

Handout 3.1 Types of Information Collected and Considered When Performing the Risk Assessment

- A. Hazard Identification
 - Collection of Data
 - a. Name of Substance
 - b. Physical/Chemical Properties
 - c. Source of Information
 - d. Exposure to Toxic Substances
 - Route of exposure
 - Duration of exposure
 - Frequency of exposure
 - Exposure to other toxic substances
 - e. Information on Other Factors
- B. Hazard Evaluation or Dose-Response Assessment
 - 1. Calculate Dose-effect
 - 2. Incorporate Safety Factor
 - 3. Determine Dose-response Relationship
- C. Exposure Assessment
 - 1. General Information for Each Chemical
 - a. Molecular Formula and Structure
 - b. Physical and Chemical Properties
 - 2. Sources
 - a. Characterization of Production and Distribution
 - b. Uses
 - c. Disposal
 - d. Summary of Environmental Releases
 - 3. Exposure Pathways and Environmental Fate
 - a. Transport and Transformation
 - b. Identification of Principal Pathways of Exposure
 - c. Prediction of Environmental Distribution
 - 4. Measured or Estimated Concentrations
 - Estimation of Environmental Concentration
 - 5. Exposed Human Populations
 - a. Effects from exposure to simple and complex mixtures
 - b. Geographic area
 - c. Health Impact on Susceptible Population
 - d. Population habits
 - 6. Integrated Exposure Analysis (Measurement of Exposure)
 - Calculation of Exposure
 - a. Identification of the exposed population
 - b. Identification of pathways of exposure
- D. Risk Characterization