

Environmental Hazard Assessment Certificate: Career Snapshots by Sector

ACADEMIA, RESEARCH, or CONSULTING FIRMS	SAMPLE RESPONSIBILITIES & TASKS
• BUSPH & other academic institutions • Abt Associates • Health Effect Institute • Silent Spring Institute • Stantec (Chemrisk)	• Conduct desktop research including literature searches, and critically evaluate and summarize scientific information and government regulations. Evaluate chemicals and their effects and interactions with humans and the environment, and evaluate claims raised in various types of toxic tort or personal injury litigation. Assist with the production of technical work products, presentations, and proposals. Perform statistical analyses and some field sampling work. Work independently and part of a team. • Apply risk assessment and risk management strategies to support contaminated site decision-making under federal, state, and international site cleanup programs. Support and implement site characterization and remedial action projects that involve efforts to identify and control potentially unacceptable human and ecological exposures to chemicals in the environment such as addressing soil, groundwater, sediment and surface water contamination. Perform fate and transport modeling including groundwater flow, vapor intrusion, air emission and dispersion, and surface water. Conduct statistical and spatial analysis and assess damages to natural resources. Develop remediation/risk management plans and provide technical support for litigation and regulatory negotiations. • Assist with research projects related to environmental chemical exposures and health effects (such as environmental links to breast cancer and asthma), exposure to endocrine disrupting compounds, high-throughput chemicals toxicity testing and drinking water contamination. Conduct data management and quantitative analysis for environmental exposure data including biomonitoring and metabolomics. Compile and analyze results from nationwide drinking water testing and socioeconomic data to evaluate disparities in contaminant exposure related to drinking water quality. Compile and analyze toxicity information from a variety of sources. Develop novel approaches to data exploration and visualization. Develop and follow study protocols, operate sampling equipment, develop sample tracking systems, and interact with study participants. Conduct literature reviews, assist in the preparation of presentations and manuscripts and author peer-reviewed articles. Speak about environmental health issues with community organizations. Support proposal preparation for federal and foundation grants.

GOVERNMENT AGENCIES	SAMPLE RESPONSIBILITIES & TASKS
• MA Department of Public Health • NYC Department of Mental Health and Hygiene • Centers for Disease Control and Prevention (CDC) • Environmental Protection Agency (EPA) • Local Public Health Departments	• Produce maps documenting geographic disparities for a specific disease state, such as the burden of heart disease and stroke morbidity and mortality. Administer databases for the Interactive Atlas of Heart Disease and Stroke. Promote the use of GIS for the surveillance, prevention and treatment of Heart Disease, Stroke, and other Chronic Diseases. Disseminate maps and other GIS related materials produced alone and in collaboration CDC staff, state and local health departments and other partners. Coordinate with the communications team within the Division for Heart Disease and Stroke Prevention, via the Chronic Disease GIS Exchange, via manuscripts and government reports. • Participate in the investigation of environmental health threats by collecting and analyzing health and environmental data, preparing interpretation of findings, and disseminating recommended prevention and control measures. Respond to requests for data on health-related statistics and associated risk behaviors; design, code, and construct variables by utilizing computer software appropriate for epidemiologic analysis. Prepare detailed statistical reports and analyses of data that include, but are not limited to, specific geographic area, population size, gender, race, age, and medical condition. Analyze health trends and patterns in the county population and assists in the development of a community health profile with policy recommendations. Review epidemiological case history forms completed by District nurses or physicians to gather information and to ensure accuracy and completeness of forms. Prepares summaries of epidemiologic studies for presentations in community settings or at professional meetings. Assist in the preparation of a grant application to support enhanced surveillance and targeted epidemiologic research on a specific health-related issue. • Conduct rapid epidemiologic investigations in response to outbreaks that are believed to have environmental causes and respond to natural and technologic disasters. Perform routine inspections of Food Service facilities, public water supply systems, and public swimming pools. Participate in community outreach to educate the community about disease prevention.

NGO'S, NON-PROFITS, or HOSPITALS	SAMPLE RESPONSIBILITIES & TASKS
• International Rescue Committee (IRC) • NYU Langone Medical Center • Braun Intertec Corporation • Institute for Public Strategies • Ecology Center	• As an Environmental Health Coordinator, support water, sanitation, and hygiene promotion (WASH) projects within a global health program, such as IRC's Environmental Health program in Cameroon. Review and evaluate programs to assist in enhancing program delivery and quality. Continuously monitor and supervise WASH activities. Contribute to the technical design, execution, and evaluation of progress through outputs and impacts using both quantitative and qualitative data. Participate in assessment process, including analysis and planning. Support write-up of assessment findings and draw plans based on these findings. • As an Infection Preventionist for a hospital, contribute to high quality patient care by promoting and implementing infection prevention and control practices and compliance with regulatory agency requirements. Through interdisciplinary and collaborative actions, evaluate occupational health exposures/issues and assist with the determination of proper care and planning related to infection prevention and control. Participate in the identification, prevention, and control of infections by data collection, surveillance and analysis, development of verbal and written reports, educational programs for personnel and patients. Serve as a liaison with the Department of Health Services and report communicable diseases as required. Participate in research on infection control related issues at the local and regional levels. Assist departments in preparations for accreditation and licensure surveys in both the acute and ambulatory care areas as well as other Regulatory Standard reviews (e.g. Cal-OSHA, CDPH, CMS, etc.). • Increase public health and safety by helping communities create sustainable, population-wide change through comprehensive environmental systems change, knowledge transfer, and project planning and implementation. Develop strategic plans to advance policy and enforcement goals focused on, for example, preventing alcohol and drug related problems in a particular city. Work with public and institutional policy makers to build support for project goals. Recruit, convene and train community partners to champion policy goals and enforcement strategies and participate in media advocacy efforts. Develop support for project goals among enforcement agencies and business owners. Help develop and implement strategic media advocacy plans to advance project goals. Assist in strategic development and execution of expanded set of alcohol- and drug-free events. Develop materials to support community and stakeholder support for project goals. Oversee data collection to measure progress of project. Complete reports, document activities and maintain compliance files.