

Maternal and Child Health

The Family Health Services Division (FHSD) is located within the Hawaii Department of Health (DOH). The FHSD level includes several diverse programs and Dr. Hayes (primary mentor) 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 various topics which may include, but is not limited to:

1. 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 they are seen in WIC. Other potential analyses with this linked data include assessing birthweight 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.
2. In Hawaii, as across the nation, mothers are increasingly delaying child birth to later years and this has been reflected by the increase in mean age of births. Concurrently there has been a substantial increase in risk factors for as well as the development of chronic disease such as obesity, hypertension, diabetes, and cancer. This increase in disease can influence maternal and child health outcomes. Further, about half of all pregnancies are unintended so it is important to emphasize clinical and public health programs to promote healthy pregnancies in

those contemplating a pregnancy as well as those not currently anticipating one. Studies are needed to determine relationships between chronic disease, medication use, advancing maternal age, pregnancy intendedness, family planning, and receipt of appropriate clinical care. It is expected that these analyses will highlight the increasing importance of preconception and inter-conception care for women of reproductive age. The PRAMS Hawaii data set allows exploration of several of these indicators so studies can be done to see how they relate to preconception and inter-conception care, particularly among Hawaii's unique Asian and Pacific Islander populations. Other potential data sources include the Behavioral Risk Factor Surveillance System and Hospital Discharge Data. This practicum will occur in a broader context to utilize current data and drive the development of and use of various data sets to inform the Department of Health and Maternal and Child Health stakeholders in Hawaii. This may include meeting with various clinical providers, medical training programs, and the Hawaii Medical Association. Products anticipated from this practicum include the development of abstracts, manuscripts, and helping to frame the issue in Hawaii.

3. Hawaii is a very unique and diverse population. Some of this is reflected in that the majority of all births in Hawaii can be considered multi-ethnic. The impact of this heterogeneity on outcomes is not known. The Hawaii birth certificate captures as many racial/ethnic groups that are entered but traditionally are classified into a single race for reporting consistency. In addition to this single race coding, we can obtain the full birth certificate file which would include all racial/ethnic groups entered and the CSTE Fellow could evaluate the birth certificate file for birth outcomes such as Preterm delivery and Low birthweight with a particular interest in changes depending on classification based on reported child's race, compared to mother's race, father's race, both the father's and mother's race. This work will help inform the department on the use of ethnicity data for program purposes and develop guidelines around how multiple race and ethnicities could be classified. Products anticipated from this practicum include the development of reports, presentations, abstracts, and manuscripts.

There may be some difficulty in obtaining inexpensive housing and prospective fellows should be aware of the high cost of living in and getting to Hawaii. For example, the office is located on the outskirts of Waikiki and 1BDRM apartments run anywhere from \$1000 to \$2000 monthly.

Assignment Location:	Honolulu, Hawaii
Primary Mentor:	Donald Hayes, MD, MPH Maternal and Child Health Epidemiologist Centers for Disease Control and Prevention

Hawaii State Department of Health
Family Health Services Division

Advanced Degrees: MPH, San Diego State University (2004)
MD, University of Hawaii (1999)

Secondary Mentor: Loretta Fuddy, DrPH, MSW, MPH
Chief, Family and Health Services Division
Hawaii Department of Health

Advanced Degrees: DrPH, Johns Hopkins (1990)
MPH, University of Hawaii (1982)
MSW, University of Hawaii (1973)