

**HANDOUTS and VISUAL AIDS**  
**MODULE III**

### **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