

Substance Abuse

The Bureau of Epidemiology within the Michigan Department of Community Health (MDCH) provides epidemiological support to the state's Public Health programs. It is staffed by nearly 200 epidemiologists and professional staff organized into four Divisions: Communicable Diseases; Environmental Health; Genomics, Perinatal Health and Chronic Disease Epidemiology; and Immunization.

The CSTE Fellow will have opportunities to experience and contribute to applied epidemiology in a new topic, substance abuse, which cuts across multiple areas of public health. He/she will be based in the Epidemiology and Surveillance Section of the Division of Environmental Health (DEH) in the Bureau of Epidemiology, which provides epidemiology support to programs in Injury Control and specifically in substance abuse. The DEH currently has seven staff with advanced degrees and training in epidemiology; three have doctorates. Tom Largo, our Injury Epidemiologist, currently works part-time on substance abuse. He will provide technical support to the Fellow in accessing and manipulating data and in understanding case definition and coding issues. Because of the collaborative structure of the MDCH Bureau of Epidemiology, the Fellow can get access and assistance in using data systems managed by other sections such as Chronic Disease and HIV/AIDS. Please visit our website at www.michigan.gov/epi

The Bureau of Epidemiology is building its capacity to do substance abuse epidemiology and surveillance. On a daily basis, the Fellow will learn to use data sets of varying size and complexity, link data files, edit data and maintain quality control, and manage projects. He/she will participate in the design of studies, in data collection, in the analysis and interpretation of results, and in their dissemination. Academic collaborations are underway with experts in drug abuse epidemiology from Michigan State University (Dr. James Anthony) and the University of Michigan (Dr. Sandro Galea). The Fellow will join this collaborative research team which is constructing analytic studies of substance abuse impacts on mortality and morbidity. The Bureau also works with the MDCH Office of Drug Control Policy (ODCP) to develop ongoing public health surveillance of key substance abuse measures. ODCP has federal funding to build prevention capacity through the use of state and local data for prioritizing substance abuse problems and assessing the impact of interventions. To implement the program, ODCP has organized a State Epidemiology Workgroup (SEW) chaired by Dr. Corinne Miller, State Epidemiologist and Bureau of Epidemiology Director, assisted by Dr. Lorri Cameron. The SEW has compiled a wealth of data resources that are being used to develop state and community plans for prevention. The Fellow would participate in the SEW and develop in-depth analyses of data sources of interest.

There are multiple data sources available to address substance abuse issues, including hospital discharge data, death certificate files, statewide Poison Control Centers data, state and local traffic crash death and injury data, and Medical Examiner and Death Review data for selected topics or areas; also behavioral data such as the Behavioral Risk Factor Survey (BRFS) Youth Risk Behaviors Surveillance System (YRBS), Michigan Profile of Healthy Youth (MiPHY), Michigan Youth Tobacco Survey (YTS), the

National Survey of Drug Use and Health (NSDUH) and other special surveys of alcohol and drug use behaviors in Michigan.

Some possible analytic projects include: 1) examine regional distribution and morbidity, mortality trends due to alcohol use, prescription drug misuse, or illegal drug use among different age and ethnic groups in Michigan; 2) comparison of Michigan with national data on youth binge drinking collected as a special supplement to the Youth Tobacco Survey; 3) examination of co-morbidity using multiple cause or diagnostic fields in death or hospital discharge data; 4) comparison of risk factors and alcohol use patterns as reported by BRFSS vs. NSDUH; 5) assessment of the “burden of disease” in Michigan due to substance abuse using attributable risk models constructed by the National Institute on Drug Abuse and CDC.

The Fellow will be invited to join the CSTE Fatal Drug Overdose Workgroup chaired by Dr. Cameron and will participate in the development of tools, standard case definitions and data to be used to promote surveillance of drug overdose fatalities on a national level.

Several of the behavioral data surveillance systems would be good subjects for evaluation. One suggestion would be the MiPHY, a new statewide survey of risky behaviors among middle and high school students developed by the Michigan Department of Education. Another surveillance system which helped detect drug fatality clusters due to Fentanyl is the statewide Poison Control Center system; this could also be the basis of an evaluation project.

The Fellow is encouraged to participate in trainings and exercises through the Division’s Chemical Terrorism and Emergency Preparedness Section. He/she is welcome to participate in other Bureau activities as time permits, including communicable disease or environmental field investigations.

Assignment Location:	Lansing, Michigan
Primary Mentor:	Lorraine Cameron, MPH, PhD Lead State Environmental Epidemiologist Manager, Epidemiology and Surveillance Section Division of Environmental Health Michigan Department of Community Health
Advanced Degrees:	PhD, Johns Hopkins (1985) MPH, University of Michigan (1976)
Secondary Mentor:	Corinne Miller, PhD State Epidemiologist Michigan Department of Community Health
Advanced Degrees:	PhD, University of Minnesota (1993)

DDS, University of Minnesota (1982)