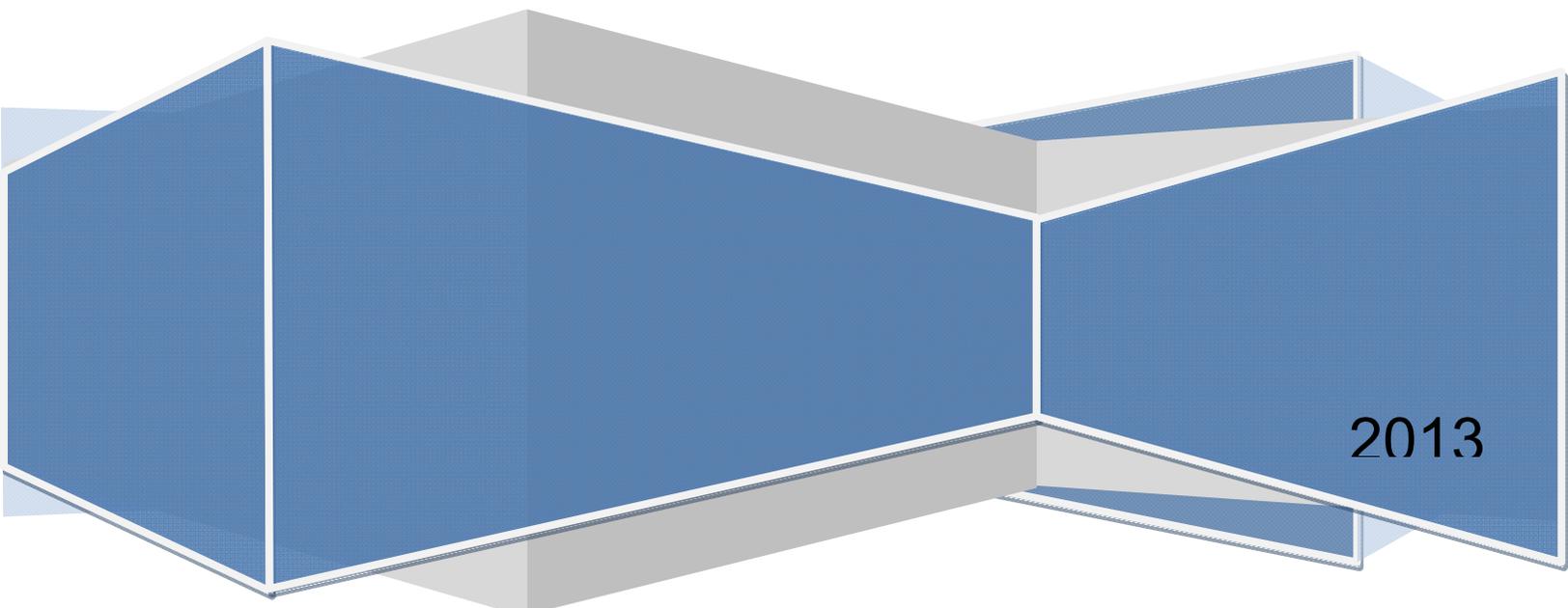


INSTRUCTOR TRADE SAFETY AWARENESS MANUAL



2013

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To receive a copy of the video “Steve’s Story” – CBC I-team Report, please contact the Director of Program Standard Apprenticeship Manitoba at 204 945-3337

INTRODUCTION

The Trade Safety Awareness Unit is part of a broader provincial strategy aimed at achieving long-term reductions in occupational injuries and disease.

This Trade Safety Awareness Unit is to be implemented in all Level One technical training programs for students. High School students enrolled in accredited courses in schools will also be required to participate in this seven-hour unit of instruction. A content evaluation component is included at the end of the Instructor Trade Safety Awareness Manual.

GOAL

The goal of the Trade Safety Awareness Unit is to increase student awareness of trade safety and health.

ACKNOWLEDGEMENTS

Advisory committees, industry representatives, instructors and government staff provided valuable input to the development of this document. Without the dedication to quality training this document could not have been produced.

Ray Clarkson, University College of the North (UCN)
Wayne Johnson, Assiniboine Community College
Steve Nicholson, Labour Programs - Workplace Safety and Health
Michael Watson, Red River College

This Trade Safety Awareness Unit was approved by the Apprenticeship and Trades Certification Board.

HOW TO USE THE INSTRUCTOR TRADE SAFETY AWARENESS MANUAL

Instructor Lessons and Resources

Instructional Time for Unit

- This unit in its entirety requires approximately 7 hours.
- The unit may be taught in a number of ways. The material may be offered in one full day, over two half-days, or over a period of approximately seven one-hour sessions.
- The sequencing and timing of the unit is left to the discretion of the instructor, who must incorporate the content and materials into existing trade-specific curriculum.
- The instructor must compare existing trade-specific curriculum with the learning outcomes for the Trade Safety Awareness unit of instruction. Those learning outcomes that are not covered would be selected and the corresponding lessons taught.

Learning Outcomes

- The learning outcomes are identified for each lesson.

Page Information and Format

- Each Lesson contains the following information :

Lesson Number, Lesson Name
Learning Activity Number and Minutes
required to teach each lesson.

Lesson 1

Workplace Safety and Health Issues and Their Importance

Learning Activity 1.1

Time 12 minutes

Describes each learning activity and the suggested teaching method.

Instructor recourses are listed as web links for bulletins and information

LEARNING ACTIVITIES

RESOURCES

INTRODUCTION, QUIZ, VISUAL AIDS and DISCUSSION

Square bullets (■) are used to give direction to the instructor.

- State the goal of this program:
 - To increase student awareness of trade safety and health.

POWERPOINT | Slides #1 and #2 |

- Ask students to take 5 minutes to individually complete the quiz "Trade Safety IQ" Quiz.
 - Statistics on workplace injuries to young employees.
 - The importance of safety awareness in the trades.

QUIZ | Lesson 1- Learning Activity #1.1 – Trade Safety IQ Quiz

Facilitate discussion on the students' responses to the quiz using the answer key.

POWERPOINT | Slides #3 to #14 |

ANSWER KEY | Lesson 1 - Learning Activity #1.1 - Trade Safety IQ Quiz |

Go to the Safe Manitoba <http://www.safemanitoba.com> website for all your information and safety resources.

Training New Employees Orientation and Awareness <http://safemanitoba.com/Guide-Training-New-Young>



Instructor
Information
in Blue



Apprentice
Hand outs
in Red

Round circles (○) are used to indicate information and content to be shared with students.

The information to facilitate each learning activity are listed, as HANDOUT, POWERPOINT, VIDEO/CD, WORKSHEET or ANSWER KEY. All resources for the student and instructor are included in each Trade Safety Awareness Instructor Manual and Workbook.

Trade Safety Awareness Workbook

- This workbook contains the resources that need to be photocopied for students.
- Instructors are encouraged to have students place these materials in a duo-tang.
- Students require 70% mark on the Trade Safety Awareness Multiple Choice Test to pass the unit.

Glossary

- Information and definitions for instructors and students regarding trade safety awareness.

LEARNING OUTCOMES AND RELATED LESSONS

1. Explain the importance of trade safety and health in reducing injuries and fatalities to young employees in Manitoba	Lesson 1
2. Describe the rights and responsibilities of employees, employers and supervisors under the <i>Workplace Safety and Health Act</i> .	Lessons 1 and 2
3. Describe the steps to use in the Right to Refuse process.	Lesson 2
4. Explain how and where to find information on workplace safety and health.	Lessons 1 and 2
5. Demonstrate how to handle a potentially dangerous work situation.	Lesson 3
6. Explain the S.A.F.E. acronym.	Lesson 3
7. Define workplace safety and health hazards.	Lessons 2 and 3
8. Give examples of trade-specific workplace safety and health hazards.	Lesson 2 and 3
9. Give examples of five types of safety and health hazards.	Lesson 4
10. Define workplace safety and health risk.	Lesson 2 and 3
11. Give examples of trade-specific workplace safety and health risks.	Lesson 3
12. Explain the principles of hazard recognition and control as they apply to the specific trade.	Lessons 4 and 6
13. Explain the Workplace Hazardous Material Information System (WHMIS).	Lesson 5
14. Match the WHMIS hazardous materials symbols and their meanings.	Lesson 5
15. Describe the importance of the Material Safety Data Sheets (MSDS).	Lesson 6
16. Describe the importance of using Personal Protective Equipment (PPE).	Lesson 6
17. Demonstrate proper selection and use of a variety of personal protective equipment and fall protection systems.	Lesson 7
18. Outline the safety principles for working on and around electrical equipment.	Lesson 8
19. Outline workplace fire safety principles.	Lesson 8
20. Identify the hazards in confined spaces and the preparation needed to work in a confined space.	Lesson 9

Lesson 1

Workplace Safety and Health Issues and Their Importance

Total Lesson Time - 55 minutes

Learning Outcomes:

- Explain the importance of trade safety and health in reducing injuries and fatalities to young employees in Manitoba.
- Describe the rights and responsibilities of employees, employers and supervisors under the *Workplace Safety and Health Act*.
- Explain how and where to find information on workplace safety and health.

Contents:

- Time Allotments for learning activities.
- Learning Activities.
- Resources and Equipment.
- www.Safemanitoba.com/Resources/Guideline
- <http://safemanitoba.com/Guide-Training-New-Young>

Lesson 1

Workplace Safety and Health Issues and Their Importance

Learning Activity #1.1

Time 12 minutes

LEARNING ACTIVITIES	RESOURCES
<p>INTRODUCTION, QUIZ, VISUAL AIDS and DISCUSSION</p> <ul style="list-style-type: none"> ▪ State the goal of this program: <ul style="list-style-type: none"> ○ To increase student awareness of trade safety and health. <p style="text-align: center;">POWERPOINT Slide #2 </p> <ul style="list-style-type: none"> ▪ Ask students to take 5 minutes to individually complete the quiz “Trade Safety IQ” Quiz. <ul style="list-style-type: none"> ○ Statistics on workplace injuries to young employees. ○ The importance of safety awareness in the trades. <div style="border: 1px solid black; padding: 5px; text-align: center; margin: 10px 0;"> <p>QUIZ Lesson 1- Learning Activity #1.1 - Trade Safety IQ Quiz </p> </div> <ul style="list-style-type: none"> ▪ Facilitate discussion on the students’ responses to the quiz using the answer key. <p style="text-align: center;">POWERPOINT Slides #3 to #14 </p> <div style="border: 1px solid black; padding: 5px; text-align: center; margin: 10px 0;"> <p>ANSWER KEY Lesson 1 - Learning Activity #1.1 - Trade Safety IQ Quiz </p> </div>	<p>Go to the Safe Manitoba http://www.safemanitoba.com website for all your information and safety resources.</p> <p>Training New Workers Orientation and Awareness http://safemanitoba.com/Guide-Training-New-Young</p>

Lesson 1 Learning Activity #1.1 Trade Safety IQ Quiz - QUIZ
--

TRADE SAFETY IQ QUIZ

Instructions

Please complete the worksheet by circling your responses to each True (T) or False (F) statement.

