

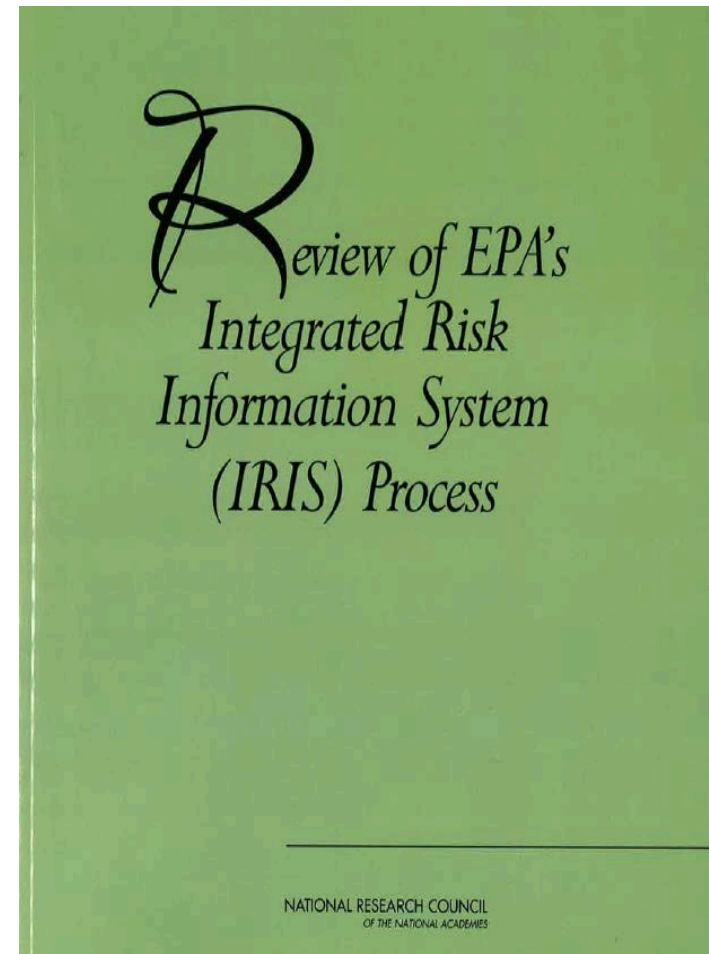
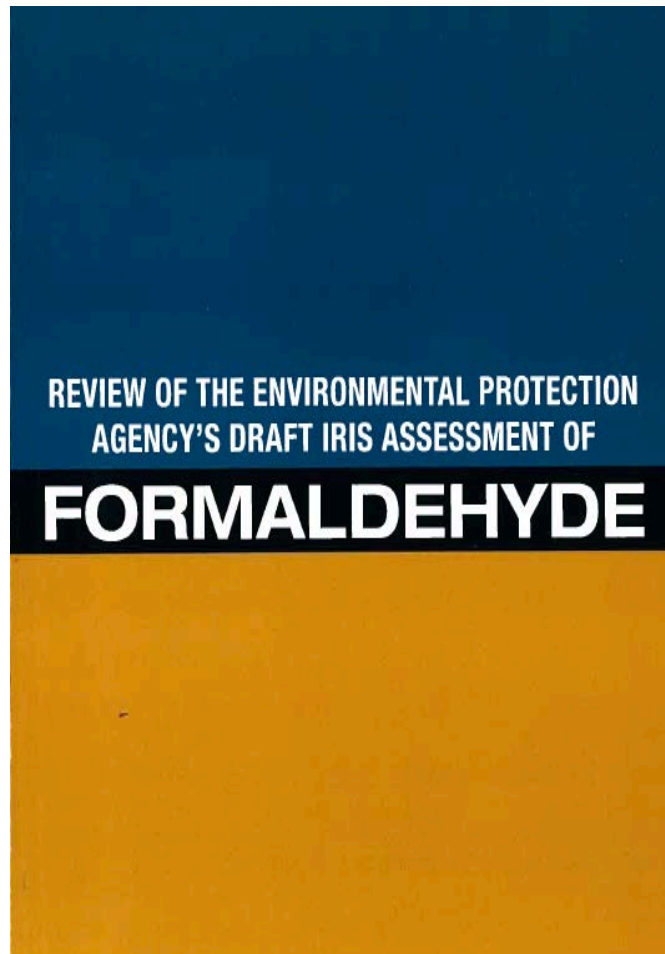
The National Research Council's IRIS Report

**Jonathan M. Samet
Professor and Flora L. Thornton Chair,
Department of Preventive Medicine
Keck School of Medicine of USC**

October 15, 2014

**EPA IRIS NRC Recommendations
Workshop**

Formaldehyde and IRIS Reports



For PDF version or to order: <http://www.nap.edu>

Study Genesis

- Formaldehyde committee, like other NRC committees, identified deficiencies in the specific assessment, but also more broadly in EPA's general approaches and specific methods.





