

# YOUR RIGHT-TO-KNOW

## DEPARTMENT OF ENVIRONMENTAL HEALTH & SAFETY

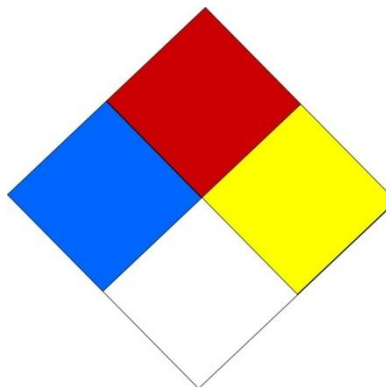
Case Western Reserve University is committed to maintaining a safe and healthy environment in which faculty, staff, and students can work, study, and live. "Right-to-Know" is a generic term used when describing an employee's legal right to obtain information about the hazards of chemical substances used on the job, and the precautions necessary to work safely with these materials. The Occupational Safety & Health Administration (OSHA) requires Case Western Reserve to communicate this information to affected employees through the "Hazard Communication" standard (29 C.F.R. 1910.1200), a federal regulation that applies to all employers in the United States. If you would like to review this regulation, you may visit the OSHA website ([www.osha.gov](http://www.osha.gov)) or contact the safety office (216.368.2907) to have a safety specialist help you find the regulation and, if necessary, assist you in understanding your rights under the regulation.

The "Right-to-Know" standard applies to all employees who have the potential for exposure to chemical hazards while conducting their work place activities. The standard requires that the university, through a written Hazard Communication Program, coordinate the methods that hazard information will be communicated to employees. Communication of hazard information includes distributing this brochure, appropriate training through the EHS office to prepare you to identify hazards in your work place, making material safety data sheets (MSDS) available to employees upon their request, and an established hazard warning and labeling system that will notify personnel of the hazards in their workplace.

The EHS office is available to answer any questions, respond to concerns, or provide information related to hazardous materials or practices in your work place. If you have any questions please do not hesitate to contact the EHS office by phone (216.368.2907) or email ([does@case.edu](mailto:does@case.edu)).

### RIGHT-TO-KNOW INFORMATIONAL BROCHURE

This document is distributed to all personnel during orientation when hired. This brochure contains all necessary information for employees who are not routinely exposed to hazardous materials such as administrative, clerical, and accounting personnel.



## TRAINING

The EHS office offers numerous trainings depending on what hazards you may come into contact with while working at the university and your job classification. Below is a short description of the trainings and, generally, the personnel who need to attend that training. If you have questions regarding what training you will need, call the EHS office at 216.368.2907.

### *Biohazard and Bloodborne Pathogen (Includes General BSL1 and BSL2 Biohazards)*

**Who needs to attend**—Personnel who work with infectious organisms, materials derived from humans (tissue, blood, *etc.*), clinical workers (medical residents, medical and dental students, dentists, nurses, *etc.*), and any personnel who may come into contact with materials derived from humans (facility services, custodial personnel, Police and Security, *etc.*).

This training will review basic requirements for working with infectious organisms and bloodborne pathogens. Universal precautions and waste handling and treatment will be discussed.

### *Laboratory Safety & Regulated Chemicals*

**Who needs to attend**—All personnel who work in laboratories using chemicals or commercial chemical products.

This training will review the basic laboratory and chemical safety as well as chemical waste handling procedures. Use of engineering and administrative controls and personal protective equipment to reduce exposure will also be discussed.

### *Right-to-Know (Hazard Communications)*

**Who needs to attend**—All personnel who are not classified as laboratory personnel and perform tasks in areas where hazardous chemicals are present or work with chemicals for non-research purposes. Examples include facility services, custodial, Police and Security, clinical personnel (medical residents, medical and dental students, dentist, nurses, *etc.*), anyone who is not conducting research, but does work in a laboratory.

This training will explain employee rights and employer responsibilities, hazardous materials that can be found in the workplace, methods to access material safety data sheets and a description of the information contained in these documents, and the labeling and warning system.

### *Respirator Safety*

**Who needs to attend**—Personnel who are required to wear a respirator (N-95, half-face, full-face) during the course of their work.

This training will outline when a respirator is required, and when it will not be effective. Also, proper donning and doffing and storing. *Please note that a medical examination will need to be completed prior to training and a fit-test prior to wearing a respirator.*

### *Radioactive Material Handling*

**Who needs to attend**—All personnel who work with radioactive materials. Information regarding the hazards associated with radiation, safe use of radioactive materials, proper decontamination procedures, and exposure monitoring will be provided during this training.

