

M. Jane Teta, Dr.PH, M.P.H.
Principal Scientist

Professional Profile

Dr. M. Jane Teta is a Principal Scientist in Exponent's Health Sciences Center for Epidemiology, Biostatistics, and Computational Biology. She has 30 years experience in chronic disease epidemiology, particularly occupational and environmental epidemiology studies; regulatory risk assessment for cancer endpoints; and risk communication to the media and public. In addition, she has expertise in EPA/OSHA/NTP regulatory issues related to chemicals. Dr. Teta has served on numerous scientific advisory boards including those of ATSDR, EPA, The Mickey Leland Center and the Harvard Center for Risk Analysis. She is also an Adjunct Associate Professor of Epidemiology in the Department of Biostatistics and Epidemiology at the University of Massachusetts.

Prior to joining Exponent, Dr. Teta was the Director of Epidemiology, Health Information, Risk Assessment, and TSCA for Union Carbide Corporation, managing epidemiology program planning and implementation, design, management, and communication of studies to employees, and providing consultation to businesses and manufacturing sites. Dr. Teta received a Doctorate in epidemiology and a Masters of Public Health in biostatistics from Yale University.

Academic Credentials and Professional Honors

Doctor of Public Health, Chronic Disease Epidemiology, Yale University, 1987
M.P.H, Biostatistics, Yale University, 1979
B.A., Mathematics, Physics, Education Emmanuel College (*magna cum laude*), 1965

American College of Epidemiology: Fellow

CMA Quality Award, 1997

Society of Toxicology Award for "An Outstanding Published Paper Demonstrating an Application of Risk Assessment," 2005

Publications

Valdez-Flores C, Sielken RL, Teta MJ. Quantitative risk assessment for ethylene oxide inhalation in occupational settings. *Archives of Toxicology*, 2011, in press.

Valdez-Flores C, Sielken RL, Teta MJ. Quantitative risk assessment based on NIOSH and UCC epidemiologic data for workers exposed to ethylene oxide. *Regul Toxicol Pharmacol* 2010; 56:312–320.

Swaen GMH, Burns C, Teta MJ, Bodner K, Keenan D, Bodnar CM. Mortality study update of ethylene oxide workers in chemical manufacturing: A 15 year update. *JOEM* 2009; 51:714–723.

Teta MJ, Mink PJ, Lau E, Scurman BK, Foster ED. U.S. mesothelioma patterns 1973–2002: Indicators of change and insights into background rates. *Eur J Cancer Prev* 2008; 17:525–534.

Kelsh MA, Craven VA, Teta MJ, Mowat FS, Goodman, M. Mesothelioma in vehicle mechanics: Is the risk different for Australians? *Occup Med* 2007; 57:581–589.

Teta MJ, Lau E, Scurman BK, Wagner ME. Therapeutic radiation for lymphoma: Risk of malignant mesothelioma. *Cancer* 2007; 1432–1438.

Sielken RL, Valdez-Flores C, Gargas ML, Kirman CR, Teta MJ, Delzell E. Cancer risk assessment for 1,3-butadiene: Dose-response modeling from an epidemiologic perspective. *Chem-Biol Interact* 2007; 166:140–149.

Li AA, Mink PJ, McIntosh LJ, Teta MJ, Finley B. Reply: Endotoxin, a possible agent in the causation of Parkinson's disease. [Letter/Response]. *J Occup Environ Med* 2006; 48:655–656.

LaVerda N, Teta MJ. Letter to the Editor. Re: "Reporting participation in epidemiologic studies: A survey of practice." *Am J Epidemiol* 2006; 164:292.

Li AA, Mink P, Mcintosh, LJ, Teta M, Finley B. Evaluation of epidemiologic and animal data associating pesticides with Parkinson's Disease. *J Occup Environ Med* 2005; 47(10):1059–1087.

Hessel P, Teta MJ, Goodman M, Lau E. Mesothelioma among brake mechanics: An expanded analysis of a case-control study. *Risk Anal* 2004; 24:547–552.

Teta MJ. Letter to the Editor. Re: "Asbestos in brakes: Exposure and risk of disease." *Am J Indust Med* 2004; 46:312–314.

Teta MJ, Tran N, Mink PJ, Barraji LM. Validity of using background leukemia incidence rates with cohort mortality-based potency estimates to calculate excess lifetime risk. *Hum Ecol Risk Assess* 2004; 10:923–938.

Kirman CR, Sweeney LM, Teta MJ, Sielken RL, Valdez-Flora C, Albertini RJ, Gargas ML. Addressing nonlinearity in the exposure-response relationship for a genotoxic carcinogen: Cancer potency estimates for ethylene oxide. *Risk Anal* 2004; 24:1165–1183.