BEST

Board on Environmental Studies and Toxicology

**Review of EPA's Integrated Risk
Information System (IRIS) Process**

Committee to Review the IRIS Process

Board on Environmental Studies and Toxicology

Division on Earth and Life Studies

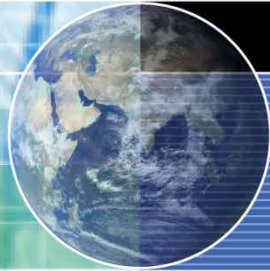
National Research Council

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Statement of Task

- Review the IRIS process and the changes being implemented or planned by EPA and recommend modifications or additional changes as appropriate to improve the scientific and technical performance of the IRIS program.
- Review current methods for evidence-based reviews and recommend approaches for weighing scientific evidence for chemical hazard and dose-response assessments.



Committee

JONATHAN M. SAMET (*Chair*), University of Southern California

SCOTT BARTELL, University of California, Irvine

LISA BERO, University of California, San Francisco

ANN BOSTROM, University of Washington

KAY DICKERSIN, Johns Hopkins School of Public Health, MD

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JAMES S. HOUSE, University of Michigan

MARGARET M. MACDONELL, Argonne National Laboratory, IL

RICHARD P. SCHEINES, Carnegie Mellon University, PA

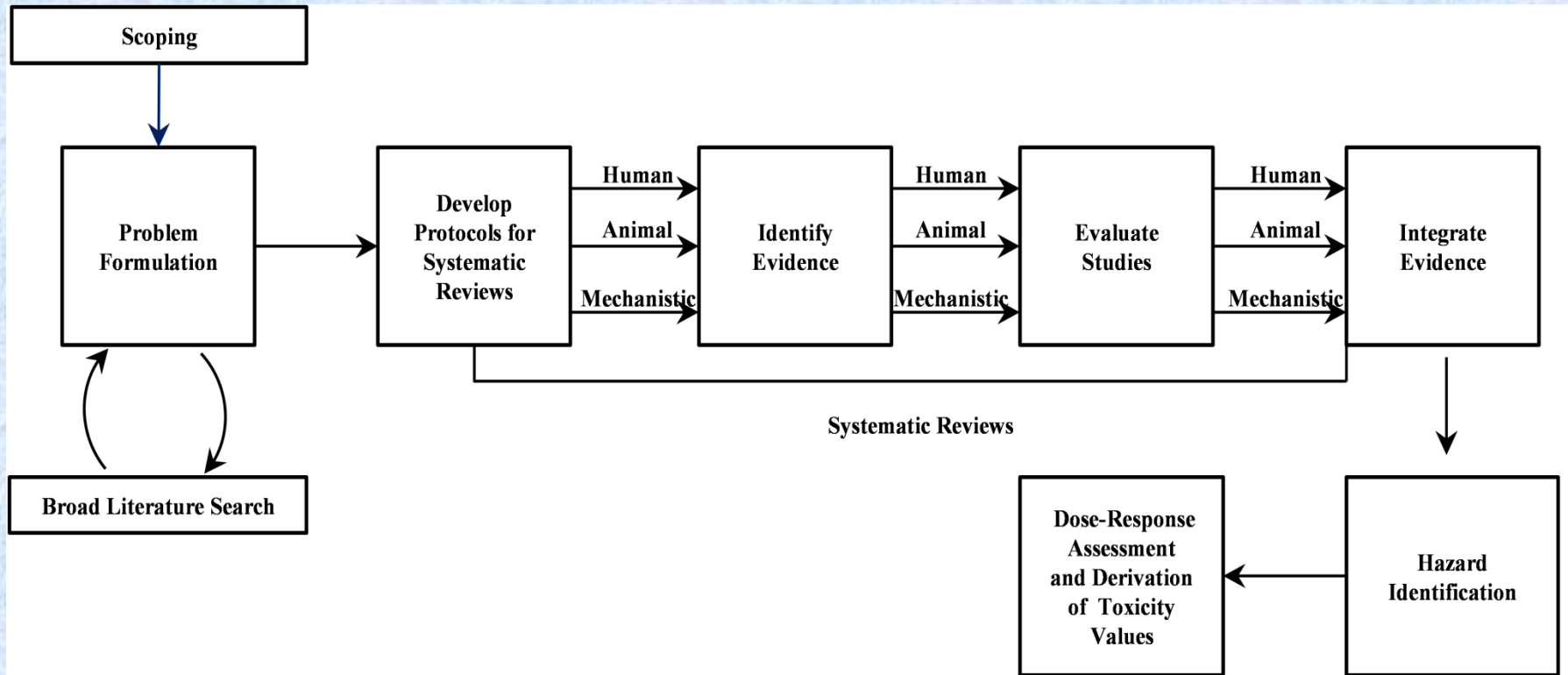
LEONARD M. SIEGEL, Center for Public Environmental Oversight, CA

