

## Instructor Manual

Young Worker Safety Certificate Course





We promote workplace health and safety while providing no fault insurance to employers and care for injured workers.

## values

**Respect** - We demonstrate care, compassion and honesty.

**Engagement** - We ensure meaningful participation and collaboration.

**Integrity** - We honour our commitments and act fairly.

**Openness** - We are accessible, clear and transparent.

Cultural Safety - We recognize, gain knowledge of, and respect cultural dignity.

**Excellence** - We are efficient and service focused.

**Stewardship** - We sustain the Workers' Protection Fund through accountability and fiscal responsibility.

### Welcome to the Workers'

Safety and Compensation Commission's (WSCC) Young Worker Certificate Course. Every day across the Northwest Territories and Nunavut, young people enter the workforce for the first time. This is an important time for Young Workers', as this will be some of the first working experience and training that they will receive. Education on worker rights and how to stay safe is essential.

WSCC developed a certificate course for young workers to teach them the fundamentals of safety, and to set a foundation for a strong workplace safety culture as well as a sense of responsibility for their workplace safety.

Through two hours of interactive content, the certificate course can be completed online, or through a desk-top version for communities with limited internet access. When students successfully complete the course they receive a certificate, which can be presented to employers as proof of this training.

Students will learn:

- Essential information about workplace safety;
- how to recognize safety hazards in the workplace;

how to talk about safety concerns and whom to ask for help:

- their role in keeping their work environment safe, under the Internal Responsibility System (IRS); and,
- what to do if they are injured at

The Course consists of three main components:

- 1. Instructor's manual to assist in the delivery of the online program. This manual provides:
  - an overview of each online lesson:
  - an additional (optional) inclass activity to help with student understanding and retention:
  - review questions for each lesson to evaluate student understanding.
- 2. Online modules for the students to complete. Each online lesson includes an activity to help the student further their understanding on the topic.
- 3. Final Exam to assess the student's overall knowledge and retention of the content provided in the course.



### Navigate the Course

The online course has a number of accessibility features for greater ease of use by students.

#### 1. Accessibility Mode

This course can be taken in accessibility mode. To enable the accessibility mode, click the tab key on your keyboard. Accessibility mode allows you to use your keyboard to navigate through the course; it will remove the audio and simplify the navigation throughout. Click the arrow on the right to move to the next course feature.

#### 2. Course Menu

The course menu displays all the different course pages. These pages are represented by numbered circles at the bottom of the page. As you complete each page, the outer ring of the circle fills.

#### 3. Text Size

Text size can be increased or decreased for greater reading comfort.

#### 4. Navigation

Progress Bar – Each page has a progress bar at the top of the screen. As you go through each page, the bar will fill in. If it's not filled in all the way, click or tap on the progress bar to see which sections are complete and those you missed. A section is complete when the oval is filled in – if the oval is empty, you've missed something.

Click or tap on the title to jump to that specific spot on the page.

**Exiting the course** – When you're ready to leave the course, click on the **Exit** button in the top right corner of the course window.

Bookmarking – The course will automatically set a bookmark as you progress through the course so that you can easily pick up where you left off. \*Note that bookmarking will not work in the offline version of the course. Students will need to note where they left off.

#### 5. Resources Feature

In the top right corner of the screen, there is an icon that opens the Resources menu, which may include a glossary of important terms and/or links to other resources.

Click or tap the **Next** button below to progress to the next page.

Action symbols - These symbols prompt students to take an action in different sections of the online module:



Review these symbols with your students. Most text will include an audio version accompaniment.



### Navigate the Instructor Manual

Each topic in this manual will have the same layout:

#### Lesson Summary

You will find a summary of the overall topic and the learning objectives for the chapter.

#### Summary of Interactive Content

This summary lets you know the activities that students are being asked to do, to complete each chapter online.

#### Background Information (optional)

Background information may be supplied to give you context for the topic.

Note: when using the offline/desktop version of this course, students' progress will not be saved. Make sure students take note of where they left off. When they return, they can jump ahead using the chapter navigation menu.

A user guide is included with the manual for help with accessing the online course and/or the exam on the CCOHS website (Canadian Centre for Occupational Health and Safety).

## extended learning

Each section of this manual includes an "extended learning" section with suggestions for supplementary content:



class or group discussions



supplementary activities



review questions serve as exam preparation students work individually or in groups to find the correct answers



## Contents

WSCC Vision, Mission, Values	ii
Welcome	iii
Navigate the Course	iv
Navigate the Instructor Manual	٧
Why Workplace Health and Safety is Important	1
What you Need to Know About Work and Staying Safe	2
Hazards at the Workplace	3
Hazard Assessments	4
Controlling Hazards	5
Building a Safety Culture	6
Working Safely	7
Working Safely with Common Workplace Hazards	8
Materials Handling	9
Equipment	.10
Fire Safety and Confined Space	.11
Work Outdoors and on the Land	.12
Emergency Preparedness	.13
What Happens if I Get Hurt at Work?	.14
Next Steps & Conclusion	.15
Appendices	.16
Appendix 1.0: Online course and exam	.17
Appendix 2.0: Review Questions-Answer Key	.18
Why workplace health and safety is important	.18
What you need to know about work and staying safe	
Hazards at the workplace	.18
Hazard assessments	
Controlling hazards	
Building a safety culture	
Working Safely  Working safely with common workplace hazards	
Materials handling	

Equipment	21
Fire safety and confined space	21
Work outdoors and on the land	22
Emergency preparedness	22
What happens if I get hurt at work?	22
Appendix 3.0: How Loud Is It?	23
Appendix 3.0: How Loud is it?	24
Appendix 3.1: WHMIS Pictograms	25
Appendix 3.2: Prevent the Spread	26
Appendix 3.3: WHMIS Bingo	27
Appendix 3.3: WHMIS Bingo Terms List	31
Appendix 5.0: Hazard Control	32
Appendix 5.1: Case Study – Hazard Control	33
Appendix 6.0: Workers' Basic Rights	34
Appendix 6.1: Case Study – Workers' Rights	35
Appendix 9.0: Manual Materials Handling	36
Appendix 9.1 Materials Handling Activity	37
Answer Key	37
Appendix 9.1 Materials Handling Activity	38
Student Handout	38
Appendix 10.0: Equipment Safety Activity	39
Answer Key	39
Appendix 10.0: Equipment Safety Activity	40
Student Handout	40
Appendix 11.0: Case Study – Fire Safety	41



## extended learning



What are examples of safety activities or measures you do at home or at play? Why are these important?



