Environmental Exposure Assessment and Evaluation

The Graduate School of Public Health (GSPH) is a traditional regional, national and international leader in environmental and occupational health applied research and practice. Within this framework the CHEC routinely responds to both regional and extra-regional challenges posed by exposure to; metals, metalloids, and other toxic elements; organic and inorganic contaminants; carcinogens and endocrine-active substances and radionuclides. Complete Exposure Assessment, including the discovery of sources of contamination, their rates of release, the fate and transport of source contaminants through all environmental media, relevant environmental concentrations of contaminants, the most likely modes of human and ecological exposure, and most susceptible population groups are necessary for proper Risk Characterization and ultimately for Policy Development to insure adequate administrative, institutional, engineering and community and individual behavioral controls to block exposure.

Solving complex questions regarding the sources, concentrations, fate and transport through environmental media, uptake mechanisms and body burdens of both legacy and new contaminants requires a collegial, multi-disciplinary team approach. The CHEC assembles such teams to meet the threats posed by each presenting type and groups of contaminants; these teams can include exposure assessment specialists, geographic information system experts as well as clinicians, statisticians, epidemiologists, analytical chemists, geologists and geneticists.