



**Exponent**<sup>®</sup>  
Engineering & Scientific Consulting

## Megan Leonhard, M.P.H.

Managing Scientist | Health Sciences  
15375 SE 30th Place, Suite 250 | Bellevue, WA 98007  
(425) 519-8757 tel | mleonhard@exponent.com

### Professional Profile

Ms. Leonhard has expertise in epidemiological study design, data analysis and management, data analysis program use, and surveillance system use. She also has extensive experience in literature review particularly related to injury, trauma, and rare disease. Ms. Leonhard is currently involved in mortality and occupational injury data preparation and analysis, manuscript and report preparation, proposal development, and literature review.

Prior to joining Exponent, Ms. Leonhard completed a B.S. in Mathematics and Biology and obtained her M.P.H. in Epidemiology and Biostatistics from Oregon Health & Science University, School of Medicine. Her Master's work focused on the epidemiology of pediatric traumatic brain injury, using multivariable logistic regression models to test for urban/rural pediatric traumatic brain injury fatality disparities in Oregon. While in graduate school, Ms. Leonhard also worked in conjunction with the Oregon State Health Authority gaining experience in injury, trauma, and communicable disease epidemiology, research design, data registry use and management, and syndromic surveillance system use.

Additionally, Ms. Leonhard has participated in research projects performing both lab and data analysis work for microbiology projects related to biodegradable mulches and growth inhibition of *Aspergillus* and for agricultural projects with the USDA - Agricultural Research Service related to fruit storage environments and apple volatile production. She has experience with computer programming languages C++ and Ada and is versed in numerous data analysis programs including SAS, STATA, SPSS, R, and Minitab.

### Academic Credentials & Professional Honors

M.P.H., Public Health, Oregon Health and Science University, 2014

B.S., Biology/Mathematics, Western Washington University, 2012

### Prior Experience

Co-founder/Chief Epidemiologist & Biostatistician, Center To Cure™, 2013-2014

Syndromic Surveillance Consultant, Oregon Health Authority — Public Health Division, 2014

Lab Assistant/Data analyst, USDA — Agricultural Research Service, 2011, 2012

## Professional Affiliations

American Public Health Association — APHA

Oregon Public Health Association — OPHA

American College of Epidemiology - ACE: Associate Member

## Publications

Fordyce TA, Leonhard MJ, Mowat F, Moolgavkar S. Response to Finkelstein Re: the Fordyce et al. Vermont Talc Miners and Millers Cohort Study Update. *Journal of occupational and environmental medicine*. 2020 Feb 6.

Fordyce TA, Mowat FS, Leonhard MJ, Moolgavkar SH. Letter to the Editor: Misrepresentation by Egilman et al. of the Fordyce et al.(2019) Vermont Talc Miners and Millers Cohort Study Update. *Journal of Occupational and Environmental Medicine*. 2020 Jan 1;62(1):e19-21.

Boffetta P, Fordyce T, Leonhard M. Evaluation of recent evidence on the solubility of beryllium compounds and cancer risk. *European Journal of Cancer Prevention*. 2020 Mar 1;29(2):186-90.

Fordyce TA, Leonhard MJ, Mowat FS, Moolgavkar SH. A 37-year update on mortality patterns in an expanded cohort of Vermont talc miners and millers. *Journal of occupational and environmental medicine*. 2019 Nov 1;61(11):916-23.

Leonhard MJ, Chang ET, Loccisano AE, Garry MR. A systematic literature review of epidemiologic studies of developmental manganese exposure and neurodevelopmental outcomes. *Toxicology*. March 2019; 420, 46-65. doi: 10.1016/j.tox.2019.03.004.

Schmier JK, Patel JD, Leonhard MJ, Midha PA. A Systematic Review of Cost-Effectiveness Analyses of Left Ventricular Assist Devices: Issues and Challenges. *Applied Health Economics and Health Policy* 2018; 1-12. doi:10.1007/s40258-018-0439-

Williams AL, Bates CA, Pace ND, Leonhard MJ, Chang ET, DeSesso JM. Impact of chloroform exposures on reproductive and developmental outcomes: A systematic review of the scientific literature. *Birth Defects Research*. 2018; 1-47. <https://doi.org/10.1002/bdr2.1382>

Bailey WH, Williams AL, Leonhard MJ. (2018). Exposure of laboratory animals to small air ions: a systematic review of biological and behavioral studies. *Biomed Eng Online*, 17(1), 72. doi:10.1186/s12938-018-0499-z.