ROBERT B. WALLACE, University of Iowa College of Public Health

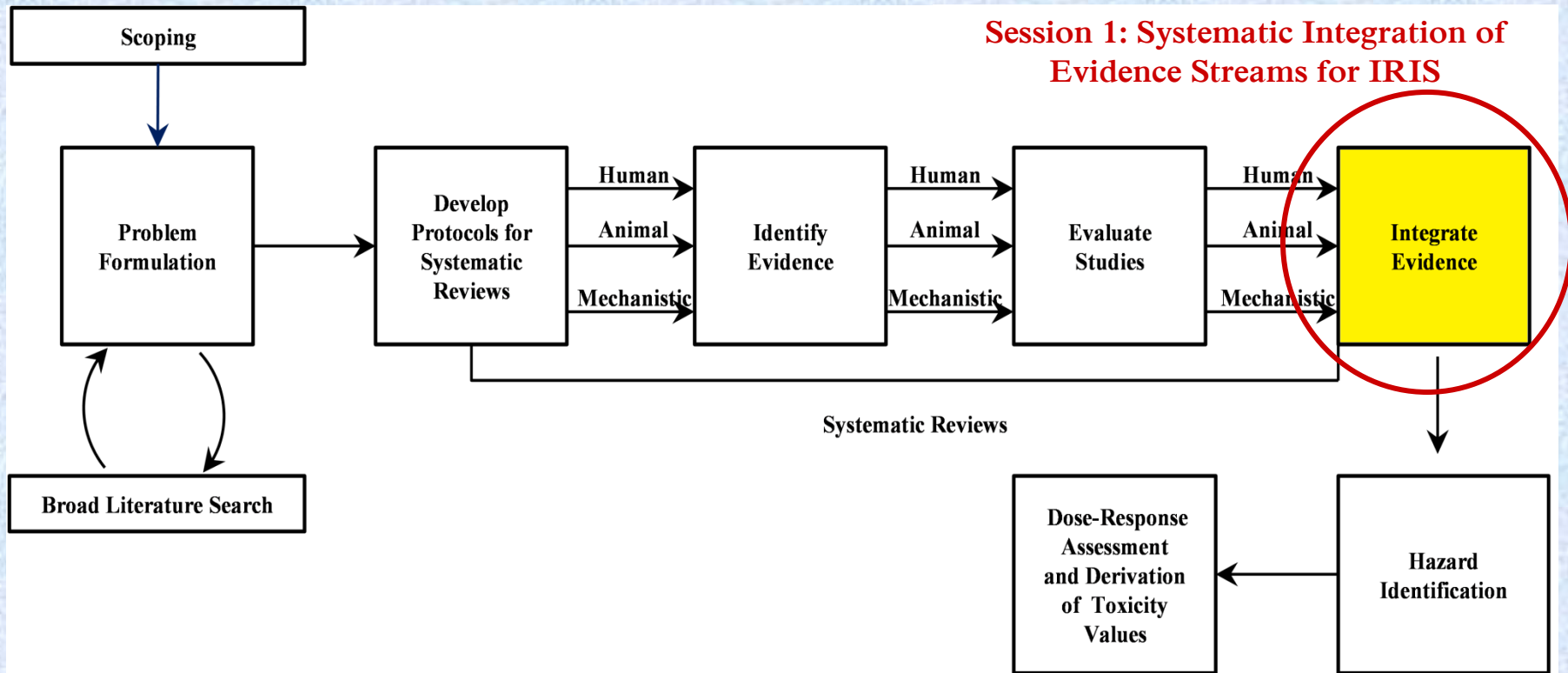
YILIANG ZHU, University of South Florida

