

Always remember, most reports will be carbon paper, your employer will get a copy and the second copy goes to its respective person. With the advancement of technology there are various other ways to distribute these reports for example e-mail. If this is the form of distribution in your work place, a good practice would be to ensure that a hard copy of the report is printed off, in the event of electronic loss.

Here is a list of people that might get the copy of your report:

*Client* – Would get copies of reports that would involve any incident occurring at the building that you are working at. Example: fire alarm.

*Building Operators* – Would get reports that would involve something wrong with the building. Example: temperature problem in a tenant space.

*Building Maintenance* – Would get reports that require maintenance of the building. Example: graffiti found on a wall.

*Security Supervisor* – Would get any internal reports that are employer specific. Example: vacation request.

## Chapter 5

### Health and Safety

The policies and procedures of the Occupational Health and Safety Act and the Workplace Hazardous Materials Information System (WHMIS) are necessary to ensure the occupational safety of security guards and those they interact with.

#### **Understanding the Occupational Health and Safety Act – Ontario**

An occupational health or safety hazard is anything in the work place that has the potential to cause harm to the human body. Health and safety hazards vary greatly depending on the type of work involved. We usually associate work hazards with mines, construction sites and other industrial workplaces. However, workplaces like schools offices, hospitals and retail locations have their own particular hazards.

Many aspects of life can cause health and safety hazards. Equipment, processes, chemical, biological or physical agents, work procedures and design of the workplace are all potentially hazardous.

This understanding has guided the evolution of the *Ontario Occupational Health and Safety Act*. The act depends on the participation of both workplace parties to translate its principles into action. The joint participation of workers and employers with equal powers to act on health and safety matters is known as the *internal responsibility system*.

The Occupational Health and Safety Act include three fundamental rights to workers:

- The right to know about workplace health and safety hazards.
- The right to participate in health and safety recommendations, through their representation on joint health and safety committees.
- The right to refuse work if it endangers health and safety.

### The Right to Know

The act places a duty on employers to provide a wide range of information about hazards in the workplace to workers and to joint health and safety committees. Joint committees have a duty to communicate with workers.

### The Right to Participate

The right to participate is given force by a duty on employers. They must consult with joint committees about testing methods and strategies and about health and safety training programs. Designated worker members of joint committees have the right to be present at the beginning of testing, to participate in Ministry inspections and investigations and to investigate serious accidents. Certified workers have the right to investigate complaints dealing with dangerous circumstances. Joint committees have the right to make recommendations to employers about health and safety improvements, and the Act requires employers to reply in writing.

### The Right to Refuse

Bill 139 proposed that workers be given a limited right to refuse work on the grounds that it endangers the health or safety of themselves or another worker. The 1978 OHS Act expanded on this right by setting out specific work refusal procedures. The Act contains a two-stage refusal process. The work may be initially refused on the basis of a worker's subjective belief that it is dangerous. Once the supervisor has investigated, the worker must have reasonable grounds to believing that the work is still dangerous in order to continue refusing.

To summarize here are *the rights and responsibility of workers*:

### **RIGHTS**

- To know about workplace health and safety hazards.

- To participate in making recommendations on health and safety issues.
- To refuse work if they believe it endangers health and safety.

### *RESPONSIBILITIES*

- To work in compliance with the Occupational Health and Safety Act.
- To wear protective equipment, devices and clothing required by the employer.
- To report to a supervisor any defective equipment, hazard or violation of the Act.
- To work in manner that does not endanger the worker or others.
- Not engage in horseplay or boisterous conduct.

## **Workplace Hazardous Materials Information System (WHMIS)**

WHMIS is Canada's national hazard communication system. Its prime objective is to provide relevant safety and health information to Canadian workers so that they can take the necessary precautions to avoid injury, illness and premature death. The key elements of WHMIS are cautionary labeling, MSDS and worker education and training programs. WHMIS ensures that employers have adequate information about hazardous materials being used in the workplace so that they can meet their legal obligations under F/P/T OHS legislation to provide a safe workplace. WHMIS addresses both the workers' right-to-know the identity and hazards of workplace chemicals and the need for industry to protect confidential business information.

