



INDIANA UNIVERSITY

OFFICE OF THE EXECUTIVE VICE PRESIDENT
FOR UNIVERSITY ACADEMIC AFFAIRS
University Environmental Health and Safety

Hazard Communication Program

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1. INTRODUCTION

1.1 Purpose

All employees have both a need and right to know the hazards and identities of the chemicals they are exposed to when working as identified in the Hazard Communication Program. This document establishes the objectives and administrative requirements for the Indiana University Hazard Communication Program.

The Program set forth in this document is intended to ensure compliance with federal and state requirements. Applicable regulations are the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (HCS) [29 CFR1910.1200](#), the Environmental Protection Agency (EPA) Community Right-To-Know (SARA), [40 CFR Part 370](#), and the Indiana State Board of Health Infectious Waste Rule, 410 IAC 1-3.

1.2 Scope

The Hazard Communication Program establishes requirements for informing Indiana University employees who work with or are exposed to those regulated chemicals which pose a physical and/or health hazard during routine or non-routine operations or during emergency conditions at any phase of the chemicals' "life-cycle" including receipt/issue, use or disposal.

This document applies to all personnel who work with or supervise operations involving work with materials of concern at any of the Indiana University campuses.

Exception: Research Laboratories are exempted from the provisions of the Hazard Communication Program; however, they are subject to the requirements under the OSHA Laboratory Standard, [29 CFR1910.1450](#) which are addressed in the Laboratory Safety and Chemical Hygiene Plan.

The Hazard Communication Program applies to laboratories only as follows:

- a) Ensure that labels on incoming containers of hazardous chemicals are not removed or defaced (See Section 3.3);
- b) Maintain all Safety Data Sheets (SDS) for incoming containers of hazardous chemicals and ensure that they are readily accessible to employees (See Section 3.2); and
- c) Employers shall ensure that employees are provided information and training on the associated hazards of chemicals in their workplace.

For additional information on the Bloomington or IUPUI campus, contact the respective Environmental Safety and Health Laboratory Safety Manager. For information on the Regional IU Campuses, please contact the Safety Representative at your respective campus. Refer to the Chemical Hygiene Plan for additional information on specific requirements affecting laboratory employees.

2. AUTHORITY AND RESPONSIBILITY

2.1 University Environmental Health and Safety (IUEHS)

IUEHS has the primary responsibility and authority for the implementation and enforcement of the Hazard Communication Program and is responsible for:

1. Reviewing and revising the Hazard Communication Program annually to ensure compliance;
2. Providing general information and training relating to hazard communication for affected University employees;
3. Providing a source for Safety Data Sheets (SDS);
4. Identifying appropriate personal protective equipment (PPE);
5. Assisting supervisors in identifying hazardous substances present in the work area and evaluating potential hazards of operations; and
6. Recommending appropriate engineering controls, administrative controls and personal protective equipment.

2.2 Department Supervisors

Department Supervisors in support and administrative areas are responsible for providing the necessary direction and support to ensure the effective implementation of the Hazard Communication Program for their work locations. The supervisor is responsible for:

1. Notifying all employees of the purpose and intent of the Hazard Communication Program;
2. Identifying hazardous chemicals in their work area that may pose a potential health or physical risk to employees;
3. Ensuring that affected employees are trained in general hazard communication;
4. Providing department specific information and training relating to hazard communication for affected University employees;
5. Maintaining a list of hazardous chemicals and updating the list on an annual basis;
6. Ensuring Safety Data Sheets (SDS) for all hazardous materials in their work area are readily available for employees;
7. Ensuring that all containers of hazardous materials are properly labeled with the chemical or trade name;
8. Ensuring that employees follow established safety procedures;
9. Adequately informing any non-University personnel sharing the same work area of the hazardous substances to which their employees may be exposed while performing their work; and
10. Providing personal protective equipment.

2.3 Employees

Affected *Employees* are responsible for:

1. Complying with the Hazard Communication Program procedures;
2. Participating in the University's general Hazard Communication training session and department specific training sessions;
3. Understanding how to read chemical labels and safety data sheets;
4. Knowing the location and use the information provided on the SDS;
5. Understanding and taking necessary precautions when handling hazardous chemicals;
6. Ensuring proper labeling of hazardous chemicals; and
7. Using personal protective equipment.

