

COLLEEN E. REID
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Department of Geography
University of Colorado, Boulder

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EDUCATION

2014 Ph.D. University of California, Berkeley (Environmental Health Sciences)
2007 M.P.H. University of California, Berkeley (Environmental Health Sciences)
2000 Sc.B. Brown University (Environmental Science), Magna Cum Laude with Honors

ACADEMIC APPOINTMENTS

2023 - Associate Professor, Geography Department, University of Colorado, Boulder, CO
2021 - Director, Public Health Certificate, University of Colorado, Boulder, CO
2017 - Faculty Associate, Earth Lab, University of Colorado, Boulder
2016 - Faculty Fellow, Institute of Behavioral Science, University of Colorado, Boulder
2016 - 2023 Assistant Professor, Geography Department, University of Colorado, Boulder, CO
2014– 2016 Robert Wood Johnson Health and Society Scholar, Post-Doctoral
Harvard School of Public Health, Harvard University - Cambridge, MA

AWARDS AND HONORS

2023 Dean's Innovation Grant Winner to Develop Interdisciplinary Coursework in Public Health, University of Colorado Boulder College of Arts & Sciences
2022 Member of SOS Home Research Team that won the Pathfinding Partnerships Award from the Colorado Governor's Awards for High-Impact Research
2022 Member of SOS Home Research Team that won a Boulder County Public Health Healthy Community Award
2021 Provost's Faculty Achievement Award Winner, University of Colorado Boulder
2020 Emerging Scholar Award, American Association of Geographers Health and Medical Geography Specialty Group
2020 Outstanding Faculty Mentor, Honorable Mention, Undergraduate Research and Opportunities Program, University of Colorado Boulder
2018 - 2021 JPB Environmental Health Fellow run by Harvard T.H. Chan School of Public Health
2013 International Society of Exposure Science Student Poster Award, Honorable Mention
2010 APHA Student Travel and Registration Scholarship
2010 – 2013 EPA STAR Graduate Student Fellowship
2009 – 2010 CDC and ASPH Environmental Public Health Fellowship
2006 Roshetko Family Scholarship, UC Berkeley School of Public Health
2005-2006 UC Berkeley School of Public Health Fellowship
2000 Honors Thesis in Environmental Science, Brown University
2000 Nomination to Sigma Xi, the Scientific Research Society
1998 Undergraduate Teaching and Research Award, Brown University

PUBLICATIONS | *Web of Science h-index = 19; Google Scholar h-index = 21*

*graduate student under my supervision; **undergraduate student under my supervision; #post-doc under my supervision

Peer-reviewed Journal Articles

1. Watson GL, **Reid CE**, Jerrett M, Telesca D. 2023. Prediction & Model Evaluation for Space-Time Data. *Journal of Applied Statistics*. doi: 10.1080/02664763.2023.2252208.
2. Silberstein JM, Mael LE, Frischmon CR, Rieves ES, Coffey ER, Das T, Dresser W, Hatch AC, Nath J, Pliszka HO, **Reid CE**, Vance ME, Wiedinmyer C, de Gouw JA, Hannigan MP. 2023. Residual impacts of a Wildland Urban Interface Fire on Indoor Urban Particulate Matter and Dust: A study from the Marshall Fire. *Air Quality, Atmosphere and Health* <https://doi.org/10.1007/s11869-023-01376-3>
3. **Reid CE**, **Considine ED, Telesca D, Watson G, Pfister GG, Jerrett M. 2023. Effect modification of the association between wildfire smoke and respiratory health by area-level smoking prevalence and socio-economic status. *Environmental Research Health* doi: 10.1088/2752-5309/acc4e1
4. Spark TL, **Reid CE**, Adams RS, Schneider AL, Forster J, Denneson LM, Bollinger M, Brenner LA. 2023. Geography, rurality, and community distress: deaths due to suicide, alcohol-use, and drug-use among Colorado Veterans. *Injury Epidemiology* 10:8. <https://doi.org/10.1186/s40621-023-00416-x>
5. Considine EM, Hao J, deSouza P, Braun D, **Reid CE**, Nethery RC. 2023. Evaluation of Model-Based PM_{2.5} Estimates for Exposure Assessment During Wildfire Smoke Episodes in the Western U.S. *Environmental Science & Technology*. <https://doi.org/10.1021/acs.est.2c06288>
6. Iglesias V, Stavros N, Balch JK, Barrett K, Cobian-Iñiguez J, Hester C, Kolden CA, Leyk S, Nagy RC, **Reid CE**, Wiedinmyer C, Woolner E, Travis WR. 2022. Fires that matter: Reconceptualizing fire risk to include interactions between humans and the natural environment. *Environmental Research Letters* 17 045014. <https://doi.org/10.1088/1748-9326/ac5c0c>
7. **Reid CE**, *Rieves ES, Carlson K. 2022. Perceptions of green space usage, abundance, and quality of green space were associated with better mental health during the COVID-19 pandemic among residents of Denver. *PLOS One* 17(3): e0263779. <https://doi.org/10.1371/journal.pone.0263779>
 - a. Data available at: <https://doi.org/10.25810/3wjs-ay43>
8. Kondo MC, **Reid CE**, Mockrin MH, Heilman WE, Long D. 2022. Socio-demographic and Health Vulnerability in Prescribed-Burn Exposed versus Unexposed Counties near the National Forest System. *Science of the Total Environment* 806: 150564. <https://doi.org/10.1016/j.scitotenv.2021.150564>
9. Martin MA, Alcaraz Sendra O, Bastos A, Bauer N, Bertram C, Blenckner T, Bowen K, Brando PM, Rudolph TB, Buchs M, Bustamante M, Chen D, Cleugh H, Dasgupta P, Denton F, Donges JF, Donkor FK, Duan H, Duarte CM, Ebi KL, Edwards CM, Engal A, Fischer E, Fuss S, Gaertner J, Gettelman A, Girardin CAJ, Golledge NR, Green JF, Grose MR, Hashizume M, Hebden S, Hepahc H, Hirota M, Hsu HH, Kojima S, Lele S, Lorek S, Lotze HK, Matthews HD, McCauley d, Mebratu D, Mengis N, Nolan RH, Pihl E, Rahmstorf S, Redman A, **Reid CE**, Rockstron J, Rogelj J, Sauniois M, Sayer L, Schlosser P, Sioen GB, Spangenberg JF, Stammer D, Sterner TNS, Stevens N, Thonicke K, Tian H, Winkelmann R, Woodcock J. 2021. Ten new insights in climate science 2021 – a horizon scan. *Global Sustainability*, 1-39. Doi: 10.1017/sus.2021.25.
10. Spark TL, Wright-Kelly E., Ma M, James K, **Reid CE**, Brooks-Russell A. 2021. Assessment of Rural-Urban and Geospatial Differences in Perceived Handgun Access and Reported Suicidality Among Youth in Colorado. *JAMA Network Open*. doi: 10.1001/jamanetworkopen.2021.27816
11. *Hines E, **Reid CE**. 2021. Hospital Preparedness, Mitigation, and Response to Hurricane Harvey in Harris County, Texas. *Disaster Medicine and Public Health Preparedness*. 1-7; doi:10.1017/dmp.2021.146.