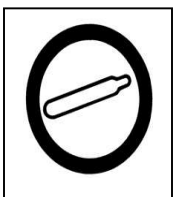
WHMIS is implemented through coordinated federal, provincial and territorial legislation. Supplier labeling and MSDS requirements are set out under the Hazardous Products Act and associated Controlled Products Regulations. The Hazardous Products Act and its regulations are administered by the Government of Canada Department of Health, commonly referred to as Health Canada. Under W.H.M.I.S. there are six (6) classes of hazards:

- Class A – Compressed Air: A substance that at room temperature (20 C) is in the gaseous state and kept under pressure.
- Class B – Flammable and Combustible Material: A solid, liquid, or gas that will ignite and continue to burn if exposed to a flame.
- Class C – Oxidizing Material: A substance that will cause another substance to burn when coming in contact. – For example Chromic Acid, when it comes in contact with paper, will cause the paper to burn.
- Class D – Poisonous & Infectious Material: This category is sub-divided into three categories:

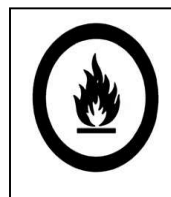
- 1) Immediate Serious & Toxic Effects – This is a material which will cause harmful effects, including death within a short period of time after exposure.
  - 2) Other Toxic Effects – These are materials which cause harmful effects, days, months or years after exposure. Cancer causing materials are included here.
  - 3) Bio-hazardous Materials – An organism or its toxins that may cause serious infectious diseases. For example: used syringes, hospital waste, meat processing waste.
- Class E – Corrosive Material: A substance that will erode steel, aluminum or human tissues.
  - Class F – Dangerously Reactive Material: Any material that will react to water to produce a poisonous gas or which will undergo a reaction if the container is heated, pressurized or agitated.

Certain materials are exempted from W.H.M.I.S. rules, such materials are governed under other existing acts such as the Explosives Act, the Food and Drugs Act, the Pest Control Products Act, and the Nuclear Safety and Control Act. Also manufacturers or suppliers may apply to have a hazardous substance omitted from W.H.M.I.S. compliance due it being a trade secret. The *Hazardous Materials Information Review Act* was established to review these recommendations for omissions.

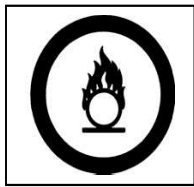
W.H.M.I.S. uses standardized symbols to identify the different classes of hazards. They are:



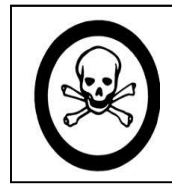
Compressed  
Gas



Flammable &  
Combustible



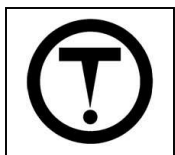
Oxidizing



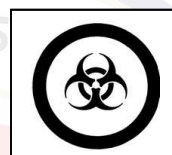
Poisonous



Corrosive

Dangerously  
Reactive

Toxic

Bio-  
Hazardous

Due to the Ontario Occupational Health & Safety Act being amended, The employer is now required to identify hazardous materials in the workplace by preparing a workplace inventory and performing assessments on hazardous materials produced and used in the workplace. An inventory requires:

- The formulation of a list of all hazardous materials present.
- The list must be prepared and maintained with the participation of the joint health and safety committee.
- Copies of the inventory lists must be made available to all employees.

W.H.M.I.S. promotes worker safety through three essentials ways:

- Labeling of all hazardous materials
- Printing of M.S.D.S.
- Training for employees

### **Labeling**

There are two types of labels under W.H.M.I.S., supplier labels and workplace labels.

Supplier labels – These are affixed on a container holding a hazardous material by a manufacturer outside of your workplace. The information requirements are dependant on the size of the container:

If the container contains less than 100ml the following is the necessary information that must appear;

- Product Identifier – The common name, chemical name, or trade name of the product. Whichever it is called, the same name must appear on the M.S.D.S.
- Supplier Information – The name of the supplier
- M.S.D.S. Statement – A statement which advises that an M.S.D.S. is available for the product – See *Material Safety Data Sheet* for more information – is an acceptable statement.
- Hazard symbol – As previously noted, one or more of the hazard class symbols.