3. PROGRAM ELEMENTS

3.1 Chemical Inventory List

Departments shall compile and maintain a workplace chemical list of the hazardous chemicals or products in their areas. The chemical inventory list must contain the following information for each hazardous chemical or product normally present in the workplace or temporary workplace.

- The identity of the chemical as specified on the container label or SDS for that chemical;
- The location (room number or work area) that the chemical is used and/or stored; and
- The quantity of the chemical generally kept at the location.

At Indiana University, inventories must be maintained using MSDS Online, the online inventory system provided by IUEHS. More information can be found online by visiting the IUEHS website <https://protect.iu.edu/environmental-health/safety-data-sheets/index.html> or by contacting your campus IUEHS representative.

Departments are responsible for updating the workplace chemical list upon the introduction of a new chemical or product into the workplace and at least by December 31st annually.

3.2 Safety Data Sheets

Safety data sheets (SDS) are the primary data source intended to outline the special precautions and controls necessary for handling specific hazardous chemicals. The purpose of the safety data sheet is to provide health and safety data about specific hazardous substances. A safety data sheet must be kept for each hazardous chemical or product used in the workplace.

Safety data sheets are readily available upon request 24 hours a day and shall be accessible by one of the following methods:

- Accessing MSDS Online from the IUEHS webpage (See Section 3.1);
- Accessing www.toxnet.nlm.nih.gov;
- Contacting the chemical manufacturer; or
- Contacting IUEHS.

3.3 Labeling and Other Forms of Warning

To ensure that appropriate information concerning the hazards of a chemical are accessible to employees, all containers of hazardous chemicals shall be labeled.

Chemical manufacturers, importers, and distributors shall ensure that every container of hazardous chemicals entering the workplace is appropriately labeled with the following:

- The product identifier used on the safety data sheet,
- Signal word,
- Hazard statement(s),
- Pictograms (See Appendix B-1),
- Precautionary statement(s),
- The name, address, and telephone number of the chemical manufacturer, importer, or other responsible party.

If the chemical label on the original container becomes damaged, illegible, or is inadvertently removed from a container, it shall be replaced immediately by the department supervisor or designee. The replacement label must include the same information that was initially provided by the manufacturer or distributor.

Secondary Container Labels

Chemicals which are transferred from the original container into a secondary container shall be identified by a label on the secondary container which includes the product identifier used on the safety data sheet, signal word, and pictograms which provide general information regarding the hazard of the chemical.

Portable Containers for Immediate Use

Portable containers into which hazardous chemicals are transferred from labeled container, and which are intended only for the immediate use of the employee who performed the transfer are not required to be labeled.

Stationary Process Container Labels

For stationary process containers (i.e. 55-gallon drums, 33-gallon drums, 5-gallon carboy), alternate identification methods may be used if the hazards of the chemical (as specified in [29 CFR 1910.1200\(f\)\(4\)](#)) are effectively conveyed to the employee.

Alternate methods of labeling are:

- Signs, placards, batch tickets (tags). A numbering or lettering system may be an acceptable form of identification on the above types of labels. However, all employees must understand this method of identification and know where to find the SDSs in their work areas during each shift.
- Containers that are used for carrying daily use and/or storing chemicals (i.e. safety cans, plastic bottles, etc.) will be labeled with the trade and/or chemical name. Hazard warnings do not have to be included if the primary container or SDS is located in the same area as the carrying, storing, or daily use containers, and if the primary container is identified with the appropriate hazard warnings (health, reactivity, flammability, PPE).
- Pipes at Indiana University are labeled in the hospital and academic areas only if they contain a hazardous gas or chemical. Pipes that are unlabeled and insulated contain either steam, condensate, or water.

3.4 Shipping

Any employee offering or accepting international, interstate or intrastate transportation of hazardous materials shall be in accordance with the Department of Transportation [49 CFR 172](#).

3.5 Non-Routine Operations

Employees may periodically be required to perform hazardous non-routine tasks. A non-routine task is one that the employee does not normally perform (because of infrequency, location, or type of work) and for which the employee has not previously been trained. A non-routine task may include when an employee is to work with a chemical under conditions that arise infrequently.

