

Review of EPA's Draft IRIS Assessment of Formaldehyde

Committee

Jonathan M. Samet

Chair

JONATHAN M. SAMET (chair) is a pulmonary physician and epidemiologist. He is currently professor and Flora L. Thornton Chair for the Department of Preventive Medicine at the Keck School of Medicine at the University of Southern California (USC) and director of the USC Institute for Global Health. Dr. Samet's research has focused on the health risks of inhaled pollutants. He has served on numerous committees concerned with public health: the U.S. Environmental Protection Agency Science Advisory Board; committees of the National Research Council (NRC), including chairing the Biological Effects of Ionizing Radiation VI Committee, the Committee on Research Priorities for Airborne Particulate Matter, and the Board on Environmental Studies and Toxicology; and committees of the Institute of Medicine. He is a member of the Institute of Medicine, and he is currently chair of the NRC Committee to Develop a Research Strategy for Environmental, Health, and Safety Aspects of Engineered Nanomaterials and member of the Committee on Science, Technology, and Law. Dr. Samet received his M.D. from the University of Rochester, School of Medicine and Dentistry.

Andrew F. Olshan

Vice Chair

ANDREW F. OLSHAN (vice-chair) is professor and chair of the Department of Epidemiology at the University of North Carolina Gillings School of Global Public Health. His research interests are the etiology of birth defects and cancer in children and adults. Recent work has focused on the role of environmental exposures, genetic factors, and adverse health effects in children and adults; risk factors for childhood tumors and neuroblastoma; and the effects of drinking water disinfection by-products and male reproductive health. He has served on several National Academies committees, most recently the National Research Council Committee on Drinking Water at Camp Lejeune and the Committee for Review of Evidence Regarding Link between Exposure to Agent Orange and Diabetes. Dr. Olshan received his Ph.D. in epidemiology from the University of Washington.

A. J. Bailer

Member

A. JOHN BAILER is distinguished professor and chair in the Department of Statistics at Miami University in Oxford, Ohio. He is also a research fellow in the Scripps Gerontology Center, affiliate member of the Department of Zoology, affiliate member of the Department of Sociology and Gerontology, and affiliate member of the Institute of Environmental Sciences at Miami University. His research interests include the design and analysis of environmental and occupational health studies and quantitative risk estimation. Dr. Bailer is a fellow of the American Statistical Association (ASA), a fellow of the Society for Risk Analysis, and a recipient of the ASA Statistics and the Environment Distinguished Achievement Medal. He has served on several National Research Council Committees, including the Committee on Improving Risk Analysis Approaches Used by the U.S. EPA, the Committee on Spacecraft Exposure Guidelines, the Committee to Review the OMB Risk Assessment Bulletin, and the Committee on Toxicologic Assessment of Low-Level Exposures to Chemical Warfare Agents. He also has served as a member of the Report on Carcinogens Subcommittee and the Technical Reports Review Subcommittee of the Board of Scientific Counselors of the National Toxicology Program. Dr. Bailer received his Ph.D. in biostatistics from the University of North Carolina at Chapel Hill.

Sandra J. Baird

Member

SANDRA J.S. BAIRD is an environmental analyst with the Massachusetts Department of Environmental Protection, Office of Research and Standards. She supports the air toxics and drinking water programs through the development of cancer and noncancer toxicity values, evaluation of the implications of new toxicological information and guidance, evaluation of site-specific toxicity and exposure assessment issues, and development of guidance in support of risk-based decision making. Her research interests include probabilistic characterization of uncertainty in toxicity values for use in risk assessment and mixtures risk assessment. Dr. Baird received her Ph.D. in toxicology from the University of Rochester, School of Medicine and Dentistry.

Harvey Checkoway

Member

HARVEY CHECKOWAY is a professor in the Department of Environmental and Occupational Health Sciences and the Department of Epidemiology at the University of Washington School of Public Health and Community Medicine. His expertise is in the area of occupational and environmental determinants of chronic diseases. Research projects for which Dr. Checkoway has been the principal investigator include epidemiologic studies of cancer mortality in nuclear workers, cancer mortality in phosphate industry workers, silicosis and lung cancer in silica-exposed diatomaceous earth industry workers, lung cancer among chromate-exposed aerospace workers, reproductive hazards among lead smelter workers, cancer risks and parkinsonism among textile workers, and environmental and genetic risk factors for Parkinson's disease. Dr. Checkoway received his M.P.H. from Yale University and his Ph.D. in epidemiology from the University of North Carolina, Chapel Hill.