If the container is larger than 100ml, additional information must also be included in addition to the four items previously mentioned.

- Risk Phrases – Description of the effects which may result from exposure. For example, “Dangerous if ingested / inhaled”
- Precautionary Notice – Informs on how to avoid the risks associated with the substance. For example, “Wear appropriate eye protection”
- First Aid Information – Explains how to treat a person who has been over exposed.- For example, “Wash under running water”

Additionally the color, size and shape of the labels must be of a fashion to be clearly identifiable from the container. (A yellow label on a yellow drum is unacceptable). It must be printed in English and French, or two separate labels, one in English and one in French, must be affixed

### Workplace labels

Workplace labels are used instead of supplier labels if the material is produced in the workplace or for export, or if the material is transferred from a supplier’s labeled container into another container after its arrival in the workplace. The workplace label must state, in similar fashion as the supplier label, a product identifier, safe handling instructions and a M.S.D.S. statement.

These labels are to be revised and updated as new information on the substance is available. The revised label must not contradict the M.S.D.S for the material. In



addition to the labels, if the materials are to be transported through the workplace via pipeline or conveyer or stored in a tanker truck(s) identifying the materials may be done through color coding of the pipes or placards instead of labels.

### **Material Safety Data Sheets (M.S.D.S.):**

MSDS are documents provided by the manufacturer or supplier of the hazardous material. They provide detail information on the material and outline procedures for its handling and safe usage. Much of the information is of a technical nature and is addressed primarily to engineers, occupational hygienist, fire fighters and emergency coordinators. Employees who have some involvement or work in the proximity with the material should review the MSDS to have an understanding of the risks and how best to protect themselves.

There must be a MSDS for each hazardous material present in the workplace. It must be placed in an area which all workers have access to. The information must be recent and must be replaced every three years or as new information is found on the material. It is the employer's responsibility to keep the MSDS information current and accurate and the manufacturer or supplier must provide the MSDS sheet upon request.

#### **Information found on the MSDS:**

While there is no legal format that the MSDS must take, the information it must include regarding the hazardous material is the following:

- **Hazardous Ingredient:** Lists all the ingredients and concentration of the product which come under any of the six hazard classes. It also provides the chemical abstract service number (CAS number). This number is used for ease and accuracy in identifying additional information on a hazardous ingredient.
- **Preparation Information:** Gives contact information on the company / person who prepared the MSDS, as well as the date on which it was printed. Any MSDS which is older than three years is considered to have expired and must be replaced
- **Product Information:** Gives the complete product name, what it is used for, the chemical family it belongs to, molecular weight and chemical formula. Importantly it also provides the name, address and phone number in case of emergency.

- *Physical Data:* Explains how the material behaves when in use. The information is usually highly technical in nature. Overall it advises whether the material is a gas, solid, liquid, what it looks like and smells like when in use, how likely it is to evaporate (materials which evaporate easier are generally more dangerous) if a gas, is it heavier or lighter than air (important for ventilation), and how it can enter the body and what effects it can have.
- *Fire or Explosion Hazard:* Describes the potential the material has for burning or exploding under various circumstances (certain temperatures, static electricity, sharp impacts or jarring etc.) It is provided to illustrate safe handling procedures, and in case of exposure, what emergency equipment (ie – Fire extinguisher) will be most effective.
- *Reactive Data:* How stable the material is. How it behaves when exposed to certain types of light, chemicals, heat, vibration, moisture, etc. It assists in defining the proper storage methods.
- *Toxicological Properties:* Explains how the material can affect the workers health. How it enters the body (inhalation, absorption ingestion), as well as the conditions or diseases it may cause. Provides the information on the acute effects (immediate symptoms) and chronic effects (long term) which may result from exposure to the material.
- *Preventative Measures:* Recommends safe handling procedures based on the other information provided.
- *First Aid Measures:* Describes immediate first aid treatment for a worker who has been exposed to the material, in chronological order (what should be done first, second, third, etc.) starting with removing the worker from the unsafe area.

### **Worker Education Programs**

This is the third component of the WHMIS Information Delivery System. Employees must be aware of the information available to them and their right to have access to that information. It is the employers' responsibility to educate any employee who works with or near a hazardous material.