Watch a video:

"Safety is not a joke"
<a href="https://youtu.be/0Clv">https://youtu.be/0Clv</a>
<a href="https://youtu.be/0Clv">Hcbr51E</a>



- Why is workplace health and safety important, particularly for young workers?
- 2. Why should students take this course?

## Why Workplace Health and Safety is Important

Lesson Summary

Every year in the Northwest Territories and Nunavut, young workers suffer workplace incidents and injuries. Anyone who doesn't have training and experience is at a higher risk.

People under 25 years of age are considered to be young workers. Young and new workers rely on their supervisors for training, education, and to answer questions about the workplace and the worker's responsibilities.

This course will give students an understanding of how to be a safety conscious worker, what they need to be aware of, as well as tools for how to talk about safety with their supervisors.



## What you Need to Know About Work and Staying Safe

#### Lesson Summary

A student's first job could be in any industry, but one thing remains clear: young workers are at greater risk for injury in their first few months of employment. At the start of a young worker's time in the workplace, they won't yet have the experience or training to stay safe on the job. It might be harder to ask questions, and they might not know their rights as a worker.

No matter what field a student starts their job in, building a strong safety culture is essential.

The Internal Responsibility System (IRS) is important for workplace safety and supporting a safety culture. It is everyone's responsibility to keep the workplace safe. All workers have three rights: the right to know, to participate, and to refuse unsafe work.

By the end of this lesson, students will be able to:

- Explain what IRS means.
- Give an example of how to show responsibility for safety (IRS) in the workplace.

#### Summary of Interactive Activities

Students complete two activities in this lesson:

- 1) Click boxes next to photos that show paid work versus unpaid work.
- 2) Click boxes next to sentences that describe IRS.

## extended learning



What is your experience with work? Have you ever felt uncomfortable with a task you were given to do?



Watch a video:

"Workplace Spook" https://youtu.be/5qm NWKSI-Fk



Review Questions:

1. Who is responsible for workplace health and safety according to the internal responsibility system (IRS)?



## extended learning



What are some workplace dangers? What should you do, if you see a hazard at work?



WHMIS!

Print bingo cards (Appendix 3.3)



- What are the types of hazards with an example for each?
- 2. What course do you take to work safely with chemicals?

### Hazards at the Workplace

#### Lesson Summary

A **hazard** is any action, condition, or exposure that might cause injury or illness to people, or damage to equipment, structures or property. Hazards can be physical, chemical, biological, ergonomic, psychosocial, or job-related.

Employers must tell workers about hazards. Also, workers have the right to ask for training and education any time they don't know how to do a job safely. Workers can also report hazards to the Joint Occupational Health and Safety Committee, or to the Health and Safety Representative.

By the end of this lesson, students will be able to:

- identify one example of each type of hazard
- explain the purpose of WHMIS training

#### Summary of Interactive Content

Students can print the handout How Loud is it?, which explains hearing impairment hazards, and common WHMIS pictograms, or Preventing the Spread of germs and viruses.

There are three activities in this lesson:

- 1) Match keywords with the correct hazard.
- 2) Read a short case study and match the correct sentences.
- 3) Listen to an audio example of what it's like to suffer from hearing impairment.

#### Background Materials

- How loud is it? (Appendix 3.0)
- WHMIS pictograms (Appendix 3.1)
- Prevent the Spread (Appendix 3.2)



#### Hazard Assessments

#### Lesson Summary

One system of assessing hazards includes the, "See it, Think it, Do it System":

- See it Identify a hazard by observing "PEME":
  - People, Equipment, Materials, Environment
- Think it Why is it a hazard, and what could happen?
- **Do it** Find a solution to deal with the hazard: either control or eliminate.

When a worker sees a hazard they need to:

- Immediately stop working;
- Make sure everyone is aware of the hazard;
- Have someone manage the hazard eliminate, if possible; and,
- Report the situation to their supervisor.

By the end of this lesson, students will be able to:

- Explain the See it, Think it, Do it System.
- Discuss the PEME categories to consider when looking for workplace hazards:



## extended learning



When you walk into a new or unknown space, what do you naturally do to make sure you are safe?



Write a story or draw a comic strip:

You are a safety investigator and you discover a hazard. What type of hazard is it, why is it a hazard, and how will you eliminate or control it?



- What are the 4 things to consider when looking for workplace hazards?
- 2. What is the "See It, Think It, Do It system?"



## extended learning



Case study: **Hazard Control** (Appendix 5.1)



In pairs or in a group, develop a hazard control program using the steps used for the case study discussion.



- 1. What are the types of controls with an example for each?
- 2. What are the steps in a hazard control program?

### Controlling Hazards

#### Lesson Summary

There are ways to control hazards with the most effective control being

elimination of the hazard.

If the hazard cannot be eliminated, then other controls of substitution, engineering, administrative, and/or



Personal Protective Equipment (PPE) measures may be used for the most effective control of the hazard.

In this lesson, students will learn how to manage hazards by using one of these appropriate measures.

By the end of the lesson, students will be able to:

- Identify the steps in a hazard control program.
- Provide one example use each method of hazard control.

