Exponent®
Engineering & Scientific Consulting

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

Senior Scientist | Human Factors
15375 SE 30th Place, Suite 250 | Bellevue, WA 98007
(425) 519-8739 tel | jdiebol@exponent.com

Professional Profile

Dr. Diebol's areas of expertise include risk communication, environmental health sciences, chemical hazard communication, human factors, and product and occupational safety. She uses her expertise to evaluate the role of warnings, safety information, risk communications, regulations, and other factors in safety and environmental health behaviors. Her expertise has been applied to communications regarding a broad range of hazards, products, and situations, such as carcinogens, corrosives, flammables, PBTs, combustible dust, aerosols, cosmetics, cleaning products, and pesticides, including in communities affected by environmental contamination.

Dr. Diebol has specialized knowledge of current and historical risk communication and safety management practices obtained 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 research and data collection methods, including interviews, questionnaires, mailed and online surveys, and focus groups. 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 risk communication, chemical hazard communication, environmental health, product and occupational safety, and process safety management.

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. From 2012 to 2017, she also taught a professional development course regarding human factors for chemical hazard communication in consumer and industrial settings.

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, *magna cum laude*, 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 Safety Professional #CSP-32344

Certified Product Safety Manager #04082

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

Vice President, Society for Chemical Hazard Communication 2018-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

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

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

Member of the 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

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

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

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 products liability 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 a 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 a site inspection and developed opinions.

Served as a named expert in a toxic tort case alleging lung disease from occupational exposure to corrosive chemicals (hydrochloric acid and sulfur monochloride). Analyzed communications provided to the employer by chemical suppliers, developed opinions and submitted expert report.

Advisory Appointments

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

Peer Reviewer

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)