Welcome to an HEI Webinar

Health Effects of Traffic-Related Air Pollution: Assessing the Evidence in an Evolving and Complex World

July 13, 2022 | 11:00 AM – 1:00 PM EDT

For the full report, please visit: https://tinyurl.com/HEITrafficReport.
Before we begin

All attendees are muted (view-only) for the duration of the webinar. There will be a Q&A period after the presentations. Please submit questions via the Q&A function at any time during the webinar.

If you experience any logistical difficulties, please contact us using the “Chat” box.

Webinar slides and video will be available in the coming weeks. Please check HEI website for details.

https://www.healtheffects.org/meeting/new-hei-review-webinar-health-effects-traffic-related-air-pollution
An independent, nonprofit corporation chartered to provide policy-relevant, high-quality, and impartial science

Funded jointly by government and the worldwide motor vehicle industry and, occasionally, private foundations

Funds research that is selected, conducted, overseen, and reviewed independently of HEI’s sponsors

Does not take policy positions
A Panel was convened to review the traffic and health literature up to 2008.

Detailed chapters on emissions, exposure, toxicology and epidemiology.

At that time, evidence was considered sufficient to support a causal relationship between traffic-related air pollution and exacerbation of asthma in children. Suggestive and/or limited evidence for other health outcomes.

https://www.healtheffects.org/
New Review of the Traffic and Health Literature

Strong interest in an update of the review:

- Substantial new research published
- Regulations and vehicular technology have advanced
- Interest in non-tailpipe emissions and traffic noise is increasing

HEI appointed a new panel to systematically review epidemiologic studies in 2018.
HEI Panel on the Health Effects of Long-term Exposure to Traffic-Related Air Pollution

Co-chairs:
Francesco Forastiere, Imperial College London
Frederick Lurmann, Sonoma Technology

Members:
Richard Atkinson, University of London
Jeffrey Brook, University of Toronto; HEI Research Committee
Howard Chang, Emory University
Gerard Hoek, Utrecht University
Barbara Hoffmann, University of Düsseldorf; HEI Research Committee
Sharon Sagiv, University of California - Berkeley
Evi Samoli, University of Athens; HEI Research Committee
Audrey Smargiassi, University of Montreal
Adam Szpiro, University of Washington
Danielle Vienneau, Swiss Tropical and Public Health Institute
Jennifer Weuve, Boston University

Consultants to the Panel:
Julia Fussell, Imperial College London
Frank Kelly, Imperial College London
Tim Nawrot, University of Hasselt
Gregory Wellenius, Boston University; HEI Research Committee

Contractor: Meltem Kutlar Joss and Ron Kappeler, Swiss Tropical and Public Health Institute

HEI: Hanna Boogaard, Dan Crouse, Dan Greenbaum, Robert O’Keefe, Martha Ondras, Allison Patton, Ellen Mantus, Rashid Shaikh, Eleanne van Vliet, Annemoon van Erp
The Special Report was subjected to detailed Peer Review

Chair:
Bert Brunekreef, Professor Emeritus, Utrecht University

Peer Reviewers Full Report:
Haneen Khreis, University of Cambridge
Michael Jerrett, University of California – Los Angeles; HEI Review Committee
Susan Norris, Oregon Health & Science University
Annette Peters, Helmholtz Zentrum München
Neil Pearce, London School of Hygiene and Tropical Medicine; HEI Research Committee
Marie Pedersen, University of Copenhagen
David Savitz, Brown University; Chair HEI Research Committee
Jay Turner, Washington University in St. Louis

Peer reviewers Specific Chapters:
Chad Bailey, United States Environmental Protection Agency
David Carslaw, University of York
Flemming Cassee, National Institute for Public Health and the Environment, Netherlands
David Foster, University of Wisconsin – Madison
Mark Frampton, Professor Emeritus, University of Rochester Medical Center
Monica Guxens, Barcelona Institute for Global Health
Michael Kleeman, University of California – Davis
Nick Molden, Emissions Analytics, UK
Marc Weisskopf, Harvard T.H. Chan School of Public Health

And edited by HEI's Publication Department
Today’s webinar

Chaired by Ellen Mantus, HEI and Evi Samoli, University of Athens and HEI Research Committee

✓ Traffic-Related Air Pollution: A Moving Target  Fred Lurmann, Sonoma Technology
✓ A bird’s eye overview of HEI’s traffic review  Hanna Boogaard, HEI

✓ A deeper dive into the evidence for some of the selected health outcomes:

Moderated by Jeff Brook, University of Toronto and HEI Research Committee

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<tr>
<th>Health Outcome</th>
<th>Speaker</th>
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<tbody>
<tr>
<td>Birth outcomes</td>
<td>Danielle Vienneau, Swiss Tropical and Public Health Institute</td>
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<td>Respiratory</td>
<td>Audrey Smargiassi, University of Montreal</td>
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<td>Cardiometabolic</td>
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<td>Neurodevelopmental</td>
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<td>Neurodegenerative</td>
<td>Jennifer Weuve, Boston University</td>
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✓ Current knowledge: have we filled the gap?  Francesco Forastiere, Imperial College
✓ Q&A