### Ancillary Radiation

**Who needs to attend**—Personnel who do not work directly with radioactive materials, but are exposed to it by entering into areas where radiation is present. Examples include facility services, custodial personnel, Police and Security, laboratory personnel who do not handle radiation, but work in laboratories where it is used. This training will review the hazards associated with radiation and how to identify areas where radiation is used.

### Laser Safety

**Who needs to attend**—All personnel whose work involves Lasers.

This training will review the hazards associated with using Lasers and how personnel should protect themselves.

### X-Ray

**Who needs to attend**—Personnel who use X-ray devices must attend this training.

This training will review the hazards associated with use of X-ray technology and how personnel should protect themselves.

### Driver Safety

**Who needs to attend**—Personnel who operate vehicles owned by Case Western Reserve.

Defensive driving techniques will be discussed as well as procedures that should be followed in the event of an accident. Please note that personnel attending this training must bring a valid driver's license to the training.

### Hazardous Material Shipper's Training

**Who needs to attend**—Any person who will offer hazardous material for transportation. Hazardous materials include chemicals, infectious organisms, patient specimens, radioactive materials, and any package containing dry ice.

This training will discuss the Department of Transportation and International Air Transport Association regulations as they apply to university personnel who ship hazardous materials. Classification of hazardous materials, proper packaging and labeling will also be discussed.

### **MATERIAL SAFETY DATA SHEETS (MSDS), SOON TO BE NAMED SAFETY DATA SHEETS (SDS)**

OSHA requires that a MSDS be created and distributed by a product's manufacturer, importer, or distributor. The MSDS is a great source for personnel to retrieve safety and health information regarding chemicals that they are handling. You can access SDSs or obtain additional information by any of the following methods:

- Ask your supervisor or principal investigator if information is available in the workplace
- Visit the EHS homepage (<https://www.case.edu/ehs>) and select the "MSDS" hyperlink on the left-hand side of the page.
- Call EHS (216.368.2907) and request the information by mail, fax, or email.
- Submit a request to EHS by e-mail to [does@case.edu](mailto:does@case.edu) or by fax at 216.368.2236

- Write the EHS office through campus mail (Location Code: 7227) or through the United States postal service at:  
 Department Environmental Health and Safety  
 Case Western Reserve University  
 Service Building 1<sup>st</sup> Floor  
 2220 Circle Drive  
 Cleveland, OH 44106-7227
- Go to the EHS office located on the 1<sup>st</sup> floor of the Service Building and ask the department assistant or safety specialists for assistance finding the MSDS.
- Contact the manufacturer of the product and request the information or visit the manufacturer's homepage.

There is no specified format for MSDSs, but all must contain the following information:

- Name of the material as listed on the product label;
- Supplier's name, address and emergency contact information;
- Identity of the material including chemical names, common names, and mixtures;
- Hazardous ingredients or mixtures;
- Physical hazards (e.g., flammable, corrosive, explosive);
- Health hazards (e.g., toxic, carcinogen, symptoms of exposure, and target organ effects);
- Physical characteristics (e.g., color, state, boiling point, vapor pressure);
- Routes of entry (i.e., how the chemical will enter the body and cause harm);
- Exposure limits (i.e., both legally enforceable and recommended airborne concentrations that should not be exceeded);
- Carcinogenicity (i.e., ability to cause cancer) status and toxicology information;
- Recommended personal protective equipment (e.g, gloves, eye protection, respirator), engineering controls (e.g., direct and general ventilation), storage precautions, and chemical incompatibilities;
- First aid procedures including recommendations to medical professionals;
- Date of MSDS preparation or latest revision date.

**NOTE: There will be consistency to the new SDS format.**

If you would like assistance in locating or understanding a MSDS for a particular material please call the EHS office (216.368.2907)

## LABELS AND WARNING SIGNS

Principal investigators, laboratory managers, and researchers are required to place signs at laboratory entrances to warn employees and visitors of chemical, biological, radiological, and physical hazards in their laboratories as well as provide contact information for knowledgeable personnel for routine or emergency situations. An example of a laboratory door sign can be seen to the right.



As you can see, there are various warnings that may be posted on the laboratory door sign. These symbols can also be found on containers of hazardous materials. A list of hazard pictograms and their meaning can be found below. NOTE: The symbols bordered by a red diamond follow the new Global Harmonization System (GHS).



**Explosive Material**—material that contains a large amount of stored energy that will rapidly expand upon ignition. This symbol is also used for self reactives and organic peroxides.



