Health & safety 101 Resource Booklet











Workplace Safety & Insurance Board

Commission de la sécurité professionnelle et de l'assurance contre les accidents du travail



This resource book is provided for use with the H&S 101 e-course available on the Internet at **www.hs101.ca**

Disclaimer

Copyright © 2010 Workplace Safety and Insurance Board and/or other rights holder. All rights reserved. The material contained in this resource book is for information and reference purposes only and is not intended as medical, legal or other professional advice. Please consult with a qualified professional to obtain the advice you require. The adoption of the practices described in this resource book may not meet the needs of your organization or a particular individual. The WSIB does not warrant or guarantee the accuracy, completeness, timeliness, or usefulness of any information contained in this resource book and shall not be responsible or liable, directly or indirectly, in any way, for any loss or damage of any kind incurred as a result of, or in connection with the use of, or reliance on, any such content. Information contained in this resource book is subject to change without notice.



5051A (02/10) © 2010, Workplace Safety and Insurance Board.



Table of Contents

Part	1 – Safety Matters	4
	Be Aware	5
	Health and Safety Laws	6

Employer's Role	11
Your Role	12
Your Rights	13

Part 3 – Work Hazards.....16

Recognizing Hazards	17
WHMIS	21

Part 4 – Staying Safe25Controlling Hazards26PPE27Emergencies28Reporting Injuries30Some Final Words31

Resources

Glossary of Terms and Acronyms......36

Part 1



Safety Matters



Safety Matters

It's great to have a job and exciting to start a new one, but workplaces can be dangerous places. Injuries happen in all kinds of workplaces, but they don't have to.

Be Aware

Every day in Ontario, workers like you are injured, made ill or killed on the job.

How many workers between the ages of 15 to 24 get injured on the job?

In 2008,

- Almost 40,000 were injured
- About 10,000 were injured seriously enough to miss work

Between 2004 and 2008, 39 young workers were killed on the job.

There's no single reason why so many young workers are getting hurt. There could be a number of contributing factors. Here are a few to watch out for:

- 1. Not enough training: Since they might be employed on a temporary basis, filling in for summer vacations, or working in a very busy workplace, young workers may not receive proper training.
- 2. Not enough experience: Workers new to a job, regardless of age, are not familiar with the hazards in their new workplace or department and tend to have more injuries than experienced workers.
- **3. Don't know their legal rights:** Young workers may not realize they have legal rights that protect their health and safety the rights to know, participate and refuse unsafe work. They may also hesitate trying to exercise these rights.
- **4. Afraid to ask questions:** Young workers may be embarrassed to ask questions or rock the boat. They do not want to appear incompetent by asking questions.
- 5. Tired from trying to balance work with school and other activities: Young workers may have to juggle their job with classes, homework and other activities.

The costs of injury or illness can be high. If you are injured, you may miss special activities, sports and school. And there is a risk of permanent injury or death. Plus, getting hurt also affects your family, friends, employer, co-workers and community.

- Family and friends it's very hard to see someone you love in pain or permanently disabled
- **Employer** loss of a valuable employee will hurt production, productivity and reputation
- Co-workers staff morale may drop and people may have to work harder if you're not there
- Community you may not be able to take part in community events like sports or volunteer work

Health and Safety Laws

Preventing workplace injuries is important to everyone. That's why the Ontario government has laws to protect the health and safety of workers.

The purpose of these laws is to prevent injury and illness and to create better places to work. (The Government of Canada has similar laws for federal work-places, but this resource book will only cover the details of Ontario's law).

Along with specific duties and responsibilities, the law also sets out general health and safety requirements for everyone in the workplace.

The law sets out:

- Your rights and responsibilities as a worker
- The responsibilities of your supervisors and employer
- The role of the government in enforcing the law
- Specific regulations for certain jobs or workplaces.

Under the law, everyone in the workplace has a role to play in preventing workplace injury and illness. This means workers, supervisors, employers, and worker representatives all have legal duties to keep their workplace safe and healthy. We call this system of health and safety duties the Internal Responsibility System (IRS).

Who's Covered

OHSA: Ontario's *Occupational Health and Safety Act* covers most workers in Ontario.

Canada Labour Code: Workers with the federal government or organizations such as airlines, banks, television stations, cable companies and railways are covered by the Canada Labour Code.

Not covered: Nannies and domestic workers in private homes are not covered under OHSA.

Who's who under the Law

- Employer: a person who employs one or more workers. In other words, he or she runs the business and pays your salary.
- Supervisor: a person who has authority over any worker or charge over a workplace. In other words, any person who can direct you on how or when to do your job.
- Worker: a person who is paid to perform work or supply services.
- Worker Representative: a co-worker who can speak to management about worker health and safety issues and help to resolve problems



Here's an example of how the IRS might work:

A worker spots a health and safety problem and reports it to the boss. The boss lets all workers know of the hazard and then eliminates it. A worker representative looks at the area during a regular inspection to make sure the hazard is still eliminated.

Part of the Internal Responsibility System is the Joint Health and Safety Committee or Health and Safety Representative.

- Workplaces with 6-19 workers must have a Health and Safety Representative
- Workplaces with 20 or more workers must have a Joint Health and Safety Committee (JHSC).
- Any workplace where a Designated Substance Regulation applies must have a JHSC, regardless of the number of workers in the workplace.
- Generally, construction sites with 20 or more workers are required to have a JHSC only if the project is expected to last more than 3 months.

At least one-half of the members of the committee must be worker members, chosen by their co-workers or union. In workplaces where 20 or more workers are employed, at least one worker and one management member must receive training to become Certified Members of the committee.

Health and Safety Representatives and Joint Health and Safety Committee Members can speak to management about your health and safety concerns. They will also

- Identify hazards in the workplace
- Try to help solve health and safety issues
- Do regular inspections of the workplace
- Obtain information from the employer
- Recommend changes to make the workplace safer and healthier
- Investigate serious accidents and fatalities

You should find out what regulations apply to your work.