Goodman M, Teta MJ, Hessel P, Garabrant DH, Craven V, Scrafford CG, Kelsh MA. Mesothelioma and lung cancer among motor vehicle mechanics: A meta-analysis. *Ann Occup Hyg* 2004; 48:309–326.

Henry CJ, Phillips R, Carpanini F, Corton JC, Craig K, Igarashi K, Leboeuf R, Marchant G, Osborn K, Pennie WD, Smith LL, Teta MJ, Vu V. Use of genomics in toxicology and epidemiology: Findings and recommendations of a workshop. *Environ Health Perspect* 2002; 110:1047–1050.

Mundt KA, Zorn M, Pastides H, Teta MJ. Cohort mortality study of Union Carbide Texas City employees: 1941–1944. *Am J Epidemiol* 2001; 153:(Abstract). Congress of Epidemiology, Toronto, Canada, June 13–16, 2001.

Pastides H, Zorn MW, Mundt KA, Teta MJ. Update of mortality among Union Carbide Corporation chemical workers in the Kanawha Valley of West Virginia. *Am J Epidemiol* 2001; 153:(Abstract). Congress of Epidemiology, Toronto, Canada, June 13–16, 2001.

Teta MJ, Sielken RL, Valdez-Flores C. Ethylene oxide cancer risk assessment based on epidemiologic data: Application of revised regulatory guidelines. *Risk Anal* 1999; 19:1135–1155.

Lucas LJ, Teta MJ. Letter to the Editor. Re: “Breast cancer and ethylene oxide exposure,” *Int J Epidemiol* 1996; 25:685–686.

Olsen G, Lucas L, Teta J. Letter to the Editor. Re: “Ethylene oxide exposure and risk of spontaneous abortion, preterm birth, and postterm birth.” *Epidemiology* 1996; 8:465–466.

Dell LD, Teta MJ. Mortality among workers at a plastics manufacturing and research and development facility: 1946–1988. *Am J Indust Med* 1995; 28:373–384.

Teta MJ, Avashia BP, Cawley TJ, Yamin AT. Absence of sensitizations and cancer increases among glutaraldehyde workers. *Toxic Subst Mech* 1995; 14:293–305.

Blair A, Burg J, Foran J, Gibb H, Greenland S, Morris R, Raabe G, Savitz D, Teta J, Wartenberg D, Wong O, Zimmerman R. Guidelines for the application of meta-analysis in environmental epidemiology. *Regulat Toxicol Pharmacol* 1995; 22:189–197.

Acquavella JF, Raube G, Teta MJ, Chase, GR. Letter to the Editor. Re: “Disclosure of interest: A time for clarity.” *Am J Indust Med* 1995; 28:609–610.

Teta MJ. Epidemiology in occupational health risk assessment. In: *Chemical Risk Assessment And Occupational Health*. Smith CM, Christiani DC, Kelsey KT (eds). Auburn House, Westport, CT, 1994.

Collins JJ, Ramlow JM, Teta MJ. Letter to the Editor. Re: "Respiratory and irritant health effects of ambient volatile organic compounds: The Kanawha Valley County Health Study." *Am J Epidemiol* 1994; 140:72–73.

Teta MJ, Benson LO, Vitale JN. Mortality study of ethylene oxide workers in chemical manufacturing: A ten year update. *Br J Indust Med* 1993; 50:704–709.

Benson LO, Teta MJ. Mortality due to pancreatic and lymphopietic cancers in chlorohydrin production workers. *Br J Indust Med* 1993; 50:710–716.

Selenskas SL, Teta MJ, Vitale JN. Pancreatic cancer among workers processing synthetic resins. *Am J Indust Med* 1995; 28:385–398. Presented at the Annual Meeting of the Society for Epidemiologic Research, Keystone, CO, June 1993.

Teta MJ, Perlman GD, Ott MG. Mortality study of ethanol and isopropanol production workers at two facilities. *Scand J Work Environ Health* 1992; 18:90–96.

Teta MJ, Ott MG, Schnatter AR. An update of mortality due to brain neoplasms and other causes among employees of a petrochemical facility. *J Occup Med* 1991; 33:45–51.

Van Mynen R, Teta MJ, Tyler TR. Scientific approach to risk assessment. *Environ Carcinogen Rev* 1990–91, C8(2):253–265.

Teta MJ, Schnatter AR, Ott MG, Pell S. Mortality surveillance in a large chemical company: The Union Carbide Corporation experience, 1974–1983. *Am J Indust Med* 1990; 17:435–447.

Ashby J, Doerrner NG, Teta MJ, et al. A scheme for classifying carcinogens. *Regulat Toxicol Pharmacol* 1990; 12:270–295.

