

Valerie G. Zartarian, Senior Scientist for Exposure Assessment and Decision Support Sciences, in EPA's National Exposure Research Laboratory

Systems Exposure Division

[Mailing Address](#)

zartarian.valerie@epa.gov

Area of Expertise: Dr. Zartarian's research focuses on developing, applying, and providing human exposure science, models, and decision support tools to inform EPA and community/tribal decisions for improving environmental public health. Example projects include:

- Exposure analyses to inform revised Lead and Copper Rule
- Flint, Michigan water concentration data analysis
- Artificial turf/tire crumbs exposure study, activity component
- Lawrence, MA Making a Visible Difference in Communities project, public health/EJ (environmental justice) component of water strategy
- Development and applications of Stochastic Human Exposure and Dose Simulation model for multimedia chemicals (SHEDS-Multimedia), which has supported EPA risk assessments and regulatory decisions regarding residential pesticides and other toxic substances
- Initiation and development of C-FERST (Community-Focused Exposure and Risk Screening Tool) and Tribal-FERST, environmental decision support Web-based tools for building sustainable, healthy communities and tribes;
- Health Impact Assessment (HIA) to evaluate proposed remediation scenarios for a school in Springfield, MA
- Local scale exposure analyses to advance the science and understanding of cumulative impacts from multiple environmental stressors (e.g., climate stressors) to vulnerable communities and populations
- Exposure factors to reduce uncertainty in human exposure and risk assessment
- Collaborative efforts and case studies to harmonize human exposure assessment approaches internationally.

Select Publications:

View research publications by [Valerie Zartarian](#).

Education:

- Ph.D., Civil Engineering, Environmental Engineering and Science, Stanford University, 1997
- M.S., Civil Engineering, Environmental Engineering and Science, Stanford University, 1993
- B.S., Civil Engineering, Water Resources, Princeton University, 1989

Professional Experience:

- Senior Research Physical Scientist, USEPA, Office of Research and Development, National Exposure Research Laboratory, Systems Exposure Division, 2015-present
- Research Environmental Engineer, Exposure Modeler, USEPA, Office of Research and Development, National Exposure Research Laboratory, Human Exposure and Atmospheric Sciences Division, 1998-2015
- Postdoctoral Research Affiliate, Department of Civil Engineering, Stanford, CA 1997-1998
- Research Assistant, Department of Civil Engineering, Stanford, CA 1991-1997
- Water Resources Engineer, Camp, Dresser, & McKee, Inc., Cambridge, MA 1998-1991