Curriculum Vitae

Michael N. Bates

EDUCATION

1972	B.Sc.(Hons)	Chemistry	University of Canterbury, Christchurch, New Zealand.
1975	M.Sc.	Toxicology	University of Surrey, Guildford, England.
1989	M.P.H	Environmental health sciences	University of California, Berkeley.
1991	Ph.D.	Epidemiology	University of California, Berkeley.

EMPLOYMENT

2021 (January)-present	Researcher (volunteer), VA Northern California Health Care System, Martinez, California.
2019 (August)-present	Adjunct Professor and Researcher, Emeritus, Divisions of Epidemiology and Environmental Health Sciences, School of Public Health, University of California, Berkeley.
2005-2019 (August)	Associate Director, Global Health and Environment Program, Division of Environmental Health Sciences, School of Public Health, University of California, Berkeley.
2003-2019 (August)	Adjunct Professor, Division of Epidemiology, School of Public Health, University of California, Berkeley.
2001 (November)-2019 (August)	Researcher, Division of Environmental Health Sciences, School of Public Health, University of California, Berkeley.
2000 (November)-2001 (October)	Visiting Researcher, Arsenic Health Effects Research Group, School of Public Health, University of California, Berkeley.
1992 (November)-2000 (October).	Managing Scientist/Principal Scientist, Epidemiology Institute of Environmental Science and Research Ltd (ESR) Kenepuru Science Centre, Porirua, New Zealand
1992 (February)-1992 (October)	Visiting Lecturer, Zentrum für Gesundheitswissenschaften (Health Sciences Centre), University of Bielefeld, Bielefeld, F.R. Germany
1980 (July) – 1987 (August)	Principal Toxicologist, Health Protection Program, Department of Health, Wellington, New Zealand.

1972 (June) – 1980 (July) Scientific Officer (Toxicology), Division of Public Health, Department of Health, Wellington, New Zealand.

PUBLICATIONS

1. Smith, A.H. & **Bates, M.N.** Epidemiological studies of cancer and pesticide exposure. In: Carcinogenicity and Pesticides: Principles, Issues and Relationships. ACS Symposium Series 141. Washington, DC: American Chemical Society, 1989: 207-222.

2. Buckland, S.J., Hannah, D.J., Taucher, J.A. & **Bates, M.N.** Levels of polychlorinated dibenzo-p-dioxins and dibenzofurans in the breast milk of New Zealand mothers. Proceedings of Dioxin '90, Bayreuth, Germany. September, 1990.

3. **Bates, M.N**. Extremely low frequency electromagnetic fields and cancer: the epidemiologic evidence. *Environmental Health Perspectives*. 1991;95:147-156.

4. **Bates, M.N**., Smith, A.H. & Hopenhayn-Rich, C. Arsenic ingestion and internal cancers: A review. *Amer J Epidemiol*. 1992;135:462-476.

5. Smith, A.H., Hopenhayn-Rich, C., **Bates, M.N**., Goeden, H.M., Hertz-Picciotto, I., Duggan, H.M., Wood, R., Smith, M.T. & Kosnett, M.J. Cancer risks from arsenic in drinking water. *Environmental Health Perspectives*. 1992;97:259-267.

6. Smith, A.H. & **Bates, M.N**. Confidence limit analyses should replace power calculations in the interpretation of epidemiologic studies. *Epidemiology*. 1992;3449-452.

7. Bates, **M.N.** & Fehr, R. Schools of Public Health in the United States of America. *Zeitschrift für Gesundheitswissenschaften.* 1993;1:5-19.

8. **Bates, M**., Baker, M., Wilson, N., Lane, L. & Handford, S. Epidemiologic overview of the New Zealand shellfish toxicity outbreak. In: Marine Toxins and New Zealand Shellfish. The Royal Society of New Zealand Miscellaneous Series 24, 1993

9. **Bates, M.N**., & Till, D. The New Zealand shellfish toxicity outbreak: an overview. *NZ Microbiological Society Newsletter*, September, 1993.

10. Baker, M., Wilson, N. & **Bates, M**. Occupational communicable diseases in New Zealand. *Comm Dis NZ.* 1993;93:85-91

11. Baker M, Wilson N, **Bates M**, Till D, Hannah D. Toxic shellfish poisoning update. *Comm Dis NZ* 1993; 93:16-18.

12. **Bates, M.N**., Hannah, D.J., Buckland, S.J., Taucher, J.A. & van Maanen, T. Chlorinated organic compounds in the breast milk of New Zealand women. *Environmental Health Perspectives*. 1994;102 suppl 1:211-217.

