

Susan T. Pastula, M.P.H.

SUPERVISING EPIDEMIOLOGIST

CONTACT INFORMATION

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PROFESSIONAL PROFILE

Ms. Susan Pastula is an epidemiologist with more than 25 years of experience conducting research in occupational, environmental, cancer, nutrition, and pharmacoepidemiology. Ms. Pastula has worked in various settings, including industry, university, and consulting. She has performed systematic literature reviews and meta-analyses of scientific literature on various topics, including per- and polyfluoroalkyl substances (PFAS), asbestos, elongated mineral particles, nitrates, red meat and coffee consumption, and medical devices. She has conducted studies of community environmental exposures and supported pharmaceutical drug development. Early in her career, Ms. Pastula assisted with the conduct of a cohort mortality study of occupational exposure and cancer in a manufacturing environment. In the role of an industry epidemiologist, Ms. Pastula also oversaw third-party researchers conducting union/company-sponsored mortality studies of specific occupations and processes. She was involved in developing an in-house health-data analysis tool for surveillance and regulatory reporting, including company-wide training of safety and health professionals, as she also analyzed employee healthcare usage and injury data for adverse outcomes.

Ms. Pastula holds a Master of Public Health degree, has published multiple articles in the peer-reviewed literature, and regularly presents at scientific conferences.

EDUCATION

Master of Public Health in General Epidemiology
 University of Michigan School of Public Health, Ann Arbor

1991 Bachelor of Science in Biology University of Michigan, Ann Arbor









SELECTED PROFESSIONAL EXPERIENCE

Performed and managed systematic literature reviews for topics that included health effects of PFAS exposure, health effects of nitrate-contaminated drinking water, risk of cancer with occupational asbestos exposure, cancer risks with consumption of red meat and coffee, and adverse outcomes of metal-on-metal hip replacements and inferior vena cava filters.

Managed an extensive literature review and meta-analysis of occupational asbestos exposure and multiple cancer sites, with a focus on cancer risk by occupation. This included recoding multiple national labor codes into meaningful categories for analysis. Continued to update the meta-analyses with current literature to support litigation efforts.

Updated and expanded a landmark analysis of the comparison of potency of asbestos fiber types for mesothelioma to include more recent literature, as well as the addition of other elongated mineral particles such as talc, taconite, and vermiculite. This effort included obtaining and revising the original authors' statistical coding in R to calculate updated and new potency factors.

Used SEER, census-tract, and state environmental protection department data to evaluate childhood cancer incidence in a community with exposure to fracking operations.

Used hospital discharge data from the National Inpatient Sample, Healthcare Cost and Utilization Project, and the Agency for Healthcare Research and Quality databases to examine the prevalence, severity, and cost of hospitalizations for respiratory syncytial virus (RSV) compared to pneumonia and influenza in adults. Also led an analysis of an internal convenience sample of laboratory data from the client's surveillance system to characterize adult RSV patients, including genotypes and surface proteins, to inform the client's development of monoclonal antibody treatment for RSV.

Assisted with a meta-analysis of the association between red and processed meat and multiple cancer sites for review by the International Agency for Research on Cancer. Analyses were performed using the Comprehensive Meta-Analysis software tool.

Assisted with a systematic review of coffee consumption and multiple health outcomes in support of Proposition 65 litigation efforts in California.

Assisted with the conduct of a cohort mortality study of occupational exposure and cancer in a manufacturing environment. Performed mortality tracing of cohort subjects, managed a large data set using SAS, and conducted life-table analyses.

Participated in the development of an in-house injury and illness surveillance tool to support required OSHA industry reporting, as well as influence the design of future manufacturing processes to minimize injuries and related costs. Trained safety and health professionals across the country in data analysis using the tool.

Maintained a large company mortality database, including mortality tracing and death certificate coding. Oversaw third-party researchers conducting union/company-contracted mortality studies using this data set. Conducted analyses of company healthcare usage and workplace injuries using SAS.



MANUSCRIPTS

Pastula ST, Bylsma LC, Rege SV, Lewis RJ, Movva N. 2024. Scoping review of indices to measure a community's health status. Popul Health Manag doi: 10.1089/pop.2024.0138. Online ahead of print 19 Nov 2024. PMID: 39558762; open access.

Suh M, Movva N, Jiang X, Reichert H, **Pastula ST**, Sacks NC, Frankenfeld C, Fryzek JP, Simões AF. 2024. Healthcare utilization among infants covered by Medicaid and newly diagnosed with respiratory syncytial virus. Open Forum Infect Dis, open access.

Movva N, **Pastula ST**, Rege SV, Lewis RJ, Bylsma LC. 2023. Scoping review of employer-led research using employee health claims data. <u>Popul Health Manag</u> 26(5):341-352; doi: 10.1089/pop.2023.0140.

Alexander DD, **Pastula ST**, Riordan AS. 2021. Epidemiology of lung cancer among acrylonitrile-exposed study populations: A meta-analysis. Regul Toxicol Pharmacol 122:104896, doi: 10.1016/j.yrtph.2021.104896, PMID: 33617939.

