

Environmental Health

Assignment Description:

Fellow will be assigned in the Health Assessment Program (HAP) under the Principal Investigator (PI) and Program Manager (PM) of HAP. The Health Assessment Program was established in 1989 through a competitive grant from the Agency for Toxic Substances and Disease Registry (ATSDR). This program has successfully re-competed for funding in early 2011 for a new 3-year grant cycle. The HAP evaluates hazardous waste sites to 1) determine the potential human health impacts of exposure at the site; 2) mitigate potential adverse health effects from exposures; 3) prevent or reduce exposure to hazardous substances; and 4) provide community and health professional education for impacted communities. Pennsylvania currently has 95 National Priority List (NPL or Superfund) sites (2nd nationally) and 589 Comprehensive Environmental Recovery Compensation Liability Information System (CERCLIS) sites. Some sites have substantial media and legislative interest. The HAP is also getting involved with potential health effects related to Marcellus Shale gas drilling in parts of the commonwealth of Pennsylvania. The fellow could be assigned to parts or all of activities mentioned above.

Day-to- Day Activities:

The CSTE fellow would be expected to learn from the health educator the basics of health education that relates to hazardous waste sites: how to prepare community assessment analysis and prepare reports for communities impacted by such sites. These include, but are not limited to, preparing fact sheets, brochures, posters etc. Also, the fellow will give presentations at forums, seminars and meetings, both internally at PADOH and at local/national meetings/conferences. Secondly, the fellow would be assigned to learn from the asthma epidemiologist the basic understanding of asthma prevention concepts, work with asthma data and create reports from asthma data and share with CDC and other stakeholders. Finally, the fellow would work closely with the Adult Blood Lead Surveillance System (ABLESS) coordinator, learning to manage ABLESS data, generate periodic reports from such data and share these reports with concerned stakeholders. In addition to above, the fellow could be assigned to assist a Health Assessor to any of the NPL sites in PA in writing up a Health Consultation (HC), a Letter Health Consultation (LHC), or a Technical Assistance (TA) document that would be published with ATSDR and he/she would get credit for such published documents. These would add to the resume of the intern to augment his/her career in Public Health.

Potential Projects:

Identify environmental health education needs in 3 communities impacted by National Priority List (NPL aka Superfund) sites. Collaborate with community stakeholders to perform a community assessment and community profile in 3 prioritized areas to reduce or mitigate exposure to toxic substances. Prioritize community health education and outreach based on health impact, feasibility and community engagement. Develop education and outreach initiatives within 3 communities impacted by a NPL site to:

1. Network and identify stakeholders, including residents impacted by NPL sites, community leaders, local subject matter experts, health care providers, and environmental health advocates;
2. Provide PA DOH input and services to existing community members and coalitions; and
3. Seize opportunities to build community capacity around environmental health issues of concern. Also, the fellow would collaborate with an Epidemiology Research Associate by providing technical assistance

and assessment of training needs and health education needs with communities and the health care providers serving the communities.

For the ABLESS Program the fellow would create database using PANEDSS data for 16- 22 year old patients exposed to lead; Analyze database to determine lead exposures; Summarize this analysis as occupational and non-occupational , breaking each down into subsectors; Assist in 1 surveillance report; Present ≥ 3 findings of analysis on the primary lead exposures for this age group at PADOH quarterly epidemiology meeting; Develop line-list of key stakeholders responsible for prevention of occupational , non-occupational lead exposures; Build 1 coalition to address non-occupational lead exposures related to high school rifle team shooting; Participate in a community/employer-based health fair regarding lead exposure & prevention activities; Review educational materials regarding lead exposure & prevention for adequate content and accessibility & perform gap analysis.

For the Asthma Program, the fellow's potential projects could include: assist in Asthma Data analysis: the analysis will provide information about the number and rate of hospital admissions for people with asthma, trends over the last decade, length of stay, hospital charges, sources of payment, admission type, and more detailed data by patient age, gender and race/ethnicity. A result of this analysis represents the state-wide and region/county levels of Asthma. Also, to assist in Asthma Death Data Analysis: Asthma deaths, defined as the underlying cause of death, were classified according to ICD-9 (493.0-493.9). Data are provided by the Bureau of Health Statistics and Research, Pennsylvania Department of Health. The sources of the asthma mortality data are Pennsylvania Certificates of Death and the Bureau of Health Statistics and Research, Pennsylvania Department of Health.

Preparedness Role:

Fellow may be assigned to the Planning and Preparedness section in the Division of Infectious Disease Epidemiology and may be trained to participate in and respond to cases/suspected cases of CDC defined category A, B or C infectious agents, with the supervision of trained epidemiologists in the bureau of epidemiology. The fellow would have access to PA Health Alert Network (HAN) and would receive health alerts/advisories/updates on all public health issues of importance. Also, as part of preparedness, the fellow would have access to Epi-X from CDC. The fellow would also be provided FEMA ICS NIMS training courses.

Assignment Location:	Harrisburg, Pennsylvania
Primary Mentor:	Farhad Ahmed, MBBS, MPH Epidemiologist Supervisor Pennsylvania Department of Health
Secondary Mentor:	James Logue, DrPH, MPH Division Director, Environmental Health Pennsylvania Department of Health