Safety Regulations

- Construction Projects
- Industrial Establishments
- Mines and Mining Plants
- Health Care and Residential Facilities
- Window Cleaning
- Diving Operations
- Firefighters-Protective Equipment
- Oil and Gas-Offshore
- Roll-Over Protective Structures
- Teachers
- University Academics and Teaching Assistants

Training Regulations

- Training Requirements for Certain Skill Sets and Trades
- Training Programs

Designated Substances Regulations

- Acrylonitrile
- Arsenic
- Asbestos
- Asbestos on Construction Projects and in Buildings and Repair Operations
- Benzene
- Coke Oven Emissions
- Ethylene Oxide
- Isocyanates
- Lead
- Mercury
- Silica
- Vinyl Chloride

General Regulations

- Biological or Chemical Agents, Control of Exposure
- Workplace Hazardous Materials
 Information System



Ministry of Labour

The Ontario Ministry of Labour (MOL) enforces the Occupational Health and Safety Act (OHSA) and its regulations.

MOL Inspectors can enter any workplace covered by the OHSA at any time.

The MOL can also

- Lay charges against companies or people breaking the law
- Inspect workplaces
- Issue orders and stop unsafe work
- Investigate serious accidents, fatalities or work refusals
- Look for violations of health and safety laws and regulations

When health and safety laws are broken, there are penalties to pay. A person can be fined up to \$25,000 for every charge laid under OHSA and/or serve 12 months in jail.

A corporation can be fined up to \$500,000 for each violation if convicted.



David Ellis, 18, of Burlington, Ontario was removing cookie dough from an industrial mixer when the mixer started running. David was pulled into the mixer by the blades and struck his head. He was taken to hospital where he died six days later. It was David's second day on the job.



The company David was working for pleaded guilty to failing to ensure that the exposed moving parts of the mixer were guarded, contrary to Section 24 of the Regulation For Industrial Establishments and Section 25(1)(a) of the *Occupational Health and Safety Act*. The company was fined \$62,500.

Two of the company's supervisors also pleaded guilty to failing to ensure that the exposed moving parts of the mixer were guarded, contrary to Section 24 of the Regulation For Industrial Establishments and Section 27(1)(a) of the *Act*. The two men were co-owners and directors of the company.

One was jailed for 20 days and the other fined \$7,500. Source: Ministry of Labour



Minimum Ages

The Occupational Health and Safety Act and its Regulations set the minimum ages for different kinds of work:

18 years of age for Underground Mines
16 years of age at a Mining Plant or Surface Mine
18 years of age for Window Cleaning
16 years of age for Construction and Logging Operations
15 years of age for Factory Operations and Repair Shops
14 years of age for all other industrial establishments.

14 and 15 year olds may not be employed during school hours unless they are excused from school attendance under the *Education Act*, Ontario Regulation 308, "Supervised Alternative Learning for Excused Students".

There are currently no minimum age requirements for health care establishments, libraries, museums, golf courses or schools.

Part 2



Safety Roles



Safety Roles

You, your employer and your supervisor all have responsibilities when it comes to keeping you healthy and safe.

Employer's Role

Your employer is responsible for your health and safety at work, as well as everyone else's.

This responsibility involves several specific duties under the Occupational Health and Safety Act (OHSA).

- Establish a health and safety policy and program
- Provide required training
- Provide the information, instruction and supervision you need to do your job safely
- Make sure you have necessary safety equipment
- Provide information on hazards in the workplace

Under the law, your employer must also display important information where everyone can see it:

- The Health and Safety Policy
- JHSC members names and locations
- The Occupational Health and Safety Act
- WSIB In Case of Injury poster

Supervisor's Responsibilities

Usually, your supervisor works closely with you on a day-to-day basis. So he or she plays an important role in keeping you safe on the job. Your supervisor has legal responsibilities too.

- Make sure that you follow the law and the company's safety rules
- Tell you about any job hazards or dangers
- Make sure you use safety equipment properly

A good supervisor should look after workers. The supervisor should

- work near or with the workers
- be available to answer workers' questions
- provide feedback on how the job is being done
- provide hands-on training until the work can be done correctly, confidently and safely by the worker
- monitor the job to make sure it is being done safely and with the right safety equipment

The law requires your employer to appoint "competent" supervisors.

What is competent? The law says:

Competent means a person who:

- is qualified because of knowledge, training and experience to organize the work and its performance,
- is familiar with the OSHA and the regulations that apply to the work, and
- has knowledge of any potential or actual danger to health or safety in the workplace.



Training

Both your employer and supervisor are responsible for making sure you have the safety training you need. There are two types of training you might receive: General training that applies to everyone in the workplace and specific training on how to do your particular job safely.

General training can include topics like

- Company Health and Safety Policy
- Company Safety Rules
- Emergency Procedures
- How to get first aid

Specific training might include

- How to do your job safely
- How to deal with hazardous materials
- How to use Personal Protective Equipment (PPE)
- How to operate machinery and equipment safely

How can you be sure that you get the training and information that you need?

Start by getting answers to questions like these.

- What are the hazards of this job?
- Is there any special training for the job?
- Do I have the right safety gear?
- Where are the fire extinguishers and emergency exits?
- What do I do if I get hurt?
- If I have health and safety questions, who do I ask?

Your Role

Your employer and supervisor aren't the only ones with legal responsibilities. You have to do your part too. Here's what the law says you must do:

- Obey the law
- Use machines and equipment safely
- Wear required personal protective equipment (PPE)
- Report hazards to your boss
- Work safely and don't fool around



Your Rights

As a worker, the law also gives you three important rights:

- 1. The Right to Know
- 2. The Right to Participate
- 3. The Right to Refuse

1. The right to know

You have a right to know about dangers in your workplace and what to do about them. Your employer must provide you with the training, supervision and hazard information you need to perform your job safely. Remember: Along with "on-thejob" training, you should also get training before you start the job.

