

PCW10



Argumentation on causal relations in environment health issues. How do environmental epidemiologists differ in their reasoning from other professionals?

Lebret E^{1,2}, Neutra R

¹Rivm, ²University of Utrecht

Duration: full day

Background and significance: There is clear evidence that causal inference about environmental health problems in the general population is quite different and also varies across disciplines. Toxicologists, epidemiologists, lawyers and lay people apply different sets of arguments and base their inferences on different information sets and apply different mental models. To explore this issue in more detail, this workshop will bring together professionals from different fields and background.

The workshop starts with expert presentations from a renowned epidemiologist, toxicologist, psychologist and law and policy scientist. Also, we will present new results from a series of interviews of experts about their causal reasoning with respect to population health risks of PFOA. Then, we will have structured discussions (plenary or in subgroups, depending on attendance) with the workshop participants about their personal experience in causal reasoning in multi-disciplinary expert settings, explore the driving forces in their personal reasoning (e.g. their views on the role of experts) and try to identify hidden beliefs, allergies and deal breakers in argumentation by experts from other disciplines.

Based on the discussions, recommendation will be drafted for further development of argumentation in causal inference in environmental health issues. The outcomes of the preconference workshop will be presented to the ISEE2019 participants in Symposium-session "Differences in Causal Inference from Epidemiological and Non-Epidemiological Evidence" (when accepted).

Conveners will explore engagement of EFSA-representatives of relevant expert committees, e.g. on PFOA, also they will explore possible NGO involvement.

Interest for the workshop

ISEE member epidemiologists deal with the cohesion of their findings with findings from other (experimental) sciences: mechanistic, physiological and toxicological. This may happen in regulatory science, in giving expert judgements or even in purely academic pursuits. Critical thinking about their own work will be improved if they understand their own reasoning processes and those of scientists from other disciplines. This workshop will stimulate such critical thinking through better insight of reasoning in other disciplines and through joint examination of underlying professional paradigms and cultural elements. Dissemination of results can be potentially expanded through related symposium.

Participants number: 50