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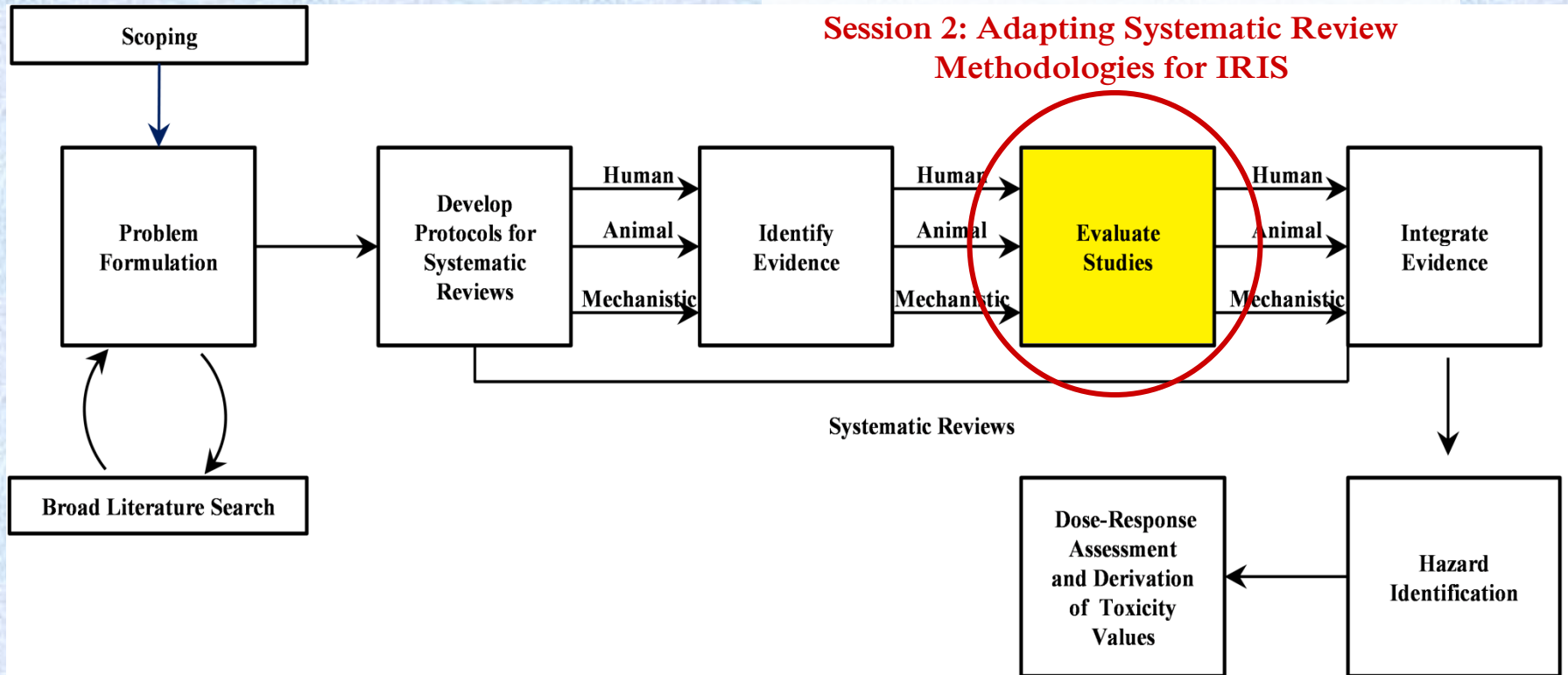
The IRIS Process: A Framework



