

EVALUATING CAUSALITY IN EPIDEMIOLOGIC STUDIES SUBCOMMITTEE

Mission

The mission of the Subcommittee on Evaluating Causality in Epidemiologic Studies is to stimulate a dialogue on the methods and issues related to evaluating causality and interpreting evidence from published epidemiology studies.

2012-2013 Participating Organizations

Agency for Toxic Substances and Disease Registry

Bayer CropScience

DLW Consulting Services, LLC

Dow Chemical Company

E.I. du Pont de Nemours and Company

ExxonMobil Biomedical Sciences

Harvard School of Public Health

Indiana University

Medical Research Council, University of Leicester

Monsanto Company

Procter & Gamble Company

Shell Oil Company

Syngenta Crop Protection, Inc.

University of Aarhus

University of Guelph

University of Leicester

US Environmental Protection Agency

US Food and Drug Administration

Committee Publication

Burns CJ, Wright M, Pierson JB, Bateson TF, Burstyn I, Goldstein DA, Klaunig JE, Luben TJ, Mihlan G, Ritter L, Schnatter AR, Symons JM, and Yi KD. (2014) Evaluating Uncertainty to Strengthen Epidemiologic Data for Use in Human Health Risk Assessments. *Environmental Health Perspectives*. Online ahead of print: [More details](#)

2012-2013 Activities and Accomplishments

Committee leaders:

Dr. Carol Burns
The Dow Chemical
Company

Dr. J. Michael Wright
US Environmental
Protection Agency

HESI manager:

Jennifer B. Pierson, MPH



This scientific program is committed to:

Stimulating a dialogue regarding the methods and issues related to evaluating causality, as well as interpretation of evidence from epidemiology.

Areas of scientific focus:

- Strengthen the value and impact of epidemiologic studies in quantitative health risk assessments by fostering agreement on what constitutes clear and relevant epidemiologic evidence for causation.
- Promote a dialogue on decreasing the uncertainty in risk assessments that integrate epidemiologic and other lines of scientific evidence.
- Address current challenges in estimating exposure metrics in epidemiological studies.
- Integrate advancements of modern epidemiologic methods in human health risk assessments.

Key accomplishments:

- *Outreach.* Members presented at a joint symposium on “Improving Reviews, Methods, and Transparency in Environmental Epidemiology to Inform Timely Public Health Decision-Making” at the August 2012 International Society for Environmental Epidemiology Annual Conference in Columbia, South Carolina.

- *October 2012 Workshop.* The collaborative work of this subcommittee culminated in a workshop on “Evaluating Causality in Epidemiology,” held October 22–23, 2012, at the US Environmental Protection Agency (EPA) in Research Triangle Park, North Carolina. The workshop objective was to develop expert recommendations on strengthening epidemiological data for use in human health risk assessments. Over 35 attendees from academia, government, and industry participated in breakout group discussions focused on three topics: modern epidemiological methods, degree of uncertainty, and exposure metrics.

The Committee’s focus for May 2013 - May 2014:

- The subcommittee is drafting a manuscript for publication in the peer-reviewed literature based on the workshop proceedings to highlight key recommendations. The manuscript will focus on how engaging multi-disciplinary experts from the epidemiology, medical, and toxicology communities may bridge the gap between theory and practice. It will also identify recommendations to decrease the uncertainty in risk assessments that integrate epidemiologic and other lines of scientific evidence.
- Following completion of the manuscript, the subcommittee will sunset.

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The Procter & Gamble Company
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University of Guelph
University of Leicester
US Environmental Protection Agency
US Food and Drug Administration

For more information, contact the Committee's manager, Ms. Jennifer B. Pierson, jpierson@hesiglobal.org.



Committee Presentations and Data Resources

Spring 2011: Evaluating Causality in Epidemiologic Studies Subcommittee Presentation.
"Evaluating Causality in Epidemiologic Studies." Participant list.



HESI EMERGING ISSUE WORKSHOP: EVALUATING CAUSALITY IN EPIDEMIOLOGY

Monday, 22 October – Tuesday, 23 October, 2012

Participant List

Participant	Organization	Break out Group
Herman Autrup	University of Aarhus	Exposure
Thomas Bateson	US EPA	Uncertainty (co-chair)
Lisa Baxter	US EPA	Exposure
Aaron Blair	US NCI	Exposure
Igor Burstyn	Drexel University	Methods (co-chair)
Carol Burns	The Dow Chemical Company	Facilitator
Michel Camus	Health Canada	Uncertainty
Tony Cox	Cox Associates	Methods
Alison Cullen	University of Washington	Uncertainty
Mike Dourson	TERA	Uncertainty
David Garabrant	University of Michigan/EpiStat	Methods
Dan Goldstein	Monsanto	Uncertainty (rapporteur)
Julie Goodman	Gradient	Uncertainty
Irva Hertz-Picciotto	UC at Davis	Methods
Jay Kaufman	McGill University	Methods
Jim Klaunig	Indiana University	Facilitator
Hans Kromhout	Utrecht University	Exposure
Matt Longnecker	NIEHS	Methods
Tom Luben	US EPA	Exposure (co-chair)
George Maldonado	University of Minnesota	Uncertainty
Gary Mihlan	Bayer	Exposure (co-chair)
Jennifer Pierson	ILSI HESI	
Charles Poole	University of North Carolina	Uncertainty
Len Ritter	University of Guelph	Facilitator
Kent Rupperecht	Bayer CropScience	Uncertainty
Leslie Rylander	Procter and Gamble	Methods
Rob Schnatter	Exxon Mobil	Methods (rapporteur)
Lewis Smith	University of Leicester	Methods
Leslie Stayner	University of Illinois at Chicago	Exposure
Elaine Symanski	University of Texas Health Science Center	Exposure
Morel Symons	Dupont	Methods (co-chair)
Shan Tsai	Shell Oil Company (US)	Uncertainty
Edwin van Wijngaarden	University of Rochester	Uncertainty
Doug Weed	DLW Consulting Services	Uncertainty
Mike Wright	US EPA	Exposure (rapporteur)

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Kun Don (Sue) Yi	Syngenta Crop Science	Uncertainty (co-chair)
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