13. Smith, A.H., Hopenhayn-Rich, C., Biggs, M.L., Moore, L., Dale, J., Warner, M., **Bates, M**. & Engel, R. Epidemiological study designs to address potential high bladder cancer risks from arsenic in drinking water. In: Arsenic Exposure and Health, eds: Chappell, W.R., Abernathy, C.O., Cothern, C.R. Northwood: Science and Technology Letters, 1994, 109-117.

14. **Bates, M.N**., Smith, A.H. & Cantor, K.P. Case-control study of bladder cancer and arsenic in U.S. drinking water supplies. *Amer J Epidemiol*. 1995;141:523-530.

15. Eberhart-Phillips, J., Malcolm, M., Bandaranayake, D. & **Bates, M**. Assessment of the risk of transmission of N. Meningitidis in a New Zealand university classroom setting. *NZ Med J* 1995; 108: 318-9.

16. **Bates M**, Hannah J. Is dioxin exposure a problem in New Zealand? *NZ Public Health Report* 1995; 2: 41-2.

17. **Bates, M.N.** Lane, L. Testicular cancer in firefighters: A cluster investigation. *NZ Med J*, 1995; 108: 334-7.

18. **Bates, M**., Malcolm, M., Wyatt, R., Garrett, N., Galloway, Y., Speir, T., Read, R. Lead in children in older housing areas in the Wellington region. *NZ Med J*, 1995; 108: 400-4.

19. Read D, **Bates M**. Lead-based paint and child health: an old public health problem revisited. *NZ Public Health Report*, 1995; 2: 83-4.

20. McNicholas A, **Bates M**, Wright J, Kiddle E. Is New Zealand's recent increase in campylobacteriosis due to changes in laboratory procedures? A survey of 69 laboratories. *NZ Med J* 1995; 108: 459-61.

21. Sarfati D, **Bates MN**, Garrett N, Baker MG. Acute gastroenteritis diagnostic practices of New Zealand GPs. *NZ Med J* 1997; 110: 354-6.

22. **Bates MN**, Wyatt R, & Garrett N. Old paint removal and blood lead levels in children. *NZ Med J* 1997; 110: 373-7.

23. **Bates M**, Begg J. Volcanic emissions and the risk to public health. *NZ Public Health Report* 1997; 4: 81-3.

24. **Bates MN**, Garrett N, Graham B, Read D. Air pollution and mortality in the Rotorua geothermal area. *Aust NZ J Public Health* 1997; 21: 581-6.

25. Eberhart-Phillips J, Walker N, Garrett N, Bell D, Sinclair D, Rainger W, **Bates M**. Campylobacteriosis in New Zealand: results of a case-control study. *J Epidemiol Com Health* 1997; 51: 686-91.

26. Sarfati D, **Bates MN**, Garrett N, Baker MG, Featherstone D. Viral gastroenteritis testing capabilities of New Zealand clinical laboratories. *NZ J Med Lab Sci* 1997; 51: 125-7.

27. Orchard V, **Bates M**. Environmental health. In: Merrilees, M: Ed. Medical and Health Sciences. The New Zealand Knowledge Base: Report no. 11. Wellington: Ministry of Research Science and Technology. 1997; 119-23.

28. **Bates MN**, Garrett N, Graham B, Read D. Cancer incidence, morbidity, and geothermal pollution in Rotorua, New Zealand. *Int J Epidemiol* 1998; 27: 10-14.

29. Fellows K, **Bates MN**. Mercury concentrations in ambient air of the Rotorua, New Zealand, geothermal area. *Bull Environ Contam Toxicol* 1998; 60: 885-91.

30. **Bates MN**, Garrett N. Vehicle fires and the introduction of unleaded petrol into New Zealand. *J Royal Soc NZ* 1998; 28: 321-8.

31. Blakely T, **Bates MN**, Garrett N, Robson R. The incidence of hepatocellular carcinoma in New Zealand. *NZ Med J* 1998, 111: 471-4.

32. Blakely T, **Bates MN**, Baker M, Tobias M. Hepatitis B carriage explains the excess rate of hepatocellular carcinoma for Maori, Pacific Island and Asian people compared to Europeans in New Zealand. *Int J Epidemiol* 1999; 28: 204-210.

