

# **WHMIS**

Session 5

Facilitator
Date
Company







### **WHMIS**

The purpose of WHMIS

Labels

Material safety

Hazard symbols

Protect yourself







# Workplace hazardous material information system (WHMIS)



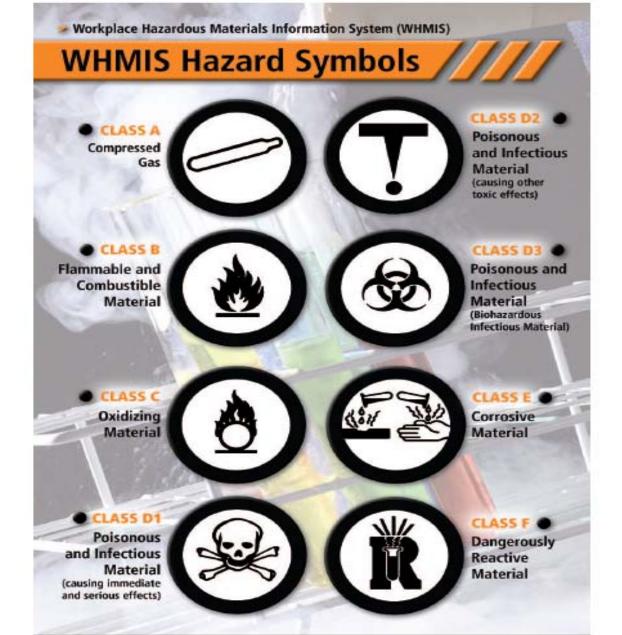
What is WHMIS?



A hazards information system for materials or chemicals at work.

WHMIS is the law.









# WHMIS symbols



### Poisonous & Infectious Material

• Immediate serious effect



### Poisonous & Infectious Material

• Other toxic effects



### Poisonous & Infectious Material

Biohazardous infections



# WHMIS symbols



### Compressed gas

- Gas under pressure in a cylinder
- Compressed air, hydrogen, nitrogen



### Flammable & Combustible Material

- Material will burn if ignited
- Gases, aerosols, liquids, solids cleaning solvents,



### Oxidizing Material

- Adds to combustion of other flammable materials
- Chlorine, nitrogen dioxide, hydrogen peroxide



# WHMIS symbols



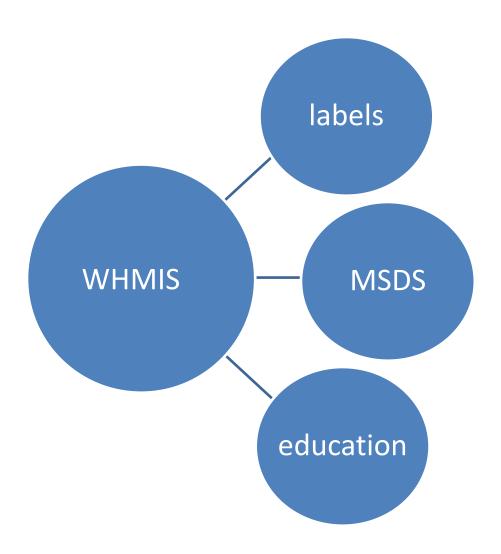
**Corrosive Material** 



Dangerously Reactive Material



# WHMIS system





labels



# Provide information for safety

### 1. Supplier labels

### **PRODUCT NAME**

Risk information

Protective measure

First Aid

See MSDS

Supplier name





# Provide information for safety 2. Workplace labels

**PRODUCT NAME** 

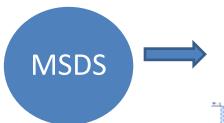
Information

See MSDS

MSDS )

### Material Safety Data sheet

Product Information		
Hazard	ous Ingredients	
Physica	al Data	I
Fire and	d Explosion Data	
Reactiv	rity Data	
Toxicol	ogical Properties	
Dravan	tative Measures	
Preven	lalive measures	
First-Ai	id Measures	



### Material Safety Data sheet

#### Product Information

Discloses manufacturers and supplier's contact information, name of product and what it is used for.

#### Hazardous Ingredients

Lists the percentage concentrations of all regulated ingredients.

#### Physical Data

Contains information regarding the physical properties of the material such as density, boiling point, melting point, etc...

#### Fire and Explosion Data

Reveals fire fighting measures, lower and upper explosive limits, auto-ignition temperatures, etc...

#### Reactivity Data

Lists the incompatible materials (if any) and conditions under which the material becomes unstable.

#### Toxicological Properties

Includes information concerning possible health effects and exposure limits.

#### Preventative Measures

The recommendations to avoid exposure.