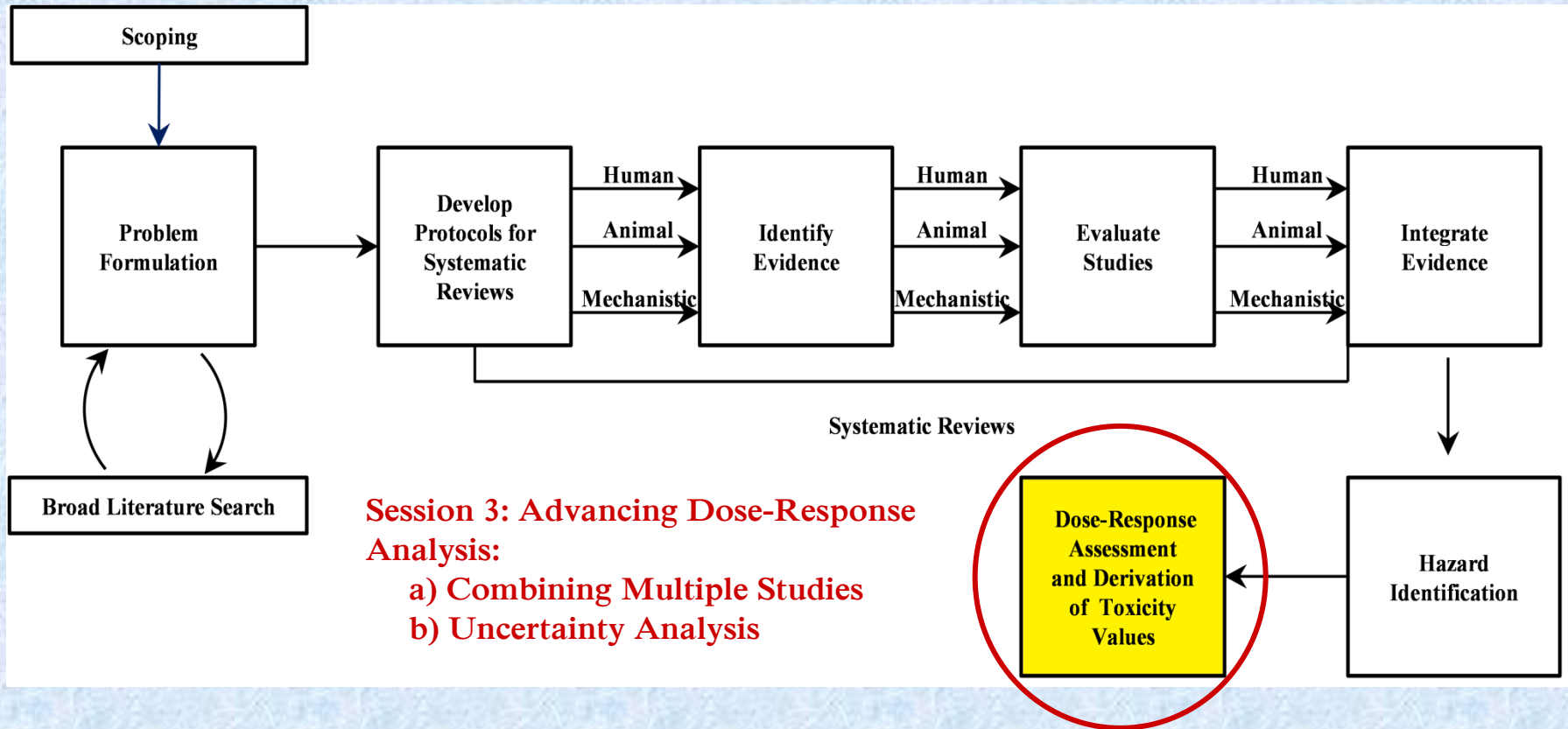
EPA IRIS Workshop Agenda



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EPA IRIS Workshop Agenda





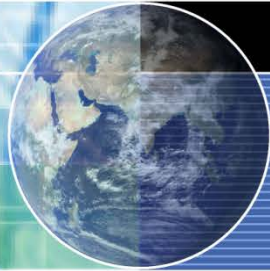
Report Structure

- Chapters cover general issues and specific elements of the framework
- For each element of the framework:
 - State of Practice
 - Recommendations of “Formaldehyde Report”
 - EPA’s response to date
 - IRIS Committee’s findings and recommendations



Future Directions

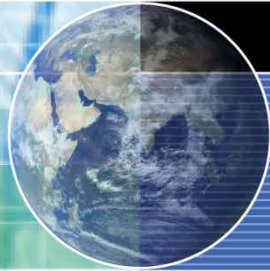
- The committee expects EPA to complete its planned revisions in a timely way and expects the revisions to result in a transformation of the IRIS program.
- To ensure that the IRIS program provides the best assessments possible, the committee identified three broad areas on which EPA should focus attention.



Future Directions (cont.)

- First, the assessment methods will need to be updated in a continuing, strategic fashion.
- Second, inefficiencies in the IRIS process need to be identified and addressed systematically.
- Third, EPA management needs to evaluate human and technologic resources that are needed to conduct IRIS assessments and support methodologic research and implementation of new approaches.

If sufficient financial and staff resources are not available to EPA, it will not be able to continue to improve the IRIS program and keep pace with scientific advancements.



Overall Conclusions of IRIS Committee

- It is clear that EPA has embraced and is acting on the recommendations in the NRC formaldehyde report.
- The changes that EPA has proposed and implemented in various degrees constitute substantial improvements in the IRIS process.
- If current trajectories are maintained, inconsistencies identified in the present report are addressed, and objectives still to be implemented are successfully completed, the IRIS process will become much more effective and efficient program.



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