Don't start a new job or machine with the promise of training later. Important health and safety training, information and instruction come first!

Ask questions!

Get clear answers and instructions. If you don't understand how to do the work, it's okay to ask questions.

With clear directions, you will have a much greater chance of doing the work properly and safely.

Apply these rules:

- 1. Don't perform any task until you have been properly trained.
- 2. If you feel that you have been getting too much information, too fast, ask your supervisor to slow down and repeat the instructions.
- 3. Don't go into unfamiliar work areas. They may have different types of hazards of which you may be unaware.
- 4. If you are unsure of something, ask someone first. A supervisor or co-worker might help you prevent an injury.
- 5. Don't hesitate to ask for more training.
- 6. Wear the safety shoes, hard hats or gloves and other personal protective equipment your work requires. Be sure you know when to wear protective gear, where to find it, how to use it and how to care for it.
- 7. Find out what to do in emergency situations like a fire or power outage.
- 8. Report any accidents to your supervisor immediately, even if no one gets injured.



2. The right to participate.

You have the right to take part in keeping your workplace healthy and safe. One way to do this is by being a Health and Safety Representative or a member of the Joint Health and Safety Committee.

But you can participate in many other ways.

- Ask questions
- Help with health and safety inspections
- Take part in training
- Identify hazards and possible solutions

3. The right to refuse unsafe work.

When the boss or supervisor tells you to do something, it's hard to say no. But you should say no if you think someone will get hurt. No job is worth getting injured.

Before refusing work that you think is dangerous, discuss it with your boss or supervisor. In most cases, you can work it out. But if your boss insists that you do work you feel is unsafe, you may have to refuse. If you do need to refuse, be polite but firm. The law spells out the steps that you and your boss must follow.

Step One:	If you decide to refuse a task because you think it is unsafe, you must report your refusal to your supervisor or employer.
Step Two:	Your supervisor or employer will call in your worker health and safety representative.
Step Three:	Your supervisor or employer must investigate your concern in front of you and the worker representative. If your supervisor or employer agrees the work is dangerous, it is corrected. You return to work.
Step Four:	In most cases, you, your supervisor and your worker representa- tive will be able to solve the problem. But if you can't and you feel you have reasonable grounds to continue refusing, the Ministry of Labour (MOL) is called. The MOL inspector will investigate and help correct the problem. While you wait for the inspector's investigation, your employer can give you other reasonable work to do.



All workers have the right to refuse unsafe work, but for some workers this right is limited. Certain workers, such as those with a responsibility to protect public safety, cannot refuse unsafe work if the danger is a normal part of the job or if the refusal would endanger the life, health or safety of another person. These workers can include police officers, firefighters certain health care workers and teachers, if pupils are in imminent jeopardy.

Your employer cannot punish or fire you for refusing work that you think is unsafe. The Occupational Health and Safety Act provides you with protection from any reprisals like being sent home without pay, having your hours drastically cut or being fired. If you think you have been disciplined you can report it to the Ministry of Labour (MOL). The MOL won't deal directly with the reprisal, but they will guide you to either your union if you have one in your workplace or to the Ontario Labour Relations Board who will deal with your situation. It may take time to resolve your issue.

Part 3



Work Hazards



Work Hazards

A hazard is anything that can hurt you or make you ill. You face hazards every day – driving, playing sports, or just walking across the street. To protect yourself against workplace hazards you first need to know how to recognize them.

Recognizing Hazards

A workplace hazard is any condition, practice, or behaviour that could cause injury or illness to a person or damage to property.

Types of Injuries and Illness: Acute and Chronic

Some hazards – like slippery floors or boiling water – cause injuries right away. But other hazards take longer.

Immediate injuries are called **acute**. Examples of acute injuries are burns, fractures, bruises.

Illnesses that develop over a long period of time are called **chronic**. Examples of chronic illnesses include repetitive strain, hearing loss, and cancer.

Types of Hazards

How can you recognize the hazards in your workplace? It helps to know that hazards come in several forms.

They are generally grouped into four basic types:

Physical Hazards include unsafe machines and environmental conditions. Examples are unguarded machine parts like saw blades, constant noise, or prolonged exposure to sun or cold.

Biological Hazards are produced by living things. They often come from working with animals and people. Examples include blood, viruses and animal and bird droppings.

Chemical Hazards include materials that are flammable, explosive or poisonous. Examples are cleaning products, pesticides and gasoline.

Ergonomic Hazards are caused by poorly designed workplaces or processes. Examples are poor lighting, workstations that are too high or low for you or a job that requires you to repeat the same movement over and over.