12. **Reid CE**, **Considine ED, #Maestas MM, *Li G. 2021. 2021. Daily PM_{2.5} concentration estimates by County, ZIP code, and census tract in 11 western states 2008-2018. *Scientific Data*. 8(1):112. doi: 10.1038/s41597-021-00891-1
13. Ebi KL, Baldwin J, Bell JE, Hondula D, Errett NA, Hayes K, **Reid CE**, Saha S, Spector J, Vanos J, Berry P. 2021. Extreme Weather and Climate Change: Population Health and Health System Implications. *Annual Reviews in Public Health*. 42: doi: 10.1146/annurev-publhealth-012420-105026.
14. Navarro KM, Clark KA, Hardt DJ, **Reid CE**, Lahm PW, Domitrovich JW, Butler CR, Balmes JR. 2021. Wildland Firefighter Exposure to Smoke and COVID-19: A New Risk on the Fireline. *Science of the Total Environment*. 144296; doi: 10.1016/j.scitotenv.2020.144296.
15. **Considine E, **Reid CE**, Olgetree M, Dye T. 2021. Improving Accuracy of Air Pollution Exposure Measurements: Statistical Correction of a Municipal Low-Cost Airborne Particulate Matter Sensor Network. *Environmental Pollution*. 115833; doi:10.1016/j.envpol.2020.115833.
16. *Hines E, **Reid CE**. 2020. Hurricane Harvey Hospital Flood Impacts: Accuracy of Federal Emergency Management Agency Flood Hazard Areas in Harris County, Texas. *American Journal of Public Health*. 110 (4), 574-579; doi:10.2105/AJPH.2019.305520.
17. Humphrey JL, **Reid CE**, Kinnee EJ, Kubzansky LD, Robinson LF, Clougherty JE. 2019. Putting co-exposures on equal footing: an ecological analysis of same-scale air pollution and social factors on cardiovascular disease in New York City. *International Journal of Environmental Research and Public Health* 16(23):4621; doi:10.3390/ijerph16234621.
18. Watson GL, Telesca D, **Reid CE**, Pfister GG, Jerrett M. 2019. Machine learning models accurately model ozone exposure during wildfire events. *Environmental Pollution*; 254: 112792. doi:10.1016/j.envpol.2019.06.088.
19. **Reid CE**, **Considine EM, Watson GL, Telesca D, Pfister GG, Jerrett M. 2019. Associations between respiratory health and ozone and fine particulate matter during a wildfire event. *Environment International*; 129:291–298; doi:10.1016/j.envint.2019.04.033.
20. **Weimer K, Farmer CJQ, **Reid CE**. 2019. A Spatial View of How United States Cesarean Section Rates Changed from 1990 to 2014. *The Professional Geographer* 71(4): 762-769. doi:10.1080/00330124.2019.1578979.
21. **Reid CE**, #Maestas MM. 2019. Wildfire smoke exposure under climate change: impact on respiratory health of affected communities. *Current Opinion in Pulmonary Medicine* 25(2): 179–187. doi: 10.1097/MCP.0000000000000552.
22. **Reid CE**, Kubzansky LD, Shmool JLC, Li J, Clougherty J. 2018. It's Not Easy Assessing Greenness: A Comparison of the Effects of Spatial Resolution of NDVI and Buffer Sizes on Self-Reported Health. *Health & Place* 54: 92–101 <https://doi.org/10.1016/j.healthplace.2018.09.005>
23. **Reid CE**, Clougherty J, Shmool JLC, Kubzansky LD. 2017. Is All Urban Green Space the Same? A Comparison of the Health Benefits of Trees and Grass in New York City. *International Journal of Environmental Research and Public Health* 14(11):1411. doi:10.3390/ijerph14111411
24. Koplitz SN, Jacob DJ, Sulprizio MP, Myllyvirta L, **Reid C**. 2017. Burden of disease from rising coal emissions in Southeast Asia. *Environmental Science & Technology* 51:1467–1476; DOI: 10.1021/acs.est.6b03731.
25. **Reid CE**, Jerrett M, Tager IB, Petersen ML, Mann JK, Balmes JR. 2016. Differential respiratory health effects from the 2008 northern California wildfires: a spatiotemporal approach. *Environmental Research* 150:227-235 DOI: 10.1016/j.envres.2016.06.012.

