

Chronic Disease

Assignment Description:

This assignment will have two areas of focus, one on the epidemiology of chronic diseases among American Indians in Arizona and another on occupational health. The Department is currently conducting a data inventory including gathering information on race designation and tribal affiliation. The fellow will work with programs to develop American Indian profiles with available data, and where possible, impute reservation specific summaries. Summary information will be shared with tribes, Tribal Epidemiology Centers (TEC), and Indian Health Services (IHS). This information will provide examples for tribes about the importance of data sharing and initiate the process for proposed data sharing agreements with tribes. There will be opportunities to work with tribes on special projects, such as cancer registry cross match with New Mexico, tribal enrollment check against vital records, and possible CDC Epi-Aids on tribal lands.

The second focus on occupational health entails establishing communication and data sharing with the State Compensation Fund, the Industrial Commission (state OSHA) to compile an occupational health profile for the state. The completed profile will be shared with partners and used for grant writing or proposals for state funding. The CSTE Epidemiology Fellow will also compose articles for the "Public Health Update" for sharing with providers and public health practitioners around the state.

Day-to-Day Activities:

Anticipated day to day activities for the fellow will include:

- Learning about each of the enterprise databases and the kind of information collected, including American Indian race, tribal affiliation, and reservation residence.
- Assisting with outbreak investigations by participating in study design, data collection, data analysis, and intervention recommendations;
- Participating in a CDC Epi-AID as opportunities arise
- Communicating and coordinating with counties, tribes, other states, CDC, IHS, FDA and USDA as well as with the Office of Border Health with cross border disease investigations;
- Coordinating with the local health departments, State Laboratory and CDC to track specimens, follow up with results, notify providers, and arrange for further testing of specimens/isolates; and
- Utilizing the incident command structure during public health emergencies including widespread infectious disease outbreaks.
- Answering questions from the public

Additionally, the Fellow will also have the ability to work alongside other epidemiologists within the Bureau and with the Office of Health Disparities and Chronic Disease Prevention. Orientation will include a meeting with several key staff and managers, tour of our state laboratory, HIPAA training, FEMA training on incident command structure, meeting with local health agency staff, cultural competency training, and attending stakeholder meetings.

Potential Projects:

Assess the utility of the Department's Hospital Discharge Database (HDD) for revealing off-reservation hospitalization rates of American Indians.

Work with the Arizona's HDD and Indian Health Services (IHS) RPMS datasets to determine hospitalization rates in the two dataset. Determine the validity (sensitivity, capture rates) of the two

systems for specific conditions such as cancer, injuries, birth defects, infectious diseases. Outcome: ability to monitor rates for serious conditions.

Working with state programs to determine which surveillance systems capture American Indian race, tribal affiliation, on reservation residence, geo coding of residence and other variables that can be used as proxies of the racial designation or tribal residence. The assessment should include the extent these databases are complete and validated for the fields of interest. The findings will be summarized and shared with the two Tribal Epidemiology Centers, Governor's Advisory Council on Indian Health, and IHS Area Offices. This will also lead into the next project.

Work with Tribal Epidemiology Centers to determine interest by Arizona tribes to receive and share public health data and, understanding that each tribe has different concerns, develop a template that might be used as a starting point for a data sharing agreement between the Department and tribes, local health agencies and tribes, Indian Health Services and the Department, and time permitting tribes and Indian Health Services.

Under the guidance of Dr. Flood and Mr. Komatsu, reach out and establish communication with Workers Compensation Fund, Office of Arizona Occupational Safety and Health and federal partners to compile data and develop an occupational health profile for Arizona for several years. Assist in writing a grant to fund the program.

Preparedness Role

The CSTE Epidemiology Fellow will take required FEMA online courses and assist in drills, functional exercises and table top exercises within the operations section. The Fellow will also receive training on handling emergency calls to our after-hours answering service.

Assignment Location: Phoenix, AZ

Primary Mentor: Khaleel Hussaini, PhD
Bureau Chief, Public Health Statistics
Arizona Department of Health Services

Secondary Mentor: Timothy Flood, MD
Medical Director, Public health Statistics
Arizona Department of Health Services