Physical Hazards

Example	Effect	Workplace Examples
EQUIPMENT AND MACHINERY can range from heavy machinery to smaller equipment. Moving parts can catch or cut the body or clothing. Blades can cut or amputate. If not guarded, materials can fly off the machines or hands and fingers can get crushed if they come into contact with moving parts.	 Serious, immediate injuries such as cuts or amputations can occur Injuries can develop over time from inappropriate workstation design Crush injuries from getting caught in the machinery or moving parts, such as rollers Eye injuries from materials flying from machinery 	 Furniture manufacturers using table saws Printing press Garbage compactors Lift trucks
NOISE is unwanted sound. It can interfere with communication in the workplace, which can lead to injuries. Excessive noise levels or pro- longed noise can damage the nerves in the ear. Hearing loss may be temporary or permanent.	 Hearing loss Ringing in the ears Difficulty in understanding what people say Sleep problems, fatigue, muscle tension 	 Power tools such as saws and power hammers Factories Lawn mowers and edge trimmers
ELECTRICITY causes electric shock when a person becomes part of the electrical circuit resulting in current flowing through the body. Frayed electrical cords, missing ground pins, improper wiring and live electrical parts can all result in electric shock.	 Death from electrocution Burns to skin and organs 	 Electricians and apprentices Construction, landscaping or other outdoor work done close to live wires Any workplace with electrical appli- ances or equipment
SLIPS, TRIPS AND FALLS are one of the leading causes of injuries. Fall from even minor heights can result in critical injuries or death	Broken bonesDeathMuscle strains	 Warehouses, stores, factories, restaurants Roofing and other construction work
TEMPERATURE includes exposure to heat and cold. Workers can be exposed to heat generated as a result of the work process or from working outdoors in the summer. Workers can be exposed to cold from working outdoors in the winter or from working in refrigeration. Exposure to extreme temperatures puts the body under stress as it tries to maintain normal biological temperatures.	 Fainting Heat stress Burns Heat stroke Hypothermia Frost bite 	 Foundries Bakeries, fast food Laundry mats Meat and frozen food departments, processing plants and warehouses
VIBRATION is a hazard associated with moving machinery parts. Can be whole body vibration or hand-arm vibration.	 Back disorders White finger disease Tingling and numbness in fingers and hands 	 Driving moving vehicles such as construction equipment, farm equip- ment and trucks over uneven ground or gravel
RADIATION is energy and can be ionizing radiation such as from x-ray machines, radioac- tive background or non-ionizing radiation such as from ultraviolet radiation of the sun, electric power lines.	 Damages cells of the body and cause cancer Can damage reproductive cells and cause genetic defects Radiation sickness Skin cancer Retinal damage 	• X-ray technicians

Biological Hazards

Example	Effect	Workplace Examples
 BACTERIA are found in the air, water and soil and in living or dead animals or plants. VIRUSES are micro-organisms that reproduce by coming into contact with living cells. They are found only in living animal and plant matter. FUNGI are simple plants that feed on the living or dead tissues of animals or plants. Mold, mushrooms and yeast are fungi. 	 Can cause various diseases and illnesses Ragweed pollen can cause allergies or asthma Viruses can cause skin, eye, ear infections, cold and flu Hantavirus (mice) Salmonella and E.coli 	 Any place where you work with animals or plants such as pet stores, gardening centres, farming
ANIMAL AND INSECT BITES	 Bee stings can cause anaphylactic reactions Rabies Tick bites can result in Lyme disease 	 Delivery type work such as mail delivery, newspaper delivery Landscaping
INFECTIOUS DISEASES through exposure to unsanitary conditions, used needles, and exposure to blood such as in surgery, dentistry, emergency services.	HepatitisAIDS	 Used needles picked up by sanita- tion/garbage pickers or in hospitals Healthcare and lab workers

Chemical Hazards

Example	Effect	Workplace Examples
DUSTS are very fine particles that can become airborne and are created when materials are crushed, ground or sanded.	 Respiratory problems such as asbestosis, silicosis Allergic reactions Irritations Pneumoconiosis (dust in the lungs) 	 Underground miners are exposed to minerals that produce dust when crushed Cement, brick manufacturers Gravel pits Woodworking Demolition
SOLVENTS are hazardous when vapours form from a liquid resulting in potential exposure or explosion.	 Dermatitis from contact on the skin Burning eyes Headaches Respiratory problems such as bronchitis Flammable and can cause burns or explosions Liver damage 	 Cleaners use cleaning solvents such as ammonia and toluene.
FUMES are created when a solid substance melts such as from welding.	 Respiratory effects Cancer	• Welding
GASES are formless substances that expand to occupy all the space of its container or workspace.	 Respiratory effects Nausea Headaches Environments with lack of oxygen can lead to death Flammable and can cause burns or explosions 	 Gas stations Mechanics exposed to diesel from exhaust
ALLERGIC REACTIONS: some substances cause allergic reactions. Usually people become allergic after repeated exposure to the substance.	 Latex causes skin rashes and/or severe allergic reactions such as anaphylactic shock 	• Health care workers such as nurses, surgeons, who use latex gloves

нealth & safety 101



Ergonomic Hazards

Example	Effect	Workplace Examples
WORK RELATED MUSCULOSKELETAL DISORDERS develop when the same muscles are used over and over again, usually while applying force, and with little recovery time away from the task. They also develop when workers have to maintain a fixed position while working.	 Cause injury to muscles, bones, blood vessels, tendons, nerves and other soft tissues Strain injuries such as carpal tunnel or tennis elbow Tendonitis Repetitive sprain or strain injury Prolonged strain results in pain and injury, which may cause impairment and disability 	• Food processing industries such as meat and poultry
PHYSICAL ENVIRONMENT such as lighting, temperature, indoor air quality and noise can cause undue stress and strains.	 Visual problems from glare Excessive noise can cause sleep disturbances and fatigue Eyestrain in dark environments 	Movie and live theatre requires work in darkened environment
MANUAL MATERIAL HANDLING includes activities requiring the use of force by a person to lower, push, pull, hold or restrain a person, animal or thing.	 Strains and sprains Neck and back injuries Slips, falls and crush incidents 	• Any job that requires placing boxes or other items on shelves, painting, gardening, cleaning

Psychosocial Hazards

In addition to the four main hazard types, psychological or social factors can cause problems. For example, stress and violence can lead to headaches or trouble sleeping.

Stress Factors:

- Conflict with managers or co-workers
- Poor working conditions
- Heavy workloads

Violence:

- Threats
- Harassment
- Assault

If you are having problems, make sure you talk to someone: your supervisor, your family or a co-worker. You should report any act of violence right away.



Dealing with hazards

Protect yourself and your co-workers by looking out for hazards.

You have a legal responsibility to report hazards. Reporting hazards will help your employer meet their responsibility for your health and safety.

So before you start a new job, stop and think about it. Try to recognize situations that might be dangerous. If you're not sure, ask someone. And pay attention to health and safety information.

Ask yourself some key questions

- Is any of the machinery broken?
- Are there any warning labels or signs?
- Is there any moving equipment I could get caught in?
- Is there a guard missing?
- Is there something I could trip on?
- Do I need protective equipment?
- Do I know how to do this job safely?

