Colorado_ Letson

1) The program area consists of two integrated components. One has existed for some time. The second is new, developing and the result of the first round of CSTE support of MCH Epidemiology capacity development. The former is comprised of a PhD demographer (2nd Mentor) who has analyzed and/or compiled data for years that has gone into the formulation of the Title V block grant application submitted annually by Colorado. The latter is an MD, Pediatric Infectious Diseases Epidemiologist and former Wyoming Title V director, retrained via CSTE MCH Epi fellowship in year 2000 as an MCH Epidemiologist. Each are housed in Colorado's Office of Maternal Child Health (MCH)which is itself housed in a larger Preventive Services Division of CDPHE that combines all preventive approaches to chronic diseases and Maternal and Child Health.

2) Anticipated activities would include participation in key meetings having to do with components of the MCH planning process including the opportunity for direct, hands on input into the block grant application. Opportunities exist, by participating in the block grant process, to understand cross-linkages between MCH and WIC and MCH and chronic disease program activities of relevance such as cancer, injuries, tobacco, obesity and asthma, all of which reside in the Preventive Services Division. In addition, although Immunizations is housed in the Disease Control Division, the primary mentor serves as Principle Investigator for the CDC Immunizations grant to Colorado presenting more opportunity for cross-linkage to other MCH related activity at CDPHE. A good deal of time would be spent on coming to understand at least two datasets(specified in 3 and 4 below) and then completing analytic projects to answer questions of relevance to MCH. This would be done with direct and daily contact supervision by the primary mentor with assistance of the second mentor and others in the MCH arena as appropriate. Effort will be made to publish the results of such investigations in a peer reviewed journal.

3) The principal mentor is PI on a CDC grant to electronically link newborn hearing and metabolic screening databases with the electronic birth certificate (EBC), immunization registry, birth defects registry, child traumatic brain injury (TBI)database, Part C of Individuals with Disabilities Education Act database and with a county level public health nursing case management database. Potential projects in these areas might be:
a) Analysis of late onset hearing loss patients from Part C and regional audiologists with an eye toward demographic and birth related risks for late onset hearing loss;
b) Analysis of the completeness of newborn hearing and metabolic screening and EBC related risk factors associated with failed screening;
c) Possibilities exist for outbreak investigation occasionally when an excess of cases of something such as congenital hypothyroidism, sickle cell disease or TBI occurs for example. Investigations in these areas would involve collaboration with disciplines such as audiology, Pediatric sub-specialists, and public health nurses and geneticists/genetics counselors depending on the specific analytic project at hand.
From other data sources, there are potential projects for analysis of:
d) Violence, depression and substance abuse from both the PRAMS and YRBS databases;
e) We are planning a repeat of an earlier birth certificate Population Attributable Risk (PAR) study of low birth weight after implemented interventions resulting from the first analysis;
f) We also are planning a similar birth certificate PAR study of premature birth.

4) The projects described above that would come from the electronically integrated data systems; represent evaluation of disease surveillance systems. As this system is just coming on line currently, only a few analyses have been done, creating a timely opportunity for an MCH Epi fellow to be involved in the next set of analytic questions. In addition to risk factor analysis, there would be potential for program analysis of the adequacy of current follow-up activities in the light of recent electronically enhanced ability to fully detect all newborns that have not been screened.

5) The primary mentor has been intimately involved in the Smallpox portion of the states bioterrorism activity, which is housed in the Disease Control Division, and is also one of the PSD designates to the CDPHE Emergency Preparedness Advisory Committee. We have not, to date, had great input on the overall approach to the uniqueness of children when planning for large scale emergencies. The fellow could be actively involved in such work to the extent he or she felt appropriate given the selection of projects from the above menu. The primary mentor would be involved in this process and could facilitate from the vantage of his involvement in statewide emergency preparedness.

Assignment Location: Denver, Colorado

Primary Supervisor: Bill Letson, MD, MS
MCH Epidemiologist, CO Department of Health (1998-present)

Advanced Degrees: MD, University of Colorado School of Medicine (1981)
MS, Colorado State University (1978)

Secondary Supervisor: Susan Ricketts, PhD
MCH Epidemiologist (1982-present)

Advanced Degrees: PhD, University of Pennsylvania, Philadelphia (1973)
MA, University of Pennsylvania, Philadelphia (1969)