26. **Reid CE**, Brauer M, Johnston F, Jerrett M, Balmes JR, Elliott CT. 2016. Critical Review of Health Impacts of Wildfire Smoke Exposure. *Environmental Health Perspectives* 124:1334-1343. DOI:10.1289/ehp.1409277.
27. Lim YH, **Reid CE**, Honda Y, Kim H. 2015. Temperature deviation index and elderly mortality in Japan. *International Journal of Biometeorology* 60:991-998.
28. **Reid CE**, Jerrett M, Petersen ML, Pfister GG, Morefield P, Tager IB, Raffuse SM, Balmes JR. 2015. Spatiotemporal prediction of fine particulate matter during the 2008 northern California wildfires using machine learning. *Environmental Science & Technology* 49(6):3887-96.
29. Snowden JM, **Reid CE**, Tager IB. 2015. Framing air pollution epidemiology in terms of population interventions, with applications to multi-pollutant modeling. *Epidemiology* 26:271-279.
30. Lim YH, **Reid CE**, Mann JK, Jerrett M, Kim H. 2014. Diurnal temperature range and short-term mortality in large US communities. *International Journal of Biometeorology* 59(9):1311-9. DOI 10.1007/s00484-014-0941-2.
31. **Reid CE**, Snowden JM, Kontgis C, Tager IB. 2012. The Role of Ambient Ozone in Epidemiologic Studies of Heat-Related Mortality. *Environmental Health Perspectives* 120(12):1627-30. <http://dx.doi.org/10.1289/ehp.1205251>
32. Holstius DM, **Reid CE**, Jesdale BM, Morello-Frosch R. 2012. Birth Weight Following Pregnancy During the 2003 Southern California Wildfires. *Environmental Health Perspectives* 120(9):1340-5. <http://dx.doi.org/10.1289/ehp.1104515>
33. **Reid CE**, Mann JK, Alfasso R, English PB, King GC, Lincoln RA, Margolis HG, Rubado DJ, Sabato JE, West NL, Woods B, Navarro K, Balmes JR. 2012. Evaluation of a Heat Vulnerability Index on Abnormally Hot Days: an Environmental Public Health Tracking study. *Environmental Health Perspectives* 120(5):715-20. <http://dx.doi.org/10.1289/ehp.1103766>
34. **Reid CE** and Gamble JL. 2009. Aeroallergens, Allergic Disease, and Climate Change: Impacts and Adaptation. *EcoHealth* 6(3): 458-470.
35. **Reid CE**, O'Neill MS, Gronlund C, Brines SJ, Brown DG, Diez-Roux AV, Schwartz J. 2009. Mapping Community Determinants of Heat Vulnerability. *Environmental Health Perspectives* 117(11): 1730-1736.

Invited Commentaries (editor-reviewed)

36. **Reid CE**. 2022. Invited Perspective: What do we know about fetal maternal health and healthcare needs after wildfires? Not nearly enough. *Environmental Health Perspectives*. <https://ehp.niehs.nih.gov/doi/10.1289/EHP11699>
37. Jennings V, **Reid CE**, Fuller CH. 2021. Green Infrastructure Can Limit But Not Solve Air Pollution Injustices. *Nature Communications*. 12, 4681. <https://doi.org/10.1038/s41467-021-24892-1>.

Book Chapters (peer-reviewed)

38. McCaffrey S.M., Rappold A.G., Hano M.C., Navarro K.M., Phillips T.F., Prestemon J.P., Vaidyanathan A., Abt K.L., **Reid C.E.**, Sacks J.D. 2022. Chapter 7: Social, Economic, and Health Effects of Smoke. In: Wildland Fire Smoke in the United States: A Scientific Assessment. Peterson D.L., McCaffrey S.M., Patel-Weyand T. (Editors). Springer.
39. Jerrett MJ, **Reid CE**, McKone TE, Koutrakis P. Participatory and Ubiquitous Sensing for Exposure Assessment in Spatial Epidemiology. 2015. In: Spatial Analysis in Health Geography. Kanaroglou P, Delmelle E, Gosh G, Páez A (Editors). Routledge Publishing.

Other Scientific Publications (peer-reviewed)

40. Clougherty, J. E., Humphrey, J. L., Kinnee, E. J., Robinson, L. F., McClure, L. A., Kubzansky, L. D., & **Reid, C. E.** (2021). Social Susceptibility to Multiple Air Pollutants in Cardiovascular Disease. *Research Reports: Health Effects Institute, 2021*, 206.

Published Datasets and Surveys

1. Dickinson, K. Devoss, R. Albright, E. Crow, D. Rumbach, A. Bean, H. Fraser, T. **Reid, C.** Bolhari, A. Welton-Mitchell, C. Andre, C. Aldrich, D. Morss, R. Whelton, A. Javernick-Will, A. Irvine, L. du Bray, M. Rubenfeld, S. Tillema, S. (2022) "Marshall Fire Unified Survey", in *RAPID: Can Big Ideas About Resilience Survive the Reality of a Disaster? Built Environment Policy and Recovery After the Marshall Fire*. DesignSafe-CI. <https://doi.org/10.17603/ds2-0yc8-4h27> v1
2. **Reid, CE**; Maestas, MM; Considine, EM; Li, G (2021): Machine learning derived daily PM2.5 concentration estimates from by County, ZIP code, and census tract in 11 western states 2008-2018. *figshare*. Dataset. <https://doi.org/10.6084/m9.figshare.12568496>

Other Scientific Publications (non-peer-reviewed)