WHMIS

The Workplace Hazardous Materials Information System (WHMIS) is a Canadian system of identifying hazardous materials.

The goal is to make sure that workers have the information they need to work safely with these products.

WHMIS has four components:

- 1. Classification and Symbols
- 2. Warning labels
- 3. Materials Safety Data Sheets
- 4. Training



WHMIS Classification Symbols

An important component of WHMIS is a system of classification and symbols.

There are eight different symbols. If you work with hazardous materials, you need to know these symbols and what they stand for.



CLASS A – COMPRESSED GAS A material (cylinder) with this symbol can explode and take off like a rocket! Example: Acetylene (in torches)



CLASS B – FLAMMABLE AND COMBUSTIBLE MATERIAL A material with this symbol can burst into flame very suddenly. **Example: Gasoline**



CLASS C – OXIDIZING MATERIAL A material with this symbol will feed any fire, making it much hotter and larger. Example: Contents of an oxygen tank



CLASS D1 – MATERIALS CAUSING IMMEDIATE AND SERIOUS TOXIC EFFECTS A material with this symbol will cause acute and serious poisoning. Example: Carbon Monoxide (in car exhaust)



CLASS D2 – MATERIALS CAUSING OTHER TOXIC EFFECTS A material with this symbol can cause slow poisoning or other illness. Example: Lead



CLASS D3 – BIOHAZARDOUS INFECTIOUS MATERIAL A material with this symbol can give you a serious disease. Example: Used needles (e.g. infected with Hepatitis B)



CLASS E – CORROSIVE MATERIAL A material with this symbol can seriously harm your eyes and burn your skin or lungs. Example: Ammonia Gas (in many cleaning products)



CLASS F – DANGEROUSLY REACTIVE MATERIAL A material with this symbol may explode if mixed with other chemicals or dropped. Example: Nitroglycerine



WHMIS Warning Labels

All hazardous materials have a warning label from the supplier.

A supplier label must:

- contain the following information:
 - product identifier (name of product)
 - supplier identifier (name and address of supplier)
 - a statement that an MSDS for this material is available
 - hazard symbols to show the dangers associated with the material
 - risk phrases (words that describe the hazard or hazards of the material)
 - precautionary measures (how to work with the product safely), and
 - first aid measures (what to do in an emergency)
- have all text in English and French
- have the WHMIS hatched border.

Containers of less than 100 ml do not include risk phrases, precautionary measures or first aid measures.

You'll recognize the label by its distinctive border and the WHMIS symbols.

If the hazardous material you're using is produced in the workplace or you've transferred it into another container, the new container will need a **Workplace Label**.

The Workplace Label must contain:

- A product identifier the common name
- Safe handling instructions
- A statement to indicate that a Material Safety Data Sheet is available

Sample Workplace Label

METHANOL

Flammable - do not use near open flame or processes that generate sparks

Avoid inhaling

Read the material safety data sheet before using this compound







Material Safety Data Sheets (MSDS)

Your workplace must have an MSDS for each hazardous material.

The MSDS will tell you about the material, its hazards, how to use it safely, how to store it safely and what to do in an emergency. Make sure you know where to find them in your workplace.

The MSDS must include

- 1. Product information: product identifier (name), manufacturer and suppliers names, addresses, and emergency phone numbers
- 2. Hazardous Ingredients
- 3. Physical Data
- 4. Fire or Explosion Data
- 5. Reactivity Data: information on the chemical instability of a product and the substances it may react with
- 6. Toxicological Properties: health effects
- 7. Preventative Measures
- 8. First Aid Measures
- 9 Preparation Information: who is responsible for preparation and date of preparation of MSDS

Training

The final WHMIS component is training.

If you work with or near hazardous materials, you must be shown how to handle them safely.

In every workplace WHMIS training is geared to its particular hazards and should include

- The WHMIS Symbols
- How to read and understand warning labels and MSDS
- How chemicals enter the body
- Principles of control of hazardous materials
- How to use the workplace's hazardous materials safely
- What controls are in place for the hazardous materials
- What to do in an emergency

Part 4



Staying Safe



Staying Safe

While your workplace may have many hazards, they can be controlled so that they don't injure you or make you sick.

Controlling Hazards

There are many strategies for controlling hazards in the workplace.

Physical Guards protect you from moving parts on machinery that can cut you or catch your clothes. Lockout procedures make sure machinery or equipment won't start and injure a worker during set-up, clean-up or similar work.

- **Chemical** Ventilation systems remove harmful vapours from the air. Substitution involves replacing a dangerous chemical or material with a safer one.
- **Biological** Safe work procedures such as washing hands can help prevent the spread of germs.
- **Ergonomic** Redesigning workstations or the way work is done can help control ergonomic hazards.
- **Psychosocial** Violence prevention, anti-bullying and stress reduction programs will help lower stress.

The best way to prevent injury is to use controls right at the source of the hazard. If that's not possible, hazards can be controlled "along the path" before they reach the worker. The last choice is to use hazard controls at the worker. Here are examples of all three.

At the Source

- Redesigning work processes
- Installing guards and enclosures around moving parts
- Isolating dangerous processes
- Replacing hazardous substances with less hazardous ones

Along the Path

- Using local ventilation systems to remove fumes
- Putting up welding screens to protect co-workers from welding flash

At the Worker

- Creating rules and procedures for how people work around hazards
- Limiting how long workers are around dangerous materials
- Providing personal protective equipment like safety glasses, gloves and boots



But whatever method the workplace uses to control a hazard, it must do three things:

- 1. Control the hazard
- 2. Not create any new hazards
- 3. Allow you to do your job comfortably

PPE

When other methods of keeping you safe aren't available, you may need to wear personal protective equipment (PPE). There are different types of PPE. Each type is designed to protect against specific hazards.



HEAD AND EYES

- · Hard Hats provide protection from falling objects.
- Goggles and face shields protect the eyes from splashing liquids and flying objects
- · Safety glasses protect you from dust and debris.



