

The DEEP Network

Newsletter Number 5

December 2023

Dear friends and colleagues

Welcome to the fifth DEEP Network Newsletter. As usual, this newsletter will also be available on our website:

Please send us any items that may be of interest for future newsletters

1. Recent events

Workshop on Applied Epidemiologic Methods and Environmental Health

Theme: Selected Study Designs and Applications for Causal Inference July 18, 2023

CDC's Environmental Health (EH) Nexus hosted its second annual environmental epidemiology methods workshop "Applied Epidemiology and Environmental Health: Selected Study Designs and Applications for Causal Inference" on July 18, 2023. Topics included: Practical considerations in causal inference (Sonja Swanson); difference-in-differences studies (Neil Pearce); regression discontinuity and interrupted time series studies (Antonio Gasparrini); and application of negative controls to identify non-causal associations (Eric Tchetgen Tchetgen). The workshop was designed for epidemiologists, statisticians, biostatisticians, and other environmental health professionals at state, tribal, local, and territorial (STLT) public health agencies and environmental health organizations. The presentations should eventually appear online, but they do not appear to be available yet.

2. Future events

The World Congress of Epidemiology will be held in Cape Town, South Africa, 24-27 September 2024: <https://www.wce2024.org/>. The Organising Committee includes several members of the DEEP Network. The programme is still under development, and the call for proposals for symposia is now open: <https://www.wce2024.org/satellites/>.

3. Relevant publications involving DEEP members

The Health Effects Institute (HEI) has conducted a large systematic effort of the epidemiologic literature on traffic-related air pollution's global public health impact, with the use of an HEI expert panel. [<https://www.healtheffects.org/publication/systematic-review-and-meta-analysis-selected-health-effects-long-term-exposure-traffic>]

The lesson learned from this review are now described in a paper published in EHP. It points to the mismatch between a formal rating scheme and the panel's judgments about the studies considered.

Boogaard H, Atkinson RW, Brook JR, Chang HH, Hoek G, Hoffmann B, Sagiv SK, Samoli E, Smargiassi A, Szpiro AA, Vienneau D, Weuve J, Lurmann FW, Forastiere F. Evidence Synthesis of Observational Studies in Environmental Health: Lessons Learned from a Systematic Review on Traffic-Related Air Pollution. Environ Health Perspect. 2023 Nov;131(11):115002.

[<https://pubmed.ncbi.nlm.nih.gov/37991444/>]

The paper is accompanied by a thoughtful perspective from Jon Samet.

Samet JM. Invited Perspective: Systematic Review for Environmental Pollutants—A Work in Progress. *Environmental Health Perspectives* 2023; 131: 11304-1.

[\[https://ehp.niehs.nih.gov/doi/epdf/10.1289/EHP14015\]](https://ehp.niehs.nih.gov/doi/epdf/10.1289/EHP14015)

4. Other relevant publications

IARC Scientific workshop and publication on Epidemiological bias assessment in cancer hazard identification

As noted in our last newsletter, the *IARC Monographs* programme and the National Cancer Institute, USA, have jointly conducted a scientific workshop convening experts in statistical and epidemiological methodology to examine and compile developments relevant to the assessment of bias (including its direction and magnitude) in observational epidemiology studies. Such assessments are relevant to the interpretation of evidence from case–control and cohort studies on cancer in humans. The focus of the workshop was on methods and tools that can be employed during cancer hazard identification by expert Working Groups (such as those convened by the *IARC Monographs*). This workshop will result in the publication of a new volume in the IARC Scientific Publications series *Statistical methods in cancer research*. The workshop was held in Lyon, France, on 17–21 October 2022.

A report on the project has been published as:

Schubauer-Berigan MK, Richardson DB, Fox MP, Fritschi L, Canu IG, Pearce N, Stayner LT, Berrington de Gonzalez A. IARC-NCI Workshop on an epidemiological toolkit to assess biases in human cancer studies for hazard identification: beyond the algorithm. *Occupational and Environmental Medicine* 2023; 80: 119-120.

<https://oem.bmj.com/content/oemed/early/2023/01/30/oemed-2022-108724.full.pdf>

[For more information on DEEP, see our website:

<https://www.lshtm.ac.uk/research/centres-projects-groups/degrading-epidemiology-network>]