True and False

1. Every hour at least one young worker is injured in a workplace incident. T F
2. Almost 20% of work-related injuries occur in the first six months on a new job. T F
3. About 50% of all time-loss injuries involve strains, sprains and tears. T F
4. All employers must establish a workplace safety and health committee. T F
5. Under the workplace safety and health legislation, only employers and supervisors are responsible for workplace safety and health. T F
6. Every year in Manitoba, about one-fifth of all workplace injuries and illnesses occur in small businesses. T F

Lesson 1 Learning Activity #1.1 Trade Safety IQ Quiz - ANSWER KEY
--

True or False

1. Every hour at least one young worker is injured in a workplace incident. I F

2. Almost 20% of work-related injuries occur in the first six months on a new job. T E

3. About 50% of all time-loss injuries involve strains, sprains and tear. I F

4. All employers must establish a workplace safety and health committee. T E

5. Under the workplace safety and health legislation, only employers and supervisors are responsible for workplace safety and health. T E

6. Every year in Manitoba, about one-fifth of all workplace injuries and illnesses occur in small businesses. I F

Lesson 1

Workplace Safety and Health Issues and Their Importance

Learning Activity #1.2

Time 35 minutes

LEARNING ACTIVITIES

RESOURCES

VIDEO, WORKSHEET, VISUAL AIDS AND DISCUSSION

- Define dangerous work:
 - Dangerous work: work involving safety and health risks that are not normal for the job.
 - Hazard: any activity situation or substance that can hurt someone (i.e. safety hazards and health hazards).

POWERPOINT | Slides #15 - #16 |

- Ask students what type of workplace attitudes are common in the trades that may be a barrier.
- View the video / CD WMV “Steve’s Story” - (18 minutes)

VIDEO | “Steve’s Story” (18 minutes) CBC I-Team Report Power Vac 1996 |

- Ask students to take 5 minutes to individually complete the worksheet “Raising Workplace Safety Issues”.

WORKSHEET | Lesson 1 - Learning Activity #1.2 - Raising Workplace Safety Issues |

Guide a discussion around the worksheet questions “Raising Workplace Safety Issues” Worksheet.

POWERPOINT | Slides #18 - #24 |

ANSWER KEY | Lesson 1 - Learning Activity #1.2 - Raising Workplace Safety Issues |

When working around/near mining installations, and excavations, have students check with supervisory personnel regarding regulations on Operations of Mines. – Part 26 Excavations and Tunnels and Excavation Regulation Part 26 of MR 217/2006.

Guidelines for Excavations
<http://safemanitoba.com/guideline-excavation>

All regulation summary sheets located here
<http://safemanitoba.com/wsh-regulations>

Training New Workers Orientation and Awareness
<http://safemanitoba.com/Guide-Training-New-Young>

Lesson 1
Learning Activity #1.2
Raising Workplace Safety Issues - WORKSHEET

Introduction: Workplaces often promote a culture that values strength, toughness, hard work and the ability to get a difficult job done without complaint.

1. What are the lessons to be learned from “Steve’s Story”?

2. Why might it be difficult to raise concerns about workplace safety?

3. As a student, what types of situations have you been asked to do by your employer or supervisor that raised a safety concern in your mind?

4. What did you do?

5. What are some potential hazards in your workplace?

6. What do you know that you can do now?

Lesson 1

Learning Activity #1.2

Raising Workplace Safety Issues - ANSWER KEY

RAISING WORKPLACE SAFETY ISSUES WORKSHEET – ANSWER KEY

Introduction:

Workplaces often promote a culture that values strength, toughness, hard work and the ability to get a difficult job done without complaint.

1. What are the lessons to be learned from “Steve’s Story”?
 - Lack of training can be a safety and health hazard.
 - Know your rights and responsibilities as an employee.
 - Fire safety is essential.
 - Confined space work requires a risk assessment.
 - Employers are required to provide “competent” supervisors – supervisors must be well-trained in the hazards of tasks, if supervising others to do them.
2. Why might it be difficult to raise concerns about workplace safety?
 - A workplace culture exists that values toughness, hard work and the ability to get a difficult job done without complaint.
 - As an student and new worker on a job, it may be difficult to raise concerns about workplace safety.
 - Worry if one complains, then be the first worker to be laid off.
 - New employees may not know their rights and responsibilities on the job.
3. As a student, what type of situations have you been asked to do by your employer or supervisor that raised a safety concern in your mind?
4. What did you do?
5. What are some potential hazards in your workplace?
 - Encourage students to seek out the workplace safety and health legislation and refer to specific information about regulations and guidelines.
6. What do you know that you can do now?

Lesson 1

Workplace Safety and Health Issues and Their Importance

Learning Activity #1.3

Time 8 minutes

LEARNING ACTIVITIES

RESOURCES

LECTURE-DISCUSSION AND VISUAL AIDS

- Discuss highlights of the Workplace Safety and Health Legislation.
 - Distinction between:
 - a. *Workplace Safety and Health Act*, enforced laws - the Act is very broad;

POWERPOINT | Slides #25 to #29 |

HANDOUT | Lesson 1 - Learning Activity #1.3 - An Overview of Workplace Safety and Health Legislation in Manitoba |

- b. Regulation – address specific aspects such as WSH Committee, workplace safety, first aid, hearing conservation and noise control, laws that state how to meet the broad duties set out in the WSH Act.
Re: prescribes safe work practices and standards.
- c. Codes of Practice – guidelines that must be passed by Cabinet; based on industry best practices at the time of publication; used in conjunction with Act and Regulations, and
- d. Guidelines – ruling based on best practices in the industry at the time of publication; discuss specific requirements for day to day workplace activities.

Go to the Safe Manitoba <http://www.safemanitoba.com> website for all your information and safety resources.

Encourage students to refer to the websites listed in their workbook for the most current Workplace Safety and health Legislation that applies to their specific trade.

All regulation summary sheets located here
<http://safemanitoba.com/wsh-regulations>

Training New Workers Orientation and Awareness
<http://safemanitoba.com/Guide-Training-New-Young>

Lesson 1

Learning Activity #1.3

An Overview of Workplace Safety and Health Legislation in Manitoba – HAND OUT

PROVINCIALY

- In Manitoba, workplaces are regulated by the Manitoba *Workplace Safety and Health Act* as well as by Regulations, Codes and Guidelines.
- All employees are covered, regardless of age, full or part time, paid or unpaid.
- For purposes of this course, we will discuss the *Workplace Safety and Health Act*.

For more information about the Manitoba *Workplace Safety and Health Act*, Regulations, Codes and Guidelines visit the Manitoba Labour and Immigration Workplace Safety and Health website at:
www.safemanitoba.com.

Guide for Training Young and New Workers please search all
<http://safemanitoba.com/Guide-Training-New-Young>

All regulation summary sheets located here <http://safemanitoba.com/wsh-regulations> or contact:
Manitoba Workplace Safety and Health
200-401 York Ave., Winnipeg, MB R3C 0P8

Telephone: (204) 945-3446 or toll-free in Manitoba 1-800-282-8069
After hours phone (204) 945-0581, 24 hour line (204) 945-3446.
After hours gives instructions about what to do if it is an emergency.
Otherwise they are asked to call back the next day. Fax: (204) 945-4556

WSH Client Services e-mail is: wshcompl@gov.mb.ca, anyone in Manitoba can e-mail for general information.

Manitoba Workplace Safety and Health offices located in:

Brandon (204) 726-6361
Thompson (204) 677-6821
Flin Flon (204) 687-1621

FEDERALLY

- If the workplace is considered a federal jurisdiction (e.g. grain elevators, banks, trucking), the law that applies is the Canada Labour Code – Part II.
- If you need to contact the safety and health authorities for federally-regulated workplaces, their contact information is:

Employment and Social Development Canada – Labour Program
201-391 York Ave, Winnipeg, MB R3C 0P4
Phone (204) 983-6375 or 1-800-838-2033 Ask for the Duty Officer
Website: www.hrsdc.gc.ca

Other websites are: www.safemanitoba.com
<http://www.passporttosafety.com>

Lesson 2

Legal Rights and Responsibilities of Employers, Supervisors and Employees

Total Lesson Time - 70 minutes

Learning Outcomes:

- Describe the rights and responsibilities of employees, employers and supervisors under the *Workplace Safety and Health Act*.
- Describe the steps to use in the Right to Refuse process.
- Explain how and where to find information on workplace safety and health.
- Define workplace safety and health hazards.
- Give examples of trade-specific workplace safety and health hazards.
- Define workplace safety and health risk.

Contents:

- Time allotments for learning activities.
- Learning activities.
- Resources and equipment.

Lesson 2

Legal Rights and Responsibilities of Employers, Supervisors and Employees

Learning Activity #2.1

Time 40 minutes

LEARNING ACTIVITIES	RESOURCES
<p>LEARNING-DISCUSSION, VISUAL AIDS and HANDOUT</p> <ul style="list-style-type: none"> ▪ Ask students if they know their rights and responsibilities as an employee in a workplace. <p style="text-align: center;">POWERPOINT Slides #2 - #11 </p> <ul style="list-style-type: none"> ▪ Refer to the handout “Legal Rights and Responsibilities of Employers, Supervisors and Employees” and encourage questions and discussion. <ul style="list-style-type: none"> ○ Rights: privileges related to the workplace. ○ Responsibilities: duties or tasks related to workplace rights. <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>HANDOUT Lesson 2 - Learning Activity #2.1 - Legal Rights and Responsibilities of Employers, Supervisors and Employees </p> </div>	<p>As of January, 2007 there was only one regulation divided into various topical areas. Please refer to the <i>Worker Health and Safety</i> website http://safemanitoba.com/resources/guideline before teaching to ensure the most current version are used as support materials will also change accordingly.</p> <p>Go to the website for all your information and safety resources. http://www.safemanitoba.com</p> <p><i>Workplace Safety and Health Act.</i> First Aid Regulation http://safemanitoba.com/regulation-part-5-first-aid</p>

Lesson 2

Learning Activity #2.1

Legal Rights and Responsibilities of Employers, Supervisors and Employees - HAND OUT

The legal responsibilities of employers are to:

Ensure the safety, health and welfare of employees by providing information such as, instruction, training, supervision and facilities so far as is reasonably practicable;
Maintain a safe workplace, equipment, tools and systems;
Ensure employees and supervisors are aware of any safety and health hazards;
Provide employees with competent supervision;
Train employees before they begin a new job;
Ensure others are not exposed to workplace risks;
Consult and cooperate with the employee safety and health representative;
Consult and cooperate with the workplace safety and health committee and with others on health and safety matters;
Ensure all employees are supervised by a person competent and familiar with the Act of regulations that apply to work performed in the workplace.
Follow Workplace Safety and Health Regulations: Provide appropriate first aid services in the workplace [i.e. services such as minimum number of first aiders in workplace (Schedule A in the Regulation) and their names and locations; post signs showing location of first aid; keep record of injury and illness; transport seriously ill or injured employee to hospital].

The legal responsibilities of supervisors are:

Take necessary precautions to protect the safety and health of employees under their supervision;
Ensure that employees comply with safety and health procedures;
Ensure that employees use safety equipment, clothing and devices;
Advise employees of safety and health hazards in the work area;
Cooperate with workplace safety and health committee;
Cooperate with other people on workplace safety and health matters;
Comply with the *Workplace Safety and Health Act* and its regulations.

