

**Concordia College  
Moorhead, Minn.**

**Title: Employee Right-to-Know/Hazard Communication**

**Effective: 8-20-97; 6-19-00 ; 8-1-03; 8-6-07**

**Purpose:**

Concordia College is firmly committed to providing all its employees with a safe and healthy work environment. In order to do this, Concordia will provide employees with information about hazardous substances, harmful physical agents, and infectious agents that may be present in the work place. This program will be reviewed annually, when a new process or product is introduced, and if job hazard analysis provides evidence that further review is needed.

**Responsibility:**

The Risk Management & Safety office will be responsible for auditing this program, ensuring effective communication between supervisors and employees, and determining when revisions shall be made to the program. Supervisors shall ensure employees follow safe working practices and procedures in accordance with this program. Supervisors will also, in conjunction with Risk Management & Safety, determine training needs of employees. Employees shall follow the requirements of this program and are also expected to notify their supervisor or Risk Management & Safety when there are questions relating to the Right-to-Know program.

**Material Safety Data Sheets (MSDS)**

1. Material Safety Data Sheets (MSDS) for hazardous substances used, stored, or transported on Concordia College property (Moorhead campus) will be made available, maintained, and updated in a timely fashion to reflect the hazardous substances actually in use in specific Concordia departments and/or buildings.
2. MSDS binders are located in the following departments:

<b>Department</b>	<b>MSDS binder location</b>
Chemistry	Chemistry Department office
Biology	Biology stockroom
Art	Olin 202; Art Department office
Physics	Ivers 134 ; Physics Department office
Physical Plant/ Delivery	Delivery office
Physical Plant/ Carpentry	Carpentry office
Physical Plant/ Painting	Painting office
Physical Plant/ Grounds	Grounds office
Physical Plant/ Electrical and Plumbing	Plumbing office
Physical Plant/ Photo Lab	Photo Lab
Physical Plant/ Print Shop	Front desk
Physical Plant/ Heating Plant	Heating Plant office
Auxiliary Services/ Knutson Center	Bottom of steps; west entrance
Auxiliary Services/ Grant Center	Custodial supervisor office
Auxiliary Services/ Normandy	Kitchen/meal prep area

3. Each department is responsible for updating their MSDS binder with any product changes.
4. A master list of all hazardous substances used by Concordia College is located in the Risk Management & Safety office..

## Labeling:

Labels can be obtained through the Delivery Department located in the Physical Plant. All departments must comply with the following Label/Warning requirements. The responsibility for ensuring this requirement shall rest with the person(s) originating the order for the substance, the person(s) receiving the substance, and the user of the substance.

1. Containers of hazardous substances must be labeled, tagged, or marked with the identity of the substance contained and must show hazard warnings appropriate for employee protection.
2. Labels must be legible, written in English (plus other languages if desired), and prominently displayed.
3. The word, term, or phrase that is used on the label to identify the hazardous substance must also be used on the associated MSDS.
4. Labels on incoming containers should not be removed, destroyed, or defaced.
5. Labels are not required on portable containers into which substances are transferred if the following conditions are met:
  - The contents of the container are for **immediate** use of the person making the transfer.
  - The container is used only by the person transferring materials and remains under the control of the person making the transfer.
  - The unlabeled portable container is used within the work shift in which it was originally filled.
  - The unlabeled container is filled from a properly labeled container.

## Training

1. Employees
  - a. All employees that have the potential to be exposed to hazardous substances through use, handling, transport, or other exposure shall be trained for proper precautions to such exposure of the substance.
  - b. New or transferred employees will be trained on the substances in the work area and precautions upon initial assignment to areas where exposure may occur.
2. Frequency of training  
Training will be provided annually, when new processes are introduced, or when hazard analysis gives evidence that further training is needed.
3. Documentation of Training  
Training documentation shall be readily available for review and approval upon request of all employees and/or supervisors. Training documentation shall also be readily available for review and approval upon inspection by representatives of The Occupational Safety and Health Division of the Minnesota Department of Labor.
4. Training Components (Hazardous Substances)
  - a. Explanation of the requirements of the Minnesota Right-to-Know standard.
  - b. Employee rights and responsibilities.
  - b. Introduction to Right-to-Know/components.
    1. Written Right-to-Know program.
    2. Hazardous Substance list/location.
    3. Labels
    4. Material Safety Data Sheets
  - c. Hazard determination  
Methods and observations that the employee must use to detect the presence of accidental release or spill of hazardous substance.

