

Maternal and Child Health

Assignment Description

The Family Health Services Division (FHSD) is located within the Hawaii Department of Health (DOH). The primary mentor for the CSTE Fellow will be Dr. Donald Hayes, who is the CDC-assigned Senior Maternal and Child Health (MCH) Epidemiologist in Hawaii. The secondary mentor will be by the FHSD chief, Loretta J. Fuddy. The FHSD level includes several diverse programs and Dr. Hayes provides guidance on Epidemiological issues to three branches: 1) the maternal and child health branch; 2) the children with special health needs branch; and 3) the Women, Infant, and Children (WIC) branch.

The Hawaii DOH provides a unique opportunity for a CSTE Fellow to work with and learn about the diverse community in Hawaii. The CSTE fellow will be located within the FHSD and become involved in multiple programs at both the division and the branch level. The Fellowship will involve learning about the structure and function of the DOH; gaining experience with public health surveillance systems; attending meetings and trainings appropriate to learning; and increasing skills in data analyses, presentations, and publications. This will be accomplished through collaboration with the primary mentor and research statisticians throughout the department, as well as working with partners at the School of Medicine and the Office of Public Health Studies. The CSTE Fellow will serve an important role in emergency preparedness for the State of Hawaii and will be expected to complete sponsored trainings and be available when needed. We are looking to obtain a CSTE fellow who will be able to take the lead and develop projects around topics of interest.

Day-to- Day Activities

CSTE Fellow is expected to work on primary projects, fulfill other CSTE objectives, participate on workgroups, review and develop survey questions, and additional analyses or projects as identified.

Potential Projects

1. Prematurity is the leading cause of neonatal deaths and often associated with birth defects and long term health problems. Reduction in preterm delivery holds great promise for overall reduction in infant illness, disability, and death. Premature delivery is an area of growing concern in Hawaii and across the nation. A recent data brief from the National Centers for Health Statistics highlighted Hawaii as the only state with a significant increase in rates of prematurity from 2006 to 2008. During the course of the fellowship, the fellow will be expected to review the work done around prematurity in the state, conduct additional analyses on existing data systems, translate the analytic data into reports, and work with community groups and providers.

Additionally, there is potential to assist in the development of legislation and other initiatives to decrease the burden of prematurity in the state. Products anticipated from this practicum include the development of reports to key stakeholders, abstracts, and manuscripts.

2. Trying to identify community behaviors and associated health affects has becoming increasing a part of public health and epidemiology. Geographic Information Systems (GIS) are a valuable tool for assessing location of behaviors and clusters of disease. In Hawaii, we are recently beginning to explore GIS mapping of chronic disease. We would like a CSTE fellow to look at several datasets, including BRFSS, YRBS, and hospital discharge data in order to first map specific chronic diseases on the islands of Hawaii.

We would then like the fellow to look at associated risk behaviors, such as nutrition and physical activity indexes, and map these as well. The fellow will then look at corresponding risk behaviors and chronic disease outcomes in order to determine with geographic clustering is occurring. Additional information that could be included might be the location of grocery stores, alcohol sellers, recreational locales, etc. We anticipate that a CSTE fellow will be able to produce key findings to present both on an academic level and for policy making.

3. The Hawaii DOH, WIC branch has an extensive database which includes encounters among mother in the prenatal time period, postpartum, and the interconception period for those that remain on WIC, and information on their children participating in WIC. We have been successful in linking the WIC data to several other data sets: the newborn birth certificate, the newborn metabolic, and the newborn hearing screening databases. We would like to obtain a CSTE Fellow to look at these linked data sets and develop various research projects such as ensuring that anemic infants identified by newborn screening receive appropriate nutritional counseling when seen in WIC. Other potential analyses with this linked data include assessing birth weight and longitudinal outcomes in children, assessments of prenatal characteristics captured in WIC and predictors of hearing loss. Products anticipated from this practicum include the development of reports to key stakeholders, abstracts, and manuscripts.

Preparedness Role

The CSTE Fellow will be expected to complete trainings and be available for emergency preparedness activities for the State of Hawaii.

Assignment Location:	Honolulu, Hawaii
Primary Mentor:	Donald Hayes, MD, MPH Epidemiologist Hawaii Department of Health
Secondary Mentor:	Loretta Fuddy, ACSW, MPH Division Chief Hawaii Department of Health