

North Dakota_ Pickard

The Community Health Section (CHS) is one of five sections within the North Dakota Department of Health. The section's overall goal is to promote health and prevent illness and disease. There are six divisions located within the CHS; Division of Cancer Prevention and Control, Division of Chronic Disease, Division of Family Health, Division of Injury Prevention and Control, Division of Nutrition and Physical Activity, and Division of Tobacco Prevention and Control. Three of the six divisions focus on maternal and child health services for state public health: Division of Family Health, Division of Injury Prevention and Control, and Division of Nutrition and Physical Activity. These division's programs include abstinence education, coordinated school health, early childhood comprehensive systems, domestic violence, family planning, injury prevention, lead program, newborn screening, nutrition, optimal pregnancy outcome program, school nursing, SIDS, women's health, and WIC. Although each of these program areas has designated management staff, there is only a single research analyst, not just for these three divisions, but for the entire section. Because of the low data capacity in the programs, an MCH epidemiologist will concentrate on a broad variety of activities to build scientific capacity within the divisions.

Although the fellow's day-to-day activities will vary, on any given day is likely to include some of the following:

- Meeting with the supervising epidemiologist,
- Program consultation,
- Strategic coordination with research analyst,
- Data analysis,
- Product or paper preparation,
- Surveillance evaluation,
- building relationships with external partners,
- Team project or research design,
- Identification and acquisition of data,
- Teaching, product presentation, or data presentation,
- Participation in important departmental or division meetings and decision-making.

Although work would be closely tied to meeting programmatic need, the epidemiologist would not be expected to participate in budgeting, supervise employees, or act as a lead grant writer. The epidemiologist may accompany management staff on program site visits as part of program evaluation assessments.

The epidemiologist will be encouraged to work on many projects that provide a broad range of experience. Project selection will focus on development of the skills needed to support state and local maternal and child health programs on a continuing basis (scientific communication, data interpretation, analysis, consultation, public speaking, data application, product design).

Up to 10% of the epidemiologist's time may be spent in research activity or may be spent in a cross disciplinary experience (e.g., chronic disease, infectious disease outbreak experience). For many of the proposed activities, it is expected that substantial consultative assistance from the primary epidemiologic supervisor will be needed and that this will be an important source of training and education for the epidemiologist. Although the fellow could obviously not be involved in all the activities listed below, potential projects are intended to be varied. Potential projects include:

- Surveillance system evaluation and surveillance system design. Examples include: development of surveillance for childhood obesity; evaluation of surveillance system for childhood injury or birth defects; data product evaluation and enhancement (e.g., web data

distribution); data collection from school nursing; survey content development for state Youth Risk Behavior Survey.

- Descriptive epidemiology and analysis. Examples include: description of health status and health risks of American Indian children; description of adverse health outcomes of pregnancy.
- Participation in and epidemiologic support for state consensus workgroups in Healthy North Dakota. Examples include: background description of burden of disease; identification and tracking of disease objectives for child nutrition and physical activity; breastfeeding; oral health; and scientific writing.
- Program needs identification (program consultation). Examples include: matching data needs to program goals; interpretation and presentation of data.
- Program evaluation: negotiation, threat reduction, cooperative evaluation with programs; data-driven outcome measurement; assessment and description of local best practices in application of MCH services.
- Community assistance (provision of hands-on assessment and evaluative assistance to communities attempting to change local health outcomes).
- Cross disciplinary options and research: evaluation of a unique childhood asthma management program on the Spirit Lake Reservation; participation in the investigation of an outbreak of infectious disease and experience with case investigation; collaboration with University of North Dakota researchers on a data analysis and publication project.
- Participation in training opportunities (e.g., software, incident command, epidemiologic training, policy meetings).

The fellow's primary supervisor works extensively with the emergency preparedness planning process, particularly in the areas of plan development and plan evaluation. Opportunities for education in emergency planning, bioterrorism and plan development are readily available. Over the next year, plan development for chemical, nuclear and radiological emergency planning will assume high level importance to the department. It is likely that in any serious health crisis (e.g., avian influenza pandemic), all hands will be needed to contribute to the emergency response.

Assignment Location: Bismarck, North Dakota

Primary Supervisor: Stephen Pickard, MD
CDC Epidemiologist, North Dakota Department of Health (2002-present)

Advanced Degrees: MD, University of Louisville (1982)

Secondary Supervisor: Larry Shireley, MPH, MS
State Epidemiologist/Director, Division of Disease Control, North Dakota Department of Health (1989-present)

Advanced Degrees: MPH, Tulane University (1980)
MS, Purdue University (1979)