Supervisors are responsible for contacting IUEHS whenever employees will be performing non-routine tasks involving the use of hazardous chemicals. Supervisors must ensure that employees are informed of the hazards and required control measures, including safe work practices, and proper personal protective equipment.

3.6 Contractors on Campus

This section applies to non-University personnel working at any of the Indiana University campuses. The primary University contact (i.e., project manager, supervisor) shall inform contractors and contract workers of workplace hazards by providing SDS's, communicating precautionary measures, and explaining labeling systems in place at Indiana University.

Contractors are required to provide Indiana University with a list of the hazardous chemicals they will bring to the job site. The University Architect's Office, Purchasing Department, or Facilities Services/Physical Plant shall be responsible for the following;

- Requiring that information (including SDSs) be provided to Indiana University on all chemicals to be utilized by the contractor in performance of his it's duties;
- Providing IUEHS with the information on all chemicals to be utilized by the contractor; and
- Ensuring that contract work involving the use of hazardous chemicals is conducted in a manner to minimize potential exposure to Indiana University employees, students, or visitors.

No hazardous chemical shall be used by a contractor without prior approval of IUEHS.

4. TRAINING AND RECORDKEEPING

Employees shall receive information and training on hazardous chemicals in their work area at the time of their initial assignment, and whenever a new chemical hazard to the employees have not previously been trained about is introduced into their work area. General training may take the form of individual instruction, group seminars, audiovisual presentations, handout material, or any combination of the above.

Information and training may be designed to cover categories of hazards (e.g., flammability, carcinogenicity) or specific chemicals. Chemical specific information shall always be available through labels and safety data sheets. Environmental Health and Safety shall provide all general hazard communication training. This general training program shall provide an introduction to the following:

- The requirements of the Hazard Communication Standard;
- The location and availability of the written Hazard Communication Program;
- The details of the Hazard Communication Program including an explanation of the labeling system and the safety data sheet and how employees can obtain and use the appropriate hazard information;
- Methods and observations that may be used to detect the presence or release of a hazardous chemical in the work area;
- The physical, health, simple asphyxiation, combustible dust and pyrophoric gas hazards, as well as hazards not otherwise classified, of the chemicals in the work area; and
- The measures employees can take to protect themselves from these hazards, including work practice controls, emergency procedures and personal protective equipment.

Department specific training shall be conducted upon employment, and whenever a new hazard (e.g., new class of chemical hazards, a change in assignment or a new process which may be hazardous) is introduced into an employee's work area. Department specific hazard communication training shall include information on:

- Any operations in their work area where hazardous chemicals are present;
- Specific chemical hazard classes found in the work area;
- Location of the IU Hazard Communication Program within the department;
- Specific location and availability of the department's Safety Data Sheets (SDS);
- A review of what a SDS is and how to read the SDS (i.e. what each section contains and where to look for specific information), where the SDSs are kept in each work area, and how to obtain copies of SDSs as required;
- The labeling system to ensure that all containers of hazardous chemicals are labeled with the product identifier and words, pictures, symbols, or combination thereof, which provide at least general information regarding the hazards of the chemical;
- Available personal protective equipment and appropriate emergency procedures for chemicals found within the work area as outlined by the Safety Data Sheets; and
- Location and availability of appropriate chemical labels.

Departmental Supervisors shall be responsible for providing department specific training to covered employees. Records of departmental training shall be kept by the department and provided to IUEHS upon request.

5. REFERENCES

[29 CFR1910.1200](#) - Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (HCS).

6. REVISIONS

Revised: August 8, 2017

APPENDIX A-1: Glossary

Chemical: Any substance or mixture of substances obtained by a chemical process or used for producing a chemical effect.

Chemical Name: The scientific designation of a chemical in accordance with the nomenclature system developed by the International Union of Pure and Applied Chemistry (IUPAC) or the Chemical Abstracts Service (CAS) rules of nomenclature, or a name which will clearly identify the chemical for the purpose of conducting a hazard classification.

Classification: Means to identify the relevant data regarding the hazards of a chemical; review those data to ascertain the hazards associated with the chemical; and decide whether the chemical will be classified as hazardous according to the definition of hazardous chemical in this section. In addition, classification for health and physical hazards includes the determination of the degree of hazard, where appropriate, by comparing the data with the criteria for health and physical hazards.