1. Jerrett M, Su JG, **Reid CE**, Jesdale B, Ortega Hinojosa AM, Shonkoff SB, Seto E, Morello-Frosch R. 2011. Mapping Climate Change Exposures, Vulnerabilities, and Adaptation to Public Health Risks in the San Francisco Bay and Fresno Regions. Public Interest Energy Research (PIER) Program Draft White Paper.
2. Gamble, JL, **Reid CE**, Post E, Sachs J. 2008. Review of the Impacts of Climate Variability and Change on Aeroallergens and Their Associated Effects. U.S. Environmental Protection Agency, Washington, DC, USA. EPA Report No. EPA/600/R-06/164F
3. Gamble JL, Ebi KL, Sussman FG, Wilbanks TJ, **Reid C**, Thomas JV, Weaver CP, Harris M, Freed R. 2008. Executive Summary. In: Analyses of the effects of global change on human health and welfare and human systems. A Report by the U.S. Climate Change Science Program and the Subcommittee on Global Change Research. [Gamble, J.L. (ed.), K.L. Ebi, F.G. Sussman, T.J. Wilbanks, (Authors)]. U.S. Environmental Protection Agency, Washington, DC, USA, p. 1-11.
4. Gamble JL, Ebi KL, Grambsch A, Sussman FG, Wilbanks TJ, **Reid CE**, Hayhoe K, Thomas JV, Weaver CP. 2008. Introduction. In: Analyses of the effects of global change on human health and welfare and human systems. A Report by the U.S. Climate Change Science Program and the Subcommittee on Global Change Research. [Gamble, J.L. (ed.), K.L. Ebi, F.G. Sussman, T.J. Wilbanks, (Authors)]. U.S. Environmental Protection Agency, Washington, DC, USA, p. 13–37.
5. Gamble JL, Ebi KL, Sussman FG, Wilbanks TJ, **Reid C**, Thomas JV, Weaver CP. 2008. Common Themes and Research Recommendations. In: Analyses of the effects of global change on human health and welfare and human systems. A Report by the U.S. Climate Change Science Program and the Subcommittee on Global Change Research. [Gamble, J.L. (ed.), K.L. Ebi, F.G. Sussman, T.J. Wilbanks, (Authors)]. U.S. Environmental Protection Agency, Washington, DC, USA, p. 169–176.
6. Kovats RS, Campbell-Lendrum D, **Reid C**, Martens P. 2000. Climate and Vector-Borne Disease: An assessment of the role of climate in changing disease patterns. Maastricht University, ICIS. UNEP. LSHTM.

Writing for Public Press

1. **Reid CE**, de Gouw J, Hannigan M. December 26, 2022. Homes that Survived the Marshall Fire 1 year ago harbored another disaster inside – here’s what we’ve learned about this insidious urban wildfire risk. *The Conversation*. <https://theconversation.com/homes-that-survived-the-marshall-fire-1-year-ago-harbored-another-disaster-inside-heres-what-weve-learned-about-this-insidious-urban-wildfire-risk-196926>

GRANTS AND CONTRACTS

Current Funding

Title: Informing school decision-making during wildfire events: evaluation of indoor PM_{2.5} exposures and associated health impacts in children

Role: PI

Sponsor: EPA

Amount: \$549,919

Goal: To collect data and do analyses to inform the intervention of whether schools should stay open or closed during wildfire air pollution events.

Period: 9/1/2021 – 8/31/2024

Title: RAPID: Sustained Air Quality Impacts of the Marshall Fire in Boulder County

Role: Co-I (PI: Joost de Gouw, NOAA, CU Boulder)

Sponsor: NSF

Amount: \$200,000

Period: 4/2022 – 3/2024

Title: Risk-Risk tradeoffs and prescribed burning decisions in Colorado

Role: Co-I (PIs: Katie Dickinson, CU Anschutz and Hannah Brenkert-Smith, CU Boulder)

Sponsor: NSF

Amount: \$954,281 (CU Boulder sub-award amount divided among co-Is Brenkert-Smith, Hannigan, and Reid)

Period: 8/2022 – 7/2025

Title: Engineering Research Center for Advancing Sustainability through Powered Infrastructure for Roadway Electrification (ASPIRE).

Role: Co-I (PI: Regan Zane. Co-PIs: Qin Lv, Konstantina Gkritza, Christopher Fawson, and Soheil Nazarian)

Sponsor: NSF

Amount: \$60,000/year for my research group (no overhead)

Period: 9/1/2020 – 8/31/2025.

Title: Toxic homes? A mixed-methods study of Marshall Fire health impacts

Role: Co-PI

Sponsor: Colorado Population Center Seed Grants

Amount: \$20,000

Goal: To employ mixed methods to understand the subjective experience and perceived physical, mental, and social health impacts of the Marshall Fire to compare to survey analyses of health impacts of people whose homes were smoke damaged.

Period: 4/2023-4/2024

PRESENTATIONS

Invited Presentations at Other Institutions

1. **Reid CE.** Climate and Health Research Moving Forward. Part of invited panel for the Kauvar Symposium at National Jewish Health. October 27, 2023.

