

The Fellow will be assigned to the Division of Research and Epidemiology in the Center for Health Information, Statistics, Research and Evaluation (CHISRE), Massachusetts Department of Public Health (MDPH). The Division of Research and Epidemiology, which includes the Health Survey Program, the Core Epidemiology Team, and MassCHIP (Massachusetts Community Health Information Profile), provides health related information to the Center, the Department, other agencies, community groups, researchers, and the public. The focus of the Division is providing health status, demographic, and disease risk factor information for program planning and policy development through publications, information dissemination, and access to computer databases. The Division conducts a broad array of projects which could provide the Fellow diverse experience in data collection, data analysis, program evaluation, and report preparation procedures.

Potential projects and focus areas from which the Fellow might choose are described below. The parameters and goals of many of these projects provide sufficient flexibility to accommodate the interests and initiative of the Fellow:

- Develop a Massachusetts Health Interview Survey pilot, which would accommodate more data demands from MDPH programs and meet the challenges of the traditional random-digit-dial telephone survey.
- Prepare topical reports using BRFSS and other data sources. Topics of interest include: obesity/overweight, physical activities, fruits and vegetable consumption, and family planning.
- Perform sensitivity analysis of obesity and overweight data using multiple data sources such as BRFSS and NHANES
- Work with researchers from the Massachusetts Tobacco Control Program and University of Massachusetts Medical School to explore quantitative methods in providing small area estimates on key risk factors and health behaviors using data sources like BRFSS and the Census.
- Develop data dissemination tools using the internet and other media, providing BRFSS data at various sub-state levels, such as the Community Health Network Areas (CHNAs), large municipalities, and the Health Service Regions in Massachusetts.
- Expand the use of multiple cause mortality data to focus on ‘constellations of causes’ that more accurately reflect the burden of chronic disease. For example, diabetes quite often is not mentioned as an underlying cause, but rather as a contributing cause of death. We would like to expand our surveillance and understanding of clusters of causes that better reflect the complex burden of chronic disease.
- Work on ART (assisted reproductive technology) related projects. The fellow will have opportunities to participate in our ongoing collaboration with the Division of Reproductive Health, CDC, on the first population-based surveillance system linking fertility treatment data with birth certificate outcome data.

- Develop chronic disease reports for MassCHIP, our online Web-based data query system.
- Explore ethnic variation in mortality in collaboration with our Minority Health Surveillance Workgroup.
- Work with the Heart Disease and Stroke Prevention and Control Program in the Center for Community Health, on evaluating the impact of a planned educational package and media campaign to increase statewide recognition of acute event symptoms of heart attack and stroke.
- Collaborate with the MDPH flu pandemic planning team to develop, implement and train for a system to rapidly ascertain and transmit flu-related mortality data from the 351 communities in Massachusetts to the Department.

The Fellow also will have opportunities to work with staff in other centers in the Department to participate in day-to-day activities such as outbreak investigation, cancer cluster investigation, hospital surge capacity research and other aspects of the MDPH emergency preparedness activities. Depending upon the interest and initiative of the Fellow, she/he will work closely with specific programs such as the Diabetes Control Program, the Tobacco Control Program, the Asthma Prevention and Control Initiative, the Cardiovascular Health Initiative, the Injury Prevention and Control Program, and the Injury Surveillance Program.

In addition, the City of Boston also offers opportunities for collaboration with academic institutions such as Harvard School of Public Health. For example, the Fellow would have opportunities to work with staff in the Core Epidemiology Team and Harvard School of Public Health on our continuing exploration of variation in premature mortality rates (PMR). PMR is a single, robust measure of community health that we are increasingly using to identify areas in need for prevention services related to chronic disease and other risk factors.

Assignment Location: Boston, MA

Primary Mentor: Zi Zhang, MD, MPH
Director, Health Survey Program

Advanced Degrees: MPH, University of Massachusetts School of Public Health (1994)
MD, Shanghai Medical University (1987)

Secondary Mentor: Bruce Cohen, PhD, MPH
Director, Health Statistics and Research

Advanced Degrees: PhD, University of California, School of Public Health, Berkeley (1978)
MPH, University of California, School of Public Health, Berkeley (1974)