

# WHMIS

## Information for SIAST Students

#### 1. What is WHMIS?

The Workplace Hazardous Materials Information System (WHMIS) is a Canada-wide legislative system providing workers with information on the dangers and safe handling of workplace chemicals.

# 2. What can I expect from my employer?

Your employer is expected to:

1. Review harmful chemical and biological substances in the workplace.

Your employer must make an inventory of all chemical and biological hazards in the workplace and decide which ones are dangerous.

## 2. Determine which substances are controlled products under WHMIS.

Your employer must identify chemicals meeting the criteria under WHMIS legislation for:

- a compressed gas
- flammable and combustible material
- oxidizing material
- poisonous and infectious material
- corrosive material
- dangerously reactive material

There is no master list of controlled products. However, materials bearing a label with a border will be controlled products. Items handled under *The Transportation of Dangerous Goods Act* (Federal Government) will likely be controlled products.

Consumer products, and some materials regulated by other laws, such as *The Pest Control Products Act*, are partially exempt from WHMIS.

## 3. Obtain Material Safety Data Sheets (MSDS) for controlled products.

A Material Safety Data Sheet (MSDS) describes the dangers and safe handling of the material. Each material safety data in the workplace should contain the following headings.

- 1. Product Information
- 2. Hazardous Ingredients
- 3. Physical Data
- 4. Fire and Explosion Data
- 5. Reactivity Data
- 6. Toxicological Properties
- 7. Preventive Measures
- 8. First Aid Measures
- 9. Preparation Information

Your employer must have current copies of MSDSs readily available for the chemicals you are expected to use. Your employer must train you to use these MSDSs to protect yourself from the hazards of the products you work with.

4. Ensure that all containers are suitably labeled.

**Supplier labels** – Suppliers must properly label all containers of their controlled products. Labels must state the dangers of the product, precautionary measures, and first aid. The label's border is distinctive and helps to readily identify the controlled product. This label must not be removed, modified or deliberately defaced as long as the material stays in the container. The label must be replaced if it is accidentally defaced.

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To contact the Occupational Health and Safety Division: Visit our website: www.labour.gov.sk.ca.

Regina call: 1-800-567-7233 (toll-free). Saskatoon call: 1-800-667-5023 (toll-free)

| (Adapted fron | Hazard Symbols and Classes<br>(Adapted from: Occupational Health and Safety Canada Volume 4, Number 5, page 54. Used with Permission.) |   |  |  |  |
|---------------|--|---|--|--|--|
| This S        | Symbol Represents  | It means the material   |  |  |  |
| $\oslash$     | Class A - Compressed Gas   | <ul> <li>Poses an explosion danger because contents are held under<br/>high pressure</li> <li>May cause its container to explode if heated</li> <li>May cause its container to explode if dropped</li> </ul>  |  |  |  |
| ۲             | <b>Class B</b> - Combustible and flammable material  | <ul> <li>May burn at relatively low temperatures</li> <li>May burst into flame spontaneously in air or release a flammable gas on contact with water</li> <li>May cause a fire when exposed to heat, sparks or flames or as a result of friction</li> </ul>     |  |  |  |
|               | Class C - Oxidizing material   | <ul> <li>May cause a fire when it comes into contact with combustible materials such as wood</li> <li>May react violently or cause an explosion when it comes</li> <li>Into contact with combustible materials such as fuels</li> </ul>                         |  |  |  |
|               | Class D, Division 1 -<br>Poisonous and infectious<br>material: immediate and<br>serious toxic effects                                  | <ul> <li>May be fatal or cause permanent damage if inhaled or if it<br/>enters the body through skin contact</li> </ul>   |  |  |  |
| ()            | Class D, Division 2 -<br>Poisonous and infectious<br>material: other toxic effects   | <ul> <li>May cause death or permanent damage as a result of repeated exposure over time</li> <li>May be a skin or eye irritant</li> <li>May be a sensitizer, which produces a chemical allergy</li> <li>May cause cancer, birth defects or sterility</li> </ul> |  |  |  |
| 8             | Class D, Division 3 -<br>Poisonous and infectious<br>material: biohazardous<br>infectious material                                     | May cause serious disease resulting in illness or death   |  |  |  |
|               | Class E - Corrosive material   | <ul> <li>Causes severe eye and skin irritation upon contact</li> <li>Causes severe tissue damage with prolonged exposure</li> <li>May be harmful if inhaled</li> </ul>  |  |  |  |
|               | Class F - Dangerously reactive material  | <ul> <li>Is very unstable</li> <li>May react with water to release a toxic or flammable gas</li> <li>May explode as a result of shock, friction or increase in temperature</li> <li>Undergoes vigorous polymerization</li> </ul>                                |  |  |  |