The legal responsibility of employees is to:

Take reasonable care to protect the safety and health of the employee and other persons who may be affected;
Use all devices, clothing and personal protective equipment designated and provided for their own protection;
Consult and cooperate with the employee safety and health representative;
Consult and cooperate with workplace safety and health committee and with any others exercising a duty imposed by the act or regulations;
Comply with the *Workplace Safety and Health Act* and its regulations.

Every employee has the following rights:

The right to know about hazards in the workplace and what precautions to take to prevent injuries or illnesses from these hazards;
The right to participate in safety and health activities in the workplace;
The right to refuse dangerous work;
The right to protection from being discriminated (defined in the *Workplace Safety and Health Act*) against once a employee raises a safety and health issue.

Under the law,

You can refuse any task that you have reasonable grounds to believe is dangerous to your safety and health and the safety and health of others.

You may not be disciplined for exercising your right to refuse in good faith, and you are entitled to the same wages and benefits that you would otherwise receive.

Acting “in good faith” means to raise the issue of workplace safety in an honest manner.

Dangerous work generally means work involving safety and health risks that are not normal for the job.

These are the steps in the “Right to Refuse” Process:

Step 1

You can refuse where you have reasonable grounds to believe that specific work is dangerous to your or another person’s safety or health.

Step 2

Report immediately to your supervisor your refusal and give reasons for refusing to work.

Step 3

If the supervisor and employee cannot resolve the refusal, the employee, co-chair of the safety and health committee or a employee representative must be advised and must investigate the situation.

Step 4

Until the problem is solved you may continue to refuse. No other employee can do the job unless they were informed of the situation by the employee who refused.

Step 5

If the situation is not remedied after the inspection, a safety and health officer with Workplace Safety and Health must be notified and the matter investigated and resolved.

Lesson 2

Legal Rights and Responsibilities of Employers, Supervisors and Employees

Learning Activity #2.2

Time 10 minutes

LEARNING ACTIVITIES	RESOURCES
<p>LEARNING-DISCUSSION, VISUAL AIDS and HANDOUT</p> <ul style="list-style-type: none"> ▪ Ask students to take 6 minutes to complete the worksheet “Legal Workplace Rights and Responsibilities”. <p style="text-align: center;">POWERPOINT Slides #12 - #20 </p> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <p>WORKSHEET Lesson 2 - Learning Activity #2.2 - Legal Rights and Responsibilities </p> </div> <ul style="list-style-type: none"> ▪ Correct worksheet and invite feedback and discussion. ▪ Employer and Employee, Rights and Responsibilities - Do you know what your Rights and Responsibilities in the workplace are? <div style="border: 1px solid black; padding: 5px; text-align: center;"> <p>ANSWER KEY – (Answers on PowerPoint) Lesson 2 - Learning Activity #2.2 - Legal Rights and Responsibilities </p> </div> <ul style="list-style-type: none"> ▪ Discuss the more specific responsibilities of employers as they relate to the regulations. <ul style="list-style-type: none"> ○ Regulations: address specific aspects such as WSH committee, workplace safety, first aid, hearing protection and noise control, etc. ○ Code of Practice: A guideline approved by Cabinet based on the best practices in the industry at the time of publication. ○ Guidelines: ruling based on best practices in the industry at the time of publication. A guideline gives specific ideas on how to do tasks safely in the workplace. 	<p>Code of Practice Powered Lift Trucks link http://www.safemanitoba.com/code-practice-safe-operation-powered-lift-trucks</p> <p>Go to the Safe Manitoba website for all your information and safety resources: http://www.safemanitoba.com</p> <p>All regulation summary sheets located at: http://safemanitoba.com/wsh-regulations</p> <p>Under the “Right to Refuse”, employees need to inform co-employees what work was refused and the reasons.</p> <p>NOTE: The regulations require the employer to certify the employee in fork-lift training. This training can be done by employer or a recognized training organization. If the trade person changes employers, re-certification is required.</p>

Lesson 2
Learning Activity #2.2
**Legal Rights and Responsibilities of Employers,
Supervisors and Employees - WORKSHEET**

1. What are your four basic rights as an employee in a workplace under the *Workplace Safety and Health Act*?

2. What are your responsibilities (legal duties) in the workplace?

3. What are three employers' duties/legal responsibilities under *Workplace Safety and Health Act*?

4. Please select one specific task you do in your workplace and describe the safety procedures around this task?

5. List the steps to follow in the "Right to Refuse" process?

Lesson 2

Learning Activity #2.2

Legal Rights and Responsibilities of Employers, Supervisors and Employees - ANSWER KEY

1. What are your four basic rights as an employee in a workplace under the *Workplace Safety and Health Act W210*?
 - **The Right to Know** about hazards in the workplace and what precautions to take to prevent injuries or illnesses from these hazards.
 - **The Right to Participate** in safety and health activities in the workplace.
 - **The Right to Refuse** dangerous work.
 - **The Right to Protection** from being discriminated against (*defined in the Workplace Safety and Health Act*) once an employee raises a safety and health issue.
2. What are your responsibilities (*legal duties*) in the workplace?
 - Take reasonable care to protect the safety and health of the employee and other persons who may be affected;
 - Use all devices, clothing and personal protective equipment designated and provided for their own protection;
 - Consult and cooperate with the employee safety and health representative;
 - Consult and cooperate with the workplace safety and health committee and with any others exercising a duty imposed by the *Workplace Safety and Health Act* or regulations;
 - Comply with the *Workplace Safety and Health Act* and its regulations.
3. What are three employer's duties/responsibilities under the *WSH Act W210*? (any 3 below)
 - Ensure the safety, health and welfare of employees by providing such information, instruction, training, supervision and facilities so far as is reasonable practicable;
 - Maintain a safe workplace, equipment, tools and systems;
 - Ensure employees and supervisors are aware of any safety and health hazards;
 - Provide employees with competent supervision;
 - Train employees before they begin a new job;
 - Ensure others are not exposed to workplace risks;
 - Consult and cooperate with the employee safety and health representative;
 - Consult and cooperate with the workplace safety and health committee and with others on health and safety matters;
 - Ensure all employees are supervised by a person competent and familiar with the *Workplace Safety and Health Act* and regulations that apply to work performed in the workplace.
4. Please **select one specific task** you do in your workplace and **describe the safety procedures** around this task.
5. List the steps to follow in the Right to Refuse Process.

Step 1

You can refuse where you have reasonable grounds to believe that specific work is dangerous to you or another person's safety or health.

Step 2

Report immediately to your supervisor your refusal and give reasons for refusing to work.

Step 3

If the supervisor and employee cannot resolve the refusal, the employee, co-chair of the safety and health committee or a employee representative must be advised and investigate the situation.

Step 4

Until the problem is solved you may continue to refuse. No other employee can do the job unless they were informed of the situation by the employee who refused.

Step 5

If the situation is not remedied after the inspection, Workplace Safety and Health must be notified and the matter investigated and resolved.

Lesson 2

Legal Rights and Responsibilities of Employers, Supervisors and Employees

Learning Activity #2.3

Time 20 minutes

LEARNING ACTIVITIES	RESOURCES
<p>LECTURE-DISCUSSION and VISUAL AIDS and ROLE PLAY</p> <ul style="list-style-type: none"> ▪ Define safety and health hazard and risk - give examples of each. <ul style="list-style-type: none"> ○ Hazard: any activity, situation or substance that can hurt someone. ○ Risk: the odds that a hazard will cause harm (i.e. probability and severity of potential incidents). <p style="text-align: center;">POWERPOINT Slide - #20 </p> <div style="border: 1px solid black; padding: 5px; text-align: center; margin: 10px auto; width: fit-content;"> <p>HANDOUT Lesson 2 - Learning Activity #2.3 - Regulations, Codes of Practice, Guidelines and Websites </p> </div> <ul style="list-style-type: none"> ▪ Ask students to work in groups of two. Either of the following activities may be used. <ul style="list-style-type: none"> ○ Give 6 minutes to: <ul style="list-style-type: none"> - Select a dangerous work situation. - Decide how to properly handle this situation using the handout and worksheet from activity 2.1 OR ○ Provide each group with a scenario specific to the students' trade. ▪ Ask each group to present its scenario. 	<p>Develop 2 - 4 trade-specific scenarios (e.g. right to refuse scenario)</p>

Lesson 2

Learning Activity #2.3

Regulations, Codes of Practice, Guidelines and Websites - HANDOUT

Regulations

- Are laws that state how to meet the broad duties set out in the *Workplace Health and Safety Act*
- Prescribed safe work practices and standards
- Regulations are enacted by the cabinet after extensive consultation with affected groups

Code of Practice

- Is a guideline approved by cabinet based on best practices in the industry at the time of publication, used in conjunction with the act and regulations, to clarify the requirements for a specific work topic or task, in order to achieve a safer work environment or process

Current Codes of Practice

- Workplace safety and health committees
- Workers working alone
- Safe operation of powered lift trucks
- Clothing for fire fighters
- Respiratory protection for fire fighters

Guidelines

- A guideline is based on best practices in the industry at the time of publication, used in conjunction with the act and regulations. It is used to clarify the requirements for a specific work topic or task and give specific ideas on how to do things safely.

All current guidelines are available at [Safe Work Guidelines](http://safemanitoba.com/resources/guideline) at the following URL address <http://safemanitoba.com/resources/guideline>

Websites

For more information about the Manitoba *Workplace Safety and Health Act*, Regulations, Codes and Guidelines visit the Manitoba Labour and Immigration Workplace Safety and Health website at: <http://www.safemanitoba.com> for all your information and safety resources.

Training New Workers Orientation and Awareness <http://safemanitoba.com/Guide-Training-New-Young>

Regulations

All regulation summary sheets located here <http://safemanitoba.com/wsh-regulations>

Lesson 3

S.A.F.E.

Total Lesson Time - 70 minutes

Learning Outcomes:

- Demonstrates how to handle a potentially dangerous work situation.
- Explain the S.A.F.E. acronym.
- Define workplace safety and health hazards.
- Give examples of trade-specific workplace safety and health hazards.
- Define workplace safety and health risk.
- Give examples of trade-specific workplace safety and health risks.

Contents:

- Time allotments for learning activities.
- Learning activities.
- Resources and equipment.

Lesson 3
S.A.F.E
Learning Activity #3.1
Time 15 minutes

LEARNING ACTIVITIES	RESOURCES
<p>LEARNING-DISCUSSION, VISUAL AIDS AND HANDOUT</p> <ul style="list-style-type: none"> ▪ Display the S.A.F.E. acronym and ask students what it means. ▪ Explain the S.A.F.E. acronym and its purposes (recognize hazards, prevent injuries and control situations). ▪ Discuss with the class the questions to ask in a work setting. <p style="text-align: center;">POWERPOINT Slides #2 - #6 </p> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <p>HANDOUT Lesson 3 - Learning Activity #3.1 - S.A.F.E. Questions </p> </div>	<p>S.A.F.E. acronym stands for:</p> <p>S = Spot the hazard. A = Assess the risk. F = Find a safer say. E = Everyday.</p> <p>See website: http://www.safemanitoba.com</p>

S.A.F.E. QUESTIONS

SPOT THE HAZARD

- What work is being done?
- Do you see the hazards (unsafe conditions or objects)?
- Who is at risk?
- Do you see any unsafe behaviour?
- Are there unsafe conditions or objects in the environment?
- What are the signals that something may become a hazard?

