



[lkerper@gradientcorp.com](mailto:lkerper@gradientcorp.com)

(617) 395-5508

## Laura E. Kerper, Ph.D.

### Managing Toxicologist

Dr. Kerper is a toxicologist with experience in human exposure and risk assessment. Her primary responsibilities include the analysis of chemical toxicity data and the evaluation of potential human health risks in response to specific environmental chemical exposures. She has particular expertise in the risk assessment of perfluorinated chemicals, metals, solvents, talc, and asbestos. Before joining Gradient, Dr. Kerper was a member of the adjunct faculty of the University of Rochester, where she taught toxicology in the M.S. Program in Environmental Studies. Her postdoctoral work at the University of Rochester focused on mechanisms of heavy metal transport, especially lead and cadmium, across cell membranes. Dr. Kerper's predoctoral research at the University of Rochester was an investigation of methylmercury transport across the blood-brain barrier.

### Selected Projects

**Evaluation of Perfluoroalkyl Substances (PFAS) Risk:** Assessed the toxicological significance of exposure to PFAS in drinking water. Provided technical oversight for analysis of the literature regarding toxicology, human health effects, and chemical and environmental characteristics of PFAS, and the historical state of knowledge of these topics.

**Analysis of Talc Exposure and Ovarian Cancer:** Managed a systematic review of the association between talc and ovarian cancer, as well as a series of risk assessments evaluating the risk of individuals exposed to talc. Reviewed and analyzed the epidemiology, toxicology, and mechanistic literature regarding evidence of an association.

**Risk Assessment of PCB Exposure:** Managed a comprehensive review of the risks of environmental PCB exposure. Assessed the scientific literature regarding human, animal, and mechanistic evidence, and oversaw the site-specific risk assessment of a potentially exposed population.

**Risk Assessment of Hexavalent Chromium:** Provided technical oversight for an assessment evaluating the risks of exposure to hexavalent chromium in soil. Was responsible for risk calculations for potentially exposed individuals, evaluation of the association between chromium and health effects, and analysis of epidemiology studies.

**Risk Assessment of Asbestos Exposure in Electricians:** Managed a series of risk assessments evaluating the risk of mesothelioma and lung cancer in individuals exposed to asbestos-containing electrical products. Reviewed and analyzed the literature regarding studies of epidemiology, exposure, and alternative causation. Co-authored a manuscript on the risk of mesothelioma and lung cancer in electricians.

**Analysis of Solvent Exposure Association with Non-Hodgkin Lymphoma (NHL):** Managed a review and assessment of the scientific literature addressing associations between solvents, especially benzene, and NHL for a case involving a workers' compensation claim. Compiled epidemiology study data for occupational exposures and NHL.

### Areas of Expertise

- Toxicology
- Risk Assessment
- Perfluorinated Chemicals
- Heavy Metals
- Solvents
- Talc
- Asbestos

### Services

- Toxicology & Risk Sciences
- Exposure & Risk Assessment
- Product Safety Assessment
- Product Liability

### Education

- Ph.D., Toxicology, University of Rochester
- M.S., Toxicology, University of Rochester
- B.A., Environmental Science, State University of New York - Purchase College

### Selected Publications

Goodman, JE; **Kerper, LE**; Prueitt, RL; Marsh, CM. 2020. "A critical review of talc and ovarian cancer." *J. Toxicol. Environ. Health B* 23(5):183-213. doi: 10.1080/10937404.2020.1755402.

Pizzurro, DM; Seeley, M; **Kerper, LE**; Beck, BD. 2019. "Interspecies differences in perfluoroalkyl substances (PFAS) toxicokinetics and application to health-based criteria." *Regul. Toxicol. Pharmacol.* 106:239-250. doi: 10.1016/j.yrtph.2019.05.008.

**Kerper, LE**; Lynch, HN; Zu, K; Tao, G; Utell, MJ; Goodman, JE. 2015. "Systematic Review of Pleural Plaques and Lung Function." *Inhal. Toxicol.* 27(1):15-44. doi: 10.3109/08958378.2014.981349.

Bailey, LA; **Kerper, LE**; Rhomberg, LR. 2015. "Naphthalene." In *Hamilton and Hardy's Industrial Toxicology (Sixth Edition)*. (Eds.: Harbison, RD; Bourgeois, MM; Johnson, GT), John Wiley & Sons, Inc., Hoboken, NJ, p663-668.