#### Summary of Interactive Content

Students complete three activities in this lesson:

1) Check next to the correct safety considerations when working alone.

Using the Hazard Control infographic, students complete two online activities:

- 2) Identify the correct hazard control.
- 3) Complete a brief self-reflection activity on why safety is important to them.

#### Background Materials

Hazard Control (Appendix 5.0)



### Building a Safety Culture

#### Lesson Summary

Employers and supervisors are legally obligated to provide a safe working environment, but workers also have an important role to play in workplace safety. It is everyone's responsibility to keep the workplace safe.

There are laws that deal with occupational health and safety. These laws, found in the Northwest Territories and Nunavut Safety Acts and Occupational Health and Safety (OHS) Regulations, describe the many different ways we must work safely. To start, it's important to know:

- The duties of employers to protect the health and safety of everyone in the workplace;
- The duties of employers to properly train workers;
- The duties of workers to work safely; and
- The three worker's rights.

By the end of this lesson, students will be able to:

- Recall and explain all workers' three rights.
- Name the OHS regulations' document and explain where to find it.

#### Summary of Interactive Content

Students complete two online activities:

- 1) A checklist to match definitions for the "Right to Participate."
- 2) Fill-in-the-blanks for statements focused on workers' rights.

#### Background Materials

Workers' Basic Rights in Canada (Appendix 6.0)

## extended learning



Case study: Workers' Rights (Appendix 6.1)



Individually or in a group:

Develop a checklist of questions that you should ask during your Workplace Orientation.

As a class, refine a final checklist that students can use in the future.



- What are the 3 rights that all workers have?
- Where can we find more information on OHS regulations?



## extended learning



As a class, brainstorm ideas on general ways of caring for our physical, mental, and emotional needs.



Reflection: make a mental or written note on one important way you already take care of your physical, mental, and emotional needs.

Did you learn about a new way that you could add from the class discussion?



- What are hazards of not practicing selfcare?
- 2. What is one self-care habit that you would like to start?

## Working Safely

#### Lesson Summary

There are many elements to creating a strong safety culture, and personal well-being is an important one. In this lesson, students will learn about ways to take care of themselves to avoid or minimize the hazards of:

- fatigue
- impairment
- workplace stress

By the end of this lesson, students will be able to:

- Identify self-care methods they can start/continue practicing.
- Discuss workplace hazards of not practicing self-care.

#### Summary of Interactive Content

Students complete an online checklist of ways they can take care of themselves to help cope with stress.



## Working Safely with Common Workplace Hazards

#### Lesson Summary

In this lesson, students will learn how to work safely with common workplace hazards that come from:

- slips, trips, and falls
- materials handling
- equipment
- fire safety and confined spaces
- working outdoors and on the land.

#### Common injuries include:

- sprains and strains broken bones
- back injuries
- cuts or burns

By the end of this lesson, students will be able to:

- Provide examples of how to avoid injury from common workplace hazards.
- Identify and explain the two types of fall protection.
- List the 11 steps for safely setting up ladders and stepladders.

#### Summary of Interactive Content

Students complete an online checklist of ways to properly use a ladder.

## extended learning



With a partner, develop an interview about a workplace injury. One person is the journalist that asks the other person, the witness, questions, such: Who was injured, What happened, and how could the situation have been prevented??



Draw a ladder and write the 11 steps for safely setting up ladders and stepladders.

Consult the online lesson, to check your work.



- What are the two types of fall protection systems?
- What are possible causes of slips, trips, and falls?



## extended learning



What is meant by the term material handling? What are some examples of proper material handling?



Match the correct instruction with the activity (Appendix 9.1)



- What are the questions to ask before manually lifting a load?
- 2. When would you use mechanical lifting devices versus powered lifting devices?

### Materials Handling

#### Lesson Summary

Material handling refers to any activity that requires the use of force to lift, lower, push, pull, slide, or hold an object. When improper techniques are used, injuries such as strains, sprains, neck and back injuries, cuts, bruises, broken bones, and hernias may happen.

The three basic ways of handling and moving materials are:

- Using mechanical lifting devices, such as hand carts, dollies, and wheelbarrows;
- Using powered lifting devices, such as cranes and automated forklifts; and,
- Manual lifting.

Before moving an object, always ask "does this object have to be moved?" If yes, remember the See it, Think it, and Do it system. Always determine the best way to move the object, before attempting to move.

By the end of this lesson, students will be able to:

- Distinguish between mechanical and powered lifting devices.
- Identify the information required before manually lifting a load.

#### Summary of Interactive Content

Students complete an online checklist of the correct order of procedures for lifting a heavy object.

#### Background Materials

Manual Materials Handling (Appendix 9.0)



### Equipment

#### Lesson Summary

Every job involves using some type of equipment or tools. Knowing the right way to use these items can reduce injuries.

Some of the most common hazards of working around equipment and tools include:

- Coming into direct contact with the equipment (e.g. touching a hot stove);
- Being hit by objects from machines or equipment (e.g. objects thrown from a snow blower);
- Being overcome by heat;
- Experiencing excessive noise or vibration caused by equipment or tools;
- Being exposed to fumes and chemicals;
- Getting loose clothing caught in equipment; and,
- Coming into contact with electricity.

By the end of this lesson, students will be able to:

- Distinguish between "lock-out" and "tag-out" procedures.
- Discuss the three types of electrical hazards and recommend ways to avoid them.

#### Summary of Interactive Content

Students complete an online checklist of ways stay safe when working with equipment.

## extended learning



Discuss examples of common equipment and how you can stay safe when working with them and around them.



Match the hazard with the correct safety procedure (Appendix 10.0)



- What is the difference between "lock-out" and "tagout" systems?
- 2. What are the three types of electrical hazards?