ASSESS THE RISK

- What kind of accident or injury could happen?
- Is someone doing something in an unsafe way?
- What training or preparation do these people need to do their job safely?
- Are there any pressures that might make these people do their work in an unsafe way (e.g. time, supervisors, employer's demands, and peer pressure)?
- What equipment do these people need to do their job safely?

FIND A SAFER WAY

- What could be done to remove the hazard or risk?
- What could be done to reduce the hazard and/or risk if it can not be removed?
- How should people change their attitudes or behaviours?
- What could an employer/supervisor and/or peer do to make the job safer?
- What are the signals that something may become a hazard?

EVERYDAY

Lesson 3
S.A.F.E
Learning Activity #3.2
Time 25 minutes

LEARNING ACTIVITIES	RESOURCES
<p>SCENARIOS, WORKSHEET, VISUAL AIDS AND DISCUSSION</p> <ul style="list-style-type: none"> ▪ Divide the students into small groups with each group given one scenario to complete the worksheet. <ul style="list-style-type: none"> ○ Each group will be given 12 minutes to: <ul style="list-style-type: none"> - Examine its assigned scenario, - Use the “S.A.F.E. Questions” handout to guide discussion, and - Record responses on S.A.F.E. Worksheet. <p style="text-align: center;">POWERPOINT Slides #7 - #20 </p> <p style="text-align: center;">POWERPOINT Print Slides #9, #11, #13, #15, #17, #19 for scenario group work </p> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <p>HANDOUT Lesson 3 - Learning Activity #3.2 - PowerPoint Slides for Scenario Group Work – PRINT PowerPoint Slides #9, #11, #13, #15, #17, #19 for Scenario Group Work </p> </div> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <p>WORKSHEET Lesson 3 - Learning Activity #3.2 - S.A.F.E. </p> </div> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <p>ANSWER KEY (Answers on PowerPoint) Lesson 3 - Learning Activity #3.2 - S.A.F.E. </p> </div> <ul style="list-style-type: none"> ▪ Ask each group to briefly present its scenario and responses and provide feedback. <ul style="list-style-type: none"> ○ Participants can record the information from the scenario on the S.A.F.E. Worksheet 	<p>You may develop other trade specific scenarios that are more relevant.</p> <p>For example: a scenario on excavation or trench work may be more applicable for some students. Guidelines for Excavations http://safemanitoba.com/guideline-excavation</p> <p>Copies of these scenario visuals and other workplace health and safety materials are available free of charge at the Work Safe B.C. website (www.WorkSafeBC.com).</p>

Lesson 3

Learning Activity #3.2

Print PowerPoint Slides for Scenario Group Work - HANDOUT

#9



#11



#13



#15



#17



#19



Lesson 3

Learning Activity #3.2

S.A.F.E. - WORKSHEET

Instructions: Please record your group's responses to the assigned scenario under the correct heading.

- Remember:
- physical layout
 - tool condition
 - time of day
 - material/equipment
 - supervision
 - safe work procedures
 - handling hazardous materials/substances
 - people
 - use of protective equipment
 - process

	SPOT THE HAZARD	ASSESS THE RISK	FIND A SAFER WAY
SCENARIO 1			
SCENARIO 2			
SCENARIO 3			
SCENARIO 4			
SCENARIO 5			
SCENARIO 6			

Lesson 3
Learning Activity #3.2
S.A.F.E. - ANSWER KEY

Instructions: Use Learning Activity 3.2 – Worksheet to discuss student responses to the different scenarios from the PowerPoint slides. Answers may vary.

- Remember:**
- physical layout
 - tool conditions
 - time of day
 - material/equipment
 - supervision
 - safe work procedures
 - handling hazardous materials/substances
 - people
 - use of protective equipment
 - process

SPOT THE HAZARD	ASSESS THE RISK	FIND A SAFER WAY
<div data-bbox="250 892 1370 1035" style="border: 1px solid black; padding: 10px;"><p>ANSWERS FOR SCENARIO'S ARE ON THE POWERPOINT</p></div>		

Lesson 3
S.A.F.E
Learning Activity #3.3
Time 30 minutes

LEARNING ACTIVITIES	RESOURCES
<p>CREATIVE ACTIVITY AND DISCUSSION</p> <ul style="list-style-type: none"> ▪ The instructor will hand out Creating S.A.F.E. Scenario's worksheet #3.3 and ask each small group to take 5 minutes and create/write its own potentially dangerous workplace scenario. ▪ The instructor will ask the groups to switch scenarios and take 5 minutes to apply S.A.F.E. to the written scenarios. <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;"> <p>WORKSHEET Lesson 3 - Learning Activity #3.3 – Creating S.A.F.E. Scenario's </p> </div>	<p>Group written scenarios</p>

Lesson 3
Learning Activity #3.3
Creating S.A.F.E. Scenario's - WORKSHEET

Lesson 4

Safety Hazard Recognition and Control Measures

Total Lesson Time - 35 minutes

Learning Outcomes:

- Give examples of five types of safety and health hazards.
- Explain the principles of hazard recognition and control as they apply to the specific trade.
- Define workplace safety and health risks.

Contents:

- Time allotments for learning activities.
- Learning activities.
- Resources and equipment.

Lesson 4
Safety Hazard Recognition and Control Measures
Learning Activity #4.1
Total Lesson Time - 3 minutes

LEARNING ACTIVITIES	RESOURCES
<p>LECTURE AND VISUAL AID</p> <ul style="list-style-type: none"> ▪ Identify the 5 types of safety hazard and identifying one example of each 5 types: physical; chemical; biological; psycho-social; ergonomic. <p style="text-align: center;">POWERPOINT Slides #2 </p>	<p>Go to the Safe Manitoba http://www.safemanitoba.com website for all your information and safety resources.</p> <p>All regulation summary sheets located here http://safemanitoba.com/wsh-regulations</p>

Lesson 4

Safety Hazard Recognition and Control Measures

Learning Activity #4.2

Time - 20 minutes

LEARNING ACTIVITIES	RESOURCES
<p>GROUP WORK, VISUAL AIDS AND DISCUSSION</p> <ul style="list-style-type: none"> ▪ Divide the students into small groups. ▪ Safety Hazard Recognition with the class. <ul style="list-style-type: none"> ○ The process for this activity is: <ul style="list-style-type: none"> - Print and Post the 5 types of safety hazards recognition printouts around the classroom, - Ask each group to select a card, - Each group will discuss and list on the worksheet the safety hazards listed on each card. <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p>WORKSHEET Lesson 4 - Learning Activity #4.2 - SAFETY Hazard Recognition </p> </div> <p>POWERPOINT Slides #3 - #10 Safety Hazard Recognition Sheets (Instructor to Print) </p> <ul style="list-style-type: none"> ▪ Correct the hazard examples with the corresponding types of safety hazards and encourage discussion where necessary. <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p>ANSWER KEY Lesson 4 - Learning Activity #4.2 - SAFETY Hazard Recognition </p> </div>	<p>HINT: Think about risk assessment in relation to specific trade and employees.</p> <p>For example: lighting must be physical or ergonomic depending upon the risk assessment and the employee.</p>

Lesson 4
Learning Activity #4.2
SAFETY Hazard Recognition - WORKSHEET

TYPES OF SAFETY HAZARDS	EXAMPLES
<p>1. Physical Hazards – These include conditions produced by the environment and processes.</p>	
<p>2. Chemical Hazards – Chemical hazards can be in the form of solids, liquids, mists, vapours or gases.</p>	
<p>3. Biological Hazards – These include animal and insects as well as micro-organisms in plant, animal or human tissue.</p>	
<p>4. Psycho-Social Hazards – These are factors that have an effect on the behavioural patterns of people. Capabilities and limitations vary among people – what is stressful for some is not for others and vice versa. This group of hazards that people refer to as causing “stress” can be caused by such psychological and sociological factors.</p>	
<p>5. Ergonomic Hazards – Ergonomics involves fitting the job to the worker.</p>	

Lesson 4
Learning Activity #4.2

Safety Hazard Recognition - ANSWER KEY

TYPES OF SAFETY HAZARDS	EXAMPLES
<p>1. Physical Hazards – These include conditions produced by the environment and processes.</p>	<p>1. Noise Temperature (e.g. heat or cold) Lighting Vibration Radiation, sunlight Unguarded machinery Poor housekeeping</p>
<p>2. Chemical Hazards – Chemical hazards can be in the form of solids, liquids, mists, vapours or gases.</p>	<p>2. Acids, caustic materials, metals (e.g. lead or mercury) Solvents, cleaners, gasoline Paints Pesticides or herbicides Asbestos Dusts (e.g. wood dust)</p>
<p>3. Biological Hazards – These include animal and insects as well as micro-organisms in plant, animal or human tissue.</p>	<p>3. Bacteria, viruses (e.g. hepatitis, HIV) Plants (e.g. poison ivy, pollen) Animal parasites, mites or dander Bee stings, unsanitary conditions</p>
<p>4. Psycho-Social Hazards – These are factors that have an effect on the behavioural patterns of people. Capabilities and limitations vary among people – what is stressful for some is not for another and vice versa. This group of hazards that people refer to as causing “stress” can be caused by psychological and sociological factors.</p>	<p>4. Shift Work Work/life pressures Harassment Potential for violence Production quotas (stress for some people)</p>
<p>5. Ergonomic Hazards – Ergonomics involves fitting the job to the worker.</p>	<p>5. Repetitive movements (e.g. cutting wood) Monotony (e.g. assembly line work) Discomfort and fatigue Tool design Work and workstations layout, poor posture due to layout or design Heavy or awkward lifting</p>

Lesson 4

Safety Hazard Recognition and Control Measures

Learning Activity #4.3
Time - 12 minutes

LEARNING ACTIVITIES	RESOURCES
<p>LECTURE-DISCUSSION AND VISUAL AIDS</p> <ul style="list-style-type: none"> ▪ Discuss the 4 main hazard control measures using the “Four Main Hazard Control Measures” Handout. <ul style="list-style-type: none"> ○ Engineering controls, substitution, work practice controls and personal protective equipment. ▪ Encourage feedback and discussion. <p style="text-align: center;">POWERPOINT Slide #9 </p> <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;"> <p>HANDOUT Lesson 4 - Learning Activity #4.3 - Four Main Hazard Control Measures </p> </div> <p>Distribute the handout “Sample: New Worker Orientation Checklist” and encourage students to practice applying this checklist in their workplace.</p> <p style="text-align: center;">POWERPOINT Slide #10 </p> <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;"> <p>HANDOUT Lesson 4 - Learning Activity #4.3 – SAMPLE: New Worker Orientation Checklist </p> </div>	

Lesson 4
Learning Activity #4.3
Four Main Hazard Control Measures - HANDOUT

NOTE:

Engineering controls are almost always the best option, with personal protective equipment often providing the least effective control.

Engineering Controls

Change to equipment, floor layouts, or other engineering arrangements can often control a hazard;

Substitution

It is often possible to replace a controlled product in the workplace with a safe product to perform the same function;

Work Practice Controls

On-the-job activities that lead to exposure can sometimes be modified or eliminated; risk is reduced by changing the task;

Personal Protective Equipment

Personal protective equipment is used to safeguard employees.

