

Staff in the Wisconsin Bureau of Environmental and Occupational Health (BEOH), Environmental and Occupational Epidemiology Unit are currently engaged in a number of CDC funded programs. The general purpose is to improve state and national capacity for linking health concerns with environmental and occupational hazards. Priority areas of interest include cancer, asthma, myocardial infarctions, lead poisoning, birth defects, air quality and drinking water quality. Current efforts are focused on improving surveillance for these individual environmental health factors and potential linkages between them, as well as making data and information accessible via the state's comprehensive Public Health Information Network.

The fellow will be assigned to the Environmental and Occupational Epidemiology program, and have the opportunity to work in other BEOH programs including asthma prevention (childhood, adult, and occupational), lead poisoning prevention (childhood and occupational), occupational epidemiology, bioterrorism preparedness, and hazardous waste site assessments. There are also a number of opportunities to collaborate with other program within the Department of Health and Family Services, with the state's environmental agencies, and with the University of Wisconsin where a number of BEOH employees have adjunct faculty appointments, including the primary and secondary mentors.

The fellow will have access to a wide range of datasets including, but not limited to:

Cancer Registry
Behavioral Risk Factor Surveillance
Birth Defects Registry
Vital Statistics-birth and death certificates
Ambient air contamination
Drinking water contamination
Agricultural pesticide use
Land use
Hospital discharge
Emergency department visits
Adult and childhood lead poisoning
Wisconsin Poison Center

The program will provide opportunities to develop and improve skills using statistical software to analyze epidemiologic data and graphical software to create visual representations, evaluating and interpreting epidemiologic research, writing reports including peer-reviewed publications, delivering professional oral presentations including poster presentations, and working within policies such as HIPPA and Institutional Review Board reviews.

Some specific activities to choose from include, but are not limited to:

- Accompany staff from other programs, such as Indoor Air Quality or Hazardous Site Assessments, on field investigations.
- Interpret scholarly data to assist in prioritizing efforts to investigate linkages between environmental exposures and health outcomes (ex: ozone and asthma, pesticides and birth defects, air toxics and cancer).
- Develop analytical techniques for linking environmental exposures with health outcomes (ex: ozone and asthma, pesticides and birth defects, air toxics and cancer).
- Design a work-related asthma surveillance program.

Wisconsin_ Anderson

- Design and evaluate the integration of hospital discharge, birth certificate and birth defect datasets as a comprehensive surveillance system for birth defects.
- Develop analytical techniques for estimating potential risk of exposure to environmental contaminants such as hazardous air pollutants or pesticides in drinking water.
- Conduct an epidemiologic investigation for priority areas such as ozone and asthma, pesticides and birth defects, or air toxics and cancer.
- Use occupational health surveillance data to develop outreach strategies.
- Assist in development and revision of Environmental Public Health Indicators for the Bureau of Environmental and Occupational Health.
- Assist in the preparation of Wisconsin Environmental Health annual report.
- Take part in the development of a state health plan that focuses on the essential public health functions.

Assignment Location: Madison, WI

Primary Mentor:	Henry A. Anderson, MD Chief Medical Officer, State Epidemiologist (present)
Advanced Degree:	MD, University of Wisconsin Medical School (1972)
Secondary Mentor:	Marni Y. (Vanning) Bekkedal, PhD Research Scientist/Project Manager (2003-present)
Advanced Degrees:	PhD, Bowling Green State University (1997)