## extended learning



Case study and Discussion (Appendix 11.0)



Video: how to correctly use a fire extinguisher –

https://youtu.be/9igRiyU RobE

Locate the fire extinguishers in your building.



- 1. What is needed to start and maintain a fire?
- 2. How is the PASS procedure used for extinguishing a fire?

## Fire Safety and Confined Space

Lesson Summary

Fire is a potential danger everywhere.

Fuel, heat, oxygen, and a sustaining chemical reaction are required for a fire to start and continue burning. When these four elements are combined they create what is called a Fire Tetrahedron (Figure 1).



Figure 1. Fire Tetrahedron

There are 5 classes of fire, depending on the materials involved:

- Class A wood, paper, and plastic
- Class B flammable or combustible liquids
- Class C electrical fires
- Class D metals
- Class K oils and/or fats used in cooking

If it is safe to do so (e.g. the fire is small, the proper extinguisher is available), use the PASS method with the fire extinguisher:

- 1. Pull the pin
- 2. Aim the nozzle at the base of the flame
- **S**queeze the trigger 3.
- **S**weep the extinguisher over the fire

By the end of this lesson, students will be able to:

- Identify tips to prevent fires.
- Describe the PASS procedure.

Summary of Interactive Content

Students complete two online checklists:

- 1) Choose the best response of what to do if you see a fire.
- 2) Check all the reasons that describe why working in confined spaces is particularly hazardous.

## Work Outdoors and on the Land

Lesson Summary

Employees may need to work remotely outdoors during cold weather.

#### **Working Remotely**

There are always risks when travelling in the remote wilderness. You must be self-reliant and responsible for your own safety. Search and rescue may be difficult or impossible under certain conditions. Survival in an emergency depends on how prepared you are. Whenever possible, carry emergency communication and bring additional batteries or power sources for any type of electronic equipment. Know the environment that you are entering, and what measures need to be taken in case of an emergency. When necessary, travel with someone who is experienced in travelling on the land.

#### Working in the Cold

Many jobs in the north involve working in extremely cold temperatures. Dangers associated with working in these environments are hypothermia, frostbite, falling through ice, and encountering wildlife.

By the end of this lesson, students will be able to:

- Identify 3 to 4 hazards of working remotely and describe how to avoid these hazards.
- Identify 3 to 4 hazards of working in the cold and describe how to avoid these hazards.

Summary of Interactive Content

Students complete two online checklists:

- 1) Identify hazards of working in northern environments.
- 2) Identify ways to be prepare for northern environments.

## extended learning



Do you have experience working on the land? What hazards are common in your community?



Develop a checklist with a partner or group, listing what you need to have with you, when working remotely in your community.

As a class, develop a revised list that students can retain for future use.



- What are the hazards of working remotely and how can you prepare?
- 2. What are the hazards of working in the cold and how can you prepare?



## extended learning



Have you ever been involved in an emergency, either at work or outside of work? How did you and others respond?



Scavenger hunt – take photos or write locations of:

- emergency plan
- first-aid kit & contents -What's missing?
- muster point
- fire marshal and/or security personnel
- fire alarm bell
- fire hose and/or fire extinguisher



1. In the workplace, who can you ask about the emergency response plan? When should you ask?

### **Emergency Preparedness**

#### Lesson Summary

Employers are required to have Emergency Response Plans and to provide employees with training on the Plan. Some elements that may be included in the plan are:

- descriptions of emergencies;
- alarms and communication equipment;
- alarm sounds, emergency signals, and code words;
- emergency exit locations;
- evacuation procedures and assembly/muster locations;
- lockdown, sheltering-in-place, or working alone procedures;
- first aid kits(location, how to use); and,
- Essential skills identified by your organization (e.g. fire extinguisher use, field emergencies, spill kits, or travel emergencies).

By the end of this lesson, students will be able to:

- Identify the building's emergency procedures plan and muster point.
- Discuss the information that should be listed on the emergency plan.



## What Happens if I Get Hurt at Work?

#### Lesson Summary

Employees must tell their employer and the WSCC about any workplace injury that requires medical attention. Whenever you have a health and safety concern, talk to your supervisor or employer first. You can raise concerns with your Health and Safety Committee or Health and Safety Representative.

**Return to Work (RTW)** is a process that helps injured workers remain at work or get back to suitable work as soon and as safe and medically possible. The RTW process begins as soon as the worker suffers an injury. It may involve working modified duties or fewer hours while recovering.

**Everyone working together is essential in ensuring a successful return to work outcome.** People who may be involved in this process are your healthcare providers, employer, you as the worker, and the WSCC.

Following this lesson, students will be able to:

- List the steps you need to follow after you are injured at work.
- Navigate the WSCC website to locate how to report an injury

## extended learning



Based on what has been learned so far in the course, discuss ways to avoid injury at work.



Go on the WSCC website and review the links. Where would you click to report a workplace injury?

http://www.wscc.nt.ca



- To whom do you report a workplace injury?
- 2. How do you report an injury to WSCC?



### Next Steps & Conclusion

Even before youth start a new job, they should start thinking about safety! Beginning with the job interview, youth should look for signs that the employer takes safety seriously.

Every workplace has hazards. Workers have the right to know about occupational hazards and to be trained on how to work safely when these hazards are present.

Supplementary activities from this manual that will help youth navigate safety before entering, and while in, their workplace(s), include:

- **Employer Orientation checklist**
- Emergency plan identification and evaluation

It's now time for students to take the online exam!

The review questions throughout the manual will help students prepare for the exam questions.



## **Appendices**



## Appendix 1.0: Online course and exam

This course is housed on the website of the Canadian Centre for Occupational Health and Safety (CCOHS). Along with this guide, you will be provided with an electronic version of the "Facilitators' Guide" that provides steps required to register for the online course and the online exam.