Lesson 4

Learning Activity #4.3

SAMPLE: New Worker Orientation Checklist - HANDOUT

Employee name:			
Position (tasks):			
Date hired:		Date of orientation:	
Person providing orientation (name and position):			
Company name:			
TOPIC	Initials (trainer)	Initials (worker)	Comments
Supervisor Name and Contact Number Provided			
Safety and Health Committee or the worker safety and health representative name(s) and contact numbers			
Rights and responsibilities			
General duties of employers, workers and supervisors			
Worker right to know, participate and refuse unsafe work and right to protection from discrimination			
The Workplace Health and Safety Policies (company rules)			
Ex: working alone or in isolation, violence and harassment prevention, personal protective equipment, incident investigation, reporting hazards and injuries, etc.			
Contents of Workplace Health and Safety Program (if 20 or more employees)			
Ex: Safety and health policy, hazard identification, inspection schedule, training plan, etc.			
Documented Safe Work Procedures (job/task specific)			
Ex: machinery, equipment, tools, ladders, chemicals, lockout, musculoskeletal injuries, etc.			
First Aid			
First aid attendant name and contact information			
Locations of first aid kits and eye wash facilities			
How to report an illness, injury, or other accident (including near-miss and dangerous occurrences)			
Emergency Procedures			
Locations of emergency exits and meeting points			
Locations of fire extinguishers and fire alarms			
How to use fire extinguishers			
What to do in an emergency situation			
Emergency contact (numbers)			
Hazardous Materials and WHMIS Training (workplace and product specific)			
Purpose and significance of hazard information on product labels			
Location, purpose and significance of material safety data sheets (MSDS)			
How to handle, use, store and dispose of hazardous materials safely			
Procedures for an emergency involving hazardous materials, including clean-up of spills			

Checklist adopted from the Guide for Training Young and New Workers
available at www.safemanitoba.com

Lesson 5

Workplace Hazardous Materials Information System (WHMIS) and Material Safety Data Sheets (MSDS)

Total Lesson Time - 30 minutes

Learning Outcomes:

- Explain the Workplace Hazardous Material Information System (WHMIS).
- Match the WHMIS hazardous materials symbols and their meanings.
- Describe the importance of the Material Safety Data Sheets (MSDS).

Contents:

- Time allotments for learning activities.
- Learning activities.
- Resources and equipment.

Go to the Safe Manitoba <http://www.safemanitoba.com> website for all your information and safety resources.

All regulation summary sheets located here <http://safemanitoba.com/wsh-regulations>

WHMIS Guideline www.safemanitoba.com/sites/default/files/uploads/guidelines/whmis.pdf

Lesson 5

Workplace Hazardous Materials Information System (WHMIS) and Material Safety Data Sheets (MSDS)

Learning Activity #5.1

Time - 5 minutes

LEARNING ACTIVITIES	RESOURCES
<p>LECTURE – DISCUSSION, VISUAL AIDS AND HANDOUTS</p> <ul style="list-style-type: none"> ■ Ask students to define the Workplace Hazardous Material Information System (WHMIS) and encourage discussion around student familiarity with WHMIS). <ul style="list-style-type: none"> ○ 3 key elements of WHMIS (labelling, MSDS, training) ○ Worker’s rights related to use of hazardous materials or chemicals: right to know what is in the hazardous material; how it can hurt you; how to protect yourself when working with it. <p style="text-align: center;">POWERPOINT Slides #1 - #5 </p> <div style="border: 1px solid black; padding: 5px; text-align: center; margin: 10px auto; width: fit-content;"> <p>HANDOUT Lesson 5 - Learning Activity #5.1 - Workplace Hazardous Material Information System (WHMIS) Information </p> </div>	<p>The <i>Workplace Safety and Health Act</i> and Regulation require employers to provide WHMIS training that is very specific to that workplace. WHMIS is about the right to know about hazardous materials in all workplaces.</p> <p>Go to the Safe Manitoba http://www.safemanitoba.com website for all your information and safety resources.</p> <p>All regulation summary sheets located here http://safemanitoba.com/wsh-regulations</p> <p>WHMIS Guidelines www.safemanitoba.com/sites/default/files/uploads/guidelines/whmis.pdf</p> <p>Part 35 - Workplace Hazardous Materials Information System (Workplace Hazardous Information Systems)</p>

Lesson 5

Learning Activity #5.1

Workplace Hazardous Material Information System (WHMIS)

Information - HANDOUT

- Nationwide system that provides information on hazardous materials used in the workplace.
- The WHMIS safety labels and symbols gives the worker the information needed to work safely with these products
- Three key elements are:

LABELING	MATERIALS SAFETY DATA SHEETS (MSDS)	TRAINING
Warning labels and symbols identify hazardous products, what it can do to people, and how to work safely with them.	<p>Gives detailed information about the hazards of controlled products used in the workplace, how to use them safely, and what to do in an emergency.</p> <p>Each MSDS must include: product information; re-activity data; preparation information; toxicological properties; hazardous ingredients; preventative measures; physical data; first aid measures; fire or explosion hazard.</p>	The employer must provide the worker with training that teaches the worker how to read and understand the WHMIS labels and MSDS.

- Manitoba Workplace Safety and Health Regulation Part 35 explains the 3 elements of WHMIS
- Additional information is found in the Federal Hazardous Products Act
- Hazardous materials are classified into six main categories:
 - A. Compressed gas
 - B. Flammable and combustible material
 - C. Oxidized material
 - D. Poisonous and infectious material
 - D1. Immediate and serious toxic effects
 - D2. Other toxic effects
 - D3. Biohazardous infectious material
 - E. Corrosive material
 - F. Dangerously reactive material

Lesson 5

**Workplace Hazardous Materials Information System (WHMIS)
and Material Safety Data Sheets (MSDS)**

Learning Activity #5.2
Time - 15 minutes

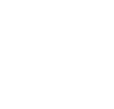
LEARNING ACTIVITIES	RESOURCES
<p>WORKSHEET, VISUAL AIDS AND DISCUSSION</p> <ul style="list-style-type: none"> ▪ Ask students to take 6 minutes and complete the WHMIS worksheet. (Learning Activity 5.2) ▪ Correct the worksheet and invite feedback and discussion. ▪ Ask students to identify some of the hazardous products they work with in their workplace and the safety and health procedures followed. <p style="text-align: center;">POWERPOINT Slides #6 - #10 </p> <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: 80%; text-align: center;"> <p>WORKSHEET Lesson 5 - Learning Activity #5.2 - Workplace Hazardous Material Information System (WHMIS) </p> </div> <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: 80%; text-align: center;"> <p>ANSWER KEY Lesson 5 - Learning Activity #5.2 - Workplace Hazardous Material Information System (WHMIS) </p> </div>	<p>NOTE: If students have had WHMIS training, they can use the “WHMIS” Worksheet as an assessment tool.</p>

Lesson 5

Learning Activity #5.2

Workplace Hazardous Material Information System (WHMIS) - WORKSHEET

Instructions: Draw lines to match the symbol with the name and hazard

	Class A Compressed Gas - Pose an explosive danger because these gases are contained under pressure. May cause container to explode if heated in a fire or subjected to impact forces.	
	Class B Flammable and Combustible Material - Material that will burn (a potential fire hazard) or may burst into flame spontaneously, in air, or release a flammable gas on contact with water vapour. May cause a fire when exposed to heat, sparks, flames or as a result of friction.	
	Class C Oxidizing Material - Pose a fire and/or explosion risk in the presence of flammable or combustible material. May react violently or cause an explosion when contacting combustible materials.	
	Class D	
		1. Materials causing immediate and serious toxic effects - Immediate and serious toxic effects. May be a potentially fatal poisonous substance. May be fatal or cause permanent damage if inhaled or swallowed, or entering the body through skin contact.
		2. Materials causing other toxic effects - A poisonous substance that may not be immediately dangerous to health. May cause death or permanent damage as a result of repeated exposures over time. May be a sensitizer (produce chemical allergies). May cause cancer, birth defects or sterility.
	3. Bio-hazardous Infection Material - May cause a serious disease resulting in illness or death.	
	Class E Corrosive material - Causes eye and skin tissue damage upon contact. Causes severe tissue damage with prolonged contact. May be harmful if inhaled.	
	Class F Dangerously reactive material - It is very unstable. May react with water to release a toxic gas. May explode as a result of shock, friction or increase in temperature. May explode if heated when in a closed container. Undergoes vigorous polymerization or decomposition.	

Lesson 5
Learning Activity #5.2
Workplace Hazardous Material Information
System (WHMIS) - ANSWER KEY

WHMIS Worksheet – ANSWER KEY

Instructions: Draw lines to match the symbol with the name and hazard

	<p>Class A Compressed Gas - Pose an explosive danger because these gases are contained under pressure. May cause container to explode if heated in a fire or subjected to impact forces.</p>
	<p>Class B Flammable and Combustible Material - Material that will burn (a potential fire hazard) or may burst into flame spontaneously, in air, or release a flammable gas on contact with water vapour. May cause a fire when exposed to heat, sparks, flames or as a result of friction.</p>
	<p>Class C Oxidizing Material - Pose a fire and/or explosion risk in the presence of flammable or combustible material. May react violently or cause an explosion when contacting combustible materials.</p>
	<p>Class D</p> <p>1. Materials causing immediate and serious toxic effects - Immediate and serious toxic effects. May be a potentially fatal poisonous substance. May be fatal or cause permanent damage if inhaled or swallowed, or entering the body through skin contact.</p> <p>2. Materials causing other toxic effects - A poisonous substance that may not be immediately dangerous to health. May cause death or permanent damage as a result of repeated exposures over time. May be a sensitizer (produce chemical allergies). May cause cancer, birth defects or sterility.</p> <p>3. Bio-hazardous Infection Material - May cause a serious disease resulting in illness or death.</p>
	<p>Class E Corrosive material - Causes eye and skin tissue damage upon contact. Causes severe tissue damage with prolonged contact. May be harmful if inhaled.</p>
	<p>Class F Dangerously reactive material - It is very unstable. May react with water to release a toxic gas. May explode as a result of shock, friction or increase in temperature. May explode if heated when in a closed container. Undergoes vigorous polymerization or decomposition.</p>
	
	

Lesson 5

Workplace Hazardous Materials Information System (WHMIS) and Material Safety Data Sheets (MSDS)

Learning Activity #5.3

Time - 10 minutes

LEARNING ACTIVITIES	RESOURCES
<p>QUESTIONS, VISUAL AIDS and DISCUSSION</p> <ul style="list-style-type: none"> ▪ Use the “Material Safety Data Sheet (MSDS) Questions” handout to discuss important questions to ask when reading a Material Safety Data Sheet (MSDS). ▪ Encourage discussion and answer student questions. <p style="text-align: center;">POWERPOINT Slides #11 - #13 </p> <div style="border: 1px solid black; padding: 5px; text-align: center; margin: 5px auto; width: fit-content;"> <p>QUESTIONS Lesson 5 - Learning Activity #5.3 - Material Safety Data Sheet (MSDS) </p> </div> <div style="border: 1px solid black; padding: 5px; text-align: center; margin: 5px auto; width: fit-content;"> <p>HANDOUT Lesson 5 - Learning Activity #5.3 - Material Safety Data Sheet (MSDS) </p> </div>	<p>NOTE: If students have had WHMIS training, they can use the “WHMIS” Worksheet as an assessment tool.</p>

Lesson 5
Learning Activity #5.3
Material Safety Data Sheet (MSDS) - QUESTIONS

Important questions to ask YOURSELF when reading a MSDS:

1. Is this the right MSDS for the product I am working with?
2. Is the MSDS up-to-date? (Updated every 3 years). (See Section 9).
3. Can the product burn or explode? (See Section 4).
4. Is the chemical product unstable? If yes, under what conditions? (See Section 5).
5. What harmful health effects are possible? (See Section 6).
6. Do I need to wear personal protective equipment when handling the product? (See Section 7).
7. What equipment is appropriate? (See Section 7).
8. Are there special handling precautions? (See Section 7).
9. Do I know what to do in case of a fire, explosion, spill or leak? (See Section 4).
10. Do I know who the first aid person is in my workplace?
11. Do I know where the emergency response equipment is located and how to use it?

