

Maternal and Child Health

Assignment 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: Policy and Evaluation, Child and Family Health (Child and Adolescent Health, Women and Infants' Health, and, Dental Health program areas), Prevention and Health Promotion (Chronic Disease Prevention and Control, and Injury and Violence Prevention program areas), and Community Nutrition. The fellow will be based out of the Division of Policy and Evaluation, which provides epidemiology and evaluation support for all program areas in the OFHS 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 Evaluation Division of the OFHS routinely assists the other four divisions 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 analyses of PRAMS data, reporting trends for Title V indicators, and providing data to the Health Commissioner's Infant Mortality Workgroup. Most importantly, the fellow will have the opportunity to explore any MCH area(s) 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 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 4 OFHS 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 and faculty at Virginia Commonwealth University's Public Health Departments, including 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.

Fellows would be expected to evaluate Virginia's Early Hearing Detection and Intervention (VEHDI) surveillance system. VEHDI has undergone a number of exciting changes over the past two years, including integration with Virginia's Vital Records system, expanding reporting to include passed screens, and adding an electronic reporting module for audiologists.

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:

- Maternally linked intergenerational birth dataset (currently, maternal data from 2005-2009 birth data are linked to 1960-1997 birth data)
- Pregnancy history data (currently 1990-2008 live birth, fetal death, and infant death data are currently linked)
- Birth-WIC data (2008-2009 data are currently linked)
- Census-Birth/Death data (1990-2010 birth/death data are geocoded to the street level; 2000 census variables are available for spatial/ecologic analyses, 2010 data need to be added as it becomes available)

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

- What is the recurrence risk for preterm and low birthweight across two generations?
- What is the contribution of maternal low birthweight to maternal health during pregnancy (e.g., hypertension, diabetes) and labor/delivery complications?
- 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?

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. In the event of a public health emergency, the CSTE fellow would assist the Office of Family Health Services (OFHS) in carrying out its assigned role of receiving, stage, and storing (RSS) the CDC's Strategic National Stockpile (SNS). The CSTE fellow will work with OFHS staff to assist in the RSS of 12 hour push packs and managed inventory from the SNS in the event of a public health emergency. Specific roles/responsibilities would be assigned based on the nature of the public health emergency. The general role for the CSTE fellow would assume includes:

- 1) Assist in the unloading of a 12 hour push pack sent from SNS.
- 2) Assist in the OFHS staff in picking items from the 12 hour push pack to ship to various Points of Distribution (PODs) across Virginia.
- 3) Assist in the unloading of Managed Inventory from SNS as needed.
- 4) Perform additional tasks/roles as needed and appropriate with the nature and scope of the public health emergency.

The fellow will also have the opportunity to get involved with other aspects of emergency preparedness. For example, a few years ago 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. In the event of an infectious/vector driven public health emergency, the CSTE fellow may be called upon to assist Office of Epidemiology staff.

Assignment Location:	Richmond, Virginia
Primary Mentor:	Derek Chapman, MS, PhD State MCH Epidemiologist/Assistant Professor Virginia Department of Health/Virginia Commonwealth University
Secondary Mentor:	Christopher Hill, MPH Lead MCH Epidemiologist Virginia Department of Health