Goals: This safety session should teach you to:
A. Recognize your right to know about chemical hazards and protections.
B. Use the right to know to work safely with chemicals.

OSHA Regulations: 29 CFR 1910.1200

1. You Have a Legal Right to Know About Chemical Hazards and Protections
A. OSHA’s Hazard Communication Standard (or HAZCOM) requires that everyone who works with a hazardous chemical has the right to know about its hazards and how to protect against those hazards—and the responsibility to use that knowledge to work safely.

2. Chemical Manufacturers Identify Hazards and Key Precautions
A. Manufacturers must:
   1. Determine the physical and health hazards of their products.
   2. Identify those hazards and key safety precautions on chemical container labels and safety data sheets (SDSs).

3. Employers Inform Employees About Chemical Hazards and Precautions
A. Employers must:
   1. Develop a written hazard communication program, including a list of hazardous chemicals used or stored in the facility.
   2. Train employees to identify chemical hazards and to use information and procedures to reduce the risks.
   3. Assure that all chemicals have proper labels and complete, easily available MSDSs.

4. Chemicals May Present Physical Hazards
A. They may catch fire easily; suddenly release pressure and explode; or react when exposed to heat, air, water, or certain other chemicals by burning, exploding, or releasing dangerous vapors.

5. Chemicals May Have Health Hazards
A. Acute health problems develop quickly after exposure (e.g., corrosive skin burns).
B. Chronic health problems develop over time, often after many exposures (e.g., cancer from inhaling a toxic chemical).
C. Exposure to health hazards can occur in three ways:
   1. Skin or eye contact, which can cause burns, rashes, or even blindness
   2. Inhaling, or breathing in, chemical vapors and fumes, which can cause dizziness, nausea, lung damage, unconsciousness, or even death
   3. Swallowing (including eating or smoking after handling chemicals without first washing), which can cause poisoning or damage to internal organs
6. Container Labels and SDSs Identify Chemical Hazards
   A. You must read them carefully before starting any job involving a chemical.
   B. Labels give a brief summary of hazards.
      1. Never use a chemical if its label is missing or too damaged to read.
   C. SDSs detail a chemical’s hazards and signs of exposure, situations that make the chemical more dangerous, and the procedures and equipment to use to reduce risk.

7. Container Labels and SDSs Describe Safety Precautions and Instructions
   A. Their safety information may include:
      1. Handling and storage requirements (e.g., ventilation, avoiding heat exposure)
      2. Personal protective equipment (PPE) to wear when using the chemical
      3. Signs and symptoms of exposure that could cause health problems
      4. How to handle spills, fires, and other emergencies involving the chemical

**Summation: Use Your Right to Know About Chemical Hazards and Protections**

Chemicals can be both useful and hazardous. Understand the risks and use your training and available information to protect yourself and others on the job.