Lesson 5

Learning Activity #5.3

Material Safety Data Sheet (MSDS) - HANDOUT

Section 1 – PRODUCT INFORMATION

Product Identifier Carbon Monoxide (combustion product fugitive emission)		WHMIS Classification (optional) – Class D1A and D2A	
Unexpected End of Formula Products Use – By-product of combustion of organic materials. May be present due to combustion engines idling near the loading dock. Propane forklifts and other combustion powered equipment.			
Manufacturer's Name		Supplier's Name	
Street Address		Street Address	
City	Province	City	Province
Postal Code	Emergency Telephone	Postal Code	Emergency Telephone

Section 2 – HAZARDOUS INGREDIENTS

Hazardous Ingredients (specific)	%	CAS Number	LD50 of Ingredient (specify species and route)	LD50 of Ingredient (specify species route)
Carbon monoxide (CO) Occupational Exposure Limit (O.E.L.) is 25ppm or 0.0025%	<0.0025	630-08-0		

Section 3 – PHYSICAL DATA

Physical State Gas		Odour and Appearance Odourless and colourless		Odour Threshold (ppm) Odourless and non-irritating	
Specify Gravity Not Applicable	Vapour Density (air = 1) 0.967		Vapour Pressure (mmHg) Not Applicable		Evaporation Rate Not Applicable
Boiling Point (°C) -192 deg C	Freezing Point (°C) -205 deg C		pH probably neutral		Coefficient of Water/Oil Distribution Not available

Section 4 – FIRE AND EXPLOSION DATA

Flammability <input type="checkbox"/> Yes <input type="checkbox"/> No		If yes, under which conditions? CO is a flammable gas and will burn when concentrations are in the flammable range.	
Means of Extinction Use water spray once the flow of gas has been stopped			
Flashpoint (°C) and method Not Applicable		Upper Flammable Limit (% by volume) 74.2%	
Auto-ignition Temperature (°C)		Explosion Data – Sensitivity to Impact	
		Explosion Data – Sensitivity to Static discharge readily ignited by a static discharge of sufficient energy when concentration is in the flammable range	
Hazardous Combustion Products Decomposes to C and CO ₂ between 400 and 700 deg C			

Section 5 – REACTIVITY DATA

Chemical Stability <input type="checkbox"/> Yes <input type="checkbox"/> No Normally stable	If no, under which conditions?
Incompatibility with Other Substances <input type="checkbox"/> Yes <input type="checkbox"/> No	If yes, which ones? Increased risk of fire and explosion in the presence of oxidizing materials. May react vigorously with oxygen, acetylene, chlorine, fluorine, nitrous oxide.
Reactivity and under what conditions? Mildly corrosive to nickel and iron at elevated pressures. CO will attack natural rubber and neoprene.	
Hazardous Decomposition Products None	

Section 6 – TOXICOLOGICAL PROPERTIES

Route of Entry <input type="checkbox"/> Skin Contact <input type="checkbox"/> Skin Absorption <input type="checkbox"/> Eye Contact <input type="checkbox"/> Inhalation <input type="checkbox"/> Ingestion	
Effects of Acute Exposure to Product Short term exposures <50ppm normally do not cause adverse effects in health individuals. CO caused increasingly severe effects with increasing concentration and/or duration of exposure. At concentrations over 5000ppm death may occur in minutes.	
Acute exposure effects include headache, weakness, dizziness, nausea, fainting, irregular heartbeat, loss of consciousness, death.	
Effects of Chronic Exposure to Product CO combines with hemoglobin in the blood reducing the ability to supply adequate oxygen to the tissues particularly the brain and heart. Observed effects are related to tissue hypoxia (low oxygen). CO is excreted in exhaled air rapidly during the first few hours after exposure but complete elimination may require 1-2 days.	
Studies show a relationship between exposure in some occupations and increased incidence of cardiovascular problems. CO can aggravate some diseases of the cardiovascular system. Tobacco smokers have elevated levels of CO in the blood and may be more sensitive to occupational exposures. People working at high altitudes may be more sensitive to CO. On recovery from serious poisoning the following effects may be observed; headache and dizziness, vision problems, memory loss, confusion and mental problems. Permanent damage to the brain has been reported.	
Exposure Limits (value, source, date) TLV-TWA 25 25ppm ACGIH 2004 IDLH 1200ppm NIOSH 2004	Irritancy (if yes, explain) <input type="checkbox"/> Yes <input type="checkbox"/> No
Sensitization (if yes, explain) <input type="checkbox"/> Yes <input type="checkbox"/> No Insufficient information	Teratogenicity (if yes, explain) Maternal symptoms are an indicator of potential risk to the fetus. Fetal effects were observed at non-toxic maternal doses. <input type="checkbox"/> Yes <input type="checkbox"/> No
Teratogenicity (if yes, explain) Maternal symptoms are an indicator of potential risk to the fetus. Fetal effects were observed at non-toxic maternal doses. <input type="checkbox"/> Yes <input type="checkbox"/> No	Synergistic Products (if yes, explain) combination of CO with CO2 causes an increase in the rate of binding CO with hemoglobin in the blood. <input type="checkbox"/> Yes <input type="checkbox"/> No

Section 7 – PREVENTATIVE MEASURES

Personal Protective Equipment <input type="checkbox"/> Gloves <input type="checkbox"/> Respirator <input type="checkbox"/> Eye <input type="checkbox"/> Footwear <input type="checkbox"/> Other	
If checked, specific type Supplied air breathing system	
Engineering Controls (specify, such as ventilation, enclosed process) – Whenever CO may be emitted local exhaust ventilation is necessary. Use a non-sparking, grounded ventilation system separate from other exhaust ventilation systems exhausted directly to the outside and supply sufficient replacement air to make up for the air removed.	
Leak and Spill Procedure – Evacuate areas and call for professional assistance. Disable the source of the emissions. Ventilation to prevent additional accumulation.	
Waste Disposal – Vehicle exhaust (CO) is vented to the outside where it mixes freely with and is diluted by air.	
Handling Procedures and Equipment – Prevention activities include regular maintenance that includes an emissions check for combustion powered equipment to be used indoors. Vehicles are not to be idling within or near building access points. Vehicles running indoors for service must be exhausted to the outside.	
Storage Requirements – Not Applicable	
Special Shipping Information – Not Applicable	PIN – Not Applicable

Section 8 - FIRST AID MEASURES

Inhalation Remove to fresh air. Minimize physical activity. Provide respiratory support as needed. Seek medical attention.
Ingestion – Not applicable
Skin Contact – Not Applicable
Eye Contact Not Applicable

Section 9 - PREPARATION INFORMATION

Prepared by (Group, Department, etc)	Telephone Number	Preparation Date
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Lesson 6

Personal Protective Equipment (PPE)

Total Lesson Time - 45 minutes

Learning Outcomes:

- Describe the importance of using personal protective equipment as approved by the Workplace Safety and Health Regulation.
- Demonstrate proper selection and use of a variety of personal protective equipment and fall protection systems.

Contents:

- Time allotments for learning activities.
- Learning activities.
- Resources and equipment.

Go to the Safe Manitoba <http://www.safemanitoba.com> website for all your information and safety resources.

All regulation summary sheets located here <http://safemanitoba.com/wsh-regulations>

Lesson 6

Personal Protective Equipment (PPE)

Learning Activity #6.1

Time - 35 minutes

LEARNING ACTIVITIES	RESOURCES
<p>LECTURE – DISCUSSION, VISUAL AIDS</p> <ul style="list-style-type: none"> ▪ Discuss the following: <ul style="list-style-type: none"> ○ Shared responsibility of employees and employers to ensure use of personal protective clothing and equipment (PPE) ○ Canadian Standards Association (CSA), American National Standards Institute (ANSI), Mining (MHSA), National Institute for Occupational Safety and Health or other standards approved by Manitoba Legislation for various PPE. <p style="text-align: center;">POWERPOINT Slides #1 - #5 </p>	<p>NOTE: All jobs that have some degree of hazard require some type of PPE. Go to the Safe Manitoba http://www.safemanitoba.com website for all your information and safety resources.</p> <p>All regulation summary sheets located here http://safemanitoba.com/wsh-regulations</p>

Lesson 6

Personal Protective Equipment (PPE)

Learning Activity #6.2

Time - 35 minutes

LEARNING ACTIVITIES	RESOURCES
<p>GROUP WORK VISUAL AIDS, DEMONSTRATIONS and DISCUSSION</p> <ul style="list-style-type: none"> ▪ Instructor will assemble and introduce a kit containing various personal protective equipment that is CSA and ANSI approved: <ul style="list-style-type: none"> ○ Different hand and foot wear, headwear, eye and face protection, hearing protection, respirators and fall protection systems (if available). ▪ Divide the students into groups of two and distribute one item of PPE to each group. <ul style="list-style-type: none"> ○ Each group will be given 7 minutes to: <ul style="list-style-type: none"> - Prepare a brief demonstration on correct use of the assigned PPE and its specific safety features. ▪ Ask students to briefly demonstrate its assigned PPE and encourage discussion. ▪ Discuss any additional PPE information using the PowerPoint slides. <p style="text-align: center;">POWERPOINT Slide #6 </p> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p>HANDOUT Lesson 6 - Learning Activity #6.1 - Ten Ways to Recognize Hearing Loss </p> </div> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p>WORKSHEET Lesson 6 - Learning Activity #6.2 - Personal Protective Equipment (PPE) </p> </div> <p style="text-align: center;">POWERPOINT Slides #7 - 16 </p>	<p>NOTE: Instructors are responsible for providing samples of PPE equipment.</p> <p>Instructor Assembled Kit of Personal Protective Equipment as approved by Manitoba Legislation.</p> <p>In the interest of time, discuss general PPE, and then select the PPE appropriate to the students' trade. Each group may be assigned different types of a particular PPE such as safety goggles, safety gloves, respirators, etc. Instructors are encouraged to assign students with more trade safety knowledge as group leaders.</p> <p>Safe Work Bulletins – Nos. M and E; 227; 189;199; 154; 102; 212 AG; 166, 197</p> <p>http://safemanitoba.com/bulletin-199 http://safemanitoba.com/bulletin-133 http://safemanitoba.com/bulletin-186-working-cold http://safemanitoba.com/bulletin-102 http://safemanitoba.com/bulletin-154 http://safemanitoba.com/bulletin-farms-5 http://safemanitoba.com/guideline-falls http://safemanitoba.com/guideline-noise http://www.safemanitoba.com</p> <p>All regulation summary sheets located at: http://safemanitoba.com/wsh-regulations</p>

Lesson 6
Learning Activity #6.2
Ten Ways to Recognize Hearing Loss - HANDOUT

Protection Update summer 2006

Using proper hearing protection in a noisy workplace is one of the simplest and most effective things workers can do to protect themselves against hearing loss. From the National Institute of Deafness and Other Communications Disorders – nidcd.nih.gov, here are ten questions to help recognize whether you may have diminished hearing:

1. Do you have a problem hearing over the telephone?
2. Do you have trouble following the conversation when two or more people are talking at the same time?
3. Do people complain you turn the TV volume up too high?
4. Do you have to strain to understand conversation?
5. Do you have trouble hearing in a noisy background?
6. Do you find yourself asking people to repeat themselves?
7. Do many people you talk to seem to mumble (or not speak clearly)?
8. Do you misunderstand what others are saying and respond inappropriately?
9. Do you have trouble understanding the speech of women and children?
10. Do people get annoyed because you misunderstand what they say?