2. **Reid CE.** Investigations into the health effects of wildfire smoke. Coffee Hour at Penn State Geography Department. February 17, 2023.
3. **Reid CE.** Informing School Decision-Making during Wildfire Events: Evaluation of Indoor PM_{2.5} Exposures and Associated Health Impacts in Children. Regional Air Quality Monitoring and Messaging (RAMM) Meeting. July 13, 2022.
4. **Reid CE.** Health impacts of wildfire smoke. Rocky Mountain Section of the Air and Waste Management Association. July 20, 2021.
5. **Reid CE.** What are the health impacts of smoke? Kaiser Permanente Los Angeles Grand Rounds. April 2, 2021.
6. **Reid CE.** Using machine learning to estimate population exposure to air pollution during wildfires and its associated health impacts. Colloquium presentation within the Program in Environmental Systems within the Engineering Department. University of California, Merced. October 21, 2020.
7. **Reid CE.** What are some health effects of smoke? National Academies of Science Workshop on “Wildland Fires: Towards Improved Understanding and Forecasting of Air Quality Impacts – A Workshop.” Online. September 23, 2020.
8. **Reid CE.** Health and wildfires. NCAR. Boulder, Colorado. August 11, 2020.
9. **Reid CE.** Using machine learning to estimate population exposure to air pollution during wildfires and its associated health impacts. NCAR FASCINATE meeting. Boulder, Colorado. September 10, 2019.
10. **Reid CE.** Challenges in Studying Wildfire Health Impacts – Exposure Assessment. National Academies of Science Workshop on “Implications of California Wildfires for Health, Communities, and Preparedness”. June 4, 2019. <https://www.youtube.com/watch?v=MILmOmgjwBE&list=PLGTMA6QkejfiN9fdrzZvPdBz3k01W5z2p&index=30> which contributed to this publication: National Academies of Sciences, Engineering, and Medicine. 2019. *Implications of the California wildfires for health, communities, and preparedness: Proceedings of a workshop*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/25622>.
11. **Reid CE.** Epidemiological Evidence of Health Impacts from Wildfire Smoke Exposure. National Academies of Science Workshop on “Implications of California Wildfires for Health, Communities, and Preparedness”. June 4, 2019. <https://www.youtube.com/watch?v=3nQc9I2nn4M> which contributed to this publication: National Academies of Sciences, Engineering, and Medicine. 2019. *Implications of the California wildfires for health, communities, and preparedness: Proceedings of a workshop*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/25622>.
12. **Reid CE.** “Health Impacts of Wildfire Smoke Exposure” at the Air Quality & Health meeting of the Colorado Air Quality Control Commission and the Colorado School of Public Health. May 9, 2019.
13. **Reid CE.** Epidemiological Evidence of Wildfire Smoke Health Impacts. British Columbia Lung Association 16th Annual Air Quality & Health Workshop. February 6, 2019. Vancouver, Canada. <https://www.youtube.com/watch?v=zO6hyRfUO2A&t=2s>
14. **Reid CE.** Wildfire Smoke Exposure and Population Health. Center for Health and the Environment Webinar. October 1, 2018.
15. **Reid CE.** Wildfire Smoke Exposure and Population Health. National Association of County and City Health Officials (NACCHO) Webinar: Western Wildfires - Keeping Communities from Polluted Air. May 21, 2018.

16. **Reid CE.** Wildfire Smoke Exposure and Population Health. UCSF Fresno Air Pollution and Health Meeting. University of California San Francisco Fresno Center, Fresno, CA. April 7, 2018.
17. **Reid CE.** Using a Novel Spatiotemporal Exposure Assessment to Estimate Health Effects during the 2008 Northern California Wildfires. Presentation at the Colorado School of Public Health, Aurora, CO, October 4, 2017.
18. **Reid CE.** 2017. Using a Novel Spatiotemporal Exposure Assessment to Estimate Health Effects during the 2008 Northern California Wildfires. Presented July 17, 2017 at the 2017 NCAR/CDC Workshop on Weather, Climate, and Health, Boulder, CO.
19. **Reid CE.** 2017. Health effects of the 2008 northern California wildfires: a spatiotemporal approach. Presentation at the University of Michigan, Ann Arbor. January 10, 2017.
20. **Reid CE.** 2014. "Wildfire Smoke Exposure and Population Health." Public Health Climate Action Team Meeting at the California Air Resources Board, Sacramento, CA. July 22, 2014.
21. **Reid CE.** 2013. "Wildfire Smoke Exposure and Population Health." Genetic and Environmental Toxicology Association. Oakland, CA. December 2, 2013.
22. **Reid CE.** 2013. "Development and Evaluation of the Heat Vulnerability Index for the US." As part of the U.S. Environmental Protection Agency's Mid-Atlantic Sustainability Collaborative Webinar - Increased Heat Vulnerability as a Consequence of Climate Change. July 22, 2013.
23. **Reid CE.** 2013. Estimating health impacts from wildfire particulate matter using chemical transport models and aerosol optical depth. ACD Internal Seminar at the National Center for Atmospheric Research. May 7, 2013.
24. **Reid CE.** 2013. "Development and Evaluation of the Heat Vulnerability Index for the US." As part of a webinar on Heat Vulnerability for C40 Cities Climate Leadership Group and The Cool Cities Network. April 25, 2013.
25. **Reid CE.** 2009 "Who's Hit Hardest by Heat Waves?" September 17, 2009. Podcast. "The Researcher's Perspective: EHP Podcast Series" Available at: <http://ehp03.niehs.nih.gov/static/podcasts.action>

Invited Presentations at Home Institution

1. **Reid CE.** Investigations into the health effects of wildfire smoke. ANALYTICAL, ENVIRONMENTAL & ATMOSPHERIC CHEMISTRY in CIRES, University of Colorado Boulder. February 27, 2023
2. **Reid CE.** Learning from the Marshall Fire: Health Impacts of a Wildland Urban Interface Fire. Presentation to the CU Foundation Board of Trustees. University of Colorado Boulder. Boulder, CO. February 3, 2023.
3. **Reid CE.** Is green space always beneficial to health? CU Well wellness program. University of Colorado Boulder. October 5, 2022.
4. **Reid CE.** Assessment of exposure to and respiratory health impacts of wildfire smoke. CAQR Seminar. Environmental Engineering, University of Colorado Boulder. October 30, 2019.
5. **Reid CE,** Maestas MM, Considine EM, Li G. Challenges in estimating wildfire smoke exposures and associated public health impacts. Climate, Health and Migration Workshop. IBS, University of Colorado, Boulder. May 20, 2019.
6. **Reid CE,** Maestas MM, Considine EM, Li G. Using satellite data and machine learning to understand air pollution exposures and associated health impacts from wildfires. NC CASC (North

Central Climate Adaptation Science Center) Flash Talk. Earth Lab, University of Colorado Boulder. April 19, 2019.