You can follow the link below to navigate to the online course registration where your students can register for the course or just the exam:

https://www.ccohs.ca/distributors/wscc-ntnu/



## Appendix 2.0: Review Questions-Answer Key

As stated in the guide navigation section, the review questions are included as preparation for questions that may appear on the exam, as these questions involve content that is most valuable to retain.

Students should be encouraged to give answers based on what they remember from the course. If students are unsure or give answers that do not align with those below, the instructor can provide the correct response.

#### Why workplace health and safety is important

Q1: Why is health and safety important, particularly for young workers?

Young workers are possibly new to the workforce and new workers get injured more often. This is due to limited or no training and/or experience.

Q2: Why should students take this course?

Students should take this course to get tools on how to be a safe worker.

#### What you need to know about work and staying safe

Q1: Who is responsible for workplace health and safety, according to the Internal Responsibility System (IRS)?

There is a shared responsibility among everyone to keep the workplace safe:

- Employers provide resources such as people, time, and money for safe operations, for proper equipment, and for training and supervision.
- Supervisors train workers, and make sure workers follow safe work practices. Supervisors also address unsafe conditions and practices.
- Workers work according to safe work procedures and report all unsafe conditions.

Everyone doing their part will keep the workplace safe and healthy.

#### Hazards at the workplace

Q1: What are the six types of hazards and give an example of each.

Physical – noise; Chemical – flammable products; Biological – mould; Ergonomic – repetitive tasks; Psychosocial – harassment; Job Hazards – falling from ladders



Q2: What course do you take to work safely with chemicals?

WHMIS – Workplace Hazardous Materials Information System

#### Hazard assessments

Q1: What are the four things to consider when looking for workplace hazards? Using the **PEME** acronym:

**P**eople (customers, coworkers, visitors, and contractors) **E**quipment (tools, machinery, or utensils) Materials (chemicals, heavy items) **E**nvironment (buildings, outside, weather)

Q2: What is the "See It, Think IT, Do It System"?

See it – Identify a hazard by observing "PEME" (see above) Think it – Why is it a hazard and what can be done? Do it – find a solution – either eliminate or control

#### Controlling hazards

Q1: Can you give an example of each control?

Elimination – remove completely

<u>Substitution</u> – replacing materials, equipment or processes with those that are less hazardous

<u>Modification/Engineering</u> – controlling hazards by redesigning procedures or processes

Work practices/Administrative - procedures to manage who, where, when and how procedures are done

<u>Personal protective equipment (PPE)</u> – protection of workers by what they wear

Q2: What are the steps in a hazard control program?

- 1 Identify the hazard
- 2 Assess the risk
- 3 Choose the best control
- 4 Implement the control
- 5 Evaluate the control effectiveness



#### Building a safety culture

Q1: What are the 3 rights that all workers have?

- 1. The right to know about workplace hazards
- 2. the right to participate in your own safety at work by asking questions
- 3. the right to refuse unsafe work

Q2: Where can we find more information on OHS regulations?

Northwest Territories and Nunavut Safety Acts and Occupational Health and Safety (OHS) regulations

#### **Working Safely**

Q1: What are the hazards of not practicing self-care?

We are not physically, mentally, and/or emotionally able to do our job safely, due to fatigue, impairment, and/or stress.

Q2: What is one self-care habit that you would like to start?

Some examples might be: eat well, stay active, get plenty of rest, do not use alcohol or drugs

#### Working safely with common workplace hazards

Q1: What are the two types of fall protections systems?

- 1 full-body harnesses
- 2 lanyards and/or lifelines secured to an anchor point

Q2: What are possible causes of slips, trips, and falls?

Some examples might be clutter, slippery floor, cords and other obstacles, poor lighting, running or rushing, type of job



#### Materials handling

Q1: What are the questions to ask before manually lifting a load?

- 1 What is the nature of the load?
- 2 What working conditions will affect moving the load?
- 3 What are your personal limitations?
- 4 What PPE (personal protective equipment) do you need?

Q2: When would you mechanical devices versus powered lifting devices?

Powered lifting devices (e.g. forklift) are used when objects are too heavy or bulky for mechanical devices (e.g. hand cart) or manual lifting.

#### Equipment

Q1: What is the difference between "lock-out" and "tag-out" systems?

Lock-out is a term used to identify a piece of equipment with its power cut-off because is unsafe to use. Equipment will not start and may only be handled by someone qualified to do repairs.

Tag-out means tags are placed on equipment or tools that are out of service or being repaired. This equipment can only be used after repairs are completed.

Q2: What are the three types of electrical hazards?

Electrical shock, further injury from tool while being shocked, and static electricity.

#### Fire safety and confined space

Q1: What is needed to start and maintain a fire?

Fuel, heat, oxygen, and a sustaining chemical reaction.

Q2: How is the PASS procedure used for extinguishing a fire?

- 1 Pull the pin
- 2 Aim the nozzle at the base of the flame
- 3 Squeeze the trigger
- 4 Sweep the extinguisher over the fire



#### Work outdoors and on the land

Q1: What are the hazards of working remotely and how can you prepare?

Hazards include: staying in camps, exposed to extreme weather, working alone, remote areas with wildlife encounters

Preparations include: first aid/wilderness skills, travelling with experienced/trained people, necessary gear for camping or navigating, time and provisions in case of delays, mentally prepared for changing conditions

#### **Emergency preparedness**

Q1: In the workplace, whom can you ask about the emergency response plan and when should you ask about this?

Ask your supervisor about the company's emergency response plan before an emergency occurs.

#### What happens if I get hurt at work?

Q1: To whom do you report a workplace injury?

Your employer and the Workers' Safety and Compensation Commission (WSCC).

Q2: How do you report an injury to the WSCC?

Fill out a "Worker's Report of Injury" form and send to the WSCC.



