

Maternal and Child Health

Childhood obesity has become one of the most important public health issues in the United States. One in four of Ohio's low income preschool-aged children and one in three of Ohio's third-graders are overweight or obese.

The Ohio Department of Health (ODH) has addressed childhood overweight through a wide spectrum of its programs including; 1) Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), 2) School and Adolescent Health, 3) the Early Intervention program, and 4) the Community Obesity Grants. The Office of Healthy Ohio (OHO) recently established a Chief of Community and Obesity Prevention to coordinate activities related to adult and childhood obesity. This allows for better program (i.e., diabetes, physical activity, school health) integration. Additionally, the governor has charged ODH with leading the development of a statewide obesity prevention plan, with a special focus on childhood obesity. The OHO Chief of Community and Obesity Prevention will coordinate this effort. The fellow would work with staff across program areas.

ODH is actively involved in surveillance of childhood obesity. The School and Adolescent Health Section has conducted surveillance of obesity among 3rd grade Ohio students since the 2004-5 school-year. In 2004-5 and planned again for the 2009-10 school were large surveys that provide obesity estimates at the county level and allow for subgroup analyses. In the intervening years, smaller surveys, which provide state level estimates, are conducted. These surveys are coordinated with the oral health survey and involve directly measured heights and weights. A report from the 2004-5 survey can be found at the following link:

<http://healthyohioprogam.org/ASSETS/7FBDB7A5C3FB4977A430A1EA46C642D9/bmirept.pdf>.

Methods for the survey are available as of December 15, 2008 in the January 2009 edition of the online journal Preventing Chronic Disease.

In addition to Ohio's 3rd grade surveillance, ODH has access to Ohio-specific data on childhood obesity from the National Survey of Children's Health (NSCH), the Youth Risk Behavior Survey (YRBS), and Pediatric Nutrition Surveillance System (PedNSS). the state has data on maternal obesity through our Pregnancy Risk Assessment Monitoring System (PRAMS).

The fellow's day to day activities will include contributing to childhood overweight priorities of interest to the fellow. Specifically, the fellow could assist with

- Training and data quality assurance for the 2009-10 3rd grade BMI survey;
- Collection of school-level information to augment the individual-level data for the 3rd grade BMI survey;
- Participation in the ODH-wide obesity "virtual" team, which is a forum for planning and sharing and is chaired by the Chief of Community and Obesity Prevention;
- Participation in ODH's two childhood overweight workgroups related to the Title V Block Grant;
- Assessment of Ohio's capacity to provide treatment for overweight children;
- Development of fact sheet or policy briefs on childhood obesity and related conditions;

- Evaluation and monitoring for the state's obesity prevention plan.

Activities may include conducting special investigations, communicating project results within and outside of the department, and opportunities to participate in meetings, local conferences and site visits that will enrich the internship experience.

The fellow's interests and individual training needs will drive the specific analysis projects undertaken. Statistical support is available through an existing contract with the Ohio State University Center for Biostatistics. Potential projects include:

- Multivariate analysis of 3rd grade obesity data including but not limited to
 1. multivariate analysis of 2004-5 data,
 2. multivariate analyses and multilevel (both individual and school level data will be available) of the 2009-10 data,
 3. trend analyses;
- Analysis of Medicaid data on conditions related to childhood obesity such as Type 2 diabetes;
- Analysis of the National Survey of Children's Health to identify characteristics of overweight children and children with risk factors for overweight in Ohio;
- Analysis of overweight and nutrition risk data from the PedNSS, which include participants in the WIC program. These systems have been operating since 1995 and can be linked to vital statistics birth records;
- Obesity and risk factors for obesity in Ohio using data from the Youth Risk Behavior Surveillance System (YRBSS).
- Impact of maternal obesity on birth outcomes using vital statistics or PRAMS data.

There are two major opportunities for evaluating surveillance systems:

- Conduct a thorough evaluation of the system to monitor childhood obesity among Ohio's 3rd grade students (see description above).
- Evaluate surveillance of overweight and obesity among low-income preschoolers through PedNSS.

Opportunities for outbreak investigations are available through the State Infectious Disease Epidemiologist in coordination with the Division of Prevention. Both have extensive experience supervising Epidemic Intelligence Service (EIS) officers in outbreak investigation. In addition, both supervisors have outbreak investigation experience and the secondary supervisor regularly supervises EIS officers in outbreak investigations. The majority of the fellow's projects, analytical and otherwise,

will be completed with interdisciplinary teams. Defining a public health problem, planning and completing a project, and communicating results will require that the fellow work with staff across the department and often partners outside of the department. The fellow is encouraged to publish the results of their projects.

The fellow will be invited to participate in trainings, planning meetings (such as the Bioterrorism Steering Committee Meeting), desktop exercises, and other elements of Ohio's emergency preparedness plan such as school emergency planning. ODH is committed to providing additional support and opportunities for the fellow's involvement in emergency preparedness.

Columbus, Ohio is a growing, culturally diverse city with many excellent schools, including colleges and universities, and a variety of affordable housing options. Greater Columbus is a thriving metropolitan area of 1.6 million people (Columbus is the 15th largest city in the U.S.). It is home to The Ohio State University, four major healthcare systems, nightlife, family attractions, and diverse sporting events and cultural arts.

Assignment Location:	Columbus, Ohio
Primary Mentor:	Elizabeth Conrey, RD, PhD State Maternal and Child Health Epidemiologist Centers for Disease Control and Prevention Division of Reproductive Health , Ohio Department of Health
Advanced Degrees:	PhD, Cornell University (2003) MS, Cornell University (1999)
Secondary Mentor:	Rosemary Duffy, MPH, DDS State Chronic Disease Epidemiologist Centers for Disease Control and Prevention Ohio Department of Health
Advanced Degrees:	MPH, University of Michigan (1988) DDS, Case Western Reserve University (1983)