

HEIDI M. HARTMANN

Environmental Health Risk Section
Environmental Science Division
Argonne National Laboratory

Education:

M.S. University of Minnesota, Minneapolis, Public Health, 1987
(Emphasis on Environmental Toxicology and Epidemiology)
B.A. University of Illinois, Champaign-Urbana, German, 1984
B.S. University of Illinois, Champaign-Urbana, Biochemistry, 1983

Professional Experience:

1990-2005 Environmental Systems Engineer
(ongoing) Environmental Science Division
Argonne National Laboratory

Area of expertise is human health risk assessment, including environmental dispersion and exposure pathway analysis, and assessment of acute and chronic toxicity potential for a broad range of chemicals. Recent projects have focused on Homeland Security needs, such as development of guideline levels for acute exposures for the National Homeland Security Research Center, and on human health impacts from production and use of alternative energy sources. Other major projects have included assessing the potential for adverse human health impacts associated with major federal actions undertaken by the Department of Energy (DOE) and the Department of Defense (DOD), and conducting Baseline Risk Assessments for contaminated sites. Various studies have involved risk assessment methods development, for example, methods for cumulative risk assessment, quantifying acute exposure and transportation risks, and assessing the risks of bulk chemical storage.

An important component of this position is oral and written presentation of work and findings for technical review by sponsors, regulators, and the general public, as well as preparation of manuscripts for publication in peer-reviewed journals and presentations for professional society meetings. The position also requires project management responsibility, especially in the area of coordination and review of technical input from various scientific disciplines to generate consistent and complete assessments. Responsiveness to sponsors and regulators and compliance with time restrictions is consistently achieved.

Ongoing projects focus on evaluating impacts from alternative energy sources, development of guideline levels for acute exposures from water supply systems, and hospital emergency planning. Major completed projects have included health risk assessments for several Environmental Impact Statements (EISs), including DOE's proposed mixed oxide fuel facility under the U.S. Surplus Plutonium Disposition Program, BLM and DOE's Imperial/Mexicali 230-kV Transmission Line, BLM's Trans-Alaska Pipeline System Right-Of-Way, DOD's Assembled Chemical Weapons Assessment Program, and Programmatic and Site-Specific EISs under DOE's Depleted Uranium Hexafluoride Management Program. Other projects have included the Cook County IL and Lake County IN Cumulative Air Screening Assessment, Aberdeen Proving Ground Site-Wide EIS, and the Weldon Spring Site Remedial Action Project.

Summary of Previous Experience:

1988-1990 Health Risk Assessment Section
Minnesota Department of Health

Prepared Health Assessments for Minnesota National Priorities List (Superfund) sites, under a cooperative agreement with the federal Agency for Toxic Substances and Disease Registry (ATSDR). These assessments included the evaluation of potential environmental exposure pathways, toxicity of environmental pollutants, and appraisal of the effectiveness of planned remediation techniques in protecting public health. The position required interactions with the public and other interested parties.

1987-1988 Division of Epidemiology
University of Minnesota

Contributed to the analysis of data from a comprehensive study of cardiovascular disease mortality, morbidity, and risk factors. Work included use of univariate statistics, multivariate statistics, and maintenance of a large data base.

6/86-9/86 Biological and Medical Research Division
Argonne National Laboratory

Conducted a statistical analysis of data on radon exposures in an occupational cohort. The results of this analysis were used as a Master's Thesis, submitted to the University of Minnesota School of Public Health.

Educational Pursuits:

Teach individual sessions of college level environmental or toxicological courses on request.
Participate in Argonne's "Women in Science" and "Introduce a Girl to Engineering" programs.

Research Interests and Professional Activities:

Risk assessment for acute chemical exposures and chemical warfare agents.
Risks associated with oral and inhalation polycyclic aromatic hydrocarbon exposures.
Interim President of Society for Risk Analysis, Chicago Regional Chapter
Member of Society for Risk Analysis.

Publications:

Author or co-author of 50+ journal, report, and conference publications and presentations.