## Appendix 3.0: How Loud Is It?

# **ON** THE JOB

Hearing loss can result from exposure to sound levels at or above 85 decibels (dBA) for extended periods of time.

#### Typical Noise Levels for Various Occupations

#### Automotive (dBA)

Addonotive (dD/1)	
Auto Body Technician	90
Detailer	97
Mechanic	87
Partsman	80
Tire Installer	87

#### Municipalities (dBA)

Grade Operator	90	
Lifeguard	78-90	
Mechanic	83-90	
Sewer Worker	88-100	
Street Cleaner	90	



#### Construction (dBA)

Contract of the Contract of th	
Carpenter, Framer	91
Concrete Worker	92
Crane Operator	90
Drywaller	89
Electrician	89
<b>Equipment Operator</b>	91
Ironworker	93
Jackhammer Operator	97
Labourer	93
Mobile Equipment Operator	91
Roofer	88
Truck Driver	89
Welder	94

#### Schools (dBA)

Bus Driver	83
Music Teachers	86
Physical Education (Teachers who referee)	86



#### NOISE LEVEL (dBA = Decibel) & RECOMMENDED **HEARING PROTECTION**

Hearing protection reduces exposure to noise. Select hearing protection by class and grade based on noise exposure, communication demands, hearing ability, use with other personal protective equipment, climate, and physical characteristics of the job or worker.













Workers' Safety scc.nt.ca 1.800.661.0792

ሺያው የተመሰው የተመሰው የተመሰው የ wscc.nu.ca 1.877.404.4407





### Appendix 3.0: How Loud is it?

### **OFF** THE JOB

## How Loud Is It?

#### Typical Noise Levels of Various Equipment and Activities

#### Environment (dBA)

Aircraft (cruising)	71-83	
Ambulance Siren	120	
Thunderclap	120	

#### Firearms (dBA)

.22 Rifle	132-139
Hand Guns	150 –167
Rifles	156-167
Shotguns	147-149

#### Home & Garden (dBA)

Air Conditioner	60-72
Alarm Clock Ring	80
Chainsaw	up to 125
Dishwasher	54-85
Food Blender	88
Garbage Disposal	68-93
Hedge Cutter	95
Lawn Mower	80-95
Leaf Blower	up to 115
Power Saw	95-115
Router	85-110
Snow Blower	85-91
Vacuum Cleaner	60-82



#### Leisure Time (dBA)

ATV, Quads	90-110
Motorcycle	80-115
Movies	80-85
Powerboat	60-115
Private Aircraft	80-110
Snowmobile	86-100
Zumba Class	90-100



#### Music (dBA)

90
up to 154
90-115
up to 110
up to 115

#### Toy Box (dBA)

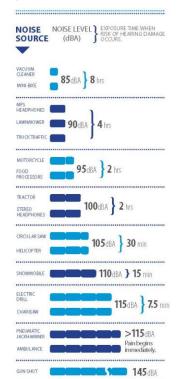
Balloon Pop	157
Bicycle Horn	143
Cap Gun	99-156
Hammer & Peg Board	94-97

#### Workshop (dBA)

Circular Saw	113
Electric Drill	94

## HOW FAST CAN NOISE DAMAGE UNPROTECTED EARS?

Hearing loss can result from exposure to sound levels at or above 85 decibels (dBA) for extended periods of time.



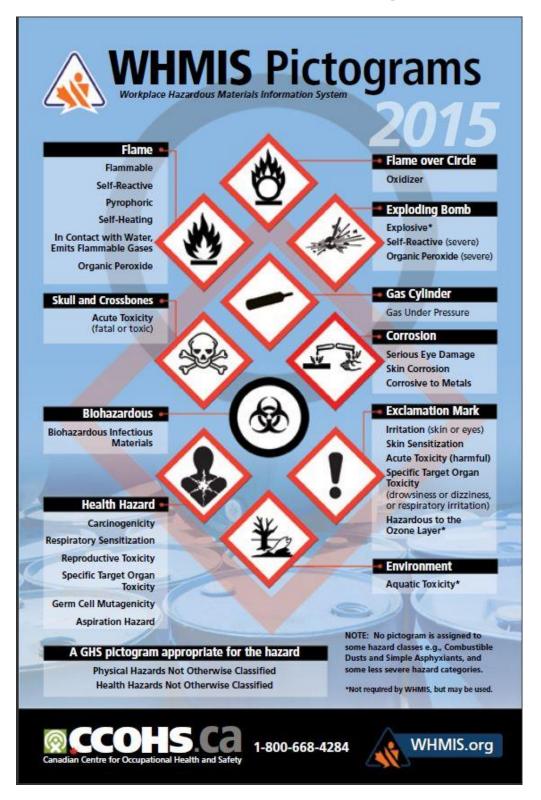
DANGEROUSDECIBELS.ORG/EDUCATION/INFORMATION-CENTER/

WSCC Workers' Safety & Compensation Commission wscc.nt.ca 1.800.661.0792





## Appendix 3.1: WHMIS Pictograms





## Appendix 3.2: Prevent the Spread





## Appendix 3.3: WHMIS Bingo

		Laps T		Ma	ъ c _	Ē
	\$	Right to know, participate and refuse unsafe work	<b>*</b>	Manufactured goods, cosmetics	Report Unsafe conditions or behaviour	Globally Harmonized System
≨	I	2015	Every 3 years	Health, Physical, Environmental	"Warning" and "Danger"	
WHMIS Bingo	≤	Occupational Health & Safety Act	Workplace Hazardous Materials Information System	FREE SPACE	$\langle \! \hat{\diamond} \! \rangle$	Supplier Labels
ngo	_	Ken (Med)	Pictogram	Inhalation Ingestion Absorption Injection	16 Sections	Safe use, handling and storage of product
	တ			Legal Duty to Protect Workers	Workplace Labels	Safety Data Sheets
	\$	"Warning" and "Danger"	2015	Workplace Hazardous Materials Information System	Inhalation Ingestion Absorption Injection	
SIMHM	I	Report Unsafe conditions or behaviour	Occupational Health & Safety Act	k <sub>T</sub>	Inhalation Every Data Absorption 3 years Sheet	Supplier Labels
	≤		Legal Duty to Protect Workers	FREE SPACE	Safety Data Sheets	Right to know, participate and refuse unsafe work
Bingo	_		Workplace Labels	16 Sections	Globally Harmonized System	Manufactured goods, cosmetics
	S		Safe use, handling and storage of product	Health, Physical, Environmental		Pictogram