Richard A. Corley

Member

RICHARD A. CORLEY is laboratory fellow in the biologic monitoring and biologic modeling group at the Pacific Northwest National Laboratory operated by Battelle for the U.S. Department of Energy. Dr. Corley specializes in the development of physiologically based pharmacokinetic models, real-time breath analysis, dermal and inhalation bioavailability, and the development of three-dimensional computational fluid-dynamic models of the respiratory system. He has published numerous peer-reviewed papers on oral, dermal, and inhalation toxicology; modes of action of a variety of industrial and consumer chemicals; and pharmacokinetic modeling and its applications in human health risk assessments. Dr. Corley served on the National Research Council Committee to Assess the Health Implications of Perchlorate Ingestion and the Standing Committee on Risk Analysis Issues and Reviews. He received a Ph.D. in environmental toxicology from the University of Illinois at Urbana-Champaign.

David C. Dorman

Member

DAVID C. DORMAN is associate dean for research and graduate studies in the College of Veterinary Medicine at North Carolina State University. The primary objective of his research is to provide a refined understanding of chemically induced neurotoxicity in laboratory animals that will lead to improved assessment of potential neurotoxicity in humans. Dr. Dorman's research interests include neurotoxicology, nasal toxicology, and pharmacokinetics. He served as a member of the National Research Council Committee on Animal Models for Testing Interventions Against Aerosolized Bioterrorism Agents and as member and chair of two Committees on Emergency and Continuous Exposure Guidance Levels for Selected Submarine Contaminants. He received his D.V.M. from Colorado State University. He completed a combined Ph.D. and residency program in toxicology at the University of Illinois at Urbana-Champaign and is a diplomat of the American Board of Veterinary Toxicology and the American Board of Toxicology.

Charles H. Hobbs

Member

CHARLES H. HOBBS is a senior scientist emeritus at Lovelace Respiratory Research Institute (LRRI) and member of the board of directors at Lovelace Biomedical and Environmental Research Institute. He was formerly director of toxicology at LRRI. His research interests centered on the long-term biologic effects of inhaled materials and the mechanisms by which they occur. His research has ranged from physical and chemical characterization of airborne toxicants to in vitro mechanistic and toxicologic studies in laboratory animals. Dr. Hobbs is an associate of the National Academies and has served on several committees of the National Research Council, including service as chair of the Committee on Animal Models for Testing Interventions Against Aerosolized Bioterrorism Agents, the Committee on Submarine Escape Action Levels, and the Committee on Beryllium Alloy Exposures, and he is currently a member of the Committee on Biodefense at the U.S. Department of Defense. Dr. Hobbs earned a D.V.M. from Colorado State University.

Michael D. Laiosa

Member

MICHAEL D. LAIOSA is an assistant professor at the University of Wisconsin, Milwaukee. Prior to that, he was a research assistant professor of environmental medicine at the University of Rochester. Dr. Laiosa's research interests are focused on how environmental factors influence immunologically based human diseases, such as leukemia and autoimmunity. His specific interests involve identifying developmental and early life environmental factors that influence cancer risks and autoimmune pathogenesis; identifying prenatal and early postnatal chemopreventative agents that may reduce risk for developing diseases, such as leukemia, atopy, and autoimmune disease; and determining the impact of early life exposures to chemical mixtures on long-term immunological health outcomes. Dr. Laiosa earned a Ph.D. in microbiology and immunology from the State University of New York, Upstate Medical University.

Ivan Rusyn

Member

IVAN RUSYN is a professor in the Department of Environmental Sciences and Engineering in the School of Public Health at the University of North Carolina (UNC) at Chapel Hill. He directs the Laboratory of Environmental Genomics and the Carolina Center for Computational Toxicology in the Gillings School of Global Public Health at UNC. He also serves as associate director of the Curriculum in Toxicology and is a member of the Lineberger Comprehensive Cancer Center, the Center for Environmental Health and Susceptibility, the Bowles Center for Alcohol Studies, and the Carolina Center for Genome Sciences. Dr. Rusyn's laboratory focuses on the mechanisms of action of environmental toxicants and the genetic determinants of the susceptibility to toxicant-induced injury. He is currently a member of the National Research Council Committee on Use of Emerging Science for Environmental Health Decisions and was previously a member of the Committee on Tetrachlorethylene. Dr. Rusyn received his M.D. from Ukrainian State Medical University in Kiev and his Ph.D. in toxicology from UNC-Chapel Hill.

