adults are up to four times more likely to use tobacco than the general population. Although many correctional facilities have adopted some type of smoke free or tobacco-free policy, many inmates cycle through prisons, interrupting tobacco use only when they are incarcerated, and resuming tobacco use upon release. The BTCD has partnered up with the Arizona Department of Corrections (which currently allows tobacco use), as well as the Maricopa County Jail System (which prohibits tobacco use) to implement and evaluate smoking cessation programs among incarcerated populations. For this project, the fellow will assist with drafting proposal, developing methodology and survey tools, and utilize both qualitative and quantitative data to evaluate the impact of the smoking cessation programs in correctional facilities. In addition, the fellow will have the opportunity to publish results and present project at local and national conferences. This unique project will allow fellow to collaborate with law enforcement stakeholders, and the attorney general's office.

Additional Project Preventing and/or managing chronic illnesses among Refugees

Forced displacement continues to be an ongoing issue affecting over 65 million individuals globally. The United States continues to be a safe haven for tens of thousands of vulnerable refugees, giving them a chance to find a new home and safety. While integrating to their new communities, it has become evident that more work needs to be done within public health systems to support refugees, as other despaired communities, in preventing and/or managing chronic illnesses. One of the strategies of the ADHS will be to ensure our program and projects are evidence based. The CSTE Fellow will help the program manager analyze both qualitative and quantitative data from collaborative health partner surveys; match resettlement and health data; and present and share evidence based best practices. Within the setting they will also have the opportunity to learn more regarding community-based participatory research and leadership.

Preparedness Role

As a trained epidemiologist, the fellow will have the capacity to be involved if a public health emergency were to arise. They will become a critical partner in the response. In addition, the fellow will have an opportunity to participate on tabletop exercises on a variety of topics with stakeholders across the state.

Additional Activities

The fellow will have ample opportunities to participate in programs across the two Prevention bureaus in projects such as:

- Development of EPI briefs utilizing BRFSS data to monitor MCH and chronic trends in Arizona
- Enhance the division's capacity in public health evaluation by providing their own skillset in the design and execution of program evaluation in areas ranging from women's health to children with special health care needs.
- Utilize a variety of data sources (Hospital Discharge Data, Mortality Data, etc.) to monitor health status and identify health disparities.
- Develop health profiles and infographics to highlight specific populations (Veterans, LGBT, Refugees) and racial/ethnic disparities.
- Evaluate a wide range of health conditions through a health equity lens, establishing clear connections to priority topics in health equity and in alignment with the Arizona Health Improvement Plan.
- Collaborate with refugee program manager to identify and evaluate chronic diseases among refugees.
- Collaborate with American Indian Liaison and tribes to develop the Arizona American Indian Health Status Summary Report, highlighting some of the health disparities and major causes of death faced by the American Indian/Alaska Native community in Arizona.
- Evaluate tobacco use and smokeless tobacco use trends among youth and adults and communicate information to stakeholder across the state.
- Participate in generating reports from statewide surveillance systems such as the Arizona Behavioral Risk Factor Surveillance System (BRFSS)
- Investigate the association between health issues and social demographics (income, access to health insurance, education, etc.) outcomes, as well as the association between oral health issues.

Mentors

Primary	Michelle Sandoval-Rosario MPH, CPH, DrPH(c) Senior Staff Epidemiologist
Secondary	Enid Quintana-Torres MPH Epidemiology Program Manager; PRAMS Coordinator

