

Overview of the Environmental Health Matters Initiative

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The EHMI brings together leaders from various sectors to share their insights on how to solve a wide array of environmental health challenges.



NEUTRALITY

A neutral, nonpartisan space where stakeholders can share insights.



STEWARDSHIP

Leadership from an experienced program development team and advisory committees with experts from government, business, and academia.



CREDIBILITY

A long organizational history of working in the environmental health field.



CONNECTION

The unique ability to convene experts from a wide array of science, engineering, and health disciplines.



Environmental health challenges require multi-discipline, multi-sector approaches.

- Identifying Opportunities to Understand, Control, and Prevent Exposure to PFAS– Sep 2019
- Quality Water from Every Tap – Nov 2019
- Reducing Health Impacts of Reactive Nitrogen in Ground and Surface Water from Agricultural Sources – Jan 2021
- How We Move Matters: Exploring the Connections between New Transportation and Mobility Options and Environmental Health: A Workshop – July 2021
- Airborne Transmission of SARS-CoV-2 – August 26-27, 2020



Learn more at www.nationalacademies.org/EHMI.

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Today's challenges at the intersection of environment and health are “Wicked” problems.

- Complex
- Affected by many interacting factors
- Various spatial scales and long temporal scales
- May have global implications
- Difficult to define
- Unstable and socially complex
- Have no clear solution or end point
- Extend beyond the understanding of one discipline

SARSCoV-2 and COVID-19 = WICKED



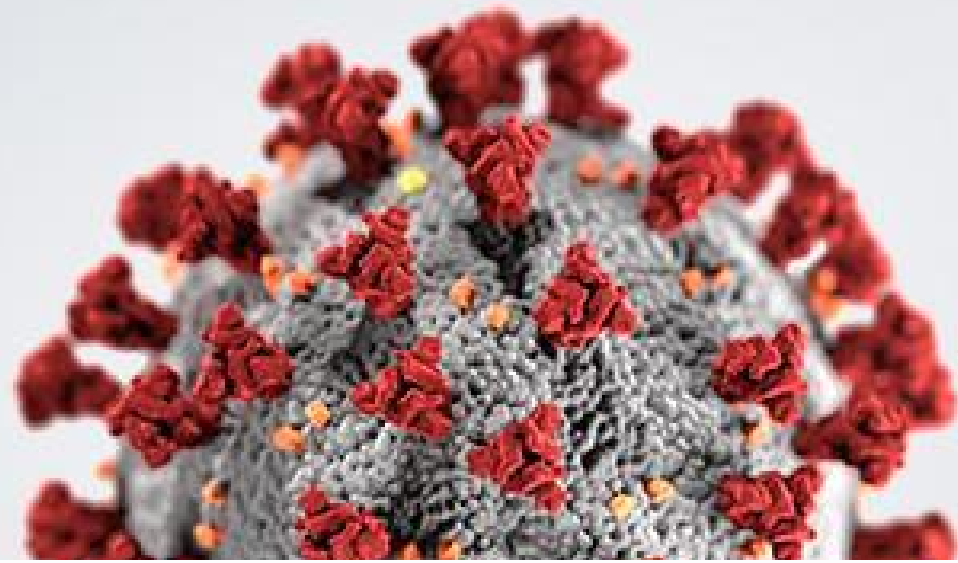
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Cross-Cutting Challenges: A Cross Disciplinary Approach

- Aerosol Science
- Atmospheric Chemistry
- Building Engineering
- Epidemiology
- Environmental Health/Science
- Infectious Disease
- Medicine
- Pulmonary Medicine
- Public Health
- Virology