33. **Bates MN**, Buckland SJ, Ellis HK, Garrett N, Needham LL, Patterson DG, Turner W, Russell D, Wilson N, Duncan A. PCDDs and PCDFs in the serum of the non-occupationally exposed New Zealand population. *Organohalogen Compounds* 1999; 44:17-21.

34. Brown J, Parr W, **Bates MN**. Evaluation of a smoking cessation programme that uses behaviour modification. *NZ Med J* 1999; 112: 399-402.

35. **Bates MN**, Blakely T. Role of cannabis in motor vehicle crashes. *Epidemiol Reviews* 1999; 21:222-32.

36. **Bates MN**, Maas E, Martin T, Harte D, Grubner M, Margolin T. Investigation of the prevalence of *Legionella* species in domestic hot water systems. *NZ Med J* 2000; 113: 218-20..

37. Wright JC, **Bates MN**, Cutress T, Lee M. The cost-effectiveness of fluoridating water supplies in New Zealand. *Aust NZ J Pub Health* 2001; 25:170-8.

38. Fowles J, Mazzoni S, **Bates M**, Thornley C, Galloway Y. The surveillance of agrichemical spray drift incidents in New Zealand, 1999-2000. *NZ Public Health Report* 2001; 8:25-28.

39. **Bates MN**, Fawcett J, Garrett N, Arnold R, Pearce N, Woodward A. Is testicular cancer an occupational disease of fire fighters? *Amer J Indust Med* 2001, 40:263-70.

40. **Bates MN**, Fawcett J, Dickson S, Berezowski R, Garrett N. Exposure of hospitality workers to environmental tobacco smoke. *Tobacco Control*. 2002; 11:125-129.

41. Fawcett J, Garrett N, **Bates MN**. Follow-up methods for retrospective cohort studies in New Zealand. *Aust NZ J Public Health* 2002, 26:256-61.

42. Smith AH, Lopipero PA, **Bates MN**, Steinmaus CM. Arsenic epidemiology and drinking water standards. *Science* 2002, 296: 2145-6.

43. **Bates MN**, Garrett N, Shoemack P. Investigation of health effects of hydrogen sulfide from a geothermal source. *Arch Environ Health* 2002; 57:405-411.

44. **Bates MN**, Thomson B, Garrett N. Reductions in organochlorine levels in the milk of New Zealand women. *Arch Environ Health* 2002; 57: 591-597

45. **Bates MN**, Selevan SG, Ellerbee SM, Gartner LM. Reporting needs for studies of environmental chemicals in human milk. *J Toxicol Environ Health Part A* 2002; 65:1867-79.

46. Berlin CM, LaKind JS, Sonawane BR, Kacew S, Borgert CJ, **Bates MN**, et al. Conclusions, research needs, and recommendations of the expert panel: Technical Workshop on Human Milk Surveillance and Research for Environmental Chemicals in the United States. *J Toxicol Environ Health Part A* 2002; 65:1929-35.

47. Zhang L, Forster M, Hagen D, **Bates MN**. Children's blood lead levels and environmental correlates: An analysis from 1996-2000 data. *Calif Environ Health Bulletin* 2003; 2:6-9.

48. LaKind JS, **Bates MN**, Wilkins AA. How useful is measurement of environmental chemicals in human milk in investigations of breast cancer etiology? *Organohalogen Compounds* 2003; 65:346-349**.**

49. Moore LE, Smith AH, Eng C, DeVries S, Kalman D, Bhargava V, Chew K, Ferreccio C, Rey OA, Hopenhayn C, Biggs ML, **Bates MN**, Waldman FM. TP53 Alterations in Bladder Tumors from Arsenic and Tobacco Exposed Patients. *Carcinogenesis* 2003; 24:1785-1791

50. Steinmaus C, Yuan Y, **Bates MN**, Smith AH. Case-control study of bladder cancer and drinking water arsenic in the western United States. *Amer J Epidemiol* 2003; 158:1193-1201.

51. **Bates MN**, Buckland SJ, Garrett N, Ellis H, Needham LL, Patterson Jr DG, Turner WE, Russell DG. Persistent organochlorines in the serum of the non-occupationally exposed New Zealand population. *Chemosphere* 2004; 54:1431-1443.

52. **Bates MN**, Rey OA, Biggs ML, Hopenhayn C, Moore LE, Kalman D, Steinmaus C, Smith AH. Case-control study of bladder cancer and exposure to arsenic in Argentina. *Amer J Epidemiol* 2004; 159:381-9.

