



Exponent[®]
Engineering & Scientific Consulting

Julia Diebol, Ph.D., CSP, C.P.S.M.

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Professional Profile

Dr. Diebol's areas of expertise include human factors, product and occupational safety, risk communication, and chemical hazard communication. She uses her expertise to evaluate the roles of warnings, instructions, risk communications, policies and procedures, standards, and regulations in safety and environmental health behaviors in consumer, occupational, and community settings. Dr. Diebol's expertise has been applied to a broad range of broad range of consumer products (including cosmetics, consumer electronics, recreational vehicles, cleaning products, toys, infant products, and others) and occupational contexts (including manufacturing, automotive repair, foodservice, construction, transportation, and others). Dr. Diebol also provides expert analysis and testimony in cases involving product liability, occupational safety, personal injury, and toxic torts, among others.

As a Certified Safety Professional and a Certified Product Safety Manager, Dr. Diebol regularly evaluates occupational safety management policies, programs, procedures, and training materials, as well as product literature (warnings, instructions, user manuals, labels, safety data sheets, advertisements, instructional videos, etc.). She has experience evaluating compliance with a variety of regulatory requirements including those administered by the Occupational Safety and Health Administration (OSHA), Consumer Product Safety Commission (CPSC), Food and Drug Administration (FDA), Environmental Protection Agency (EPA), California Office of Environmental Health Hazard Assessment (OEHHA/Proposition 65), and other state, federal, and international regulatory bodies. She is authorized to teach both 10- and 30-hour OSHA General Industry Outreach Training courses. Dr. Diebol also has experience assessing conformance with industry and consensus standards by the American National Standards Institute (ANSI), International Organization for Standardization (ISO), National Fire Protection Association (NFPA), and others, including the ANSI Z535 series, ANSI Z400.1/Z129.1, and ISO 45001.

Dr. Diebol has obtained specialized knowledge of current and historical safety management and risk communication practices through researching federal and state regulations, industry and consensus standards, and technical literature dating back to the early 1900s. She also has experience using a variety of qualitative and quantitative research and data collection methods, including interviews, focus groups, questionnaires, mailed and online surveys, and time studies. Based on her research and professional practice, Dr. Diebol has lectured at the University of Michigan and at national and international conferences on topics related to safety management, risk communication, chemical hazard communication, environmental health, and process safety.

Prior to joining Exponent, Dr. Diebol was a safety and human factors consultant at a firm in Ann Arbor, Michigan, as well as an adjunct faculty member at the University of Michigan, teaching a senior-level engineering course in Product and Occupational Safety Management. Dr. Diebol is a Past President of the Society for Chemical Hazard Communication and has taught a variety of professional development courses regarding chemical hazard communication in consumer and industrial settings. She completed

her undergraduate degree at the University of Michigan College of Engineering and conducted her graduate research in risk communication at the University of Michigan School of Public Health.

Academic Credentials & Professional Honors

Ph.D., Environmental Health Sciences, University of Michigan, Ann Arbor, 2013

B.S.E., Industrial and Operations Engineering, University of Michigan, Ann Arbor, 2005

Risk Science Center Fellowship, School of Public Health, University of Michigan, 2011

National Institute for Occupational Safety and Health (NIOSH) Traineeship, Education and Research Center (ERC), School of Public Health, University of Michigan, Ann Arbor, 2007-2009

Marian Sarah Parker Scholarship, Human Factors Group, University of Michigan Transportation Research Institute (UMTRI), 2004-2005

Licenses and Certifications

Certified in Public Health (CPH)

Certified Product Safety Manager (CPSM)

Certified Safety Professional (CSP)

OSHA Authorized General Industry Trainer

Academic Appointments

Adjunct Lecturer (Occupational and Product Safety Management), Industrial and Operations Engineering Department, College of Engineering, University of Michigan, 2014-2018

Prior Experience

Managing Consultant, Applied Safety and Ergonomics, Inc., 2005-2018

Production Supervisor, General Motors, 2004

Industrial Engineering Internship, General Motors, 2003

Professional Affiliations

Member, Nominating Committee, Society for Chemical Hazard Communication, 2024-Present

Member, American Society of Safety Professionals, 2018-Present

Member, Human Factors and Ergonomics Society, 2014-Present

Member, Society for Risk Analysis, 2011-2014, 2019-Present

Interim Chair, Exhibit Committee, Society for Chemical Hazard Communication, 2024

Chair, Professional Development Committee, Society for Chemical Hazard Communication, 2022-2023

Past President, Society for Chemical Hazard Communication, 2022-2024

President, Society for Chemical Hazard Communication, 2020-2022

Vice President, Society for Chemical Hazard Communication 2018-2020

Secretary/Treasurer, Society for Chemical Hazard Communication, 2017-2018

Chair, Board of Directors, Society for Chemical Hazard Communication, 2016-2017

Member Board of Directors, Society for Chemical Hazard Communication, 2014-2016

Co-Chair, Program Committee, Society for Chemical Hazard Communication, 2012-2014

Member, Technical Committee, Risk Science Symposium, Risk Science Center, University of Michigan, 2011

Member, Junior Faculty Search Committee, Risk Science Center, School of Public Health, University of Michigan, 2010-2011

Languages

German

Publications

Diebol, J.K., LoVoi, K., & Coelho, C.J. (2023). Behavioral compliance with safety signs and labels: An analysis of research methods from the past 25 years. In Proceedings of the Human Factors and Ergonomics Society 67th Annual Meeting, pp. 1031-1037.