EARS

· Ear muffs and plugs protect your hearing from loud noises



FEET

- Safety shoes and boots protect your feet from sharp or heavy objects.
- Footwear should be non-slip.



HANDS

Gloves protect hands from chemicals and sharp objects.



LUNGS

• Respirators prevent you from inhaling tiny particles in the air that can damage the lungs.





SKIN

• Shirts with long sleeves and coveralls can protect you from being scratched, burned or splashed by chemicals



BODY

• Fall protection systems (harnesses that tie off) can prevent serious injury if you fall from a height.

Your employer must ensure you have PPE and train you how to use it. You must wear it and let your boss know if there are any problems with it. Your PPE won't eliminate the hazard but it will help protect you if used properly.

PPE must:

- Be comfortable and fit properly
- Be maintained and kept in good condition
- Be appropriate for the hazard
- Not cause new hazards

Hygiene and Emergency Facilities

Along with PPE and other controls, some jobs will also have hygiene facilities such as hand washing stations and showers. Proper and frequent washing will reduce the chance of skin absorption or swallowing a hazardous substance. Some jobs may also have facilities to deal with emergencies. They could include emergency eye wash stations or showers. Make sure you're shown when and how to use them.

Emergencies

You can also stay safe at work by knowing what to do in an emergency. It's important that everyone knows what to do in these situations.

Types of Emergency

- Fire, Explosion
- Injury
- Hazardous Material Spill
- Violence
- Severe Weather



Emergency Procedures

Make sure you know the emergency procedures in your workplace. The procedure will include an emergency plan and emergency equipment.

A workplace emergency plan should include:

- Reporting Procedure
- Description of alarm system
- Duties and responsibilities
- Escape routes and safe meeting area
- Communication method
- Names and numbers of key people
- Regular drills
- Map of the building

Your workplace may have emergency equipment available, including:

- fire extinguishers
- fire blankets
- stretchers
- flashlights
- spill kits
- eyewash stations and showers

Note: Before using a fire extinguisher or other emergency equipment, make sure you're trained on its proper use.

Be Prepared. Ask yourself these questions.

- Where are the emergency exits?
- When do I evacuate?
- Where are the fire alarms?
- Where are the fire extinguishers?
- Where can I get first aid?
- Who do I report an emergency to?



Reporting Injuries

If you do get hurt at work or made sick by your job, the *Workplace Safety and Insurance Act* (WSIA) likely covers you. The *Act* outlines the benefits you can get if you are off work because of your injury. It also spells out the steps that you should take if you get hurt.

If you get hurt

- 1. Get first aid treatment
- 2. Tell your supervisor
- 3. Get medical care if necessary

Your employer must

- Arrange for transportation for you to get medical care
- Pay your wages for the day of the injury

If you require health care treatment, or time away from work, or lose wages, you and your boss must file a claim with the Workplace Safety and Insurance Board (WSIB). (The claim is reported using a Form 7 – see sample)

The WSIB will review your claim. If necessary, they'll help you with benefits, get you necessary health care, and help you return to work as soon as possible.

Some types of workplaces are not covered by the WSIA. For example

- Banks, trusts and insurance companies
- Private health care practices (such as those of doctors and chiropractors)
- Trade unions
- Private day cares
- Travel agencies
- Private summer camps
- Clubs (such as health clubs)
- Photographers
- Barbers, hair salons, and shoe-shine stands
- Taxidermists
- Funeral directing and embalming

This is not a complete list. If you're not sure if your workplace is covered, ask your employer or contact the Workplace Safety and Insurance Board.

Please PRINT in bi	ack ink					Craterines	ALIBEL		
ob Title/Occupation (at the time of accident/illness - do not use abl	breviations)	Longth of tim	e in this posi	ition	_	Social In	surance	Number	
		white working	t sex hoe	the state second					
			Is the wo	orker covered by	ra .	Worker R	eference	Number	
Last Name First Name			Union/C	Villective Agne	mert?				
Address (number, street, apr., suite, unit)		_	Worker's	s preferred lang	prage	Date of	dd	mm	30
fit-fit-s	and a start of the start		100	er	in .	Telephor	ie i	-	
Log the Point P	onai code		6			[)	-	
			Sec] F	Date of Hire			"
3. Employer Information								Fold I #10-	nere for invelope
hade and Legal Name (If different provide both)		Chi	^{tck} □ Fin ^k □ Nu		Account Number	Provide	Number		
failing Address		Rat	te Group Nur	nber	Classifi	cation Uni	t Code		
City/Tawn	Provi	ice Por	stal Code		Telepho				
terristics of Business Inticity		Descore	have 10 a.		()			
an gan a managan a sa s		more workers?	20.07) yes 🔲 no	()			
Iranch Address where worker is based (if different from mailing addr	ress - no abb	reviations)							
City/Teen	Provi	ice Pa	stal Code		Alternat	e Telepho	ne		
			_		1)			
Accident/liness bates and betails dd mm w		2. Who was the	accident/ill	ness reported t	o? (Name	& Positie	eð.		
accident/Awareness of illness	Hem								
Date and hour reported dd mm yy	Real			Telephone				Ext.	
3. Was the accident/illness: 4	Type of acc	ident/illness: (lease ch	ock all that	apply)	-		-	
Sudden Specific Event/Occurrence Gradually Occurring Over Time	Struck/	laught tion	Fall Harmful S	abstances/Em	vironment	∍ E	Silp/Tr Motor	ip Vehicle k	scident
Fatality	Fire/Exp	in losion	Other						
5. Area of injury (Body Part) - (Please check all that apply)				Blake I in		E at			Black
Face Neck Deverback	Shoulder	ΠIA	Wrist	ΠΪ	Ë 🖧	Ĥ	ÌË	Ankle	Ã
Earts Pelvis	Elbow	H I H	Finger(s)		Kne	Ee H		Toels	۰H
Uther	the weekers	as dains at the t	ine Alfine s	50 lb box die		at from a	-		ate.
etc). Include what the injury is and any details of equipment, a person) that may have contributed. For a condition that or	materials, e	adually over	ditions (wor	karea, tempera	descrip	a, chemic	al.gas. the ph	fumes. o	ther
activity required to de the work.									