	-			
	Manufactured goods, cosmetics		"Warning" and "Danger"	$\bigcirc$
	Workplace Hazardous Materials Information System	Right to know, participate and refuse unsafe work	Globally Harmonized System	Health, Physical, Environmental
Safety Data Sheets	Supplier Labels	Occupational Health & Safety Act FREE SPACE		
16 Sections	Safe use, handling and storage of product	Inhalation Ingestion Absorption Injection	Legal Duty to Protect Workers	Report Unsafe conditions or behaviour
16 Every Sections 3 years	2015	Workplace Labels	Pictogram	FT ME
Right to know, participate and refuse unsafe work	Report Unsafe conditions or behaviour	Safety Data Sheets	16 Sections	Health, Physical, Environmental
"Warning" and "Danger"	Workplace Labels	Globally Harmonized System	Workplace Hazardous Materials Information System	Safe use, handling and storage of product
		FREE SPACE	Pictogram	
Inhalation Ingestion Absorption Injection		2015 Every 3 years	$\bigcirc$	Manufactured goods, cosmetics
Legal Duty to Protect Workers	Supplier Labels	Every 3 years	Occupational Health & Safety Act	FT ME

≥

S

≶

S





		ا		_		A
	8	Supplier Labels	Safety Data Sheets		"Warning" and "Danger"	
¥	T	Workplace Hazardous Materials Information System	Safe use, handling and storage of product	Right to know, participate and refuse unsafe work	2015	Report Unsafe conditions or behaviour
WHMIS Bingo	Z	Legal Duty to Protect Workers		FREE SPACE	$\Diamond$	
ngo	,—·	16 Sections	Occupational Health & Safety Act	Health, Physical, Environmental	Every Inhalation Ingestion Absorption Injection	Manufactured goods, cosmetics
	S	Globally Harmonized System	Workplace Labels	Pictogram	Inhalation Ingestion Absorption Injection	
	×	"Warning" and "Danger"		Globally Harmonized System	<b>k</b> y	2015
		iing" d ger"		ılly nized m	(Nell	5
HW	V I		Health, Physical, Environmental	Supplier Labels	Pictogram	Occupational Health & Safety Act
WHMIS B	V Н		Health, Physical, Environmental	To State		7000
WHMIS Bingo	Ξ	16 E	Health, Physical, Environmental Environmental Injection	Supplier Labels	Pictogram   Wo	Occupational Health & Safety Act



# Appendix 3.3: WHMIS Bingo Terms List

Use this randomly generated list as your call list when playing the game. There is no need to say the BINGO column name. Cross out each word as you announce it, to keep track. You can also cut out each item, place them in a bag and pull words from the bag.

1.16 Sections

2. "Warning" and "Danger"



4. Pictogram

5. Occupational Health & Safety Act



7. Legal Duty to Protect Workers





10. Supplier Labels



12. Workplace Hazardous Materials Information System



14. 2015

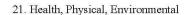
15. Right to know, participate and refuse unsafe work

16. Every 3 years

17. Safety Data Sheets

18. Safe use, handling and storage of product

19. Report Unsafe conditions or behaviour





22. Manufactured goods, cosmetics

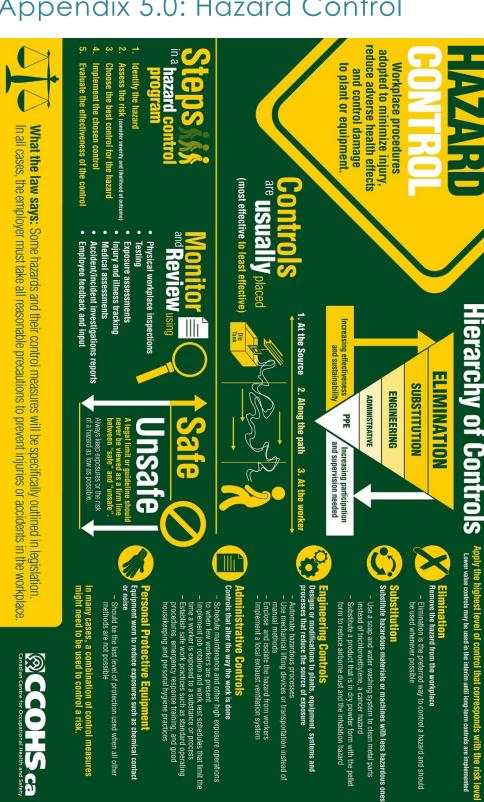


24. Inhalation Ingestion Absorption Injection





# Appendix 5.0: Hazard Control





### Appendix 5.1: Case Study – Hazard Control

In pairs, groups, or as a class, read the following case and apply the hazard control program steps.

Stephanie is 16-years old and works in the kitchen of a nursing home. To clean cooking pans, she soaks them in a powerful cleaning solution. She uses kitchen gloves to protect her hands and arms.

One day, as Stephanie was lifting three large pans out of the cleaning solution at once, the pans slipped out of her hands and back into the solution, which splashed all over the side of her face and into her left eye. She was blind in one eye for two weeks. Stephanie was lucky...she got her eyesight back.

