

## COMMUNITY EXPOSURES TO INDUSTRIAL POLLUTION AND WASTE: ETHICS DISCUSSION

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**Background and aims:** Epidemiologic studies in communities with residential exposure to hazardous pollutants from industrial production or waste facilities can be affected by many ethical, legal, and social issues. In this presentation, and as part of the ISEE Ethics and Philosophy Committee contribution, we consider ethical issues associated with research on community exposures to industrial pollution and waste and facilitate discussion with session participants.

**Methods:** We use information on past problems in studies of community exposures to identify problems that are relevant to recent and on-going research. Analysis of past problems will be used to promote examination of ethical, legal and social challenges in research presented at this ISEE meeting.

**Results:** Residents in communities with sources of industrial pollution may be distrustful of researchers associated with the government agencies that regulate and permit polluting facilities, hampering recruitment. Industry officials may be distrustful of research that could find evidence of harm for which industry could be held responsible, which may lead them to try to prevent access to data on releases or alter releases during times that measurements are being made. Additionally, industries may directly or indirectly attempt to obstruct research or intimidate community members or researchers. Other methodological challenges in conducting research in these situations include the absence of measurements needed to address research questions of most interest, such as whether community residents have been exposed to particular pollutants and whether those exposures have been a cause of disease. Epidemiologists trained to write for scientific journals may be expected to present study findings and limitations without reliance on technical jargon and in an adversarial context. Confidentiality of both individuals and neighborhoods may be compromised by legal proceedings.

**Conclusions:** Analysis of these issues could be helpful for improving the design, interpretation and communication of epidemiologic studies.