Fordyce TA, Leonhard MJ, Chang ET. A critical review of developmental exposure to particulate matter, autism spectrum disorder, and attention deficit hyperactivity disorder. *Journal of Environmental Science and Health Part A* 2017; 1-31. <https://doi.org/10.1080/10934529.2017.1383121>.

Volberg V, Fordyce TA, Leonhard MJ, Mezei G, Vergara XP, Krishen L. Injuries among electric power industry workers, 1995-2013. *J Safety Res (Available online 25 Nov 2016)*. <http://dx.doi.org/10.1016/j.jsr.2016.11.001>.

Fordyce TA, Leonhard MJ, Watson HN, Mezei G, Vergara XP, Krishen L. An analysis of fatal and non-fatal injuries and injury severity factors among electric power industry workers. *Am J Ind Med* 59 (11), 948-958. 2016 Jun 27.

Leonhard MJ, Wright D, Fu R, Lehrfeld D, Carlson KF. Urban/Rural Disparities in Oregon Pediatric Traumatic Brain Injury. *Injury Epidemiology* 2015, 2:32; doi: 10.1186/s40621-015-0063-2.

## **Presentations**

Leonhard MJ, Fordyce TA, Vergara XP, Bauman E. Injury outcomes for falls in older workers and by occupational group: electric energy workers, 1995-2016. Presented at the American College of Epidemiology Annual Meeting, New Orleans, LA, September 2017.

Fordyce TA, Leonhard MJ, Vergara XP, Bauman E. Risk factors for same level and different level falls: electric energy workers, 1995-2014. Presented at the American College of Epidemiology Annual Meeting, New Orleans, LA, September 2017.

Erickson, H, Fordyce TA, Leonhard MJ, Satin K. Leukemias in a cohort of crude oil workers, 1946-2012. Presented at the American College of Epidemiology Annual Meeting, New Orleans, LA, September 2017.

Leonhard MJ, Fordyce TA, Vergara X, Krishen L. An analysis of Sprains and Strains among Electric Energy Workers, 1995-2014. Presented at the American Public Health Association Annual Conference, Denver, CO, November-December 2016.

Fordyce TA, Leonhard MJ, Vergara X, Krishen L. Injury Risk Profiles and Outcomes by Type of Fall: Electric Energy Workers, 1995-2014. Presented at the American Public Health Association Annual Conference, Denver, CO, November-December 2016.

Fordyce TA, Leonhard MJ, Vergara X, Krishen L. Injuries among Older Electric Energy Workers, 1995-2014. Presented at the American Public Health Association Annual Conference, Denver, CO, November-December 2016.

Leonhard MJ, Fordyce TA, Volberg V, Mezei G, Vergara X, Krishen L. Injuries from motor vehicle crashes among electric power industry workers, 1995-2013. Presented at the Centers for Disease Control and Prevention (CDC) National Occupational Injury Research Symposium, Kingwood, WV, May 2015.

Leonhard MJ. Pediatric traumatic brain injury case review — Urban/rural disparities in Oregon pediatric traumatic brain injury fatality. Presented at the Oregon State Trauma Advisory Board Meeting, Portland, OR, July 2014.

Leonhard MJ. Urban/rural disparities in Oregon pediatric traumatic brain injury. Oregon Master of Public Health Poster Showcase, Portland, OR, April 2014.

Bails G, Lind M, Leonhard MJ, Kinloch K, McSharry M, Kinash B. Soil microbes with potential for biodegradable plastic breakdown. Western Washington University Scholars Week Poster Showcase, Bellingham, WA, May 2012.

## **Technical Reports**

EPRI Occupational Health and Safety Annual Report 2017: Occupational Health and Safety Trends Among Electric Energy Workers 1995-2016. EPRI, Palo Alto, CA, 2017.

EPRI Occupational Health and Safety Annual Report 2016: Occupational Health and Safety Trends 1995-2014. EPRI, Palo Alto, CA, 2016.

EPRI Occupational Health and Safety Annual Report 2015: Occupational Health and Safety Trends 1995-2013. EPRI, Palo Alto, CA, 2015.

Occupational Health and Safety 1995-2013. Injury Surveillance Highlights - Focus on Injury Severity. EPRI, Palo Alto, CA, 2015.