Apply the steps in a hazard control program to the above case:

- 1. What is the hazard?
- 2. Assess the risk
- Choose the best control for the hazard:
  - a. Flimination
  - b. Substitution
  - c. Engineering
  - d. Administrative
  - e. Personal Protection Equipment (PPE)
- 4. Implement the chosen control
- 5. Evaluate the effectiveness of the control

(case obtained from CCOHS website:

https://www.ccohs.ca/teach\_tools/chem\_hazards/case\_studies.html)



# Appendix 6.0: Workers' Basic Rights





### Appendix 6.1: Case Study – Workers' Rights

After months of searching for a weekend job, Danté, finally got a job at a busy car wash and gas station. The owner gave him the job, saying that he would be working on a weekend shift with seven other young men, all students from the local area. The shift manager would train him on the car wash equipment.

On Danté's first day, the shift manager gave him only a few minutes of instruction on the equipment. Danté watched what the other men were doing, but when he asked questions, they were not very helpful.

One busy Saturday afternoon, a whole section of the car wash equipment broke down because someone had allowed the system to become overheated. Danté had worked on that section until his break, when a co-worker took over. The system had broken down at some point after that.

The shift manager was furious and accused Danté of negligence. Danté replied that he believed the system was fine when he left for his break.

#### Questions for discussion:

- 1. What are the three rights that all workers have?
- 2. Were all three of Danté's rights respected?
- 3. Which right(s) were respected and which one(s) were not?

(Case adapted from Ontario Human Rights Commission website: http://www.ohrc.on.ca/en/students%E2%80%99-handouts/case-study-1darlene)



# Appendix 9.0: Manual Materials Handling

Awareness

[MMH] is the most common cause of occupational fatigue and lower back pain







Assess/identify



the weight of the load.



Ensure that the load is free to move.



you can lift the load without over-exertion.







Check to see if mechanical lifting aids are available.





Stand close to the 4 load and face the direction you

intend to move.

Be sure you

have a good

grip on

the load.

Tuck chin

into your

chesť.













Lift smoothly, without jerking.



Avoid twisting, side bending, and carrying loads with only one hand.

Use handles or lift aids where appropriate.

Prepare for the lift

by warming up

your muscles.



Lift with your legs and body weight, not with your back.





Keep your back straight and butt out.

Lift load as close to and as centred to body as possible.







# Appendix 9.1 Materials Handling Activity

# Answer Key

Match the correct number of activity with the instruction:

<u>Ins</u>	<u>ruction</u>	<u>Activity</u>	
2	Keep the load close to your body		
		•	
1	Tuck in your chin	1.	Lifting a
3	Allow enough room for fingers and toes		Load
3	Slowly bend your knees	_	
		2.	Carrying a
1	Always keep your back straight	-	Load
2	Move carefully toward your destination		
1	Keep your arms as straight as possible	3.	Unload the
3	Secure load to ensure it will not tip		Material
2	Make sure you can see over the load	-	



# Appendix 9.1 Materials Handling Activity

#### Student Handout

Match the correct number of activity with the instruction:

Instruction	<u>Activity</u>	
Keep the load close to your body		
Tuck in your chin	1. Lifting a	
Allow enough room for fingers and toes	Load	
Slowly bend your knees		
Always keep your back straight	2. Carrying Load	a
Move carefully toward your destination	1	
Keep your arms as straight as possible	3. Unload th	ıe
Secure load to ensure it will not tip	Material	
Make sure you can see over the load	_	



# Appendix 10.0: Equipment Safety Activity

# Answer Key

Match the safety procedure with the correct explanation:

<u>Explanation</u>		<u>Procedure</u>
2 Do this before using any equipment		
5 Don't use a screwdriver to open a plastic bag	1.	Do not use equipment if impaired
1 Your judgement and ability to function are affected	2.	Get proper training
3 Eye protection, is an example of this	3.	Wear PPE
4 These protect the equipment operator from hazards	4.	Use guards
6 Lubrication and other systems are working properly	5.	Use the proper equipment or tool
3 Hearing protection, is an example of this	6.	Use equipment
This will turn off the power supply in an emergency	-	and tools in good working order
6 Guards and safety features are in place	_	



# Appendix 10.0: Equipment Safety Activity

#### Student Handout

Match the safety procedure with the correct explanation:

<u>Explanation</u>		<u>Safety Procedure</u>		
Do this before using any equipment				
Don't use a screwdriver to open a plastic bag	1.	Do not use equipment if impaired		
Your judgement and ability to function are affected	2.	Get proper training		
Eye protection, is an example of this	3.	Wear PPE		
These protect the equipment operator from hazards	4.	Use guards		
Lubrication and other systems are working properly	5.	Use the proper equipment or tool		
Hearing protection, is an example of this	6.	Use equipment and tools in		
This will turn off the power supply in an emergency		good working order		
Guards and safety features are in place				



### Appendix 11.0: Case Study – Fire Safety

Hi, I'm Spencer. This is what happened to me at work. I work part-time for a friend of my father's. He runs a woodworking business and sometimes I help him out.

One day I was applying some gasoline to clean wood cupboards. I was working alone because my dad's friend was really busy and I had done this job hundreds of times before.

I guess I was rushing and I spilled some of the gasoline on my clothes. Oh well - my mom would wash them. It was getting dark, so I turned on a propane lantern beside me, and then it happened.

All of a sudden, out of nowhere, everything seemed to catch fire at once. I don't remember much else. They tell me that I wasn't found for 2 hours. Rehab has been hard and I know the scars are not going to go away, but I guess I am lucky to be alive.

- 1. What Class of fire is this?
- 2. What could Spencer have done to avoid this fire?
- 3. What could he have done to extinguish the fire?
- 4. If this happened at work, what does Spencer need to do now?

(case obtained from CCOHS website: https://www.ccohs.ca/teach\_tools/chem\_hazards/case\_studies.html)

