

# Hazard Communication Standard General Training

## I. Scope

In 1983 the Federal government established the OSHA Hazard Communication Standard (HCS). This standard is designed to protect employees who use hazardous materials on the job by requiring employers to provide information and training on the proper handling and use of these materials. In the past there was no guarantee that employers would communicate to their employees the chemical hazards they may face in their jobs. Container labels and warning sheets, if even provided, quite possibly didn't provide enough information on potential hazards, what to do in an emergency, or where to turn for help. The federal government decided to set a uniform hazard communication standard to ensure that the information necessary to keep employees safe is standard and communicated.



The HCS requires information to be prepared and transmitted regarding all hazardous chemicals. It covers both physical hazards (such as flammability), and health hazards (such as irritation, lung damage and cancer). Most chemicals used in the workplace have some hazard potential, and thus will be covered by this rule. As an employee you have the **RIGHT TO KNOW** about the hazardous materials used in your work area and the potential effects of these materials on your health and safety.

As an employer, ENT and Allergy Associates, is required to develop a written hazard communication program which includes:

- Informing employees about the Hazard Communication Standard
- Explaining how the Standard is being put into effect in this workplace
- Providing information and training on hazardous chemicals which includes:
  - o How to recognize, understand and use labels and Material Safety Data Sheets and,
  - o Use safe procedures when working with hazardous substances.

This training module covers most of the information you will need to know regarding the ENT and Allergy Associates Hazard Communication Program; however, this training module will not cover the location of the MSDSs in your area, nor will it provide you with site specific training. The Hazard Communication Standard requires that employees are provided with effective information and training on hazardous chemicals in their work area at the time of their initial assignment, and whenever a new physical or health hazard the employees have not previously been trained about is introduced into their work area.

**Your training is not complete until both this training module and site specific training have been completed. For site specific training please contact the Practice Site Primary Responsible Party** (see Practice Site Specific Information sheet for the name of the specific person).

Hazard communication is a continuous program in your practice location. Compliance with the HCS is not a "one shot deal." In order to have a successful program, specific people in your

practice location are responsible for the initial and ongoing activities that must be undertaken to comply with the rule. This information can be found on the Practice Site Specific Information sheet at the front of the HAZCOM Plan in your office.

## **II. The Hazard Communication (HAZCOM) Plan**

Each practice site has a copy of the ENT and Allergy Associates HAZCOM Plan. This general plan is supplemented with Practice Site Specific Information which informs employees of who at that practice site is responsible for ensuring compliance with specific parts of the HAZCOM Plan.

## **III. Continuous Chemical Inventory and Material Safety Data Sheets (MSDS)**

### **A. Continuous Chemical Inventory**

As part of the HAZCOM Plan, each practice location must inventory the products used in your area and prepare a list (see Appendix B of the HAZCOM Plan) of all hazardous materials. If a material has any specific hazard warning then it must be included on the inventory list. The PSA or Supervisor is responsible for making sure that the list is created and maintained. When the inventory list is complete, an MSDS must be obtained for each product on the list and made available to you.

The broadest possible perspective should be taken when doing the inventory. Sometimes people think of “chemicals” as being only liquids in containers. The HCS covers chemicals in all physical forms – liquids, solids, gases, vapors, fumes and mists – whether they are “contained” or not. The hazardous nature of the chemical and the potential for exposure are the factors which determine whether a chemical is covered. If it’s not hazardous, it’s not covered. If there is no potential for exposure, the rule does not cover the chemical.

### **B. What is a Material Safety Data Sheet (MSDS)?**

Once the Continuous Chemical Inventory is completed, the next step is to determine whether we have a current Material Safety Data Sheet for all of them.

Chemical manufacturers must evaluate chemicals they produce to determine if they are hazardous. Using that information they must then prepare labels for containers and more detailed technical bulletins called material safety data sheets (MSDSs) which describes:

- the physical and chemical properties
- physical and health hazards
- routes of exposure
- precautions for safe handling and use
- emergency and first-aid procedures
- control measures



This comprehensive source of information helps prepare employers and employees to respond effectively to daily exposure situations as well as to emergency situations. There may be information on the MSDS that is not useful to you or not important to the safety and health of our particular practice. Concentrate on the information that is applicable to our

situation. Generally, hazard communication information and protective measures should be the focus of concern.

### Your Rights

1. Your workplace is required to have Material Safety Data Sheets available for every single hazardous chemical or substance you use or encounter as part of your job.
2. These must be readily available for employee review at all times you are in the workplace. In other words, they cannot be locked in an office or filing cabinet to which you do not have access.

### Your Responsibilities

1. If you do not know where the MSDSs for your area are kept, find out!
2. Familiarize yourself with the MSDS for those chemicals that you use.
3. If you cannot locate a MSDS, report it to the appropriate person immediately.

### Employers Responsibilities

1. Complete and accurate MSDSs are made available during each work shift to employees when they are in their work areas.
2. Information is provided for each hazardous chemical.