Some Final Words

Who can you talk to if you have a problem at work?

Talk to your supervisor or employer. Talk to the worker member of the health and safety committee or the health and safety representative.

Ask other workers on the job. Find experienced workers who have done the job for some time and talk to them about your concerns. They may have suggestions on how to do your job safer or how to get the information you need.

If the company you work for has a health and safety department (many large companies do), see one of their health and safety professionals. It's part of their job to answer questions and give advice. If there is a union, the union health and safety representative will be able to advise you because they monitor health and safety concerns.

How about outside the job?

Talk to your parents or other adults who have workplace experience. Many issues you may face may not be new to more experienced workers. They may talk about how they handled a similar situation or provide you with advice on how to resolve your concerns. No one wants to see you injured at work, especially your friends and family.

If you are a student working in a co-op placement, talk to your teacher.

Ontario Ministry of Labour

You can also call your local office of the Ontario Ministry of Labour. Explain the situation and get their advice. You don't have to give your name. They may come to the workplace and check out the situation you mentioned. If you don't want to be identified, they'll explain their visit as a routine inspection so that the employer doesn't know you alerted the inspector. They have offices all over Ontario and their number can be found in the Blue Pages of the Telephone Book.

Health & safety

Tips for Effective Communication with your Supervisor

Preparation

- Identify the issue.
- Plan what you are going to say and how.
- Ensure you have the facts straight.
- Focus on the main points and do not get side-tracked into other issues.

Propose Solutions

No one likes to listen to complaints including your supervisor. If you complain the supervisor may not listen to you or will not consider your complaint. If you propose solutions to the issue, then the supervisor will be more likely to listen to you and respond to your concerns. You will be seen as a positive employee and not as a "problem employee".

Think of how the problem affects your supervisor and how solving it might benefit him or her. For example, maybe you work as a dishwasher in a restaurant and people are constantly slipping on the wet floors. A rubber mat is inexpensive and will prevent people from slipping and getting hurt. This would save the employer money because they wouldn't have to hire new employees whenever someone gets hurt.

Be assertive but not aggressive.

- No one likes to be threatened or yelled at.
- Remain focused and stick to your main points.
- Ask for support.
- Talk to your co-workers or your joint health and safety committee.
 - They may be able to give you alternate solutions to your problem.
 - They may approach your supervisor on your behalf.
 - They may be able to provide you with information on your health and safety rights.
- Talk to your family and friends who can also give you ideas and support.

нealth & safety 101

Advice from Marco

Advice to others?

I would say that, don't think that you're invincible. That accidents can happen and they do happen to people, young like us, out of high school and in a second your life can change. And no matter how much money you need, or how bad you need a job, if there's something that's not safe, don't do it. It's not worth it in the end."





Resources

Health and Safety Associations

Construction Safety Association of Ontario

21 Voyager Court South, Etobicoke, Ontario, M9W 5M7 Tel: (416) 674-2726 or 1-800-781-2726 E-mail: info@csao.org Web: www.csao.org

Education Safety Association of Ontario

4950 Yonge Street, Suite #1505 Toronto, Ontario, M2N 6K1 Tel: (416) 250-8005 or 1-877-732-3726 E-mail: esao@esao.on.ca Web: www.esao.on.ca

Electrical & Utilities Safety Association of Ontario

5580 Explorer Drive, Suite 200 Mississauga, Ontario, L4W 4Y1 Tel: (416) 640-0100 1-800-263-5024 E-mail: eusa@eusa.on.ca Web: www.eusa.on.ca

Farm Safety Association Inc.

Suite 22-23, 340 Woodlawn Road West, Guelph, Ontario, N1H 7K6 Tel: (519) 823-5600 or 1-800-361-8855 E-mail: info@farmsafety.ca Web: www.farmsafety.ca

Health Care Health & Safety Association

4950 Yonge Street, Suite 1505, Toronto, Ontario M2N 6K1 Tel: (416) 250-7444 or 1-877-250-7444 Web: www.hchsa.on.ca

Industrial Accident Prevention Association

207 Queens Quay Ave. West Suite 550, Toronto, Ontario M5S 2Y3 Tel: (416) 506-4272 or 1-800-406-4272 E-mail: infor@iapa.on.ca Web: www.iapa.on.ca

Mines and Aggregates Safety and Health Association

P O Box 2050, Station Main, 690 McKeown Avenue, North Bay, Ontario, P1B 9P1 Tel: (705) 474-7233 E-mail: info@masha.on.ca Web: www.masha.on.ca

Municipal Health & Safety Association of Ontario

450A Britannia Road East Mississauga, Ontario, L4Z 1X9 Tel: (905) 890-2040 E-mail: info@mhsao.com Web: www.mhsao.com

Occupational Health Clinics for Ontario Workers

15 Gervais Drive, Suite 202 Don Mills, Ontario, M3C 1Y8 Tel: (416) 449-0009 or 1-888-596-3800 Web: www.ohcow.on.ca

Ontario Forestry Safe Workplace Association

690 McKeown Avenue, P.O. Box 2050, North Bay ON Canada P1B 9P1 Tel: (705) 474-7233 E-mail: info@ofswa.on.ca Web: www.ofswa.on.ca

Ontario Service Safety Alliance

4950 Yonge Street, Suite 1500, Toronto, Ontario, M2N 6K1 Tel: (416) 250-9111 or 1-888-478-6772 E-mail: info@ossa.com Web: www.ossa.com

нealth & safety 101

Pulp and Paper Health and Safety Association

P.O. Box 2050 Station Main, 690 McKeown Avenue North Bay, Ontario, P1B 9P1 Tel: (705) 474-7233 E-mail: info@pphsa.on.ca Web: www.pphsa.on.ca