- d. Labeling procedures.
- e. MSDS availability and interpretation.
- f. Methods of protection (i.e. personal protective equipment, work practices, emergency procedures), as well as first aid/medical procedure.
- g. Procedures of non-routine tasks.
- h. Informing other employers.  
Outside contractors will be responsible for informing their employees of the Concordia College, Moorhead, Right-to-Know/ Hazard Communication program.

## Records

The following information will be located in the Risk Management & Safety office for review:

1. Location and maintenance of Hazardous Substance Lists.
2. Location and maintenance of Material Safety Data Sheets (MSDS) binders.
3. Employee training records.
4. New employee orientation acknowledgments.

## Responsibility

1. The Risk Management & Safety office is responsible for coordinating and/or conducting training and revising the Right-to-Know/ Hazard Communication program to assure compliance with the Hazardous Substance requirements of the Right-to-Know standard.
2. Supervisors will be responsible for ensuring that established work rules for substance handling and use to avoid or reduce exposures are being followed.
3. Every employee will accept responsibility for safely performing his/her work in line with established work practices and precautions outlined on hazardous substance labels.

## Non-Routine Task

Periodically, employees may be required to perform non-routine tasks. Prior to starting such work, each affected employee will be informed by the supervisor or the Risk Management & Safety office about potential hazards and the appropriate protective and safety measures.

## How to Read and Understand an MSDS

Manufacturers, importers, distributors, and suppliers are required to provide MSDS for each hazardous substance. As an employer, Concordia College, Moorhead, is required to maintain a file of MSDS for the hazardous substance in use. According to federal and Minnesota OSHA, a hazardous substance is identifiable by referring to the substance's MSDS and label. The standard specifies the information required on each data sheet, and all the information must be in English.

An MSDS must precede or accompany the initial shipment but does not have to be physically attached to it. If the chemical make up of a substance does not change, subsequent shipments of a material do not need to have an MSDS.

Make sure the latest version of an MSDS is the one on file. If an MSDS comes in with a product that already has an MSDS, compare the two to determine which is the most recent.

To ensure proper record keeping and maintenance of MSDS's, Concordia shall:

1. Make sure all chemical purchases include the pertinent MSDS and labels.
2. Request an MSDS for any material bearing a label indicating it is a hazard if there is no MSDS already on file.
3. If a Concordia College employee is exposed to a contractor's hazardous substances, the contractor will provide Concordia with any and all pertinent MSDS information

While MSDS's will appear in many different formats, all MSDS are required to provide the following information:

## Section I - Identification

1. Chemical name as it appears on the label.
2. Manufacturer's name and address.
3. Emergency telephone number.
4. Date MSDS was prepared and the name of the person who prepared it.

## Section II - Hazardous Ingredient/Identity Information

1. Hazardous components: the specific chemical identity, its formula, and any common names of the chemical.
2. OSHA permissible exposure limit. (PEL) The maximum amount of the substance a person can be exposed to without harm.
3. American Conference of Governmental Industrial Hygienist Threshold Limit Values (TLV): TLV is the concentration of a chemical in the air that can be breathed for five consecutive eight-hour work days by most persons without harmful effects. It is generally expressed in parts per million (PPM)
4. Other recommended limits: Any other recommended limitations on the use of the substance by an agency, scientific group, or organization.

## Section III - Physical/Chemical Characteristics

1. Boiling Point: The temperature at which liquid boils.
2. Vapor Pressure (mm Hg): Measures a liquid's tendency to evaporate.
3. Vapor Density: Indicates the weight of the vapor compared to an equal volume of air.
4. Solubility in water: Indicates whether the substance can mix with water in any ratio without separating.
5. Appearance and odor: A brief description of the substance's color and smell.
6. Specific Gravity: Ratio of the weight of the substance to the weight of an equal volume of water. This is an indicator whether a material will sink or float in water.
7. Melting Point: Indicates at what temperature a solid changes to a liquid.
8. Evaporation Rate ( Butyl Acetate = 1) Indicates the temperature at which a substance evaporates.