### C. Sections of an MSDS and Their Significance

OSHA specifies the information to be included on an MSDS, but does not prescribe the precise format for an MSDS. A non-mandatory MSDS form that meets the Hazard Communication Standard requirements has been issued and can be used as is or expanded as needed. The MSDS must be in English and must include at least the following information:



#### Section I. Chemical Identity

- Who makes it, their address, emergency phone number, date prepared
- An identity on the MSDS must be cross-referenced to the identity found on the label.

#### Section II. Hazardous Ingredients



- This includes the substance's hazardous components, chemical ID and common names.
- Worker exposure limits to the chemical, (a.k.a OSHA PEL or ACHIH TLV) are also included here.
- All components of a mixture that have been determined to present a physical hazard must be listed.

#### Section III. Physical and Chemical Characteristics



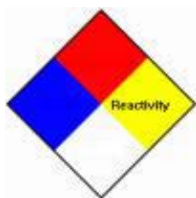
- The physical and chemical characteristics of the hazardous substance must be listed. These include items such as boiling and freezing points, density, vapor pressure, specific gravity, solubility, volatility, and the product's general appearance and odor. These characteristics provide important information for designing safe and healthful work practices.

#### Section IV. Physical Hazards Information

- The compound's potential for fire and explosion must be described. Also, the fire hazards of the chemical and the conditions under which it could ignite or explode must be identified. Recommended extinguishing agents and fire-fighting methods must be described.



#### Section V. Reactivity (Instability) Data



- This section presents information about other chemicals and substances with which it reacts. Information on any hazardous decomposition products, such as carbon monoxide, must be included.
- You learn here what substances to keep that particular chemical away from so it won't react.

#### Section VI. Health Hazards

- The acute and chronic health hazards of the chemical, together with signs and symptoms of exposure, must be listed. In addition, any medical conditions that are aggravated by exposure to the compound must be included. The specific types of chemical health hazards defined in the standard include carcinogens, corrosives, toxins, irritants, sensitizers, mutagens, teretogens, and effects on target organs (i.e. liver, kidney, nervous system, lungs, mucous membranes, skin, eyes, etc.).
- The route of entry section describes the primary pathway by which the chemical enters the body. There are four principal routes of entry: inhalation, absorption, ingestion and injection.
- If the compound is listed as a carcinogen (cancer-causing agent), this information must be indicated on the MSDS.
- Emergency and first aid procedures should an accident happen will be listed here too.



#### Section VII. Precautions for Safe Handling and Use

- What to do if the substance leaks or spills
- Proper disposal of the substance
- Equipment and procedures needs for cleaning up spills and leaks.
- Safe handling precautions and instructions
- Storage information

#### Section VIII. Control Measures

- This section includes engineering controls, safe handling procedures, and personal protective equipment. Information is often included on the use of goggles, gloves, ventilation, respirators, and face shields.



### D. OSHA Requirements Regarding MSDSs

Employers must maintain a complete and accurate MSDS for each hazardous chemical that is used in the facility. They are entitled to obtain this information automatically upon purchase of the material. When new and significant information becomes available concerning a product's hazards or ways to protect against hazards, chemical manufacturers, importers, or distributors (e.g. Caligor) must add it to their MSDS within

three months and provide it to their customers with the next shipment of the chemical. Employers must have a manufacturer specific MSDS for each hazardous chemical used in the workplace.

While MSDS(s) are not required to be physically attached to the shipment, they must accompany or precede the shipment. When the manufacturer/supplier fails to send an MSDS with a shipment labeled as a hazardous chemical, the employer must obtain one from the chemical manufacturer, importer, or distributor as soon as possible. Similarly, if the MSDS is incomplete or unclear, the employer should contact the manufacturer or importer to get clarification or obtain missing information.

Review any MSDSs to make sure that they are clear and legible. If there is any problem with the MSDS contact the supplier for clarification. If you have any questions or concerns after reviewing the information contained within a Material Safety Data Sheet, please feel free to contact the Director of Regulatory Affairs at (914) 333-5924.

The Continuous Chemical Inventory, the MSDS and other documents for the HAZCOM Plan are located in an area that is accessible to you at all times. If an emergency or crisis occurs, or if you need more information, you must be able to access the information quickly. Your PSA or Supervisor will inform you where this information is in your practice location.

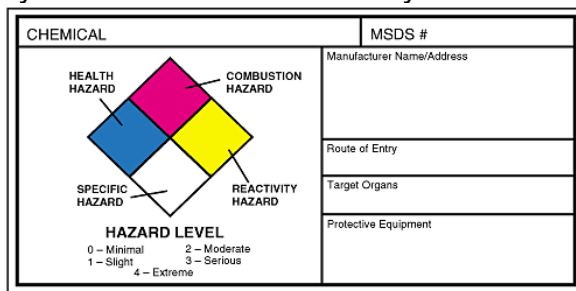
#### **IV. Labels and Other Forms of Warning**

The Hazard Communication Standard requires that every container of hazardous chemicals you receive must be labeled, tagged or marked with the following required information:

- Identity of the hazardous chemical(s);
- Appropriate hazard warnings; and
- Name and address of the chemical manufacturer, importer or other responsible party.

