

The DEEP Network

Newsletter Number 3

July 2021

Dear friends and colleagues

Welcome to the third 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

HEI Annual Conference Webinar 5: From Evidence to Action: Synthesizing Air Quality Evidence Relevant to Public Health

May 04, 2021 - 10:00am

Chairs: Neil Pearce, London School of Hygiene and Tropical Medicine, HEI Research Committee, and Jennifer Peel, Colorado State University, HEI Review Committee

Synthesizing evidence relevant to public health is now more important than ever. Evidence synthesis may include systematic reviews or formal meta-analyses of the findings of observational studies. There have been evolving approaches to synthesis and integration of various forms of evidence throughout the years, for example, the weight of evidence's approach that the US EPA use in their integrated science assessments. Another approach is Grading of Recommendations Assessment, Development and Evaluation (GRADE), which has its origins in clinical research and has been adopted by the WHO and Cochrane Collaboration. It has been applied recently to assess the quality of evidence for environmental exposures, such as air pollution. However, GRADE considers results from randomized studies as higher-quality evidence than non-randomized designs, a criterion that creates difficulties in environmental research, where randomized designs are largely not possible, thus down-grading important evidence by default. Alternative promising strategies for evidence synthesis have been suggested, including "triangulation". This session will examine approaches for evidence synthesis in environmental epidemiology and discuss possible paths forward.

Link to Webinar: https://www.youtube.com/watch?v=3FN3wKe4i_U

2. Future events

National Academies Committee on Guidance on PFAS Testing and Health

Outcomes, Information Gathering Session, Meeting 5, July 13-14, 2021, 1:30pm to 4:30pm ET

https://www.eventbrite.com/e/guidance-on-pfas-testing-and-health-outcomes-meeting-5-tickets-157868148883?aff=odeimcmailchimp&utm_source=Division+on+Earth+and+Life+Studies&utm_campaign=651a5c03f0-

EMAIL_CAMPAIGN_2019_08_06_06_18_COPY_01&utm_medium=email&utm_term=0_3c0b1ad5c8-651a5c03f0-278807781&mc_cid=651a5c03f0&mc_eid=7a96e4e41f

This includes a session on evidence synthesis:

2:55 – 4:55 pm ET Evidence Synthesis and Its Application

Methods for Evidence Synthesis

Jonathan Samet, Colorado School of Public Health

Making Useful Recommendations

Rebecca L. Morgan, McMaster University

Panel Reflection and Q&A from Committee

Moderator: Ned Calonge, Committee Member

- **Ellen Chang**, Exponent
- **Nicholas Chartres**, University of California, San Francisco
- **Holger Schünemann**, McMaster University
- **Rebecca L. Morgan**, McMaster University
- **Jonathan Samet**, Colorado School of Public Health

33rd Annual Conference of the International Society for Environmental Epidemiology (ISEE 2021), August 23-26, 2021: Symposium Tuesday August 24 from 11:30 - 13:00 PM Eastern Time

Presentation and discussion of ISEE principles for evidence synthesis and evaluation in environmental health with invited feedback from speakers of major national and international agencies relying on evidence synthesis in environmental health, an ISEE Policy Committee symposium

The ISEE Policy Committee recently identified this topic as one of their themes that warrants ISEE activity. To this end, a subgroup has been identified, which includes Neil Pearce, David Savitz, Barbara Hoffmann, Hanna Boogaard, and others, and work is underway. Specifically, ISEE is working on developing principles for evidence synthesis in environmental health. An ISEE 2021 symposium chaired by Jon Samet and Kurt Straif is organized to present the evolving principles and invite feedback from major national and international agencies that rely on evidence synthesis in environmental health. Additional potential future steps at ISEE could be to evaluate existing frameworks against the principles and expanding on one or a few of these general principles. This potential future ISEE work needs additional discussion.

Kurt Straif, Co-chair, ISEE Europe Chapter, ISGlobal and Boston College
Presentation of ISEE Principles of Evidence Synthesis and Evaluation in Environmental Health

Jon Samet, Co-chair, Colorado School of Public Health
Comments from the perspective of pertinent committees of the National Academy of Sciences

Comments from the perspective of pertinent committees of the US National Academies of Sciences, **Jonathan M Samet, United States**

Evidence Synthesis and Integration Methods used in the US Environmental Protection Agency's (EPA) Integrated Risk Information System (IRIS) Program, **Kristina Thayer, United States**

ISEE principles for evidence synthesis and evaluation in environmental health - Perspectives from HEI, **Daniel Greenbaum, United States**

Comments from experience on advisory and regulatory committees, **Neil Pearce, United Kingdom**

Comments from the perspective of the Cochrane Collaboration, **Lisa Bero, United States**

Fifty years of comprehensive cancer hazard identification: the IARC {Monographs} Programme's systematic review and synthesis across multiple evidence streams, **Mary K Schubauer Berigan, France**

ISEE principles for evidence synthesis and evaluation in environmental health, **Kurt Straif, Spain**

3. Relevant publications by DEEP members

Pearce N, Vandenbroucke J. Arguments about face masks and Covid-19 reflect broader methodologic debates within medical science. *European Journal of Epidemiology* 2021; 36: 143-147. [<https://link.springer.com/article/10.1007/s10654-021-00735-7>]

Savitz DA, Forastiere F. Do pooled estimates from meta-analyses of observational epidemiology studies contribute to causal inference? *Occupational and Environmental Medicine*, in press; <http://dx.doi.org/10.1136/oemed-2021-107702>

4. Other relevant publications

Eick SM, Goin DE, Chartres N, Lam J, Woodruff TJ. Assessing risk of bias in human environmental epidemiology studies using three tools: different conclusions from different tools. *Systematic Reviews* 2020; 9: 249; doi.org.10.1186/s13643-020-01490-8

Rugulies R, Burdorf A. Causal inference and evidence-based recommendations in occupational health and safety research. *Scand J Work Environ Health* 2020; 46: 554-556; doi: 10.5271/sjweh.3929