If you answered “yes” to three or more questions, you may want to have your hearing evaluated by an audiologist or ear, nose and throat doctor.

ISEA member companies make a variety of high-tech earplugs, caps and muffs. Find a buyer’s guide that lists hearing protection products on ISEA’s website: www.safetyequipment.org or obtain a paper copy by putting “please send me an ISEA Buyer’s Guide into the subject line of your e-mail to sflahety@equipment.org; include your name, title, organization and mailing address.

Lesson 6
Learning Activity #6.2
Personal Protective Equipment (PPE) - WORKSHEET

Instructions: Please complete the worksheet for your assigned PPE.

1. What is the name of the personal protective equipment your group will demonstrate?

2. Locate and record the approved standard for the PPE.

3. Be prepared to demonstrate the correct use of the PPE. Describe when to correctly use this product. HINT: Refer to the following Work Safe Bulletins: No. 189, 199, 154, 102, and Safe Farms 11.

4. State the specific safety features of this product.

Lesson 7

Electrical Safety

Total Lesson Time - 30 minutes

Learning Outcomes:

- Outline the safety principles for working on and around electrical equipment.

Contents:

- Time allotments for learning activities.
- Learning activities.
- Resources and equipment.

http://safetyauthority.ca/sites/default/files/approved_certification_marks_for_electrical_products_be3_071019_3_revision_2.pdf

Lesson 7

Electrical Safety

Learning Activity #7.1

Time - 5 minutes

LEARNING ACTIVITIES	RESOURCES
<p>QUESTION – ANSWER AND VISUAL AIDS</p> <ul style="list-style-type: none"> ■ Ask the following questions and encourage discussion: <ul style="list-style-type: none"> ○ What effects can electricity have on the human body? Answer: can cause severe burns, injury or death. ○ What three factors affect the severity of the electrical shock? Answer: amount of current (<i>size of amperage</i>), path of current flowing through body and length of time body is in circuit. ○ What are the hazards with ARC? Answer: actual contact does not have to be made with high voltage line; electric “ARC” can jump several inches from conductor to nearby equipment. <p style="text-align: center;">POWERPOINT Slides #1 - #5 </p>	<p>Electrical work can only be done by a licensed electrician. (The Electricians License Act E50)</p> <p>See website: http://www.safemanitoba.com http://safemanitoba.com/guideline-falls</p> <p>Safe work bulletin 140</p>

Lesson 7
Electrical Safety
Learning Activity #7.2
Time - 15 minutes

LEARNING ACTIVITIES	RESOURCES
<p>WORKSHEET, GROUP WORK, VISUAL AIDS AND DISCUSSION</p> <ul style="list-style-type: none"> ▪ Divide students into small groups. <ul style="list-style-type: none"> ○ Each group will be given six minutes to discuss the scenario on the worksheet and record their responses. ▪ Correct the worksheet with the class and encourage feedback and discussion. <p style="text-align: center;">POWERPOINT Slides #6 - #8 </p> <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;"> <p>WORKSHEET Lesson 7 - Learning Activity #7.2 - Electrical Safety </p> </div> <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;"> <p>ANSWER KEY Lesson 7 - Learning Activity #7.2 - Electrical Safety </p> </div>	

Lesson 7
Learning Activity #7.2
Electrical Safety - WORKSHEET

Instructions: Please read the scenario and answer the questions.

Scenario #1: An electrician has to perform maintenance work on a lighting circuit in a business workplace. To do so, he turned off the circuit breaker at the panel box which is located some distance from where he was working. Leaving the panel box open he started working on the equipment.

Spot the Hazard

Could you think of some obvious hazards in the scenario described above?

Who is at risk?

Do you see any unsafe behaviour?

Assess the Hazard

What kind of accident or injury could happen in the above situation?

Why is it unsafe?

Find a Safer Way

What could be done to remove or reduce the danger or risk?

Lesson 7

Learning Activity #7.2

Electrical Safety - ANSWER KEY

Instructions: Please read the scenario and answer the questions.

Scenario: #1

Scenario #1: An electrician has to perform maintenance work on a lighting circuit in a business workplace. To do so, he turned off the circuit breaker at the panel box which is located some distance from where he was working. Leaving the panel box open he started working on the equipment.

Spot the Hazard:

Could you think of some obvious hazards in the scenario described above?

- Circuit breaker
- Distance from work site

Who is at risk?

- Electrician

Do you see any unsafe behaviour?

- Open panel box
- Unsupervised panel box

Assess the Hazard:

What kind of accident or injury could happen in the above situation?

- Severe burn, injury or death

Why is it unsafe?

- Electrical shock potential
- Electrical fire potential

Find a Safer Way

What could be done to remove or reduce the danger or risk?

- Close panel box
- Post signage
- Lock-out/tag-out

Lesson 7

Electrical Safety

Learning Activity #7.3

Time - 10 minutes

LEARNING ACTIVITIES	RESOURCES
<p>HANDOUT, VISUAL AIDS and DISCUSSION</p> <ul style="list-style-type: none"> ▪ Present the Electrical Safety Principles to follow when around energized equipment and encourage discussion. ▪ Electrical Safety ▪ Review Lock-out and Tag-out on electrical equipment. Instructor must provide <p style="text-align: center;">POWERPOINT Slides #9 - #11 </p> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p>HANDOUT Lesson 7 - Learning Activity #7.3 - Electrical Safety Principles </p> </div> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p>HANDOUT Lesson 7 - Learning Activity #7.3 - Certification Marks Recognized in Manitoba </p> </div> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p>HANDOUT Lesson 7 - Learning Activity #7.3 - Field Evaluation Labels Recognized in Manitoba </p> </div>	<p>Working Near Powerline bulletin #106 http://safemanitoba.com/SFBulletin_2</p> <p>Regulation – Part 38 Electrical Safety and summary Sheet.</p> <p>Lock-Out, Tag-Out Box – Instructor must provide.</p>

Lesson 7

Learning Activity #7.3

Electrical Safety Principles - HANDOUT

When Working On Electrical Systems, Machine Or Equipment:

- Proper Lock-out and Tag-out procedures must be used at all times.

When Working Near Power Lines:

- Manitoba Regulations require that when a machine, or any part of a machine, might come within 3 meters (10 meters) of any electrical transmission line, Manitoba Hydro must be notified before work commences. Manitoba Hydro will then de-energize, guard or re-route the electrical line, and confirm that protection has been provided.
- Never lose awareness of the overhead hazard and location of the machine/machine parts. If work is conducted near an electrical transmission line, a person should be assigned by the employer to signal and warn the machine operator if any machine part comes within 3 meters (10 meters) of the power line.
- Proper planning and precautionary action taken at the worksite prior to beginning the work, includes:
 - Housekeeping – knock down spoiled lines, debris, etc.
 - Identify hazards to all sub-contractors
 - Know the limitation/capacity of the machine
 - Know the experience/training and qualifications of machine operator

When Contact Is Made With Energized Equipment

- Do not touch the equipment if you are on the ground next to it.
- If you are operating mobile equipment that has contacted a power line, attempt to move if away from the line.
- If you can't move the equipment, remain on the equipment and call for help.
- Warn anyone approaching not to touch the equipment.
- Contact Manitoba Hydro immediately.
- If no one is around and if faced with an emergency such as fire, jump with both feet together and hop or shuffle away from the equipment.

From: Working Near Powerline bulletin #106 http://safemanitoba.com/SFBulletin_2

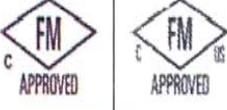
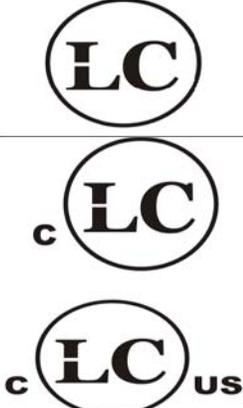
Lesson 7

Learning Activity #7.3

Certification Marks Recognized in Manitoba - HANDOUT

Name of Certification Organization	Certification Marks														
CSA		<p>The CSA certification mark alone without any identifier indicates products approved to Canadian National Standards. If another country's identifier is present (i.e., US, NRTL), then the small 'c' Canadian identifier is required to indicate that the product</p>													
					<p>The "Blue Flame" certification mark is a Canada only mark indicating compliance to Canadian National Standards. They do not require a small 'c' Canadian identifier.</p>	ETL Intertek		<p>The ETL certification mark requires the small 'c' Canadian identifier to indicate compliance to Canadian National Standards. Identifiers for the countries may be present but in all cases, the small 'c' is required.</p>		<p>The WH certification mark is an accepted Canadian mark indicating compliance to Canadian National Standards. It does not require a small "c" Canadian identifier.</p>		<p>ITS however, is introducing the small 'c' Canadian identifier at the 8 o'clock position to indicate compliance to Canadian National Standards. If another country's identifier is present (i.e., US, NRTL), then the small 'c' Canadian identifier at the 8 o'clock</p>		Entela	
		<p>The "Blue Flame" certification mark is a Canada only mark indicating compliance to Canadian National Standards. They do not require a small 'c' Canadian identifier.</p>													
ETL Intertek		<p>The ETL certification mark requires the small 'c' Canadian identifier to indicate compliance to Canadian National Standards. Identifiers for the countries may be present but in all cases, the small 'c' is required.</p>													
		<p>The WH certification mark is an accepted Canadian mark indicating compliance to Canadian National Standards. It does not require a small "c" Canadian identifier.</p>													
		<p>ITS however, is introducing the small 'c' Canadian identifier at the 8 o'clock position to indicate compliance to Canadian National Standards. If another country's identifier is present (i.e., US, NRTL), then the small 'c' Canadian identifier at the 8 o'clock</p>													
															
Entela		<p>The Entela certification mark requires the small 'c' Canadian identifier at the 8 o'clock position to indicate compliance to Canadian National Standards. Identifiers for other countries may be present but in all cases, the small 'c' is required.</p>													
															