Transportation Health & Safety Association of Ontario

555 Dixon Road, Suite 101, Etobicoke, Ontario, M9W 1H8 Tel: (416) 242-4771 or 1-800-263-5016 E-mail: thsao@echo-on.net Web: www.thsao.on.ca

Workers Health & Safety Centre

15 Gervais Dr., Suite 802, Don Mills, Ontario, M3C 1Y8 Tel: (416) 441-1939 or 1-888-869-7950 E-mail: postmaster@whsc.on.ca Web: www.whsc.on.ca

Government Organizations

Human Resources and Skills Development Canada Federal – to contact the HRSDC office nearest you, look

in the local telephone book Blue Pages. Web: www.hrsdc-rhdcc.gc.ca

Ontario Ministry of Labour

Provincial – To contact the ministry office nearest you, look in the local telephone book Blue Pages. Web: www.gov.on.ca/lab

Workplace Safety & Insurance Board

200 Front St. West, Toronto, Ontario, M5V 3J1 Head office: Tel: (416) 344-1000 or 1-800-387-5540 TTY: 1-800-387-0050 Prevention: Tel: (416) 344-1016 or 1-800-663-6639 E-mail: prevention@wsib.on.ca

Office of the Worker Adviser

123 Edward Street, Suite 1300 Toronto, Ontario, M5G 1E2 Tel: 1-800-435-8980 (English) Tel: 1-800-661-6365 (French) E-mail: webowa@mol.gov.on.ca Web: www.gov.on.ca/lab/owa

Other Health and Safety Resources

Young Worker Awareness www.youngworker.ca

WorkSmartOntario www.worksmartontario.gov.on.ca

Passport to Safety www.passporttosafety.com

Canadian Centre for Occupational Health and Safety

Inquiries Service, 250 Main Street East, Hamilton, Ontario, L8N 1H6 (905) 572-4400 or 1-800-263-8466 E-mail: inquiries@ccohs.ca Web: www.ccohs.ca



Glossary of Terms and Acronyms

Absorption

Passage through the skin.

Allergic Reaction

A response to exposure to an allergen.

Allergen

A substance which reacts with the body's immune system to produce a type of irritation known as an allergic reaction.

Acute

Occurring immediately or very soon after exposure.

Bacteria

Microorganisms associated with plants and animals.

Canada Labour Code

Part II of the Code provides the health and safety law that applies to federally regulated workplaces. It's enforced by Human Resources Development Canada.

Certified member

A member of a joint committee who has received special training in occupational health and safety and has been certified by the Workplace Safety and Insurance Board.

Chronic

Occurring long after exposure.

Dusts

Solid particles suspended in air produced by agitation, crushing, grinding, abrading or blasting. Dust ranges in size from 0.1 to 50 micron and larger.

Designated Substance

A biological, chemical or physical agent or combination thereof prescribed as a designated substance to which the exposure of a worker is prohibited, regulated, restricted, limited or controlled in Ontario.

Employer

A person who employs one or more workers or contracts for the services of one or more workers and includes a contractor or subcontractor who performs work or supplies services and a contractor or subcontractor who undertakes with an owner, constructor, contractor or subcontractor to perform work or supply services.

Fumes

An airborne dispersion consisting of minute solid particles arising from the heating of a solid (such as molten metal).

Gas

A formless substance that expands to occupy the space of its container.

Guard

Mechanical, physical and electrical devices that protect workers from moving parts on machinery.

Hazard

Anything in the workplace that can hurt workers or make them ill.

Health and safety representative

A health and safety representative selected under the OHSA.

IRS (Internal Responsibility System)

A system by which workers, supervisors, employers, and worker representatives all have legal duties to keep their workplace safe and healthy.

JHSC (Joint Health and Safety Committee)

An advisory group of worker and management representatives established under the OHSA.

MOL (Ministry of Labour)

The Ontario Government ministry that develops and enforces labour legislation.

MSDS (Material Safety Data Sheet)

Provides detailed hazard and precautionary information for hazardous materials.

Noise

Any unwanted sound which can damage the nerves in the ear.

OHSA (Occupational Health and Safety Act)

The health and safety law that applied to provincially regulated workplaces in Ontario. The MOL enforces it.

Ontario Labour Relations Board

An independent quasi-judicial tribunal that is responsible for a wide variety of matters including determining bargaining units and bargaining agents, trade union certification and unfair labour practices.



PPE

Personal protective equipment that controls worker exposure to specific hazards.

Radiation

Energy that is emitted, transmitted or absorbed in wave, or energetic particle, form.

Supervisor

A person who has charge of a workplace or authority over a worker.

Regulations

Specific health and safety regulations made under the OSHA.

Solvent

A substance, usually a liquid, capable of dissolving another substance.

Supplier label

Product label required under WHMIS for hazardous material supplied to a workplace.

Viruses

Simple submicroscopic parasites of plants, animals, and bacteria that often cause disease.

WHMIS (Workplace Hazardous Material Information System)

A Canadian system of identifying hazardous materials through product labeling, material safety data sheets and worker training.

Worker

A person who performs work or supplies services for monetary compensation but does not include an inmate of a correctional institution or like institution or facility who participates inside the institution or facility in a work project or rehabilitation program

Work related musculoskeletal disorders

Injuries that affect muscles, tendons and nerves. These injuries develop when the same muscles are used over and over again, usually while applying force, and with little recovery time between repetitions.

Workplace label

Product label, used in place of a supplier label, required under WHMIS for hazardous material used in the workplace.

WSIB (Workplace Safety and Insurance Board)

Oversees Ontario's workplace safety education and training system, provides disability benefits, monitors the quality of health care, and assists in early and safe return to work.

WSIA (Workplace Safety and Insurance Act)

Sets out Ontario's no-fault accident insurance system for work-related injuries or illness.