

Ryan Weidling, M.P.H.
Scientist

Professional Profile

Mr. Ryan Weidling is a Scientist in Exponent's Health Sciences Center for Chemical Regulation and Food Safety where he applies his data analysis, technical writing, and risk assessment experience to the area of chemical regulation in the U.S., particularly under FIFRA. He has worked with US EPA pesticide regulations in support of product registrations, label amendments, and notifications. Mr. Weidling has experience researching pesticide product information, toxicity, and environmental data using NPIRS, EPA regulatory documents, and various databases.

From 2005 to 2010, Mr. Weidling worked for Exponent's Health Sciences Center for Exposure Assessment and Dose Reconstruction. In this capacity he performed exposure assessments to chemicals and other agents, often under California's Proposition 65, where his duties included data collection, analysis, and report writing. Mr. Weidling worked on a variety of projects researching and interpreting scientific literature on potential health effects associated with asbestos, heavy metals, industrial chemicals, and pharmaceuticals. He has analyzed soil and groundwater environmental data in support of numerous human health risk assessments.

Academic Credentials and Professional Honors

M.P.H., Environmental Health Sciences, University of California, Berkeley, 2008
B.S., Biology (Ecology and Evolution), University of California, Santa Cruz, 2004

Publications

Kelsh M, Shum M, Sheppard A, McNeely M, Kuster N, Lau E, Weidling R, Fordyce T, Sulser C. Measured radiofrequency exposure during various mobile-phone use scenarios. *J Expos Sci Environ Epidemiol*, in press.

Mowat F, Weidling R, Sheehan P. Simulation tests to assess occupational exposures to airborne asbestos from asphalt-based roofing products. *Ann Occup Hyg* 2007; 51:451–462.

Presentations

Sheehan P, Mowat F, Weidling R. Simulation of asbestos release from asphalt-based roofing products. Presented at the American Industrial Hygiene Conference & Expo (AIHce), Chicago, IL, May 13–18, 2006.

Prior Experience

Technician, National Marine Fisheries Service (NOAA), 2002–2004

Project Experience

FIFRA

Submitted me-too registrations, minor formulation amendments, and product notifications under FIFRA. Updated confidential statements of formula and labels for submission to EPA.

Prepared data tables for pesticide product reduced-risk petitions submitted to the EPA. Researched and summarized health, environmental, and ecological toxicity data on competitive pesticide products. Created slides for presentation to EPA.

Exposure and Risk Assessments

Quantified exposure to TCE/PCE in drinking water, PCBs in fish oil supplements, and anthraquinone in food; managed calculation spreadsheets to quantify daily doses for comparison to health criteria.

Evaluated exposure to lead in consumer products; conducted IRB-approved handling simulations using wipes to quantify potential ingestion of lead from toys and jewelry. Interpreted data and prepared reports

Assessed occupational exposure to airborne asbestos from roofing products; managed manipulation of products in enclosed chamber, analyzed PCM and TEM data, and co-authored manuscript.

Analyzed data and prepared reports for human health risk assessments using toxicological criteria, regulatory guidance documents, and standard exposure assumptions for residential and occupational receptors. Modeled inhalation of numerous VOCs detected in soil-vapor/groundwater using EPA model for subsurface vapor intrusion. Modeled ingestion, dermal absorption, and/or inhalation of heavy metal particles detected in soil samples. Interpreted estimates of carcinogenic and non-cancer hazard quotients for reports.

Summarized individual asbestos or benzene exposure histories from deposition testimony.