**Toxic**—Chemicals (solids, liquids, or gases) that are acutely poisonous are present.



**Flammables**—Materials that ignite easily and burn readily. Other materials using this symbol include self reactives, Pyrophorics, Self-Heating, Flammable Gas Emitters, and Organic Peroxides.



**Corrosive Material**—Chemical that will destroy or irreversibly damage another surface or substance with which it comes into contact.



**Health Hazard**—This includes carcinogens, respiratory sensitizers, teratogens, target organ toxicity, mutagens, and aspiration toxicity.



**Radiation Area or Radioactive Materials**—Equipment or materials that may cause radiation exposure are present.



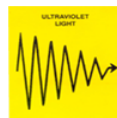
**Laser light**—Indicates that a Laser is present in the area and proper safety precautions must be taken prior to entering.



**Oxidizer**—Oxygen containing agents that can react with other materials, causing these materials to ignite more easily and burn much more readily.



**Harmful**—this includes Irritants, dermal sensitizers, acute toxicity (harmful), narcotic effects, respiratory tract sensitivity, and Irritation.



**Ultraviolet Light (UV)**—Indicates the presence of UV light in the area. UV light may cause eye and tissue damage upon exposure.



**Electrical Hazard or High Voltage**—Indicates that area or item has potential to cause electrical shock.



**Thermal Hazard**—Equipment has potential to cause physical harm by causing a thermal burn.



**Biohazard**—Potentially-infectious material is present in the area or the item is contaminated with a potentially-infectious organism.



**Magnetic Field**—Indicates the presence of a strong magnetic field. May attract metal object or cause harm to personnel who have pacemakers.



**Gases Under Pressure**—Both flammable and non-flammable. Flammable gases must also contain the flammable hazard label.



**Hearing Protection required**—Noise may exceed safe levels, therefore hearing protection is required.

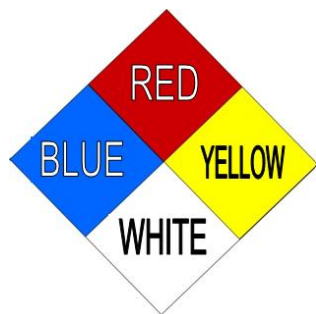


**Respirator Protection required**—Airborne contamination may exceed safe levels, therefore respiratory protection is required.



**Environmental Toxicity**—

**OTHER WARNING SIGNS AND SYSTEMS THAT MAY BE LOCATED IN AND AROUND THE UNIVERSITY**



NFPA Hazard Rating System—These labels can be found on some doors to provide general indication of the types and relative hazards of materials in the room. More commonly, these can be seen on chemical containers.

**Blue Diamond = Health Hazard**

- 4 = Deadly
- 3 = Extreme Danger
- 2 = Hazardous
- 1 = Slightly
- 0 = Normal Material

**Yellow Diamond = Reactivity Hazard**

- 4 = May detonate
- 3 = Strong shock or heat may detonate
- 2 = Violent chemical change possible
- 1 = Unstable if heated
- 0 = Normal Stable

**Red Diamond = Fire Hazard**

- 4 = Extremely Flammable
- 3 = Ignites at normal temperature
- 2 = Ignites when heated slightly
- 1 = Must be preheated to burn
- 0 = Will not burn

**White Diamond = Special Hazards**

- W = Water reactive
- OXY = Oxidizer
- ALK = Alkali
- COR = Corrosive

**EMERGENCY CONTACT INFORMATION**

Case Police and Security Services	216.368.3333
University Circle Police	216.368.2222
University Hospital Police and Security	216.844.4357
From a UH telephone	44357
Cleveland Police Department	9-911
Cleveland Fire Department	9-911
Cleveland Heights Police Department	9-911(South dorms only)
Cleveland Heights Fire Department	9-911(South dorms only)
Department of Environmental Health and Safety	
Chemical Safety	216.368.2907
Radiation Safety	216.368.2906
University Hospital Safety Office	216.844.7745
From a UH telephone	47745 (4SPIL)
University Health Center	216.368.2450
Poison Control Center	1-800-222-1222

**QUESTIONS**

If you have any questions about the material outlined in this document or would like to have your rights under the hazard communication standard explained to you further, please contact the Department of Environmental Health & Safety.

Environmental Health & Safety  
 Case Western Reserve University  
 Service Building, 1st Floor  
 2220 Circle Drive  
 Cleveland, Ohio 44106-7227  
 Telephone: 216.368.2907  
 Fax: 216.368.2236  
 Email: [does@case.edu](mailto:does@case.edu)  
 Web: [case.edu/ehs](http://case.edu/ehs)