Container: Any bag, barrel, bottle, box, can, cylinder, drum, reaction vessel, storage tank, or the like that contains a hazardous chemical.

Employee: A worker who may be exposed to hazardous chemicals under normal operating conditions or in foreseeable emergencies. Workers such as office workers who encounter hazardous chemicals only in non-routine, isolated instances are not included.

Hazard Class: The nature of the physical or health hazards, e.g. flammable solid, carcinogen, oral acute toxicity.

Hazard Not Otherwise Classified (HNOC): An adverse physical or health effect identified through evaluation of scientific evidence during the classification process that does not meet the specified criteria for the physical and health hazard classes.

Hazard Statement: A statement assigned to a **Hazard Statement** and category that describes the nature of the hazard(s) of a chemical, including, where appropriate, the degree of hazard.

Hazardous Chemical: Any chemical which is a physical or health hazard, a simple asphyxiant, combustible dust, pyrophoric gas, or hazard not otherwise classified.

Health Hazard: A chemical which is classified as posing one of the following hazardous effects: acute toxicity (any route of exposure); skin corrosion or irritation; serious eye damage or eye irritation; respiratory or skin sensitization; germ cell mutagenicity; carcinogenicity; reproductive toxicity; specific target organ toxicity (single or repeated exposure); or aspiration hazard.

Label: An appropriate group of written, printed, or graphic information elements concerning a hazardous chemical that is affixed to, printed on, or attached to the immediate container of a hazardous chemical, or to the outside packaging.

Physical Hazard: A chemical that is classified as posing one of the following hazardous effects: explosive; flammable (gases, aerosols, liquids, or solids); oxidizers (liquid, solid, or gas); self-reactive; pyrophoric (liquid or solid); self-heating; organic peroxide; corrosive to metal; gas under pressure; or in contact with water emits flammable gas.

Pictogram: A composition that may include a symbol plus other graphic elements, such as a border, background pattern, or color that is intended to convey specific information about the hazards of a chemical.

Precautionary Statement: A phrase that describes recommended measures that should be taken to minimize or prevent adverse effects resulting from exposure to a hazardous chemical or improper storage or handling.

Product Identifier: The name or number used for a hazardous chemical on a label or in the Safety Data Sheet.

Safety Data Sheet (SDS): Written or printed material concerning a hazardous chemical which is prepared in accordance with [29 CFR 1910.1200 \(g\)](#).

Signal Word: A word used to indicate the relative severity of hazard and alert the reader to a potential hazard on the label. The signal words used in this section are “danger” and “warning”. “Danger” is used for the more severe hazards, while “warning” is used for the less severe.

Simple Asphyxiant: A substance or mixture that displaces oxygen in the ambient atmosphere, and can thus cause oxygen deprivation in those who are exposed, leading to unconsciousness and death.

Work Area: A room or defined space in a workplace where hazardous chemicals are produced or used and where employees are present.

APPENDIX B-1: GHS Pictograms

Health Hazard	Flame	Exclamation Mark
 <ul style="list-style-type: none"> • Carcinogen • Mutagenicity • Reproductive Toxicity • Respiratory Sensitizer • Target Organ Toxicity • Aspiration Toxicity 	 <ul style="list-style-type: none"> • Flammables • Pyrophorics • Self-Heating • Emits Flammable Gas 	 <ul style="list-style-type: none"> • Irritant • Skin Sensitizer • Acute Toxicity • Narcotic Effects • Respiratory Tract Irritant • Hazardous to Ozone Layer
Gas Cylinder	Corrosion	Exploding Bomb
 <ul style="list-style-type: none"> • Gases Under Pressure 	 <ul style="list-style-type: none"> • Skin Corrosion/Burns • Eye Damage • Corrosive to Metals 	 <ul style="list-style-type: none"> • Explosives • Self-Reactives • Organic Peroxide
Flame Over Circle	Ernvironment	Skull and Crossbones
 <ul style="list-style-type: none"> • Oxidizers 	 <ul style="list-style-type: none"> • Aquatic Toxicity 	 <ul style="list-style-type: none"> • Acute Toxicity