Maternal and Child Health

The Bureau of Community Health Promotion (BCHP) in the Wisconsin Division of Public Health (DPH) consists of cross-cutting programs throughout the lifespan: chronic disease epidemiology, maternal and child health (MCH) [birth defects surveillance, PRAMS, reproductive health, genetics/genomics, UNHS/EHDI, children and youth with special health care needs (CYSHCN)]; injury prevention and EMS for children; physical activity and nutrition (including WIC); oral health; tobacco avoidance; cancer control and well-woman program. We have adopted the CDC Healthy People at Every Stage of Life framework: "All people, and especially those at greater risk of health disparities, will achieve their optimal lifespan with the best possible quality of health in every stage of life." For more than 4 years, we have had a very active Program Integration team to harmonize the health promotion/disease prevention messages throughout the lifespan, and Wisconsin is currently 1 of 4 pilot sites for CDC program integration demonstration project. The CSTE fellow will have exposure to all areas of epidemiology, program evaluation and disease surveillance in BCHP, which has 15 epidemiologists specializing in various areas of chronic disease and MCH. These individuals, along with students from the University of Wisconsin School of Medicine and Public Health (UWMSPH) and a number of fellows and trainees, make up a learning community that contributes to public health workforce development; the 2 mentors alone have published more than 50 articles with students and fellows.

Day-to-Day Activities:

- Participate in the following meetings: BCHP-wide meetings (2X/yr); Integration- Team meetings (6-10X/yr); Statewide epidemiology meetings (2-3X/yr); Preparedness group meetings and trainings (6-8X/yr)
- Weekly progress meeting with mentors (2-4 hr/wk as specified, minimum)
- Attend and make at least 1 presentation in learning sessions with other students at DPH (med, nursing, epidemiology, MPH fellows)
- Attend weekly public health seminars at UWSMPH
- Choose one or more epidemiologic surveillance, program evaluation, or policy development projects and follow it/them from development to investigation to data collection to analysis to report or manuscript completion
- Become comfortable with indicator development, database linkage, GIS mapping, and evidence-based public health

Potential Projects:

Epidemiology and surveillance of health disparities: This is an important area of investigation in all aspects of MCH and chronic disease in Wisconsin. For example, in 2004, white infant mortality (IM) reached the HP 2010 goal of 4.5/1,000 live births; however, the black IM was 19.2, with a B/W disparity ratio of 4.3—the worst in the US. Similar chronic disease disparities exist.

The fellow will be involved with data analysis, linkage, and display, including GIS mapping, as well a program evaluation, and policy development. The Governor and State Health Plan have a strong focus on disparity reduction (rural/urban, racial/ethnic, SES, age, gender, etc.). The fellow would be exposed

to a variety of different topics, programs, and collaborators, and have an opportunity to prepare reports and manuscripts.
Chronic disease and MCH integration across the lifespan: As described above, BCHP has a perfect structure (N~100 FTE) to examine the epidemiology of broad, common risk factors for chronic disease and MCH outcomes. Through an integrative approach, great potential exists for efficient use of resources to develop a strong case for prevention. Projects in this area would have the advantage of providing exposure to specific- condition research, as well as integrated projects across conditions. These projects would consist of collaborative program planning, surveillance, and evaluation.

Reduction in birth-outcome disparities: This project could include participating in an ongoing examination of the causes for the recent decline in infant mortality disparities in Dane County (MMWR 2009/58(20);561-565). In addition, there is a statewide initiative focused on eliminating racial and ethnic disparities in birth outcomes. Current projects through this initiative include identifying evidence-based pregnancy care practices to reduce disparities, the use of social marketing and support circles to reduce stress and improve birth outcomes, programs to support father involvement, and using a life-course approach to address these disparities.

In addition to the ongoing monitoring of disparities in birth outcomes in Wisconsin, there are a number of epidemiological and program evaluation opportunities related to the above projects. Child death review (CDR)/Fatal injury and violent death reporting: Wisconsin is now expanding the number of local CDR teams (now approximately 25) and is using the web-based standardized data and reporting system developed by the National Center for CDR. Projects related to quality and uniformity of data collection will be important, as well as linkage and utilization of data from the coroner/ME, crime lab, law enforcement, and death certificate reporting systems (Wisconsin Violent Death Reporting System).

PRAMS: Wisconsin began collecting data through PRAMS in 2007 and has just recently received its first year of data back from the CDC. As additional years of data are included in 2010, PRAMS will provide a valuable opportunity for monitoring and assessing the health of mothers and babies and examining existing health disparities. In addition, the survey contains information on chronic and other health conditions during pregnancy and can be used as a tool for program integration projects between MCH and chronic disease. Because Wisconsin is relatively new to PRAMS, there will be many opportunities for a fellow to be involved in data analysis and presentation.

Healthiest Wisconsin 2020 implementation and monitoring: The creation of Wisconsin's next state health plan will be completed at the end of 2009, and implementation and monitoring of the plan and its objectives will begin in 2010. Because a number of focus areas in the plan apply to MCH and chronic disease (healthy growth and development, sexual and reproductive health, chronic disease prevention and management, etc.), the next phase of Healthiest Wisconsin 2020 will present ample opportunities for a fellow to assist in putting the plan into action and in identifying and utilizing appropriate data sources for monitoring and tracking progress.

Preparedness: This project will focus on special populations: children, CYSHCN, older adults, individuals with chronic diseases and disabilities, low-income populations, and those with limited English proficiency, including Deafness. Epidemiologic studies, needs assessment, mapping, and disaster program planning would be developed. Evaluation Component: (included with above projects)

The fellow will participate in all ICS training and certification activities, and will be assigned a specific role in the event of an incident, such as an environmental spill, pandemic flu outbreak, fire, weather, or terrorist emergency, especially as it affects the MCH population and those with chronic disease.

Assignment Location:	Madison, WI
Primary Mentor:	Murray Katcher, MD, PhD Chief Medical Officer, State Epidemiologist for MCH and Chronic Disease Wisconsin Division of Public Health
Secondary Mentor:	Mark Wegner, MD, MPH Chronic Disease Medical Director Wisconsin Division of Public Health