53. Moore LE, Wiencke JK, **Bates MN**, Zheng S, Rey OA, Smith AH. Investigation of genetic polymorphisms and smoking in a bladder cancer case-control study in Argentina. *Cancer Letters* 2004; 211:199-207.

54. **Bates MN**, Fawcett J, Garrett N, Cutress T, Kjellstrom T. Health effects of dental amalgam exposure: a retrospective cohort study. *Int J Epidemiol* 2004, 33: 894-901.

55. **Bates MN**, Buckland SJ, Garrett N, Caudill SP, Ellis H. Methodological aspects of a national population-based study of persistent organochlorine compounds in serum. *Chemosphere* 2005; 58:943-51.

56. Pokhrel AK, Smith KR, Khalakdina A, Deuja A, **Bates MN**. Case-control study of indoor cooking smoke exposure and cataract in Nepal and India. *Int J Epidemiol* 2005; 34: 702-708.

57. LaKind JS, Berlin CM, Jr, **Bates MN**. Overview: Technical Workshop on Human Milk Surveillance and Biomonitoring for Environmental Chemicals in the United States. *J Toxicol Environ Health, Part A* 2005; 68:1683-9.

58. Wang RY, **Bates MN**, Goldstein DA, Haynes SG, Hench KD, Lawrence RA, Paul IM, Qian Z. Human Milk Research for answering questions about human health. *J Toxicol Environ Health, Part A* 2005; 68:1771-1801.

59. Berlin CM, Jr, LaKind JS, Fenton SE, Wang RY, **Bates MN**, Brent RL, Condon M, Crase BL, Dourson ML, Ettinger AS, Foos B, Fürst P, Giacoia GP, Goldstein DA, Haynes SG, Hench KD, Kacew S, Koren G, Lawrence RA, Mason A, McDiarmid MA, Moy G, Needham LL, Paul IM, Pugh LC, Qian Z, Salamone L, Selevan SG, Sonawane B, Tarzian AJ, Tully MR, Uhl K. Conclusions and recommendations of the expert panel: Technical Workshop on Human Milk Surveillance and Biomonitoring for Environmental Chemicals in the United States. *J Toxicol Environ Health, Part A* 2005; 68:1825-31.

60. **Bates MN**, Hamilton JW, LaKind JS, Langenberg P, O'Malley M, and Snodgrass W. Biomonitoring Workshop Report: Biomonitoring Study Design, Interpretation, and Communication - Lessons learned and path forward. *Environ Health Perspect* 2005; 113:1615–1621.

61. Fink C, **Bates MN**. Melanoma and Ionizing Radiation: Is There a Causal Relationship? *Radiation Research* 2005; 164:701-710.

62. Steinmaus C, **Bates MN**, Yuan Y; Kalman D; Rey OA, Biggs ML, Hopenhayn C, Moore LE, Hoang BK, Smith AH. Arsenic Methylation and Bladder Cancer Risk in Case-Control Studies in Argentina and the United States. *J Occ Environ Med* 2006; 48:478-488.

63. **Bates MN**. Mercury amalgam dental fillings: an epidemiologic assessment. *Int J Hygiene Env Health* 2006; 209:309-316.

64. Smith AH, Marshall G, Yuan Y, Ferreccio F, Liaw J, von Ehrenstein O, Steinmaus C, **Bates MN**, Selvin S. Increased Mortality from Lung Cancer and Bronchiectasis in Young Adults Following Exposure to Arsenic *In Utero* and Early Childhood. *Environ Health Persp* 2006;114:1293-6.

65. **Bates MN**, Hopenhayn C, Rey OA, Moore LE. Bladder cancer and mate consumption in Argentina: a case-control study. *Cancer Letters* 2007; 246:268-73.

66. Gallagher LM, Crane J, Fitzharris P, **Bates MN**. Occupational respiratory health of New Zealand horse trainers. *Int Arch Occup Environ Health* 2007; 80:335-41.

67. **Bates MN**, Khalakdina A, Pai M, Chang L, Lessa F, Smith KR. The risk of tuberculosis from exposure to tobacco smoke: a systematic review and meta-analysis. *Arch Intern Med* 2007; 167:335-342.