## **Occupational Health**

Occupational hazards are unwanted and unintended by products of work. It is important for employees to have basic knowledge to protect themselves against the hazards of workplace materials. Information previously discussed would be incomplete without a basic understanding on how the body works and how these materials can enter and interfere with the body's basic systems.

### **The Cell**

The human body is a large collection of similar, yet different parts each with its own function. Each body part is made up of cells, each one specialized to perform a specific function. For example, the red blood cell transports oxygen throughout the body, while the white blood cells, produces antibodies to fight off infection, and nerve cells generate and transmit electrical impulses to control our thoughts and movement.

Although cells are specialized to perform a variety of functions in the body, their basic structure is the same. Most cells have three basic parts; the nucleus, composed of the genetic material (DNA) required for reproduction of the cell; The cytoplasm, which contains the specialized structures to give each cell its particular characteristics; and the membrane (skin) that regulates the entry of food and chemicals from the blood and the elimination of waste products. – Hazardous materials can affect these cells in various negative ways and cause damage or disease as a result.

### **Routes of Entry**

There are three ways for a hazardous substance to enter the body: inhalation, absorption and ingestion.

- **Inhalation:** The main function of our respiratory system is to absorb oxygen from the air and pass it into the blood stream for circulation throughout the body. Substances entering via the respiratory system may cause damage to the respiratory system or may be carried into the blood and throughout the body.
- **Absorption:** The skin is the largest exposed surface area of the body that can potentially come in contact with harmful substances. Some chemicals can penetrate the skin and reach other areas of the body via the bloodstream.

- Ingestion: Toxic materials may be ingested through contaminated food items. Once swallowed the substances enter the digestive tract and may enter the bloodstream.

Circulatory Systems: The circulatory system is not usually in direct contact with hazardous materials as are the lungs, skin and digestive system. Once in the blood stream, harmful substances can be transported anywhere in the body. Food and oxygen reach every cell in the body through capillaries but so do the toxic substances that might have entered the blood. Some substances may affect the tissue the blood is supplying or the blood cells directly.

Disease Sites: In addition to the organs already noted, major organs such as the liver, kidneys and the nervous systems may also be damaged by materials in the workplace.

The liver is the chemical factory of the body. The liver is the organ which produces enzymes which can convert certain toxins into forms which are more easily handled with the body. However the liver itself can be damaged if it is over-whelmed.

The kidneys act as a filter to all substances in the blood. The kidneys clean out impurities in the blood and deposit them in the urine. From here the impurities travel to the bladder which controls its outlet from the body. Just as the lungs are vulnerable because they are a major route of entry, the kidneys and the bladder are vulnerable because they are a major route of exit.

The central nervous system controls all functions of the body. Most injuries to the central nervous system are permanent. Exposure to pesticides and metals like lead and mercury may interfere with nerve impulses and result in tremors or loss of feeling.

The reproductive organs are also a target of hazardous materials. Some chemicals can cause miscarriages or birth defects by attacking the genetic material of the cell or the system which controls its functions.

### **Latency of Workplace Hazards**

Latency refers to the time lag between the time of exposure to the hazardous material and the eventual development of a disease. For some occupational hazards, the latency periods can range from an average of ten or twenty years. The effects of exposure have been categorized as either “acute” (immediate) or “chronic” (long term) effects.

- Acute Effects: The acute effects of toxic substances occur immediately or soon after exposure. They are generally caused by a high level of exposure and in some cases may cause death but are more often treatable if caught early. These effects are sudden

and dramatic as a result from the direct action of the hazardous materials on the cells in the body.

- **Chronic Effects:** These long terms effects of being exposed to certain hazardous materials can potentially be a lot more serious. Most chronic effects are not treatable. They often result from the body's attempt to repair it, or to compensate for the acute effects of a substance. Chronic disease becomes evident only after severe damage has been done.

Latency has a number of important implications to the employee. A worker exposed to a dangerous substance may feel no immediate ill effects at the time of exposure, therefore not feel the need to communicate the exposure to his/her supervisor or employer. Signs and symptoms as a result of an exposure to a hazardous material can be misdiagnosed or believed to have been caused by something else.

