

## Derek Ouyang

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### Publications

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#### PUBLICATIONS

- **Partisan differences in childhood measles vaccination and general refusals: a retrospective cohort study of electronic health records in the United States, 1988-2024.** *Lancet regional health. Americas*  
Morton, C. M., Ouyang, D., Schwartz, D., Goldin, J., Ho, D. E.  
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- **Evaluating the impact of discordant and missing demographic information on population health assessments using linked electronic health records and Census Bureau microdata.** *PLOS digital health*  
Ouyang, D., Limburg, A., Rehkopf, D. H., Goldin, J., Phillips, R. L., Udalova, V., Ho, D. E.  
2026; 5 (3): e0001289
- **Do mandatory minimum penalties and penalty relief work? Evidence from California's clean water program** *PLOS WATER*  
Treves, R. J., Lin, Q., Hilderbran, M., Ouyang, D., Rodolfa, K. T., Mustain, E., Ho, D. E.  
2025; 4 (7)
- **Enabling disaggregation of Asian American subgroups: a dataset of Wikidata names for disparity estimation.** *Scientific data*  
Lin, Q., Ouyang, D., Guage, C., Gallegos, I. O., Goldin, J., Ho, D. E.  
2025; 12 (1): 580
- **Bias Delayed is Bias Denied? Assessing the Effect of Reporting Delays on Disparity Assessments**  
Gosciak, J., Balagopalan, A., Ouyang, D., Koenecke, A., Ghassemi, M., Ho, D. E., ACM  
ASSOC COMPUTING MACHINERY.2025: 1843-1861
- **Not (Officially) in My Backyard** *JOURNAL OF THE AMERICAN PLANNING ASSOCIATION*  
Jo, N., Vallebuena, A., Ouyang, D., Ho, D. E.  
2024
- **Moving from total risk to community-based risk trajectories increases transparency and equity in flood risk mitigation planning along urban rivers** *ENVIRONMENTAL RESEARCH LETTERS*  
Serafin, K. A., Koseff, J. R., Ouyang, D., Suckale, J.  
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- **Mitigating allocative tradeoffs and harms in an environmental justice data tool** *NATURE MACHINE INTELLIGENCE*  
Huynh, B. Q., Chin, E. T., Koenecke, A., Ouyang, D., Ho, D. E., Kiang, M. V., Rehkopf, D. H.  
2024
- **Leveraging genomic sequencing data to evaluate disease surveillance strategies.** *iScience*  
Anderson, B., Ouyang, D., D'Agostino, A., Bonin, B., Smith, E., Kraushaar, V., Rudman, S. L., Ho, D. E.  
2023; 26 (12): 108488
- **Improving adaptation to wildfire smoke and extreme heat in frontline communities: evidence from a community-engaged pilot study in the San Francisco Bay Area** *ENVIRONMENTAL RESEARCH LETTERS*  
Herbert, N., Beckman, C., Cannedy, C., Cao, J., Cho, S., Fischer, S., Huang, S., Kramer, S. J., Lopez, O., Lopez, S., Ouyang, D., Suckale, J., Wulf-Saena, et al  
2023; 18 (7)
- **Integrating social services with disease investigation: A randomized trial of COVID-19 high-touch contact tracing.** *PLoS one*

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- Lu, L. C., Ouyang, D., D'Agostino, A., Diaz, A., Rudman, S. L., Ho, D. E.  
2023; 18 (5): e0285752
- **Automated vs. manual case investigation and contact tracing for pandemic surveillance: Evidence from a stepped wedge cluster randomized trial.** *EClinicalMedicine*  
Raymond, C., Ouyang, D., D'Agostino, A., Rudman, S. L., Ho, D. E.  
2023; 55: 101726
  - **How Redundant are Redundant Encodings? Blindness in the Wild and Racial Disparity when Race is Unobserved**  
Cheng, L., Gallegos, I. O., Ouyang, D., Goldin, J., Ho, D. E., ASSOC COMPUTING MACHINERY  
ASSOC COMPUTING MACHINERY.2023: 667-686
  - **Science Translation During the COVID-19 Pandemic: An Academic-Public Health Partnership to Assess Capacity Limits in California.** *American journal of public health*  
Maldonado, P., Peng, A., Ouyang, D., Suckale, J., Ho, D. E.  
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  - **A language-matching model to improve equity and efficiency of COVID-19 contact tracing.** *Proceedings of the National Academy of Sciences of the United States of America*  
Lu, L., Anderson, B., Ha, R., D'Agostino, A., Rudman, S. L., Ouyang, D., Ho, D. E.  
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  - **Evaluation of Allocation Schemes of COVID-19 Testing Resources in a Community-Based Door-to-Door Testing Program** *JAMA HEALTH FORUM*  
Chugg, B., Lu, L., Ouyang, D., Anderson, B., Ha, R., D'Agostino, A., Sujeer, A., Rudman, S. L., Garcia, A., Ho, D. E.  
2021; 2 (8): e212260
  - **Rising Seas, Rising Inequity? Communities at Risk in the San Francisco Bay Area and Implications for Adaptation Policy** *Earth's Future*  
Bick, I., Santiago Tate, A. F., Serafin, K. A., Miltenberger, A., Ayansi, I., Evans, M., Ortolano, L., Ouyang, D., Suckale, J.  
2021; 9 (7)
  - **When floods hit the road: Resilience to flood-related traffic disruption in the San Francisco Bay Area and beyond.** *Science advances*  
Kasmalkar, I. G., Serafin, K. A., Miao, Y., Bick, I. A., Ortolano, L., Ouyang, D., Suckale, J.  
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