68. Steinmaus C; Moore LE; Shipp M; Kalman D; Rey OA; Biggs ML; Hopenhayn C; **Bates MN**; Zheng S; Wiencke JK; Smith AH. Genetic polymorphisms in MTHFR 677 and 1298, GSTM1 and T1, and metabolism of arsenic. *J Toxicol Environ Health, Part A* 2007; 70:159-70.

69. **Bates MN**. Registry-Based Case-Control Study Of Cancer In California Firefighters. *Am J Indust Med* 2007; 50:339-344.

70. Marshall G, Ferreccio C, Yuan Y, **Bates MN**, Steinmaus C, Selvin S, Liaw J, Smith AH. Fifty-year study of lung and bladder cancer mortality in Chile related to arsenic in drinking water. *JNCI.* 2007; 99:920–8.

71. Lakind J, Wilkins A, **Bates MN**. Human Breast Biomonitoring and Environmental Chemicals: Use of Breast Tissues and Fluids in Breast Cancer Etiologic Research. *J Exposure Science Environment Epidemiol* 2007; 17:525-40.

72. Yuan Y, Marshall G, Ferreccio C, Steinmaus C, Selvin S, Liaw J, **Bates MN**, Smith AH. Acute myocardial infarction mortality in comparison to lung and bladder cancer mortality in arsenic-exposed Region II of Chile from 1950-2000. Am J Epidemiol 2007; 166:1381-91.

73. Sreeramareddy CT, Panduru KV, Verma SC, Joshi HS, **Bates MN**. Comparison of pulmonary and extrapulmonary tuberculosis in Nepal- a hospital-based retrospective study. BMC Infectious Diseases 2008; 24;8:8. doi: 10.1186/1471-2334-8-8.

74. Yuan Y, Marshall G, Ferreccio C, Steinmaus C, Liaw J, **Bates M**, Smith AH. Kidney Cancer Mortality: 50-year Latency Patterns related to Arsenic Exposure. *Epidemiology* 2010; 21:103-8.

75. Pokhrel AK, **Bates MN**, Verma SC, Joshi HS, Sreeramareddy CT, Smith KR. Tuberculosis and Indoor Biomass and Kerosene Use in Nepal: A Case-control Study. *Environ Health Persp* 2010; 118:558-564.

76. Steinmaus C, Yuan Y, Kalman D, Rey OA, Skibola CF, Dauphine D, Basu A, Porter KE, Hubbard A, **Bates MN**, Smith MT, Smith AH. Individual differences in arsenic exposure and lung cancer in a case-control study in Argentina. *Toxicol Appl Pharmacol*. 2010. 2010; 247:138-45.

77. Porter KE, Basu A, Hubbard AE, **Bates MN**, Kalman D, Rey O, Smith A, Smith MT, Steinmaus C, Skibola CF. Association of genetic variation in cystathionine-beta-synthase and arsenic metabolism. *Environ Res*. 2010;110:580-7.

78. Lakshmi PVM, Kaur N, Thakur JS, Smith K, **Bates MN**, Kumar R. Biomass fuel and Risk of Tuberculosis: A Case-Control Study from Northern India. *J Epi Comm Health* 2012;66(5):457-61.

79. Carlton EJ, **Bates MN**, Zhong B, Seto EYW, Spear RC. Evaluation of Mammalian and Intermediate Host Surveillance Methods for Detecting Schistosomiasis Reemergence in Southwest China, *PLoS Neglected Tropical Diseases*. 2011; 5(3):e987.

80. **Bates MN**. Dental amalgam fillings: a source of mercury exposure. In: Nriagu JO (ed.) *Encyclopedia of Environmental Health*, volume 2, 2011; pp. 11–20 Burlington: Elsevier.

81. Chin DL, Hong O, Gillen M, **Bates MN**, Okechukwu CA. Cigarette smoking in building trades workers: the impact of work environment. *Am J Ind Med*. 2012;55(5):429-39.

82. Lam N, Smith KR, Gauthier A, **Bates MN**. Kerosene: a review of household uses and their hazards in low- and middle-income countries. *Journal of Toxicology and Environmental Health, Part B*. 2012 15:396–432.

83. Chin DL, Hong O, Gillen M, **Bates MN**, Okechukwu CA. Occupational factors and smoking cessation among unionized building trades workers. *Workplace Health Saf.* 2012;60(10):445-52.

