

Maternal and Child Health/Birth Defects

Description:

The Fellow will be placed in the Office of Family Health Services (OFHS) within the Virginia Department of Health (VDH) located in downtown Richmond, Virginia. The OFHS will provide an outstanding opportunity for an applied epidemiology fellow to achieve and demonstrate competencies in the areas of epidemiologic methods, communication, and public health practice. The OFHS includes the following divisions: Child and Adolescent Health, Women and Infants' Health, WIC and Community Nutrition Services, Dental Health, Chronic Disease Prevention and Control, and Injury and Violence Prevention. The Fellow will be based out of the Policy and Assessment Unit (PAU), which is an office-level unit with responsibilities across all six divisions and is where both mentors work.

Day-to-Day Activities:

When the fellow is not working on the surveillance system evaluation and the major project, there will be a variety of activities and opportunities to enable them to fulfill all of the fellowship competencies. The Policy and Assessment Unit of OFHS routinely assists the six divisions of the OFHS in a variety of data analysis and support capacities. The fellow will gain experience in providing statistical support and technical assistance to program managers and policymakers, assisting in data-driven evaluations of MCH programs, responding to routine data requests, and synthesizing information from multiple data sources on requested topics. The fellow will also be asked to conduct literature reviews on emerging issues in MCH and formulate ways to replicate analyses with Virginia's MCH data. The fellow will assist the secondary mentor in conducting trend analyses on topics such as teen pregnancy/birth rates, Title V indicators, and medical risk factors/complications of pregnancy. Most importantly, the fellow will have the opportunity to explore any MCH area that he or she finds interesting, including off-site special events. Past opportunities included attending a birth defects genetics clinic, a WIC clinic, the Virginia infant mortality summit, bicycle helmet distribution events, and Virginia's first statewide conference on health inequities.

Potential Projects:

We offer great flexibility to the Fellow regarding activities and opportunities they can participate in throughout their fellowship. Regardless of the major project chosen, the Fellow will be invited to participate in OFHS Epidemiology Workgroup meetings, where they will have the opportunity to interact with research staff from each of the 6 divisions. They will have numerous opportunities to get involved with the activities in any area of interest within the OFHS. The fellow will be encouraged to publish data related to their work in the form of a submission to a scientific conference and/or a manuscript submission to a peer-reviewed journal. The primary mentor will provide access to resources at the Virginia Commonwealth University's emerging School of Public Health, such as the Tompkins-McCaw Library for the Health Sciences. If they are interested, fellows will also have the opportunity to gain

teaching/mentoring experience at the graduate level through participation in the Maternal and Child Health Epidemiology course taught each Fall by Dr. Chapman.

Surveillance Evaluation Opportunity:

- Fellows would be expected to evaluate the Virginia Pregnancy Risk Assessment Monitoring System (PRAMS), which began data collection in 2007.

Major Project Opportunities: Major project opportunities for the fellow center around the use of linked data to conduct applied research studies which will guide MCH programs and policies. The fellow will create new data linkages (e.g., Medicaid – birth linkage, PRAMS linked to other data sources, etc.) or improve/add additional years to one of the following existing linked datasets:

- Pregnancy history data (currently 1990-2008 live birth, fetal death, and infant death data are currently linked)
- Birth-Birth Defects-Newborn Hearing screening data (2002-2006 birth years are currently linked)
- Birth-WIC data (2008 data are currently linked)
- Census-Birth/Death data (1990-2008 birth/death data are geocoded to the street level; census variables are available for spatial/ecologic analyses)

Current examples of applied research questions being answered using these datasets include:

- What is the impact of co-morbid birth defects on the timeliness of newborn hearing screening and diagnosis?
- Does the risk for preterm birth associated with short interpregnancy interval vary based on the number and type of intervening terminations?
- What is the recurrence rate of preterm birth among women with late preterm first birth?

Emergency Preparedness Role:

In Virginia, the OFHS is tasked with staffing the state Distribution Center in the event of an emergency requiring Virginia to access materials from the strategic national stockpile. OFHS staff regularly participate in training in the use of the Inventory Management System and practice exercises. The most recent activity involved the repackaging and shipment of H1N1 supplies throughout the state. The Fellow will also have the opportunity to get involved with other aspects of emergency preparedness. For example, this year the VDH expanded its statewide call center to field questions from the public about H1N1 and other public concerns; the Fellow could participate in similar types of activities as the opportunities arise.

Assignment Location: Richmond, VA

Primary Mentor: Derek Chapman, PhD, MS
State MCH Epidemiologist
Virginia Department of Health

Secondary Mentor:

Caroline Stampfel, MPH
MCH Lead Analyst
Virginia Department of Health