

David G. Dodge, M.S., DABT, CIH

Principal Scientist

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Mr. Dodge is a Principal Scientist at Gradient with a versatile skill set in the human health risk sciences. He is board-certified in both toxicology and industrial hygiene. On behalf of clients in law, industry, and government, Mr. Dodge has characterized current and historical exposure to and health risks from a diverse array of chemical agents in products, workplaces, and the environment. He is equally adept in matters of alleged causation and negligence in toxic tort litigation as he is in proactive efforts in the realm of occupational stewardship. Mr. Dodge received a Master's of Science in Public Health from San Diego State University and is a primary or participating author of over a dozen published scientific papers and over 30 presentations at scientific conferences or seminars.

Representative Projects

Analyses of Asbestos Exposure, Health Risks, and State of Knowledge in the Context of Asbestos Litigation: In various industries and settings involving asbestos products and premises, allegedly exposed persons with claimed health effects have included workers in maritime (operating ship, shipyard, and port), steel, foundry, chemical, mining/milling, automotive, and construction industries, and general population building occupants.

Risk Assessment for Hydraulic Fracturing: For an oil and gas exploration and production company, evaluated the potential for human health risks from hypothetical surface releases of chemicals associated with hydraulic fracturing.

Air Monitoring Study: Performed air sampling for lead at an industrial services company facility employing a lead-containing compound.

Causation Assessment: Evaluated whether exposure to solvents in indoor air, allegedly originating from a flooring product, could have been causally related to claimed health effects.

Risk Communication: Interpreted air monitoring data for diacetyl in a food and beverage industry manufacturer facility, and assisted with communication and control of risks posed to workers.

Analysis of Exposures from Carbon Nanotube (CNT) Manufacture: Addressed worker and customer health concerns, specifically with regard to potential exposures to polycyclic aromatic hydrocarbons (PAHs) formed unintentionally during production. Helped the client take proper steps to ensure appropriate product stewardship.

Developmental and Reproductive Toxicants (DART) Analyses: Evaluated possible health effects to pregnant workers and their offspring from *in utero* exposures to chemicals in the workplace. The assessments included a rapid review of the toxicology literature to determine whether the chemicals in question were DART agents, as well as an estimation of worker doses and overall Hazard Indices.

State-of-the-Art Analysis: For an insurance recovery dispute involving a former industrial complex owner, evaluated what was known about the toxicity and carcinogenicity of trichloroethylene and vinyl chloride at various points in time.

Areas of Expertise

- Toxicological Assessments
- Industrial Hygiene
- Human Health Risk Assessment
- Historical State-of-Knowledge
- Risk Communication

Education

M.S., Public Health/Environmental Health Sciences, San Diego State University

B.A., Biological Sciences, University of California, Santa Barbara

Certified Industrial Hygienist

Diplomate of the American Board of Toxicology

Recent Publications and Presentations

Dodge, D. 2020 (Fall). "50 years of OSHA." *Gradient Trends - Risk Science & Application.*

Goodman, JE; **Dodge, DG**; Bailey, LA; Prueitt, RL; Peterson, MK; Beck, BD; Engel, AM. 2020. "Comments on the Toxic Substances Control Act Draft Risk Evaluation for Asbestos Regarding Chrysotile Asbestos and the Occupational Use of Automotive Brakes, Docket No. EPA-HQ-OPPT."

Dodge, DG; Peterson, MK. 2019. "Evaluation of the potential for fibrous talc to cause mesothelioma based on available in vitro and in vivo animal studies." *Toxicologist* 168 (1) :143. Presented at the Society of Toxicology (SOT) 58th Annual Meeting, Baltimore, MD, March 10-14.

Braun, R; **Dodge, D.** 2018. "Coming Soon to a Drinking Water Source Near You: EPA Regulation of Perchlorate." Presented at the National Forum for Environmental & Toxic Tort Issues (FETTI) Annual Conference, Chicago, IL, September 26-28.

Dodge, DG; Beck, BD. 2016. "Historical state of knowledge of the health risks of asbestos posed to seamen on merchant ships." *Inhalation Toxicol.* 28 (14): 637-657.



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