## Section IV - Fire and Explosion Hazard Data

1. Flash Point: The lowest temperature at which a liquid gives off enough vapor to ignite in air when exposed to a flame.
2. Flammable Limits: The range of vapor concentrations which will explode when an ignition source is present. The Lower Explosive Limit (LEL) is the minimum amount of vapor in the air that can be ignited. The Upper Explosive Limit (UEL) is the maximum amount of vapor that will sustain a fire.
3. Extinguishing Media: Materials suitable for extinguishing a fire involving the substance. The most common fire fighting agents are water, fog, foam, alcohol foam, carbon dioxide, and dry chemical.
4. Special Fire Fighting Procedures: Any special fire characteristics of the substance.
5. Unusual Fire and Explosion Hazards: Any special type of hazard requiring attention.

## Section V - Reactivity Data

1. Stability: Conditions that contribute to the ability or instability of a substance when it is exposed to heat, pressure or excessive shock.
2. Incompatibility: Materials or conditions to avoid.
3. Hazardous Decomposition: Gases or vapors released when a substance is burned or decomposes.

4. Hazardous Polymerization: The molecules of one substance chemically react to the molecules of another substance to create a different substance. Large amounts of energy are used in this process which may produce a fire or other hazard.

## Section VI - Health Hazard Information

1. Routes of Entry: The routes available for entry into the body. The typical routes of entry are inhalation, absorption, ingestion, or injection.
2. Health Hazards: Long term (chronic) or short term (acute) effects of a substance to the human body.
3. Carcinogenicity: Whether a substance is known to cause cancer.
4. Signs and Symptoms of Exposure: Describes the effects of exposure to the substance, such as employee's appearance and condition. (Head ache, nausea, dizziness)
5. Medical Conditions Severely Aggravated by Exposure: How the substance will affect pre-existing medical conditions.
6. Emergency and First Aid Procedures: First aid procedures to use in order to reduce the hazardous effects of the substance.

## Section VII - Precautions for Safe Handling and Use

1. Waste disposal method: Indicates proper disposal of substance.
2. Steps to be taken in Case of Accidental Spill or Release: Indicates precautions such as avoid breathing gases or vapors; avoid contact with substance; remove ignition sources; use of special equipment for clean up. This section also gives recommended techniques for control of spills.
3. Precautions for Handling and Storage: Indicates safe practices in handling and storage and steps to be taken to avoid hazardous reactions.
4. Other Precautions: Indicates special precautions in handling or disposal.

## Section VIII - Control Measures

1. Respiratory Protection: If needed, specifies type of respirator required when working with the substance.
2. Ventilation: Indicates type of ventilation needed to prevent overexposure.
3. Protective Gloves: Indicates if gloves should be worn. If indicated, will specify type of glove needed.
4. Eye protection: Indicates appropriate eye protection.
5. Other Protective Clothing or equipment: Indicates other equipment, and the material they should be made of, to prevent skin contact.

## Infectious Agents

The following job classes have been identified as being at risk of exposure or possible exposure to Infectious Agents. Job Classes at risk for exposure:

1. Health Center Staff
2. Nursing Department Staff
3. First Aid Responders
4. Athletic trainers
5. Custodial Staff

Persons in these job classes are required to follow the procedures outlined in the Concordia College, Moorhead, *Blood borne Pathogen* and *Exposure Control Plans* found in sections \_\_\_\_\_ of this manual. Information contained in these programs include:

1. Explanations of the Minnesota Right-to-Know Standard, relating to infectious agents.
2. Explanation of the Federal Regulation on Blood Borne Pathogens.
3. Training
4. Record keeping
5. List of infectious agents employees may be exposed to during course of duties.
6. Signs and Labels used to identify agents.

## **Harmful Physical Agents**

For safety and control measures of radiation, please refer to the Concordia College, Moorhead, *Radiation Safety Policy Manual*, which can be found in room 155S of the Science Center. Contact Dr. Ellen Aho at 3797 for more information