### **Control of Hazards:**

Occupational health and safety is a workplace issue, therefore solutions must be found in the workplace. A hazard can be controlled in many different ways, depending on the nature of the hazard and the work process that causes it. A workplace may produce more than one hazard, so the best control method will usually be one that has been tailored to that process. Each control measure must meet several requirements:

- It must adequately control the hazard. In designing the control method, an effort must be made to eliminate any exposure to the hazard.
- It must allow workers to do their jobs without undue discomfort or distress. Additionally it must also not create any new hazards of its own. Example – Use of safety glasses or ear protectors. While the use of these items may protect a worker from one particular hazard, it may create others by impeding vision and hearing.
- It must protect every worker who might be exposed to the hazard. Example – A respirator might provide adequate protection for a construction worker removing asbestos, but the dust can injure the electrician working down the hall who has not been issued a respirator.
- It must not create a hazard in the surrounding community. Storing toxic chemicals in a buildings back lot or ventilating toxic fumes outside, may protect people inside the building but can harm the environment and people outside.

The controls to a hazardous substance can be placed in three ways; at the source where the hazard begins, along the path of the hazard to the worker and at the worker directly. As a general rule the most effective control measure is the one applied at the source. Controls tend to be less effective the further they are from the source of the hazard.

#### Control at the Source:

Control of a hazard at its source means that it is eliminated from the workplace all together or isolated from the worker. The easiest way to completely protect a worker from a hazard is to eliminate it entirely. In some cases, toxic substances can be replaced by less dangerous substitute material. A substitute may be safer than the material eliminated but might not be entirely safe itself, therefore steps must be taken to protect the worker from its hazards.

Isolating the substance from the worker might involve redesigning the work process, the installation of new equipment or the addition of new safety equipment. These kinds of changes are often called, "engineering controls" – Isolation by remote control is a further development of the same control principle. For example, A mechanical device, which can perform simple procedures such as lifting or pouring a substance, controlled by an operator safely removed from exposure.

#### Control along the Path:

Examples of control along the path are local ventilation close to the source and general ventilation along the entire path. Local ventilation may involve may involve the placing of hoods over the area which have fumes / vapor hazard. If properly designed and maintained, this system can be extremely effective. General ventilation is sometimes called dilution ventilation. It simply spreads a toxic substance throughout the air in an entire workplace, thereby decreasing the concentration of a substance. This is only suitable where less dangerous materials are released in small amounts into a large volume of air.

#### Control at the Worker:

These are the least satisfactory methods because it is not applied at the source of the hazard, but a person who is attempting to protect themselves from it. Most health and safety laws in Canada recognize that personal protective equipment should be used only in special circumstances and for a limited period of time. It should not be the first approach to worker protection. Personal protective devices are seldom properly tested, fitted or maintained in the long run, and may actually endanger the worker by providing only the illusion of safety. Some substances can pass through gloves or clothing long before any cracks or holes appear, work boots may present a similar problem. Personal gear may be uncomfortable and make job performance more difficult. For all those reasons, protective gear

should only be used after all other control measures have been put in place to reduce exposures as far as practically possible.

Administrative Controls:

These are the rules and regulations which control the worker rather than the hazard. It outlines procedures which all workers are to follow to ensure that they are as best protected against hazards as possible. Mandatory use of equipment, performing particularly dangerous operations on a shift with the fewest employees, scheduled medical or equipment testing are examples.

Administrative controls do not control workplace hazards, they merely impose limits on who shall be exposed and for what length of time.

## Chapter 6

### Emergency Response Preparation

Security guards are expected to respond to emergency situations and to minimize the impact caused at a worksite. They may be required to perform a variety of duties during emergency procedures and must understand the importance of scene management.

An emergency is defined as a situation or an impending situation caused by the forces of nature, an accident, an intentional act that otherwise constitutes a danger of major proportions to life or property. Numerous events can be classified as “emergencies” some examples are:

- Fire or Explosion
- Bomb Threats
- Weapons Emergency
- Suspicious Package
- Explosive Devices.

When emergencies do occur, they are most commonly dealt with by local emergency responders such as the police, fire department and emergency medical services. It is the responsibility of the owner or manager to develop or