84. Mukhopadhyay R, Sambandam S, Pillarisetti A, Jack D, Mukhopadhyay K, Balakrishnan K, Vaswani M, **Bates MN**, Kinney PL, Arora N, Smith KR. Traditional cooking practices, air quality monitoring, and the acceptability of advanced biomass cookstoves in Haryana, India: An exploratory study to inform planning of large-scale intervention efforts. *Global Health Action*. 2012;5:1-13.

85. Chin DL, Hong OS, Gillen M, **Bates MN**, Okechukwu CA. Heavy and Light/Moderate Smoking Among Building Trades Construction Workers. *Public Health Nursing*. 2013;30(2):128-39.

86. Pokhrel AK, **Bates MN**, Shrestha SP, Bailey IL, Dimartino RB, Smith KR. Biomass Stoves and Lens Opacity and Cataract in Nepalese Women. *Optom Vis Sci*. 2013; 90:257-68.

87. Lakshmi PV, Virdi N, Sharma A, Tripathy JP, Smith KR, **Bates MN**, Kumar R, Household air pollution and stillbirths in India: Analysis of the DLHS-II National Survey, *Environmental Research*. 2013;121:17-22.

88. Epstein MB, **Bates MN**, Arora NK, Balakrishnan K, Jack DW, Smith KR. Household fuels, low birth weight, and neonatal death in India: The separate impacts of biomass, kerosene, and coal. *International Journal of Hygiene and Environmental Health*. 2013; 216:523-32.

89. **Bates MN**, Garrett N, Crane J; Balmes J. Associations of Ambient Hydrogen Sulfide Exposure with Self-Reported Asthma and Asthma Symptoms. *Environ Research*. 2013;122:81-87.

90. **Bates MN**, Chandyo RK, Valentiner-Branth P, Pokhrel AK, Mathisen M, Basnet S, Shrestha PS, Strand TA, Smith KR. Childhood acute lower respiratory infection and household fuel use in Bhaktapur, Nepal. *Environ Health Persp*. 2013;121(5):637-42.

91. Dauphine D., Smith AH, Yuan Y, Balmes J, **Bates MN**, Steinmaus C. Case-Control Study of Arsenic in Drinking Water and Lung Cancer in California and Nevada. *Int J Env Res Pub Health*. 2013;10(8):3310-24.

92. **Bates MN**, Chandyo RK, Valentiner-Branth P, Pokhrel AK, Mathisen M, Basnet S, Shrestha PS, Strand TA, Smith KR. Acute lower respiratory infection in childhood and household fuel use in Bhaktapur, Nepal. Environ Health Perspect. 2013;121(5):637-42.

93. West S, **Bates MN**, Lee J, Schaumberg D, Lee D, Adair-Rohani H, Chen DF, Araj H. Is Household Air Pollution a Risk Factor for Eye Disease? *Int J Env Res Pub Health*. 2013; 10(11):5378-98.

94. Dinenberg RE, McCaslin SE, **Bates MN**, Cohen BE. Social support may protect against development of post-traumatic stress disorder: findings from the Heart and Soul Study. *American Journal of Health Promotion*. 2014 ;28(5):294-7.

95. Reed BR, Garrett N, Crane J, **Bates MN**. Chronic Ambient Hydrogen Sulfide Exposure and Cognitive Function. *Neurotox Teratol*. 2014; 42:68-76.

96. Smith KR, Bruce N, Balakrishnan K, Adair-Rohani H, Balmes J, Chafe Z, Dherani M, Hosgood HD, Mehta S, Pope D, Rehfuess E; HAP CRA Risk Expert Group (Barnes D, **Bates MN**, Duan X, Ghosh S, Guruswamy T, Sambandam S, Mishra V, Lan Q, Sapkota A, Straif K, Zimmermann A, Bonjour S, Brauer M, Cohen A, Ezzati M.). Millions dead: how do we know and what does it mean? Methods used in the comparative risk assessment of household air pollution. *Annu Rev Public Health*. 2014;35:185-206.

97. Gordon SB, Bruce NG, Grigg J, Hibberd PL, Kurmi OP, Lam KB, Mortimer K, Asante KP, Balakrishnan K, Balmes J, Bar-Zeev N, **Bates MN**, Breysse PN, Buist S, Chen Z, Havens D, Jack D, Jindal S, Kan H, Mehta S, Moschovis P, Naeher L, Patel A, Perez-Padilla R, Pope D, Rylance J, Semple S, Martin WJ 2nd. Respiratory risks from household air pollution in low and middle income countries. *Lancet Respir Med*. 2014;2(10):823-860.

