THE TEXAS HAZARD COMMUNICATION ACT

The Texas Hazard Communication Act originally became effective on January 1, 1986 and was revised in 1993. The purpose of this act is to reduce the incidence of chemically related occupational illness and injury and to provide a means for the general public to learn about the chemical hazards associated with businesses in the community. The Act sets the minimum requirements employers must meet for providing information about hazardous chemicals in the workplace to employees and other interested parties. It is patterned after the federal Occupational Safety and Health Administration (OSHA) Hazard Communication Standard and is enforced by the Texas Department of Health.

Under the Act, the University of Texas Health Science Center (UTHSC) must notify employees of their rights under the Act, compile workplace chemical lists for the nonresearch areas, train all exposed employees regarding the hazards associated with the chemicals they use, maintain a file of Material Safety Data Sheets (MSDS), and supply the appropriate emergency response personnel with information.

The Hazard Communication Act defines a hazardous chemical as one which presents a physical or a health hazard. Physical hazards include flammable materials, combustible liquids, compressed gases, oxidizers, organic peroxides, explosives, reactive and water reactive compounds. Health hazards include toxic and highly toxic chemicals, corrosives, irritants, and carcinogens. The definitions of these terms and guidelines for proper handling of these chemicals are addressed later in this section.

The purpose of this booklet is to provides general information to employees and students in the use and handling of hazardous chemicals. Topics addressed include definitions of hazardous chemicals, guidelines for use and storage, factors affecting chemical action on the body, Material Safety Data Sheets and other reference sources (See Appendix I), emergency procedures, proper protective equipment, first aid, disposal procedures, and employee rights and responsibilities under the Hazard Communication Act. Specific information concerning those materials to be handled in research laboratories must be provided by the principal investigators.

EMPLOYEE RIGHTS AND RESPONSIBILITIES

The Hazard Communication Act gives employees certain rights. Employees who may be or may have been exposed to hazardous materials in the workplace under normal conditions or foreseeable emergencies are covered by the Act. Graduate and medical students are considered to be employees under this definition.

Employee rights are listed in the "Notice to Employees" found in Appendix II. They include:

1. The right to be informed of exposures to hazardous chemicals.

2. The right to ready access to Material Safety Data Sheets and other references regarding chemical hazards.

3. The right to receive training on the hazards of the chemicals and on measures which can be taken to protect them from these hazards.

4. Employees may not be required to work from unlabeled containers of hazardous chemicals, except for portable containers for immediate use, the contents of which are known to the user.

5. Employees may file complaints with the Texas Department of Health and may not be discharged or discriminated against in any manner for the exercise of any rights provided by this act.

Under the University's Hazard Communication plan, both faculty and staff (including students) have certain responsibilities with respect to hazard communication.

Principal investigators are responsible for determining who among their staff fall under the provisions of the Act. They are to have their new staff attend a mandatory general training sessions given by Institutional Safety (Laboratory Safety & Hazardous Waste Generator safety training course info). The principal investigators are then responsible for training staff members concerning the hazards of the specific chemicals in their laboratories (Specific Hazardous Chemical Training form). To ensure that knowledge is kept current the Act requires that training be performed as needed and documentation be maintained. Principal investigators are also responsible for ensuring compliance with the labeling requirements of the Act.

Staff members are responsible for only using chemicals for which they are adequately trained. They are expected to identify hazardous chemicals in the workplace by using the chemical lists provided in the manual or by determining if the chemical falls into any of the hazard categories as discussed below. Staff are expected to consult references, including Material Safety Data Sheets, to determine hazard characteristics and handling procedures. The staff is expected to follow supervisor's instructions regarding the use of hazardous chemicals and to observe the guidelines stated here.

HAZARD DETERMINATION

Before working with any chemical it is important to determine the hazards inherent in handling the material. The primary source of information is the label on the container. Manufacturers are required to provide the user with safety information for proper handling. Material Safety Data Sheets for all products purchased by the University are available on request from Institutional Safety.

Additional safety references are available through the library and the Safety Office. All new materials should be thoroughly investigated before being put to use. It is important to remember that a chemical may have several different health and physical hazards which must be considered when deciding safe use conditions.

MATERIAL SAFETY DATA SHEETS

A Material Safety Data Sheet (MSDS) gives information and details on chemical and physical dangers, safety procedures, emergency response procedures, and the safe handling of a substance. There are several formats for MSDS but they all must contain the same basic information divided into the following categories:

1. Identification
   a. Identifies substance by trade name, synonyms, chemical name and various types of identifying numbers. The trade name and/or chemical name will match the name on the container label.
   b. Identifies hazardous components of mixtures.

2. Physical Characteristics
   Physical description, boiling point, melting point, specific gravity, vapor pressure, solubility, vapor density.

3. Fire fighting data
   a. Flash point
   b. Type of extinguisher
   c. Fire fighting instructions

4. Reactivity
   a. Chemical stability
   b. Materials with which the substance is incompatible
   c. Conditions to avoid

5. Health Hazards
   a. Toxicity information
   b. Health effects of exposure
   c. First aid measures

6. Spill and Leak Procedures
   Includes waste disposal information

7. Personal Protective Equipment
   Types of gloves, respirators, eye protection that should be used with this material.
8. Storage and Special Information

Suppliers of hazardous chemicals are required to supply UT Health Science Center with one copy of the MSDS. Usually the MSDS is sent to Institutional Safety where a master file is maintained. If a MSDS is received with a shipment please forward a copy to EH&S.

Copies of MSDS may be requested by contacting Institutional Safety. If one is not on file for the material of interest one will be requested from the supplier. Requests should be made on a copy of the form in Appendix III.

BOTTLES AND CONTAINER LABELS

Labels on bottles and containers of hazardous chemicals purchased after Nov. 25, 1985, should have hazard warnings on them. The labels on stock bottles should not be defaced or removed. When transfers are made from the stock bottles to other containers, the secondary containers should be labeled with the name of the chemical, using the same nomenclature as the stock bottle. Identical labeling will facilitate hazard determination. The only exception to the labeling requirement is for containers filled by an employee who is going to use the material during the immediate work shift.

TRAINING REQUIREMENTS

The Hazard Communication Act requires that all employees covered by the Act at UT Health Science Center, receive training on the hazards of the chemicals and on proper handling methods to protect them from the chemicals during use, storage, and disposal.

The institutional compliance plan divides the training into two parts. A general training class "Hazardous Chemicals in the Laboratory," given by Institutional Safety is required for all new employees and students covered by the Act. Institutional Safety will contact new employees to determine their status under the Act and to notify them of the times and dates of the general training class. New faculty will be trained on an individual basis by EH&S.

Once an employee has attended the general training class, continued training becomes the responsibility of the principal investigator. The investigator will ensure that all personnel under his supervision understand the hazards associated with the chemicals in the laboratory and that these chemicals are properly handled, stored and disposed. Faculty members are required to keep safety training for their staff current. It is recommended that at least on an annual basis training be performed.

Institutional Safety will keep the faculty informed of any developments regarding the Act or the institution's compliance plan that might have an effect on faculty responsibilities regarding training.