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HUMAN HEALTH RESEARCH PROGRAM
BUILDING A SCIENTIFIC FOUNDATION FOR SOUND ENVIRONMENTAL DECISIONS

Workshop on Research Needs for Community- Based Risk Assessment

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HUGH A. TILSON

National Program Director

Human Health Research Program
Office of Research and Development

ORD PROGRAMS INVOLVING HUMAN HEALTH



- *Human Health Research Program*
- Human Health Risk Assessment
- Particulate Matter
- Air Toxics
- Drinking Water
- Endocrine Disruptors
- Safe Pesticides/Safe Products
- Homeland Security

HUMAN HEALTH RESEARCH PROGRAM

The main objective of the Human Health Research Program is to reduce uncertainties associated with the risk assessment process by providing a greater understanding of exposures to environmental stressors and the basic biological changes that follow



Four Long-Term Goals of the Human Health Research Program

- **Long-Term Goal 1:**
 - Risk assessors/managers use ORD's methods, models and data to reduce uncertainty in risk assessment using mechanistic (or mode of action) information

- **Long-Term Goal 2:**
 - Risk assessors/managers use ORD's methods, models and data to characterize aggregate and cumulative risk assessment

- **Long-Term Goal 3:**
 - Risk assessors/managers use ORD's methods, models and data to characterize and provide adequate protection for susceptible subpopulations

- **Long-Term Goal 4:**
 - Risk Assessors/managers use ORD's methods and models to evaluate risk management decisions

Scientific Questions Driving Research on Cumulative Risk

- What biomarkers are available to improve cumulative risk assessments?
- What exposure models are available that can estimate aggregate exposures and cumulative risk?
- How can mode of action and exposure information be used to conduct cumulative risk assessments?
- How can cumulative risk be assessed at the community level?

Research on Community Risk

- Develop tools and framework to assess interaction of environmental chemical and non-chemical stressors at the community level
- Research on assessing exposure and health risk of tribes due to cultural practices
- Evaluate tools for use in assessing community risk
 - Regional demonstration studies
 - Community action for a renewed environment
 - National Children's Study