Julie E. Goodman, Ph.D., DABT, FACE, ATS

Principal

jgoodman@gradientcorp.com

Dr. Goodman is an expert in toxicology and epidemiology, and their application to human health risk assessments. She focuses on substances in consumer products, pharmaceuticals, and medical devices, as well as chemicals in the workplace and the environment. Dr. Goodman is board certified in toxicology, and a fellow of both the American College of Epidemiology and the Academy of Toxicological Sciences. She was also an adjunct faculty member in the Department of Epidemiology at the Harvard T. H. Chan School of Public Health, where she taught a class on meta-analysis for several years. Before joining Gradient, she was a Cancer Prevention Fellow at the National Cancer Institute. Dr. Goodman has authored numerous original peer-reviewed research articles, review articles (including systematic reviews, meta-analyses, and weight-of-evidence evaluations), and book chapters on a wide variety of chemicals and health outcomes. She has presented scientific findings and analyses at scientific and professional conferences, to community groups and regulatory and legislative bodies, and in litigation settings.

Representative Projects

Cancer Cluster Analysis: Investigated whether there was a cancer cluster in residents living near a municipal landfill. Communicated findings to city officials and residents at public meetings.

Epidemiology Analysis: Using hospital discharge and air monitoring data, conducted statistical analyses to determine the associations between air pollutants and pediatric asthma hospital admissions.

Regulatory Comment: Provided written and oral comments to several agencies and organizations (*e.g.* US EPA, National Toxicology Program) on clinical, epidemiology, toxicity, and mode-of-action studies and their bearing on regulations for pesticides, air pollutants, and other chemicals.

Post-market Safety Assessment: Evaluated whether on-label use of a pharmaceutical increased cardiovascular disease risk based on a systematic review of randomized controlled trials and observational epidemiology studies.

Product Safety Analysis: Designed and oversaw laboratory studies to determine possible exposures and subsequent toxicity of a chemical in a toy, considering several routes of exposure.

Systematic Review and Meta-analysis: Conducted a systematic review and meta-analyses of the herbicide, 2,4-dichlorophenoxyacetic acid (2,4-D), and non-Hodgkin's lymphoma (NHL), gastric cancer, and prostate cancer.

Medical Device Safety Assessment: Evaluated the potential health risks of saline-filled breast implants based on a review of the peer-reviewed literature and pre- and post-market studies of silicone- and saline-filled breast implants.

Areas of Expertise

- Epidemiology
- Toxicology
- Exposure
- Risk Assessment
- Systematic Review
- Product Safety

Education

Ph.D., Toxicology, Johns Hopkins University

Sc.M., Epidemiology, Johns Hopkins University

S.B., Environmental Engineering, Massachusetts Institute of Technology

Diplomate of the American Board of Toxicology

Fellow of the American College of Epidemiology (FACE)

Fellow of the Academy of Toxicological Sciences (ATS)

Selected Publications

Goodman, JE; Lynch, HN. 2017. "Improving the International Agency for Research on Cancer's consideration of mechanistic evidence." *Toxicol. Appl. Pharmacol.* 319:39-46.

Zu, K; Shi, L; Prueitt, RL; Liu, X; **Goodman, JE**. 2018. "Critical review of long-term ozone exposure and asthma development." *Inhal. Toxicol.* 30(3):99-113.

Zu, K; Pizzurro, DM; Lewandowski, TA; **Goodman, JE**. 2017. "Pharmacokinetic data reduce uncertainty in the acceptable daily intake for benzoic acid and its salts." *Regul. Toxicol. Pharmacol*. 89:83-94.

Goodman, JE; Peterson, MK; Hixon, ML; Shubin, SP. 2017. "Derivation of an oral maximum allowable dose level for bisphenol A." *Regul. Toxicol. Pharmacol.* 86:312-318.

Lynch, HN; Loftus; CT; Cohen, JM; Kerper, LE; Kennedy, EM; **Goodman, JE**. 2016. "Weight-of-evidence evaluation of associations between particulate matter exposure and biomarkers of lung cancer." *Regul. Toxicol. Pharmacol.* 82:53-93.