98. Pillarisetti A, Vaswani M, Jack D, Balakrishnan K, **Bates MN**, Arora NK, Smith KR. Patterns of stove usage after introduction of an advanced cookstove: the long-term application of household sensors. Environmental Science & Tech. 2014;48(24):14525-33.

99. **Bates, MN**., & Bruce, N. (2012). Review 9: Summary of systematic review of household kerosene use. WHO indoor Air Quality Guidelines Household Fuel Combustion. (http://www.who.int/indoorair/guidelines/hhfc/Review_9.pdf)

100. **Bates MN**, Crane J, Balmes JR, Garrett N. Investigation of hydrogen sulfide exposure and lung function, asthma and chronic obstructive pulmonary disease in a geothermal area of New Zealand. *PLoS One*. 2015;10(3):e0122062.

101. Pokhrel AK, **Bates MN**, Acharya J, Valentiner-Branth P, Chandyo RK, Shrestha PS, Raut AK, Smith KR. $PM_{2.5}$ in household kitchens of Bhaktapur, Nepal, using four different cooking fuels. *Atmospheric Environment*. 2015; 113:159–168.

102. Balakrishnan K, Sambandam S, Ghosh S, Mukhopadhyay K, Vaswani M, Arora NK, Jack D, Pillariseti A, **Bates MN**, Smith KR. Household Air Pollution Exposures of Pregnant Women Receiving Advanced Combustion Cookstoves in India: Implications for Intervention. *Ann Global Health*. 2015; 81; 375–385.

103. Beckman S, Eisen EA, **Bates MN**, Liu S, Haegerstrom-Portnoy G, Hammond SK. Acquired Color Vision Defects and Hexane Exposure; A Study of San Francisco Bay Area Automotive Mechanics. *Am J Epidemiol*. 2016; 183(11):969-76.

104. Lam NL; Pachauri S; Purohit P; Nagai Y; **Bates MN**; Cameron C; Smith KR. Kerosene Subsidies for Household Lighting in India: What are the Impacts? *Environ Res Lett*. 2016; 11. 044014.

105. **Bates MN**, Reed BR, Liu S, Eisen EA, Hammond SK. Solvent exposure and cognitive function in automotive technicians. *Neurotoxicology*. 2016; 57:22-30.

106. **Bates MN**, Bailey IL, DiMartino RB, Pope K, Crane J, Garrett N. Lens opacity and hydrogen sulfide in a New Zealand geothermal area. *Optom Vis Sci*. 2017; 94:487-495.

107. Pope K, So YT, Crane J, **Bates MN**. Ambient geothermal hydrogen sulfide exposure and peripheral neuropathy. *NeuroToxicology*. 2017; 60:10-15.

108. Coakley J, Bridgen P, **Bates MN**, Douwes J, 't Mannetje A. Chlorinated persistent organic pollutants in serum of New Zealand adults, 2011-2013. *Sci Total Environ*. 2018;615:624-631.

109. Lam NL, Muhwezi G, Isabirye F, Harrison K, Ruiz-Mercado I, Amukoye E, Mokaya T, Wambua M, **Bates MN**. Exposure reductions associated with introduction of solar lamps to kerosene lamp-using households in Busia County, Kenya. *Indoor Air*. 2018; 28(2):218-227.

110. **Bates MN**, Pokhrel AK, Chandyo RK, Valentiner-Branth P, Mathisen M, Basnet S, Strand TA, Burnett RT, Smith KR. Kitchen $PM_{2.5}$ concentrations and child acute lower respiratory infection in Bhaktapur, Nepal: the importance of fuel type. *Environ Res*. 2018;161:546-553.

111. Phelps S, Drew-Nord DC, Neitzel RL, Wallhagen M, **Bates MN**, Hong OS. Characteristics and Predictors of Occupational Injury Among Career Firefighters. *Workplace Health & Safety*. 2018;66(6):291-301.

112. Hyland C, Gunier RB, Metayer C, Wesseling C, **Bates MN**, Mora AM. Maternal Residential Pesticide Use and Risk of Childhood Leukemia in Costa Rica. *Int J Cancer*. 2018; 143(6):1295-1304.