Byrne JM, Steinhorn SC, Teta MJ, et al. Marriage and divorce after childhood and adolescent cancer. *JAMA* 1989; 262:2693–2699.

Teta MJ. Socioeconomic sequelae of childhood cancer survival. In: *Work and Illness: The Cancer Patient*. Barofsky I (ed). Praeger Publishers, New York, 1989.

Teta MJ. Letter to the Editor. Re: "Influence of design characteristics on the outcome of retrospective cohort studies." *Br J Indust Med* 1989; 46:591.

Ott MG, Teta MJ, Greenberg HL. Assessment of exposure to chemicals in a complex work environment. *Am J Indust Med* 1989; 16:617–630.

Ott MG, Teta MJ, Greenberg HL. Lymphatic and hematopoietic tissue cancer in a chemical manufacturing environment. *Am J Indust Med* 1989; 16:631–643.

Teta MJ, Ott MG. A mortality study of a research, engineering and metal fabrication facility in Western New York State. *Am J Epidemiol* 1988; 127:540–51. Presented at the V International Symposium, Epidemiology in Occupational Health, Los Angeles, CA, September 1986.

Mulvihill JJ, Myers MH, Teta MJ, et al. Cancer in offspring of long-time survivors of childhood and adolescent cancer. *Lancet* 1987; 10 October:813–817.

Byrne JM, Mulvihill JJ, Teta MJ, et al. Effects of treatment on fertility in long-term survivors of childhood and adolescent cancer. *N Engl J Med* 1987; 317:1315–1321.

Dupree EA, Cragle DL, McLain RW, Crawford-Brown DJ, Teta MJ. Mortality among workers at a uranium processing facility: Linde Air Products Company Ceramics Plant, 1943–1949. *Scand J Work Environ Health* 1987; 13:100–107.

Teta MJ, Ott MG, Schnatter AR. Population-based mortality surveillance in carbon products manufacturing facilities. *Br J Indust Med* 1987; 44:344–350.

Teta MJ, Del Po MC, Kasl SV, et al. Psychosocial consequences of childhood cancer survival. *J Chron Dis* 1986; 39:751–759. Presented at the Annual Meeting of the Society for Epidemiologic Research, Houston, Texas, June 13, 1984.

Teta MJ, Lewinsohn HC, Meigs JW, et al. Occupational asbestos exposure and mesothelioma in Connecticut (abstract). p. 249. In: *Occupational Lung Disease*. Brooks SM, Gee JBL, Morgan WKS (eds). Raven Press, New York, 1984. Presented at the International Conference on Occupational Lung Disease, Chicago, IL, April 1982.

Teta MJ, Walrath J, Meigs JW, White C, Flannery J. Cancer incidence among cosmetologists. *J Nat Cancer Inst* 1984; 72(5):1051–1058. Presented at the Annual Meeting of the Society for Epidemiologic Research, Winnipeg, Canada, June 1983.

Teta MJ, Lewinsohn HC, Meigs JW, et al. Mesothelioma in Connecticut 1955–1977: Occupational and geographic associations. *J Occup Med* 1983; 25:749–756.

Lewinsohn HC, Meigs JW, Teta MJ, Flannery JT. The influence of occupational and environmental asbestos exposure on and the incidence of mesothelioma in Connecticut. *Biol Effects of Mineral Fibers* 1980; 30:655–660.

Selected Invited Presentations

Teta MJ. The epidemiology of ethylene oxide: Implications for risk assessment. European Commission Scientific Committee on Occupational Exposure Limits (SCOEL), Teleconference December 16, 2010.

Teta MJ. The epidemiology of ethylene oxide: Implications for risk assessment. The Toxicology Forum, 32nd Annual Summer Meeting Given Institute, Aspen, CO, July 13, 2006.

Teta MJ. Validity of using background leukemia incidence rates with cohort mortality-based potency estimates to calculate excess lifetime risk. Society for Risk Analysis Annual Meeting, Baltimore, MD, December 2003.

Teta MJ (plenary session chair). International Agency for Research on Cancer Workshop on Mechanistic Considerations in the Molecular Epidemiology of Cancer. Lyon, France, November 17, 2001.

Teta MJ. Industry's role and responsibility in community environmental health. American Industrial Hygiene Annual Meeting, Orlando, FL, May 2000.

Teta MJ. Ethylene oxide cancer risk assessment: Utility of data for classification and setting occupational exposure limits. 6th International Symposium, Epidemiology and Occupational Risks, Graz, Austria, April 1998.

Teta MJ. Studies of biomarkers in humans—Epidemiological principles to avoid toxicological pitfalls. IBC's Environmental Health Forum: Characterizing Human Risk, Washington, DC, May 1998.