7. **Reid CE.** 2019. Wildfire Smoke Exposure and Population Health. Environmental Studies Colloquium, University of Colorado Boulder. January 30, 2019.
8. **Reid CE.** 2017. It's Not Easy Assessing Green: An exploration into different measures of exposure to urban vegetation and how that may differentially affect health. Institute of Behavioral Sciences Colloquium, University of Colorado Boulder. November 16, 2017.
9. **Reid CE.** 2017. Air Quality/Atmospheric Sciences presentation at the Climate & Health Workshop, May 9, 2017 at the University of Colorado, Boulder, CO.
10. **Reid CE.** 2016. Does exposure to green space improve our health? Using the Built Environment for Social Change: Health, Water, and Shelter. FDR Foundation Global Citizenship 3rd Annual Wintersession @Adams House. Harvard University, Cambridge, MA. January 21, 2016.

Conference Presentations [*Denotes Invited for Symposium or Panel]

1. ***Reid CE.** Creating a consistent dataset of daily fine spatial scale PM_{2.5} concentration estimates for the western US 2008-2018 for understanding population exposures to wildfire smoke. International Society of Exposure Science. Chicago, IL. August 29, 2023.
2. **Reid CE, Rieves EM, Carlton K.** "Perception of usage, abundance, and quality of green space were associated with better mental health during the COVID-19 pandemic among residents of Denver". International Medical Geography Symposium. Edinburgh, Scotland. June 23, 2022.
3. **Reid CE, Considine EM, Maestas MM, Li G.** "Using machine learning to derive daily PM_{2.5} concentration estimates at fine spatial scales for the western US 2008-2018". Annual Meeting of the American Association of Geographers. Virtual. February 25, 2022.
4. **Reid CE, Rieves ES, Carlton K.** "Impacts of green space on mental health during the COVID-19 pandemic in Denver". Annual Meeting of the International Society for Environmental Epidemiology. Virtual Conference, August 23, 2021.
5. ***Reid CE.** "Public health impacts via emission processes" as part of a panel titled 'Changing Face of Wildfire and Effects on Human Health'. Sustainability, Research, and Innovation Congress. Remote. Brisbane, Australia. June 13, 2021.
6. ***Reid CE.** "Investigations into the health impacts of wildfire smoke exposure." As part of the Emerging Scholar Award Session of the Health and Medical Geography Specialty Group of the American Association of Geographers. Annual meeting of the American Association of Geographers meeting. April 7, 2021.
7. ***Reid CE.** "Perceived versus measured exposure to urban green space" as part of a symposium titled "Nature and Human Health: Understanding and Applying the Mental and Physical Health Benefits of Time Spent in Nature". North American Congress for Conservation Biology. Virtual Conference, July 30, 2020.
8. **Reid CE.** Member on Panel Titled: "JPB Environmental Health Fellows Panel: Green Space, Nature Experiences, and the Intersection of Environmental and Social Determinants of Health". Interdisciplinary Association for Population Health Science Annual Meeting in Seattle, WA. October 3, 2019.
9. ***Reid CE, Considine E, Telesca D, Watson G, Pfister GG, Jerrett M.** Differential Effects of Wildfire Smoke Exposures on Respiratory Health: A Case Study of the 2008 Northern California

- Wildfires. Oral presentation at the Researchers Meeting of the 44th Annual Natural Hazards Workshop in Broomfield, CO, July 18, 2019.
10. **Reid CE**, Humphrey J, Hines E, Mason K. The role of greenspace on school absences in a nationally representative cohort. Oral presentation at the 2019 annual meeting of the American Association of Geographers in Washington, DC. April 7, 2019.
 11. **Reid CE**, Jerrett M, Considine E, Telesca D, Watson G, Pfister GG. Health Impacts Associated with Fine Particulate Matter and Ozone during a Wildfire: Evidence of Differential Effects Due to Measures of the Social Environment. Oral Presentation at the International Society of Environmental Epidemiology annual meeting in Ottawa, Canada. August 30, 2018.
 12. **Reid CE**, Jerrett M, Telesca D, Watson G, Pfister GG. Respiratory health impacts associated with fine particulate matter and ozone from a California wildfire. American Association of Geographers Annual Meeting, New Orleans, LA. April 14, 2018.
 13. ***Reid CE**. Wildfire Smoke Exposure and Population Health. CHPPD Invited Session: Wildfire Smoke Health Risk Communication at the American Public Health Association Annual Meeting in Atlanta, GA. November 7, 2017.
 14. **Reid CE**, Clougherty JE, Shmool JLC, Kubzansky LD. 2017. Is All Urban Green Space the Same? A Comparison of the Health Benefits of Trees and Grass in New York City. Poster Presentation at the International Society of Environmental Epidemiology, September 25, 2017, Sydney, Australia.
 15. **Reid CE**, Clougherty JE, Shmool JLC, Li J, Kubzansky LD. 2017. It's Not Easy Assessing Greenness: A Comparison of the Effects of Spatial Resolution of NDVI and Buffer Sizes on Self-Reported Health. American Association of Geographers Annual Meeting, Boston, MA. April 7, 2017.
 16. **Reid CE**. 2016. Health impacts of green space: differential effects for trees and grass. Robert Wood Johnson Health and Society Scholars Annual Meeting 2016, New Orleans, LA
 17. **Reid CE**, Jerrett M, Tager IB, Petersen M, Mann JK, Balmes JR. 2016. Using a Novel Spatiotemporal Exposure Assessment to Estimate Respiratory Health Effects during the 2008 Northern California Wildfires. American Meteorological Society's Seventh Conference on Environment and Health. January 12, 2016.
 18. Shmool JLC, **Reid C**, Kubzansky LD, Spengler J, Clougherty JE. 2015. Intra-Urban Air Pollution Concentrations, Perceived Air Quality, and Greenspace. International Society of Exposure Science Annual Meeting 2015, Henderson, Nevada. October 15, 2015.
 19. **Reid CE**. 2015. Greenspace and health: mediation through reductions in psychosocial stress? Robert Wood Johnson Health and Society Scholars Annual Meeting 2015, Chapel Hill, NC
 20. **Reid CE**, Jerrett M, Tager IB, Petersen ML, Morefield P, Balmes JR. 2013. Spatiotemporal modeling of wildfire smoke exposure in Northern California using satellite data and chemical transport models. Poster presentation at the Environment and Health – Bridging South, North, East and West Conference of ISEE, ISES and ISIAQ, Basel, Switzerland 19 – 23 August 2013.
 21. **Reid CE**, Mann JK, Alfasso R, English P, King G, Margolis H, Sabato J, West N, Navarro K, Balmes JR. 2011. Evaluation of a Heat Vulnerability Index on Abnormally Hot Days: An Application of Environmental Public Health Tracking Data. Oral presentation at the 2011 International Society for Environmental Epidemiology, Barcelona, Spain.
 22. **Reid CE**, Mann JK, Balmes JR, Rubado D, Margolis H, West N, Woods B, Flowers H. 2010. Climate change, heat waves, and population vulnerability: Using the environmental public health