Chemical manufacturers, importers and distributors must ensure that each container of hazardous chemicals leaving the workplace is appropriately labeled. We can rely on the labels provided by our suppliers however, we have a responsibility to ensure that any shipped containers of hazardous materials are, in fact, labeled.

Portable containers that contain hazardous chemicals transferred from labeled containers do not have to be labeled if the contents are intended for immediate use of the employee who performs the transfer. All other portable containers (e.g. endo-caddies) must be labeled as per the Hazardous Chemical Labeling System protocol (see Appendix C of the HAZCOM Plan). The key to the labeling system must be posted in an area accessible to key personnel for easy reference when necessary.



Labels must be legible, printed in English (plus other languages, if desired), and prominently displayed.

## **V. How Do I Know How to Use These Chemicals Safely?**

The Director of Regulatory Affairs is responsible for seeing that a written plan called the Hazard Communication (HAZCOM) Plan is written for each practice location. This details the policies for dealing with hazardous chemicals or products specific to the practice location, for example:

- the hazardous chemical inventory
- how each element of the Hazard Communication Standard will be met
- The locations of your HAZCOM plan and MSDS
- A copy of the Hazard Communication Standard so that you can read more about it.
- Other related information

### **A. Working with Health Hazards**

Chemicals that are health hazards must be absorbed in sufficient quantities to cause harm. Most of us would consider salt as a safe material necessary for our body's chemical balance. High concentrations of salt can cause high blood pressure and/or lead to heart problems. So salt is safe at low levels, but at consistently high levels it can be dangerous and/or harmful. This is true with most materials. The trick is to avoid harmful exposure levels. Toxicologists test materials and report the quantity of the material we can work with without adverse effects. This amount is called an "exposure limit." Although we can work safely with hazardous materials below this limit, the best approach is to keep our exposure as low as possible. To do this, use the minimum amount needed for a particular task, use good ventilation, and use personal protective equipment.

Chemicals can enter the body through four common ways:

- Ingestion (eating the material): Eating or ingesting chemicals usually occurs when food and hazardous chemicals are used in the same vicinity. The food may become contaminated with chemicals and be eaten without realizing it is contaminated. However, persons using chemicals can easily ingest the chemicals into the body via contaminated hands if they are not washed prior to eating, drinking,



applying cosmetics, or sticking part of the hand or a writing utensil that has become contaminated into the mouth.

- Absorption (through the skin): Absorption usually requires significant contact time, and one can be protected by preventing contact with skin, using personal protective equipment (e.g. gloves, goggles, etc) and/or using good hygiene practices (hand washing).

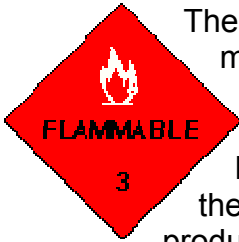


- Inhalation (breathing): Inhaling chemicals is usually the most significant route of entry. This can be minimized by using only the amount of the chemical or product necessary for the job; by keeping containers closed except when transferring or using materials; and by employing good ventilation.



- Injection (puncture, cuts, open wounds): Introducing the material directly into the bloodstream. Injection may be the result of a mechanical injury from “sharps” or from mishandling contaminated broken glassware.

## B. Working with Physical Hazards



The most common physical hazard encountered is flammability. Flammable materials, such as alcohol, will produce enough vapors to ignite in the presence of a flame or spark. Vapors can also travel some distance from an open container, become ignited and flash back to the area of the container.

Making certain that there is good ventilation and that no ignition sources are in the immediate area will minimize the likelihood of a fire when using flammable products. Remember to keep containers of flammable materials tightly closed when not in use. The spray from aerosol cans with combustible contents may also ignite in the presence of an open flame or spark. Pressurized containers that contain compressed gases may also explode or rupture if overexposed to heat or are punctured. They must be stored away from heat, direct sunlight and ignition sources.

## C. Recognizing a Spill or Leak

It is also important to know how to recognize a spill or leak of a hazardous chemical. When you first come into contact with the product, check the container for signs of wetness, discoloration, or package leakage. Sometimes unexpected or unusual odors can indicate a spill or leak. Gather as much information as possible to help you determine the contents of the container and any possible hazards associated with it. Check MSDS for clean up instructions. For most spills, absorb the material with a paper towel or tissue and dispose of it appropriately. If the material has come in contact with your skin or clothing, wash the affected area using plenty of soap and water. Remove and launder soiled clothing. The label or MSDS will supply you with more detailed information.

## **VI. Your Responsibility to Protect Yourself**

While ENT and Allergy Associates and the government have gone to a lot of trouble to protect you, you have a responsibility to maintain safe work practices to protect yourself. The following should be a part of your every day work habits.

- Identify hazards you may face in your job, or before beginning non-routine tasks
- Respect all precautions and do not take chances.
- Ask your supervisor or the Director of Regulatory Affairs when in doubt.
- Know in advance what could go wrong and what to do about it.
- Know how and where to get help.
- Read labels and MSDSs to answer questions regarding safe use of a chemical or product.
- Know where to find information about the chemicals you use.
- Follow warnings and instructions.
- Use the correct protective clothing and equipment when handling hazardous substances.
- Learn emergency procedures.
- Practice sensible, safe work habits.