

## HAZARD COMMUNICATION PROGRAM

This handout summarizes North Carolina State University's Hazard Communication program. Your supervisor will provide the necessary additional information for your specific workplace.

### I. The Hazard Communication Standard

The purpose of the Hazard Communication Standard, also known as the Right-to-Know, is to protect the employee from exposure to hazardous chemicals. To do this, employees receive information about hazardous chemicals and how to safely work with them. Thousands of chemicals are used daily throughout the campus and new ones are routinely introduced into the work environment. The goal of this program is to reduce the injuries and illnesses that result from exposure to hazardous chemicals. The first step in protecting yourself is to know what substances are hazardous. The Occupational Safety and Health Administration (OSHA) defines a hazardous chemical as one that poses a physical and/or health hazard to the user. Typical hazards include:

- **Physical:** compressed gases, explosives, flammables, oxidizers
- **Health:** carcinogens, poisons, irritants

### II. Exposure to Chemical

When you work with chemicals, it is important to always protect yourself from potential exposure.

There are four main types of chemical exposure:

1. **Inhalation-** Many chemicals produce a dust, vapor, or mist that can easily be inhaled. Some particles are so small they cannot be seen. Remember, the nose or the ability to smell is often a poor indicator of exposure because some chemicals pose a danger before you can smell them and many chemicals do not smell at all. Also remember that you can rarely see gases.
2. **Ingestion-** Many chemicals are harmful even when only a small amount is ingested. For this reason, there is no eating or drinking in the laboratories or around any chemicals. You should also make a practice of washing your hands before you eat to remove any chemicals that may be still present on your hands.
3. **Absorption-** Many workplace chemicals enter the body through cuts, scratches, even through unbroken skin. If you have a cut or abrasion on your skin, cover it with a bandage and wear gloves.
4. **Injection-** One of the most dangerous types of exposure occurs when a sharp object, contaminated with a hazardous chemical, accidentally penetrates the skin. Be careful when using all sharp items.

### III. Hazard Information for Employers

The Hazard Communication Standard requires chemical manufacturers, importers, and distributors to provide information to employers who buy chemicals. This is to prevent workplace injuries and illnesses through information and training programs. The information is provided in two ways:

1. **Product Labels-** Labels are an all-important, first visible clue to the relative dangers and risks of the chemical. Labels must be legible, written in English, and prominently displayed. Three elements are required on all container labels: Name or identity, Hazard Warnings (physical and health), name and address of manufacturer. This information is also required when you transfer a chemical from one container to another. Employees are responsible for ensuring that labels are never defaced or removed.
2. **Material Safety Data Sheets-** The employer must have MSDS for chemicals readily accessible to employees during all work shifts. The OSHA Standard requires that certain items be included in an MSDS, however, there is no required format. Therefore, employee training must include

information on how to read and understand different MSDS. Some important information on a MSDS include:

- Name and identity of chemical
- Hazardous ingredients
- Physical data
- Health Hazard data
- Fire and explosion data
- Reactivity data
- Storage spills and waste
- Personal protection information
- You can obtain a MSDS through the Environmental Health and Safety Center's web page

#### IV. **Written Hazard Comm. Program**

You can find NC State's written Hazard Communication Program in Environmental Health and Safety's web page at <http://www.ncsu.edu/ncsu/ehs/www99/right/handsMan/hazcomm/hazard.html>.

All departments should have a copy of this plan.

The program includes information on:

- Hazard determination
- Provisions for container labeling
- Availability of Material Safety Data Sheets
- Employee information and training program policy

#### V. **Employee Information and Training**

*Who must be trained?* Employers must provide information and training to all employees who may be exposed to hazardous chemicals under normal working conditions or in a foreseeable emergency. Training must be provided as follows:

1. At the time of initial assignment. This training is a general overview of the Hazard Communication program at North Carolina State University and is conducted by the Environmental Health and Safety Center as part of New Employee Orientation. Hazard Communication training is also available as a web module via the Environmental Health and Safety homepage ([www.ncsu.edu/ehs](http://www.ncsu.edu/ehs))
2. When a new hazard is introduced into an employee's work area or the employee's duties or work area change. This is the second part of the training whereby detailed information about how to safely work with chemicals in the employee's environment will be provided. Training will be conducted by the supervisor or the most knowledgeable person in the work area.

*What subjects must be covered?* Training must include:

- Existence of the Haz Com standard and requirements
- Location and availability of the written Haz Com program
- Operations in work areas where hazardous chemicals are present
- Physical and health hazards of the chemical in the work area
- Measures that employees can take to protect themselves
- Methods and observations (such as smell or visual appearance) that workers can use to detect the presence of a hazardous chemical that they may be exposed to
- Employer's specific procedures to provide protection such as personal protective equipment, work practices, and engineering controls
- How the Right-to-Know program is conducted in the workplace, how to read and interpret MSDS, and how employees can obtain and use the available hazard information
- There is medical assistance available when an overexposure incident occurs

For more information on the Hazard Communication Program, contact Environmental Health and Safety at 515-7915.