Mary Alice Smith

Member

MARY ALICE SMITH is an associate professor and graduate coordinator of Environmental Health Science at the University of Georgia. Her research interests are developmental toxicology and risk assessment. Her research focuses on the effects of toxicants on reproduction and development, environmental and microbial risk assessment methodology, and the effects of pathogens on pregnancy and development. She teaches courses in toxicology, developmental and reproductive toxicology, and risk assessment. Dr. Smith is member of the Teratology Society, the Society of Toxicology, and the International Association for Food Protection, and she is co-director of the Academy of the Environment at the University of Georgia. She has served on grant review panels for the National Institutes of Health, the Food and Drug Administration, the Centers for Disease Control and Prevention, and the Agency for Toxic Substances and Disease Registry. She has also served as a member of expert panels for the International Life Sciences – North America and the Food and Drug Administration, and she is a member of the editorial board for Reproductive Toxicology. Dr. Smith earned a Ph.D. in toxicology and pharmacology from the University of Arkansas for Medical Sciences.

Leslie Stayner

Member

LESLIE T. STAYNER is a professor of epidemiology at the University of Illinois, Chicago. His research interests are occupational and environmental epidemiology, epidemiologic methods, risk assessment, and cancer and other chronic diseases. Dr. Stayner is a member of the Society for Epidemiologic Research, the American Public Health Association, and the International Commission on Occupational Health, and he is a fellow of the American College of Epidemiology and the Institute of Medicine of Chicago. He has served on the editorial board for several journals, including as contributing editor for the American Journal of Industrial Medicine and editorial consultant for the American Journal of Epidemiology. He has also served on the Institute of Medicine Committee on Making Best Use of the Agent Orange Exposure Reconstruction Model and the National Research Council Committee on Human Health Risks of Trichloroethylene. Dr. Stayner earned a Ph.D. in epidemiology from the University of North Carolina at Chapel Hill.

Helen H. Suh

Member

HELEN H. SUH is an associate professor of environmental chemistry and exposure assessment at Harvard University. Her research examines critical questions about the public health consequences of air pollution through interdisciplinary, biologically relevant exposure assessment research. Specifically, her research combines traditional measurement methods with novel exposure risk assessment methods. Her work has been published in several journals. Dr. Suh has served on the National Research Council Committee on Estimating Mortality Risk Reduction Benefits from Decreasing Tropospheric Ozone Exposure and is a member of the U.S. Environmental Protection Agency's Clean Air Science Advisory Committee. She received her Sc.D. from Harvard University.

Yiliang Zhu

Member

YILIANG ZHU is professor in the Department of Epidemiology and Biostatistics at the University of South Florida College of Public Health. He is also director of the college's Center for Collaborative Research. His current research is focused on quantitative methodologies in health risk assessment, including physiologically based pharmacokinetic models, dose-response modeling, benchmark dose methods, and uncertainty quantification. He also conducts research in disease surveillance, health outcome evaluation, and healthcare access and utilization in developing countries. Dr. Zhu has served as a member of the National Research Council Committee on EPA's Exposure and Human Health Assessment of Dioxin and Related Compounds and the Committee on Tetrachloroethylene. He received his Ph.D. in statistics from the University of Toronto.

Patrick A. Zweidler-McKay

Member

PATRICK A. ZWEIDLER-MCKAY is an assistant professor at the University of Texas M.D. Anderson Cancer Center and a member of the faculty at the University of Texas Graduate School of Biomedical Sciences. His research is directed at understanding the critical genetic events that lead to the development of leukemia and to the discovery of novel therapeutic approaches through molecular strategies. Clinically, Dr. Zweidler-McKay specializes in treating children with particularly difficult or relapsed forms of leukemia and lymphoma. He is board certified by the American Board of Pediatrics and is a member of the American Society of Hematology, the American Society of Pediatric Hematology and Oncology, the Harris County Medical Society, and the Texas Medical Society. Dr. Zweidler-McKay earned a Ph.D. in molecular biology and genetics and a M.D. from Temple University.