

Design



Data and Methods



Communication



Review and Accountability

# ACC's Principles for Improving Chemical Hazard and Risk Assessments

Assessments should focus on understanding the inherent properties of substances in order to determine the likelihood of harm from a specific exposure. The public, businesses and regulators look to government assessments for reliable information about the potential hazards and risks associated with chemicals.

### Identify Key Science Issues Prior to Initiation of Assessment

- Discuss the purpose, scope and technical approaches
- Engage stakeholders

#### **Apply Objective Criteria**

- Develop and apply consistent criteria for selecting and evaluating a study, before an assessment begins
- Evaluate all studies to determine their quality, relevance and reliability

# **Ensure Assessments** are Transparent

- Disclose key information and assumptions used to develop assessments and reach conclusions
- Make materials, including important data sets, publicly available

## **Conduct Scientific Peer Review by Independent Experts**

- Ensure peer reviewers are fully independent from the program office issuing the assessment
- Evaluate peer review panels for conflicts of interest; ensure panels contain a balance of perspectives and appropriate technical expertise

#### **Use Modern Science and Tools**

- Use relevant data
- Consider how chemicals act in the body
- Evaluate chemicals at relevant exposure levels

#### **Integrate Evidence**

- Give the greatest weight to information from the highest-quality and most-relevant studies
- Transparently and objectively integrate evidence to make realistic determinations of hazards and risks; consider all types of evidence

## Characterize Hazards and Risks Fully and Accurately

- Present hazards and risks in an easy-to- understand manner to stakeholders and risk managers
- Present a range of plausible values, including central estimates when going beyond a screening level assessment

#### **Improve Accountability**

 Use an independent accountability procedure to verify that revised assessments are accurate and responsive to scientific and peer review

RESULT: Public Trust in High-Quality Risk Assessment