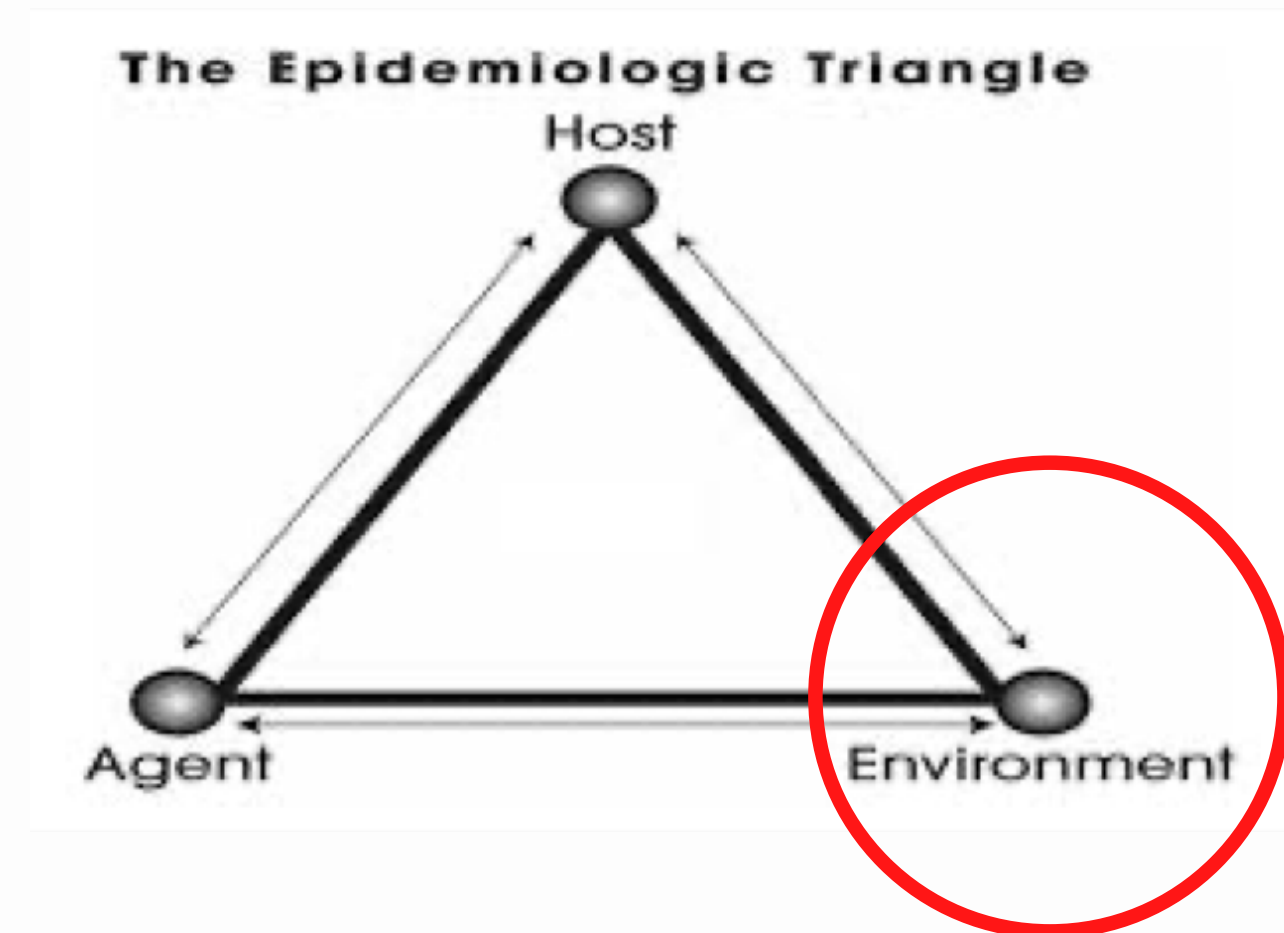


The Epidemiological Triangle

Agent, or microbe that causes the disease

Host, or organism harboring the disease

Environment, or those external factors that cause or allow disease transmission





COVID Inequities: Host and Environment Interaction

Environment

- Natural/built
 - Climate
 - Clean water
 - Food security
- Local
 - Housing
 - Density
 - Infrastructure
- Personal
 - Home
 - Workplace/ job
 - Mobility/ transportation

Host/ Environment

- Social and economic drivers of risk
 - Racial disparities
 - Access to care
 - Housing
 - High risk jobs
- Impacts of environmental quality on disease
 - Age
 - Underlying disease
 - Concurrent exposures
 - Behaviors
 - Cumulative risk

Workshop Planning Committee

- CHAIR: Jonathan M. Samet, Colorado School of Public Health
- Georges C. Benjamin, American Public Health Association
- Seema Lakdawala, University of Pittsburgh School of Medicine
- John-Martin Lowe, University of Nebraska Medical Center
- Linsey Marr, Virginia Tech
- Kim Prather, Scripps Institution of Oceanography, University of California, San Diego
- Arthur Reingold, University of California, Berkeley
- John Volckens, Colorado State University

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- George P. Daston, Procter & Gamble Company
- Linda J. Fisher, E.I. du Pont de Nemours & Company (retired)
- Estelle Geraghty, Esri
- Lynn R. Goldman, The George Washington University
- Gavin Huntley-Fenner, Huntley-Fenner Advisors
- Daniel Greenbaum, Health Effects Institute
- Philip R.S. Johnson, Heinz Foundation
- Beth Karlin, See Change Institute
- Jennifer McPartland, Environmental Defense Fund
- Amy Pruden, Virginia Tech
- Ana V. Diez Roux, Drexel University
- Martha E. Rudolph, Colorado Department of Public Health and Environment (retired)
- Jonathan M. Samet, Colorado School of Public Health
- Devon C. Payne-Sturges, University of Maryland
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- Environmental Protection Agency - Jennifer Orme-Zavaleta, Al McGartland
- U.S. Geological Survey - Geoffrey S. Plumlee
- Walmart - Zach Freeze
- Center for Disease Control - Patrick Breysse
- Covestro - Robert Skoglund
- Department of Defense - John Seibert
- Green Chemistry & Commerce Council (GC3) - Joel Tickner
- Health and Environmental Funders Network - Kathy Sessions
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