#### First-Aid Measures

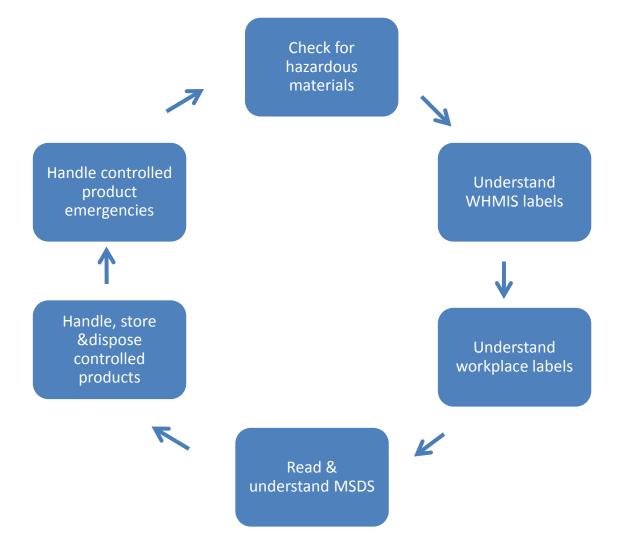
Specific first-aid measures to follow in case of exposure.

#### **Preparation Information**

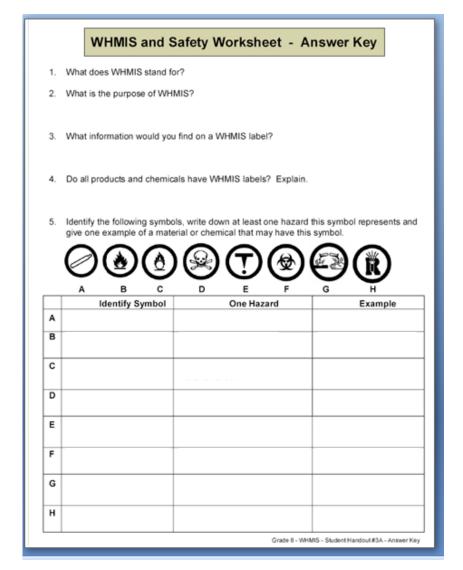
Discloses contact information regarding group that prepared the MSDS and the date of preparation.



### Learn to identify & handle materials



# WHMIS Safety Worksheet



#### WHMIS and Safety Worksheet - Answer Key

- 1. What does WHMIS stand for? Workplace Hazardous Materials Information System
- What is the purpose of WHMIS?
   It is an information system in the form of special labels, symbols, and Material Safety Data Sheets (MSDS) for potentially dangerous chemicals used on the job
- What information would you find on a WHMIS label?
   Name of the chemical, the WHMIS hazard symbols, risks and precautions, first aid instructions, supplier's name and address, a reference to the matching MSDS
- Do all products and chemicals have WHMIS labels? Explain.
   No, some products, like pesticides and many household products, are covered by other legislation, and will have other label (e.g. international hazards symbols)
- Identify the following symbols, write down at least one hazard this symbol represents and give one example of a material or chemical that may have this symbol.



	Identify Symbol	One Hazard	Example
	identity Symbol	Oneriazaru	Lxample
Α	Compressed Gas	could explode if heated	helium, hydrogen
В	Flammable & combustible materials	could cause a fire	gasoline, ether
С	Oxidizing materials	could cause flammable material to burn	chlorine, bleach, peroxide
D	Poisonous & infectious material - Division 1	could cause immediate, serious/fatal toxic effects	potassium cyanide, carbon monoxide
E	Poisonous & infectious material - Division 2	cause toxic effects	cancer, sterility,benzene asbestos
F	Poisonous & infectious material - Division 3	biohazardous infectious material transmission of a disease	hepatitis B, AIDS, fungi, viruses
G	Corrosive material	serious chemical burns, lung damage from inhaling fumes	sulfuric acid, chlorine gas
Н	Dangerously reactive material	could have a dangerous reaction with water	calcium carbide



# Clear Speech





# Vocabulary

Poisonous & Infectious	
Immediate serious effect	
Other toxic effects	
Biohazardous infections	
Compressed gas	
Flammable & Combustible	
Oxidizing	
Corrosive	
Dangerously Reactive	
Labels	
Risk information	
Protective measure	17

# Vocabulary

First Aid	
Supplier	
<b>Product information</b>	
Hazardous ingredients	
Physical data	
Fire and explosion data	
Reactivity data	
Toxicological properties	
Preventative measures	
Controlled products	
dispose	
handle	18

# Acronyms

WHMIS	Workplace hazardous material information system
CCOHS	Canadian Centre for Occupational Health and Safety
MSDS	Material safety data sheet
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