113. **Bates, M.N**., 2019. Dental Amalgam Fillings: An Under-Investigated Source of Mercury Exposure. In: Nriagu, J. (Ed.), *Encyclopedia of Environmental Health*. Elsevier, vol. 2, pp. 25–36. https://dx.doi.org/10.1016/B978-0-12-409548-9.11230-8 ISBN: 9780444639516

114. **Bates MN**, Pope K, Sijali TR, Pokhrel AK, Pillarisetti A, Lam NL, Verma SC. Household fuel use and pulmonary tuberculosis in western Nepal: A case-control study. *Environ Res*. 2019;168:193-205. PMID: 30317104; PubMed Central PMCID: PMC6263816.

115. Albers AE, Pope K, Sijali TR, Subramanya SH, Verma SC, **Bates MN**. Household Fuel Use and Latent Tuberculosis Infection in a Nepali population. *Environ Res*. 2019;173:69-76. PMID: 30897404.

116. Buehring GC, DeLaney A, Shen HM, Chu DL, Razavian N, Schwartz DA, Demkovich ZR, **Bates MN**. Bovine leukemia virus discovered in human blood. *BMC Infectious Diseases*. 2019;19(1):297. PMID: 30940091.

117. **Bates MN**, Pope K, So YT, Liu S, Eisen EA, Hammond SK. Hexane exposure and persistent peripheral neuropathy in automotive technicians. *NeuroToxicology*. 2019;75:24-29. doi: 10.1016/j.neuro.2019.08.008.

118. Tiwana J, Benziger C, Hooper L, Pope K, Alurkar V, Kafle R, Sijali TR, Balmes JR, Kaufman JD, **Bates MN**. Biomass Fuel Use and Cardiac Function in Nepali Women. *Global Heart*. 2020; 15(1):11. DOI:https://doi.org/10.5334/gh.405

119. Devkota HR, Sijali TR, Harris C, Ghimire DJ, Prata N, **Bates MN**. Bio-mechanical risk factors for uterine prolapse among women living in the hills of west Nepal: A case-control study. *Women's Health.* 2020; 16:1-9.

120. Saleh S, Shepherd W, Jewell C, Lam N, Balmes JR, **Bates MN**, Lai PS, Ochieng CA, Chinouya M, Mortimer K. Air pollution reduction interventions and respiratory health in low- and middle-income countries: A systematic review of randomised controlled clinical trials. *Int J Tuberc Lung Dis*. 2020;24(2):150-164. doi:10.5588/ijtld.19.0417. PubMed PMID: 2127098.

121. Kadota JL, McCoy SI, **Bates MN**, Mnyippembe A, Njau PF, Prata N, Harris-Adamson C. The impact of heavy load carrying on musculoskeletal pain and disability among women in Shinyanga Region, Tanzania. *Annals Global Health*. 202086(1):X,1-13. DOI: https://doi.org/10.5334/aogh.2470

122. Keller JP, Katz J, Pokhrel AK, **Bates MN**, Tielsch J, Zeger SL. A Hierarchical Model for Estimating the Exposure-Response Curve by Combining Multiple Studies of Acute Lower Respiratory Infections in Children and Household Fine Particulate Matter Air Pollution. *Environmental Epidemiology*. 2020, 4(6):e119. doi: 10.1097/EE9.0000000000000119.

123. Xiao S, Ngo, AI, Mendola, P, **Bates MN**, Barcellos AL, Ferrara A, Zhu Y. Household mold, pesticide use, and childhood asthma: A nationwide study in the U.S. *Int J Hyg Env Health*. 2021; 233:113694. doi: 10.1016/j.ijheh.2021.113694..

124. Koyuncu A, Kadota JL, Mnyippembe A, Njau PF, Sijali TR, McCoy SI, **Bates MN**, Harris-Adamson C, Prata N. Heavy load carrying and symptoms of pelvic organ prolapse among women in Tanzania and Nepal: an exploratory study. *Int J Env Res Pub Hlth*. 2021;18(3):1279. doi: 10.3390/ijerph18031279.

125. **Bates MN**. Pope K, Sijali TR, Albers AE, Verma SC. Bovine ownership and reduced pulmonary tuberculosis risk in Nepal: a case-control study. *Zoonoses & Pub Hlth*. 2021; 68:650-657. doi: 10.1111/zph.12854.

126. Koyuncu A, **Bates MN**, Petrin Z, Cope M, McCoy SI, Prata N, Sijali TR, Harris-Adamson C. Heavy load carrying and musculoskeletal health: An exploratory study of biomechanical risk factors among sand miners in Pokhara, Kaski District, Nepal. *Int J Indust Ergonomics*. 2021. In press.