Shah, R.J., Hall, S.M., & Diebol, J.K. (2016). Contextual considerations for the development and assessment of product warnings. In Proceedings of the XXVIIIth Annual Occupational Ergonomics and Safety Conference, pp. 120-125.

Zikmund-Fisher, B.J., Turkelson, A.E., Franzblau, A., Diebol, J.K., Allerton, L., Parker, E.A. (2013). The effect of misunderstanding the chemical properties of environmental contaminants on exposure beliefs: A case involving dioxins. *Science of the Total Environment*, 447, 293-300. March 1.

Franzblau, A., Zikmund-Fisher, B.J., Allerton, L., Turkelson, A., Diebol, J., Parker, E.A. (2012). Community beliefs about dioxin exposure pathways: Do they match the experts? *Organohalogen Compounds*, 74, 1160-1163.

Diebol, J.K., Parker, E., Franzblau, A., Ross, P.T., Weber, I., Zikmund-Fisher, B.J. (2010). A mental models framework for considering community perceptions of dioxin-like compounds. *Organohalogen Compounds*, 72, 332-333.

Young, S.L., Frantz, J.P., Shah, R.J., Rhoades, T.P., and Diebol, J.K. (2007). Perceptions and use of product-related age recommendations: A case study involving ATVs. In Proceedings of the Human Factors and Ergonomics Society 51st Annual Meeting, pp. 30-34.

Frantz, J.P., Rhoades, T.P., Young, S.L., Diebol, J.K., and Shah, R.J. (2007). Exploring parental response to age-related warnings. In Proceedings of the Human Factors and Ergonomics Society 51st Annual Meeting, pp. 1378-1382.

Presentations

Diebol, J.K. Consumer product SDSs and labels: Optimizing consistency, compliance, and usability. Society for Chemical Communication Annual Meeting Plenary Session, Charlotte, NC, 2024

Course Instructor, Advanced Topics in EHS: Engineering Controls and Personal Protective Equipment Selection, Society for Chemical Hazard Communication, 2024

Course Director and Instructor, Hazard Communication for Hardgoods, Society for Chemical Hazard Communication, 2023

Guest lectures in ChE 496: Process Safety Management, Chemical Engineering Department, University of Michigan, Ann Arbor, 2016, 2018

Course Director and Instructor, Human Factors in Hazard Communication for Occupational and Consumer Settings, Society for Chemical Hazard Communication, 2012, 2013, 2016, 2017

Guest lectures in IOE 438: Occupational and Product Safety Management, Industrial and Operations Engineering Department, University of Michigan, Ann Arbor, 2009, 2011-2013, 2020-2021

Diebol, J.K. Receiver satisfaction with chemical hazard and exposure information. Society for Chemical Communication Fall Meeting Plenary Session, Arlington, VA, 2012

Guest lecture in HBHED 662: Risk Communication: Theory, Techniques, and Applications in Health, Health Behavior and Health Education Department, University of Michigan, Ann Arbor, 2011

Diebol, J.K., Zikmund-Fisher, B.J., Ross, P.T., Turkelson, A.E., Weber, I., Franzblau, A., and Parker, E. Relationship between judgments of health risk and satisfaction with hazard and exposure communications. Society for Risk Analysis Annual Meeting, Charleston, SC, 2011

Diebol, J.K., Parker, E.A., Franzblau, A., Ross, P.T., Weber, I., Zikmund-Fisher, B.J. A mental models framework for considering perceptions of dioxin-like compounds. Dioxin 2010: 30th International Symposium on Halogenated Persistent Organic Pollutants, San Antonio, TX, 2010

Project Experience

Served as a named expert in a toxic tort case alleging neurological effects from occupational exposure to a solvent (1-bromopropane (1-BP)/n-propyl bromide (NPB)) during employment. Analyzed safety communications provided by the process equipment manufacturer, solvent manufacturers, and employer, conducted site inspection, developed opinions, and submitted expert report.

Served as a named expert in a combustible dust explosion case involving ground vulcanized rubber. Evaluated regulatory compliance and adequacy of labels and safety data sheets provided by rubber manufacturers and the employer's hazard communication program. Conducted site inspection and developed opinions.

Served as a named rebuttal expert in a wrongful death case, responding to allegations of improper occupational safety management practices by a manufacturing company. Developed rebuttal opinions and provided deposition testimony.

Reviewed draft user manuals, quick start guides, and on-product labels for a variety of consumer products with electrical, thermal, and mechanical hazards. Provided suggestions for improvements to communications for product safety and usability.

Served as a named expert in a product liability case, responding to allegations of failure to warn regarding thermal hazards related to a consumer cosmetic product. Reviewed product packaging and instructions, reviewed competitor product packaging and instructions, developed opinions, submitted expert report, and provided deposition testimony.

Served as a named expert in a premise liability case, responding to allegations of improper premise safety management practices by a retail store. Conducted site inspection, developed opinions, and submitted expert report.

Served as a named expert in a toxic tort case, responding to allegations of failure to warn regarding trace amounts of benzene in automotive products. Reviewed product labels and safety data sheets, developed opinions, submitted expert report, and provided deposition testimony.

Advisory Appointments

Technical Committee, University of Michigan Risk Science Center Risk Science Symposium, 2011

Peer Reviews

Proceedings of the Human Factors and Ergonomics Society - Safety Technical Group

Proceedings of the Human Factors and Ergonomics Society - Forensics Technical Group

Science of the Total Environment (STOTEN)

Toxicology and Industrial Health (TIH)