Garabrant DH, **Pastula ST**. 2018. A comparison of asbestos fiber potency and elongate mineral particle (EMP) potency for mesothelioma in humans. Toxicol Appl Pharmacol 361:127–136.

Ruzin A, **Pastula ST**, Levin-Sparenberg EM, Jiang X, Fryzek JP, Tovchigrechko A, Lu B, Qi Y, Liu H, Jin H, Yu L, Hackett J, Villafana T, Esser MT. 2018. Characterization of circulating RSV strains among subjects in the OUTSMART-RSV surveillance program during the 2016-17 winter viral season in the United States. PLoS One 13(7):e0200319.

Pastula ST, Hackett J, Coalson J, Jiang X, Villafana T, Fryzek J. 2017. Hospitalizations for respiratory syncytial virus disease among adults in the United States, 1997 to 2012. Open Forum Infect Dis 4(1):ofw270.

Fryzek J, **Pastula S**, Jiang X, Garabrant DH. 2013. Response to Goldstein et al. J Occup Environ Med 55(11):1378.

Fryzek J, **Pastula S**, Jiang X, Garabrant DH. 2013. Childhood cancer incidence in Pennsylvania counties in relation to living in counties with hydraulic fracturing sites. J Occup Environ Med 55(7):796–801.

Reeve GR, **Pastula S**, Rontal R. 1998. A major employer as a health care services laboratory. Int J Qual Health Care 10(6):547–553.

Sorock GS, Smith GS, Reeve GR, Dement J, Stout N, Layne L, **Pastula ST**. 1997. Three perspectives on work-related injury surveillance systems. Am J Indust Med 32(2):116–128.

ABSTRACTS AND PRESENTATIONS

Suh M, Mittal L, Brorby G, **Pastula S**, Vincent M, Proctor D. Epidemiology is critical in advancing cumulative impact assessment (CIA) research: A pilot study in San Antonio, Texas. International Society of Exposure Science Annual Meeting, Montreal, Canada, October 2024.

Reichert H, Jiang X, Suh M, **Pastula S**, Movva N, Fryzek J, Simões EAF. The burden of RSV and bronchiolitis in the US infant Medicaid population extends beyond the inpatient setting. Poster 192, International Society for Pharmacoepidemiology (ICPE) annual meeting, Halifax, Nova Scotia, August 2023.

Pastula S, Suh M, Jiang X, Reichert H, Movva N, Fryzek J, Simões EAF. Respiratory syncytial virus (RSV) and bronchiolitis epidemiology among the United States infant Medicaid populations in seven states. Poster 191, International Society for Pharmacoepidemiology (ICPE) annual meeting, Halifax, Nova Scotia, August 2023.



Suh M, Reichert H, Jiang X, **Pastula ST**, Movva N, Fryzek J, Simoes E. The burden of RSV and bronchiolitis in the US infant Medicaid population extends beyond the inpatient setting. Oral presentation to the Pediatric Academic Societies meeting, Washington, DC, April 2023.

Garabrant D, **Pastula S**. Asbestos and EMP fiber potency analysis. Abstract, Oral Presentation, Monticello Conference, Charlottesville, VA, October 2017.

Ruzin A, Levin-Sparenberg E, **Pastula S**, Jiang X, Fryzek J, Tovchigrechko A, Lu B, Yu L, Hackett J, Villafana T, Esser MT. Characterization of RSV strains among U.S. patients in the OUTSMART RSV program during 2015-16. Abstract, poster presentation, ID Week 2017, San Diego, CA, October 2017.

Pastula S, Hackett J, Coalson J, Jiang X, Villafana T, Fryzek J. Burden of respiratory syncytial virus disease among adults in the United States from 1997 to 2012. Abstract, poster presentation, ID Week 2016, New Orleans, LA, October 2016.

Pastula S, Hackett J, Coalson J, Jiang X, Villafana T, Fryzek J. Burden of respiratory syncytial virus disease among adults in the United States from 1997 to 2012. Abstract, poster presentation, International Society for Influenza and Other Respiratory Virus Diseases (ISIRV) 2016 — Options IX for the Control of Influenza, Chicago, IL, August 2016.

Pastula S, Hackett J, Coalson J, Jiang X, Villafana T, Fryzek J. Burden of respiratory syncytial virus disease among adults in the United States from 1997 to 2012. Abstract, poster presentation, International Society for Pharmacoeconomics (ISPOR), Washington, D.C., May 2016.

Reeve GR, **Pastula ST**. The incidence of injuries involving robots in a large manufacturing company. Oral presentation, NIOSH National Occupational Injury Research Symposium, Morgantown, WV, October 1997.

PROTOCOL REGISTRATIONS

Movva N, Cohen S, **Pastula S**. 2023. Systematic literature review of whole milk dairy food consumption and cardiometabolic outcomes. PROSPERO 2023 CRD42023427990

Pastula S, Bylsma LC, Movva N, Rege S, Lewis RJ, Fryzek JP. 2023. Scoping review of indices to monitor community health. Open Science Framework. https://doi.org/10.17605/OSF.IO/NKQV2