tracking network for validity testing of the heat vulnerability index. Oral presentation at the 2010 American Public Health Association Annual Meeting and Exhibition, Denver, CO.

23. ***Reid CE**. 2010. Heat Vulnerability Mapping: Proposed Vulnerability Measures and Mapping Approaches. Oral presentation at the 2010 CSTE (Council of State and Territorial Epidemiologists) Annual Conference in Portland, OR.
24. **Reid CE**, O'Neill MS, Brines SJ, Gronlund C, Diez-Roux AV, Brown DG, Schwartz J. 2008. Mapping Community Determinants of Heat Vulnerability. Poster presentation at the 2008 ISEE/ISEA Joint Annual Conference: Exposure and Health in a Global Environment, Pasadena CA.
25. **Reid CE**. 2008. Climate Change Impacts on Human Health in the United States: The Need for Preparedness Planning. Oral Presentation at the National Environmental Health Association's 72nd Annual Educational Conference (AEC) & Exhibition, Tucson, AZ.
26. **Reid C**, Broadwin R, Seto E. 2007. Comparison of Geocoding Results Using a Street Map and a Parcel Map. Poster presentation at the 2007 CalGIS Conference, Oakland, CA
27. **Reid C**, Morry D, Hoover S, Sandy MS, Zeise L, Zuniga R. 2007. Cancer Potencies and Daily Intake Levels for Six Industrial Chemicals. Poster presentation at the 2007 Society of Toxicology Conference, Charlotte, NC.

TEACHING

University of Colorado Courses Taught

Spring 2023	GEOG 3692: Introduction to Global Public Health, Enrollment = 191
Fall 2022	GEOG 4852/5852: Health and Medical Geography, Enrollment = 31 (21 undergrads / 10 grad students)
Spring 2022	GEOG 3692: Introduction to Global Public Health, Enrollment = 200
Fall 2021	GEOG 3692: Introduction to Global Public Health, Enrollment = 211
Fall 2021	GEOG 4002/5100: Special Topics in Geography: Climate Change and Health, Enrollment=25 (17 undergrad / 8 grad students)
Spring 2021	GEOG 3692: Introduction to Global Public Health, Enrollment = 218
Spring 2021	GEOG 4852/5852: Health and Medical Geography, Enrollment = 34 (27 undergrads / 7 grad students)
Spring 2020	GEOG 3692: Introduction to Global Public Health, Enrollment = 159
Spring 2020	GEOG 4023/5023: Quantitative Methods in Geography, Enrollment = 13 (3 undergrads / 10 grad students)
Fall 2018	GEOG 4852/5852: Health and Medical Geography, Enrollment = 34 (29 undergrads / 5 grad students)
Spring 2018	GEOG 3692: Introduction to Global Public Health, Enrollment = 131
Spring 2018	GEOG 4023/5023: Quantitative Methods in Geography, Enrollment = 22 (6 undergrads and 16 graduate students)
Fall 2017	GEOG 4120/5100: Special Topics in Geography: Climate Change and Health, Enrollment=17 (14 undergrads / 3 grad students)
Spring 2017	GEOG 3692: Introduction to Global Public Health, Enrollment = 132
Fall 2016	GEOG 4852: Health and Medical Geography, Enrollment = 24

PROFESSIONAL SERVICE

Internal Service – Geography Department

Member of Undergraduate Committee, Geography Department, Fall 2023

PUEC committee member for comprehensive review for Guofeng Cao, Summer – Fall 2023

Boulder Faculty Assembly (BFA), Representative for Geography Department, AYs 2020-2021, 2021-2022; 2022-2023

Chair of BFA Academic Affairs Committee, AY 2022-2023

Member of BFA Academic Affairs Committee, AY 2020-2021 and 2021-2022

Hiring Committee for Human Geography Instructor, Summer 2022

PUEC committee member for Instructor Sarah Kelley, Fall 2022, Summer-Fall 2021, Fall 2018

Personnel committee member, Spring 2019 – Spring 2020

Chair of Colloquium Committee, AY 2018 – 2019

Panelist on Grad School and Beyond, October 9, 2018

Colloquium Committee Member, AY 2017-2018

Digital Globe Scholarship Reviewer, Spring 2018

Diversity Committee, AY 2016-2017

Internal Service – Institute of Behavioral Science

Reviewer of applications for the STUDIO program, Spring 2023

Stand in PRA for the Health Disparities group of the CUPC (University of Colorado Population Center), Fall 2021