Teta MJ. The environmental endocrine issue. Texas Chemical Council, Houston, TX, May 1997.

Teta MJ. Ethylene oxide epidemiology: Implications for cancer risk assessment. The Toxicology Forum, Washington, DC, February 1997; Society for Risk Analysis, Washington, DC, December 1997.

Teta MJ. Epidemiology in risk assessment. Harvard Center for Risk Analysis, Boston, MA, September 1996.

Teta MJ. Impact of hormonally active chemicals on reproductive cancers and performance. Chemical Specialties Manufacturers Association, Miami, FL, December 1996.

Teta MJ. Public health effects of risk-based policies. C&E News Conference, Risk Issues and the Chemical Industry, Washington, DC, April 1995.

Teta MJ. Cancer risks of ethylene oxide. American College of Occupational Medicine, Washington, DC, May 1992.

Teta MJ. Epidemiology in occupational health risk assessment. Symposium on Occupational Health Risk Assessment: Directions for the 90's, Harvard School of Public Health, Boston, MA, May 1992.

Teta MJ. Use of human data in quantitative risk assessment. Cancer Epidemiology Seminar, The Ontario Cancer Treatment and Research Foundation, University of Toronto, April 1991.

Teta MJ. The epidemiology of chemists and the chemical industry. Council for Chemical Research, Midland, MI, October 1991.

Teta MJ. Coexistence of business and society: The Chemical Industry's Perspective. Keynote Address, Ohio University Southern Campus, Ironton, OH, January 1990.

Teta MJ. The evolving role of the industrial epidemiologist in the U.S. Royal Society of Medicine, London, October 1988.

Teta MJ. Reproductive surveillance in an industrial setting. Organization Resources Counselors and the American Occupational Medical Society, Washington, DC, February 1988.

Prior Experience

EPA: Consultant to the Scientific Advisory Board, 1999–2005
Adjunct Associate Professor of Epidemiology, Department of Biostatistics and Epidemiology, University of Massachusetts, 1993–present
Director of Epidemiology, Health Information, Risk Assessment and TSCA, Union Carbide Corporation, 1988–2001
Corporate Epidemiologist, Union Carbide Corporation, 1983–1988
Associate in Research, Yale University School of Medicine, 1979–1983
Mathematics Instructor, University of Connecticut, E.O. Smith High School, Storrs, Connecticut/Mattatuck Community College, 1965–1968

Science Advisory Boards/Panels

Agency for Toxic Substances and Disease Registry: Board of Scientific Counselors, 1992–1996
American Industrial Health Council: Hazard Characterization Program Team, 1999; Scientific Committee, 1988–1999 (Chair 1997–1999); Epidemiology Subcommittee, 1983–1991 (Chair 1988–1991)
American Chemistry Council (formerly Chemical Manufacturers Association): Alkyl Phenol Ethoxylates CHEMSTAR Panel, 1995–1997; Strategic Science Team, 1998–2000; Public Health Issues Team, 2000–2001; Endocrine Issues Task Group, 1995–1997 (Chair Communications Work Group); Ethylene Oxide Industry Council, 1990–2001, (Vice-Chair Toxicology Task Group); Butadiene Risk Assessment Task Group, 1995–1999 (Chair Epidemiology); CMA Epidemiology Technical Implementation Panel, 1996–2000 (Chair)

Carolyn's Place: A Pregnancy Care Center: Board of Directors

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Chemical Industry Institute of Toxicology: Scientific Programs Committee
Environmental Literacy Council
EPA: Cancer Risk Assessment Guidelines Workshop Expert reviewer, 1994; Invited participant to workshop on harmonization of cancer and noncancer endpoints, 2000
Federal Focus: Invited participant on expert panel at a conference developing, “Principles for Evaluating Epidemiologic Data in Regulatory Risk Assessment” (London Principles), London, October, 1995
Harvard Center for Risk Analysis: Advisory Committee
Independent Panel of Guidant Corporation 2005–2006
IARC (International Agency for Research on Cancer): Invited participant and plenary session chair, Workshop on Mechanistic Considerations in the Molecular Epidemiology of Cancer, Lyon, November 14–17, 2001; “Invited Specialist” monograph meeting June 2007
ILSI/RFF/EPA Forum on Cancer Risk Assessment Guidelines, Expert Reviewer, 1996
ILSI Working Group on Meta-Analysis, 1994–1995
Mickey Leland National Urban Air Toxics Research Center, Scientific Advisory Panel, 1995–1997
National Children’s Study: Member of Study Design Workgroup, 2002
Union Carbide Foundation: Board of Directors

Professional Affiliations

- Society for Epidemiologic Research
- Society of Risk Analysis
- American College of Epidemiology