**Workplace labels** – Where material is transferred from the original container (which should have a supplier label) to another container, a workplace label must be attached to it. A workplace label provides three pieces of information:

- 1. An identifier of the material which must be the same as that used on the MSDS;
- 2. Information for the safe handling of the material; and
- 3. A statement that an MSDS is available. Provided workers can understand them – words, signs or symbols can be used to illustrate what safety precautions must be taken.

There are some exceptions to the requirement for workplace labels:

- when the material in a container is to be used only by one person during a shift
- where the material is decanted during laboratory activities
- where material is in a pipe or reaction vessel
- where the containers are about to be labelled for sale



#### 5. Arrange for the training of workers.

The employer must implement a WHMIS workertraining program. The training program must be developed for each employer's workplace and be reviewed annually.

The occupational health committee (OHC) or the worker health and safety representative (OH&S Rep) if present, must be consulted in the development and implementation of the program and during its annual review. Where neither a committee nor a representative is present, the workers must be consulted.

While the employer can arrange for someone else to train workers, he or she remains responsible for ensuring workers understand WHMIS requirements.

There is no standard course. The test of a successful program is whether the workers can use proper safety procedures for the products they handle and know why these procedures are required.

The content of a worker-training program can be divided into two main areas.

| General WI                             | HMIS Training  | Workplace WHMIS Training             |  |
|--|--|--------------------------------------|--|
| Topics                                 | Content  | Topics                               | Content  |
| Responsibilities                       | Supplier, employer,<br>worker  | Hazardous substances                 | Hazards of the substances<br>that workers work with<br>are listed and identified in<br>the workplace   |
| Controlled products                    | Information on hazard classes, WHMIS symbols   | Hazards                              | Clearly communicated to workers. Control measures in effect  |
| Supplier/workplace<br>labels           | Content required and the purpose and significance of the content   | Materials safety data sheets (MSDSs) | Location and use in the workplace  |
| Other labels                           | Consumer products and<br>pest control products<br>exempted from WHMIS.<br>Product identifiers (such<br>as colour coding for pipes) | Labels                               | Systems used in the workplace  |
| Material safety data<br>sheets (MSDSs) | Content required. The<br>purpose and significance<br>of the content. Formats<br>allowed  | Safe work procedures                 | Workplace specific training<br>in the use, storage,<br>handling and disposal of<br>hazardous substances,<br>emergencies, fugitive<br>emissions |

If a workplace has only one or two controlled products, it will be sufficient to train the workers on the necessary hazard information about those products. Workers in workplaces with several controlled products must be able to access all of the required information.

Worker training in safe work practices must also include products that are exempt from WHMIS labeling and MSDS requirements, such as consumer products. The employer must ensure that workers understand hazard information-nation and safety precautions on product labels. More information may be required if a product will be used under unusual circumstances.

**First**, workers need to understand the WHMIS system (such as MSDS, labels and symbols). This may be called general training and could be given in a classroom with participants from many different work areas.

**Second**, workplace training must be provided that is specific to: (1) the dangers of the materials used; and (2) the appropriate safety measures that must be taken. Supervisors should probably provide this training.

# 4. What are my responsibilities as a worker?

- Attend WHMIS training and apply what you learn on the job.
- Follow WHMIS requirements and your employer's occupational health and safety rules.
- Promptly report safety concerns to your supervisor.
- Ask for help when you need it.

#### 5. What resources are available?

The Occupational Health and Safety Division provides WHMIS publications and videos, and courses for ccupational health committees (OHCs) and worker occupational health and safety representative (OH&S Reps). The Occupational Health and Safety Division also provides information on agencies, training consultants, and retailers of safety supplies that are available to help employers provide WHMIS worker training.

1-800-667-5023

For more information, contact:

Toll Free:

Regina Inquiry: 787-4496 6th Floor 400-1870 Albert St. Regina, SK S4P 4W1 Toll Free: 1-800-567-7233 Saskatoon Inquiry: 933-5052 8th Floor 122-3rd Avenue North S7K 2H6