Member of Diversity, Equity, and Inclusion (DEI) Committee, Summer 2020 – Summer 2021

Member of Strategic Planning Committee for ARPAC report, Fall 2019

Colorado Population Center, Co-chair of Hazards and Population Committee, for CUPC renewal application, Spring 2019

Internal Service – University of Colorado Boulder

Director of the Public Health Certificate, College of Arts and Sciences, Fall 2021 - present

Member of Health Programs Committee convened by Provost Russ Moore, led by Deans Adler and Maeda, Fall 2022 – Spring 2023

Member of Air Quality Advisory Group for the Colorado Shakespeare Festival, led by Dean Jim White, Fall 2021 – summer 2022

Member of Climate Change and Health committee, run by Emily Cobabe-Ammann, Fall 2016-present

- Helped coordinate May 2017 and October 2018 symposia related to climate change and human health

Reviewer for Innovative Seeds Grants, Social Science and Professional Schools, Winter 2017

External Service

2023 Reviewer for National Institutes of Health: P20 Exploratory Grants for Climate and Health.

2022 Co-organizer of sessions on “Climate change and health: climate justice” at AAG annual meeting

2021 Planning Committee Member for 2021 Rocky Mountain Regional Wildfire Smoke Symposium

- 2019 - 2021 At-Large Member of the Health and Medical Geography Specialty Group Board of the American Association of Geographers (AAG)
- 2018 Organizer and Chair of Sessions on Extreme Events, Hazards and Health at the 2018 American Association of Geographers meeting in New Orleans, LA
- 2017-2020 Ad-hoc Reviewer for National Science Foundation, Geography and Spatial Sciences

Peer Reviewing

- 2023 Invited Guest Editor for PNAS (Proceedings of the National Academies of Science)
- 2022 Reviewer of the Proceedings from a National Academies of Sciences workshop called “Wildland Fires: Towards Improved Understanding and Forecasting of Air Quality Impacts – A Workshop”
- 2022 - 2023 Invited Guest Editor for special issue on wildfire smoke and health in *Environmental Research: Health*
- 2020 Invited Guest Editor for PLOS One (one article)
- 2017- present Editorial Review Board Member, *Environmental Health Perspectives*
- Ad-hoc Peer Reviewer for: *Air Quality, Atmospheres and Health, American Journal of Public Health, American Journal of Respiratory and Critical Care Medicine, American Journal of Epidemiology, Applied Geography, Atmospheric Environment, Biometrics, BMJ Open, Climatic Change, Environmental Health Perspectives, Environmental Health, Environmental Research Letters, Environmental Research, Environmental Science & Technology, Environment International, Environmental Epidemiology, Environmental Research: Health, Epidemiology, Geocarto International, GeoHealth, Health & Place, International Journal of Biometeorology, International Journal of Health Geographics, Journal of Exposure Science and Environmental Epidemiology, Journal of Geography and Regional Planning, Journal of the Air & Waste Management Association, Lancet: Planetary Health, Nature Communications, PNAS, PLOS One, Science of the Total Environment, Social Science & Medicine, Social Science & Medicine – Population Health, Reviews of a dissertation submitted for the Association of American Geographers Jacques May Prize*
- 2016 Subject Matter Expert to the U.S. EPA on Mapping the Vulnerability of Human Health to Climate Change in the U.S. Sponsored and organized by EPA’s Global Change Research Program in the Office of Research and Development (ORD).
Resulted in the following publication: U.S. EPA. Mapping the Vulnerability of Human Health to Extreme Heat in the United States (Final Report). U.S. Environmental Protection Agency, Washington, DC, EPA/600/R-18/212F, 2018.
- 2013-2014 Climate and Health Idea Lab, Secretary and Co-founder, University of California, Berkeley
- 2010-2012 GRADS (Graduate Recruitment and Diversity Services) Ambassador for the School of Public Health, University of California, Berkeley, 2010-2012

OUTREACH

- Presented within the University of Colorado Boulder “Health and Wellness Summit” of 2023 with a talk entitled “Air Quality and Health Impacts of the Marshall Fire” on September 14, 2023
- Invited presentation to the University of Colorado Board of Trustees with a talk titled “Learning from the Marshall Fire: Health Impacts of a Wildland Urban Interface Fire” on February 3, 2023.
- Panelist for Yale Climate Change Webinar on “wildfires, air pollution & health” on November 4, 2022

- Panelist on Keystone Symposium titled “Climate Health: Extreme Events and Compounding Disasters ePanel” on October 27, 2022
- Invited panelist for SciLine’s media briefing on "Wildfires: Climate Connections & Community Impacts" run by the American Association for the Advancement of Science (AAAS) on September 1, 2021.
- Invited panelist for Columbia University’s Climate and Health Rapid Response Series on “Wildfires and Health” on August 31, 2021.
- Invited panelist for “Fire: Friend of Foe” on April 20, 2021 as part of the “The Big Picture Climate Series: Earth, Air, Fire, Water” on April 20, 2021 co-presented by: KGNU, Sustainable Resilient Longmont, and the City of Longmont.
- Presented on online lecture titled “How wildfire smoke affects human health” for high school students through the Headwaters Institute on November 17, 2020. The link of the recorded talk can be found here: <https://youtu.be/yj-eqpwmG6A>.

LANGUAGE/COMPUTER COMPETENCIES

English (native) and Spanish (fluent)

R, ArcGIS, SAS, Microsoft Office, Endnote

PROFESSIONAL MEMBERSHIPS

American Association of Geographers (2016 to present)

International Society of Environmental Epidemiology (2008 to present)

Updated January 31, 2024