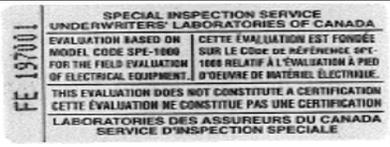
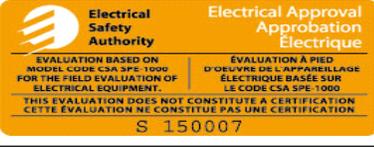
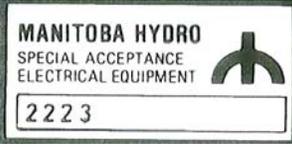
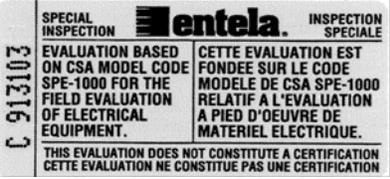
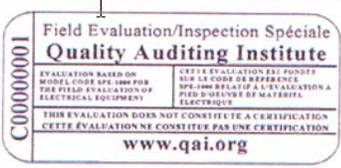
Name of Certification Organization	Certification Marks	
Quality Auditing Institute		<p>The QAI certification mark requires the small 'c' Canadian Identifier to indicate compliance to Canadian National Standards.</p> <p>Identifier for other countries may be present but in all cases, the small 'c' is required.</p>
Omni Test Labs		<p>The OTL certification mark requires the small 'c' Canadian identifier to indicate compliance to Canadian National Standards.</p>
QPS Evaluation Services Inc.		<p>The QPS certification mark requires the small 'c' Canadian identifier to indicate compliance to Canadian National Standards.</p>
Met Laboratories		<p>The MET certification mark requires the small 'c' Canadian Identifier to indicate compliance to Canadian National Standards.</p>
TUV Rheinland of North America		<p>The TUV certification mark requires the small 'c' Canadian identifier to indicate compliance to Canadian National Standards.</p> <p>Identifiers for other countries may be present but in all cases, the small 'c' is required.</p>
TUV Product Service		<p>The TUV certification mark requires the small 'c' Canadian identifier to indicate compliance to Canadian National Standards.</p> <p>Identifiers for other countries may be present but in all cases, the small 'c' is required.</p>
Underwriters' Laboratories		<p>The UL certification mark requires the small 'c' Canadian identifier to indicate compliance to Canadian National Standards.</p>
		<p>The ULC certification mark is a Canada only mark indicating compliance to Canadian National Standards. It does not require a small 'c' Canadian identifier.</p>

Name of Certification Organization	Certification Marks	
FM Approvals		<p>The FM certification mark requires the small 'c' Canadian identifier to indicate compliance to Canadian National Standards.</p> <p>Identifiers for other countries may be present but in all cases, the small 'c' is required.</p>
Nemko Canada Inc.		<p>The Nemko certification mark requires the small 'c' Canadian identifier to indicate compliance to Canadian National Standards.</p>
Curtis - Straus		<p>The Curtis - Straus certification mark requires the small 'c' Canadian identifier to indicate compliance to Canadian National Standards.</p>
NSF International		<p>The NSF certification mark requires the small 'c' Canadian identifier to indicate compliance to Canadian National Standards.</p>
Air Conditioning & Refrigerated Institute		<p>The ARI certification mark requires the small 'c' Canadian identifier to indicate compliance to Canadian National Standards.</p>
Lab Test Certification Inc.		<p>The LC certification mark requires the small 'c' Canadian identifier to indicate compliance to Canadian National Standards.</p>

Lesson 7

Learning Activity #7.3

Field Evaluation Labels Recognized in Manitoba - HANDOUT

Name of Certification Body	Special Inspection Label	Name of Certification Body	Special Inspection Label
Underwriters' Laboratories of Canada		Met Laboratories Inc.	
ESA		ESA	
Manitoba Hydro		Manitoba Labour	
Lab Test Certification Inc.			
Name of Certification Body	Special Inspection Label	Name of Certification Body	Special Inspection Label
CSA International		QPS	
ETL Intertek Entela		Quality Auditing Institute	
ETL Intertek Semko		TUV America Inc.	

Lesson 8

Fire Safety

Total Lesson Time - 30 minutes

Learning Outcomes:

- Outline the workplace fire safety principles.

Contents:

- Time allotments for learning activities.
- Learning activities.
- Resources and equipment.

Go to the Safe Manitoba <http://www.safemanitoba.com> website for all your information and safety resources.

All regulation summary sheets located here <http://safemanitoba.com/wsh-regulations>

Lesson 8
Fire Safety
Learning Activity #8.1
Time - 15 minutes

LEARNING ACTIVITIES	RESOURCES
<p>QUESTION – ANSWER, VISUAL AIDS and DISCUSSION</p> <ul style="list-style-type: none"> ▪ Facilitate a fire safety question-answer period with the class as a whole. <ul style="list-style-type: none"> ○ Four elements needed for a fire. ○ Classifications of fires. ○ Types of fire extinguishers and how to use them. ▪ Encourage discussion on workplace fire safety. <p style="text-align: center;">POWERPOINT Slides #2 - #6 (Workplace Fire Safety Question and Answer) </p> <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;"> <p style="text-align: center;">ANSWER KEY Lesson 8 - Learning Activity #8.1 - Workplace Fire Safety Question and Answer </p> </div>	<p>Fire Explosive Hazards Part 19.</p> <p>Safe Work Bulletin 127</p> <p>Go to the Safe Manitoba http://www.safemanitoba.com website for all your information and safety resources.</p> <p>All regulation summary sheets located here http://safemanitoba.com/wsh-regulations</p>

Lesson 8

Learning Activity #8.1

Workplace Fire Safety Question and Answer - ANSWER KEY

Question #1: What five elements are needed for a fire?

Answer:

- i) a fuel source – solid, liquid or gas
- ii) adequate oxygen supply
- iii) heat
- iv) chemical reaction

Question #2: What factor determines how fires are classified?

Answer: The material (fuel) causing and feeding the fire.

Question #3: What are the five types of fire extinguishers?

Answer: A. ordinary combustibles – wood, paper, cloth, rubber and some plastics.

Class A Extinguisher

B. flammable liquids and gases – gasoline, kerosene, paint, paint thinners or propane.

Class B Extinguisher

C. energized electrical equipment – appliances, panel boxes, switches and power tools.

Class C Extinguisher

D. certain combustible metals – potassium, titanium, sodium or magnesium.

Class D Extinguisher

E. wet chemicals, dry powder

Class K Extinguisher

NOTE: Class D extinguishers react violently to water and other types of chemicals.

NOTE: Some extinguishers are marked with multiple ratings such as AB, BC and ABC.

They are capable of putting out more than one class of fire.

Question #4: What three things do you do when a fire happens?

Answer:

- i) sound fire alarm
- ii) use proper type of fire extinguisher
- iii) follow fire safety procedures outlined by your employer.
(for example: implement the evacuation plan that includes 2 Mandatory exits, and certain workers may have specific responsibilities).

Question #5: What are the four steps in operating a fire extinguisher?

Answer: **P.A.S.S.**

P. - Pull pin

A. - Aim the nozzle at base of fire

S. - Squeeze trigger firmly while holding extinguisher upright

S. - Sweep the extinguisher back and forth across the base of the flames

Lesson 8
Fire Safety
Learning Activity #8.2
Time - 15 minutes

LEARNING ACTIVITIES	RESOURCES
<p>DEMONSTRATIONS, DISCUSSION AND VISUAL AIDS</p> <ul style="list-style-type: none"> ▪ Simulate how to use a fire extinguisher. <ul style="list-style-type: none"> ○ P.A.S.S. method. ▪ Demonstrate what to do if you are alone and your clothing catches on fire (i.e. Stop, Drop and Roll) ▪ Ask students to identify some workplace fire safety principles (Fire Sense). ▪ Ask students to describe their workplace evacuation plan or emergency action plan. <ul style="list-style-type: none"> ○ Follow fire safety procedures outlined by employer. ○ Exit routes (two are mandatory). ○ Certain employees may have specific responsibilities. <p style="text-align: center;">POWERPOINT Slides #7 - #8 </p> <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;"> <p style="text-align: center;">HANDOUT Lesson 8 - Learning Activity #8.2 - Workplace Fire and Safety </p> </div>	<p>Go to the Safe Manitoba http://www.safemanitoba.com website for all your information and safety resources.</p> <p>All regulation summary sheets located here http://safemanitoba.com/wsh-regulations</p>

Lesson 8
Learning Activity #8.2
Workplace Fire and Safety - HANDOUT

Fire Sense

- Do not panic
- Know the location of all fire alarms, fire extinguishers and fire exits
- Know how to use a fire extinguisher
- Keep a clean, tidy workplace
- Check all electrical wiring regularly and replace damaged parts
- Smoke only in designated areas
- Know what to do if your clothes catch on fire - (Stop, Drop and Roll)

Workplace Evacuation Plan

- Participate in scheduled fire drills to be prepared
- Know the fire exit/escape routes
- Two exit routes are mandatory
- Follow fire safety procedures outlined by your employer
- Never take the elevator
- Assign certain employees to handle specific responsibilities such as making sure everyone is out of the building
- Know where to meet after evacuation

Lesson 9

Confined Space-Hazards and Risk Assessment

Total Lesson Time - 30 minutes

Learning Outcomes:

- Identify the hazards in confined spaces and the preparation needed to work in a confined space.

Contents:

- Time allotments for learning activities.
- Learning activities.
- Resources and equipment.

Code of Practice for Confined Entry Work and S.A.F.E. - Farms Bulletin #11

<http://www.safemanitoba.com/code-practice-confined-spaces>

- http://safemanitoba.com/SFBulletin_11

Lesson 9
Confined Space-Hazards and Risk Assessment
Learning Activity #9.1
Time - 10 minutes

LEARNING ACTIVITIES	RESOURCES
<p>LECTURE-DISCUSSION AND VISUAL AIDS</p> <ul style="list-style-type: none"> ▪ Define confined spaces and give workplace examples. <ul style="list-style-type: none"> ○ Confined Space: any space not intended for continuous worker occupancy, has limited or restricted way of entering or leaving, may contain reduced oxygen levels, may contain hazardous gases, there may be presence of mechanical hazards. ▪ Discuss the two types of hazardous conditions related to confined spaces. <ul style="list-style-type: none"> ○ Physical: e.g. tight space; mechanical equipment. ○ Biological/Atmospheric: e.g. germs in sewer; pit work; mould in tanks; lack of air movement; hazardous gases. <p style="text-align: center;">POWERPOINT Slides #1 - #4 </p> <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;"> <p style="text-align: center;">HANDOUT Lesson 9 - Learning Activity #9.1 - Confined Space-Hazards and Necessary Preparation </p> </div>	<p>Also discuss the potential dangers associated with excavation work. Guidelines for Excavations http://safemanitoba.com/guideline-excavation</p> <p>Code of Practice for Confined Entry Work http://www.safemanitoba.com/code-practice-confined-spaces</p> <p>SAFE Farms Bulletin #11 http://safemanitoba.com/SFBulletin_11</p> <p>AG Agricultural Confined Spaces Can Kill You – Part 15</p> <p>Go to the Safe Manitoba http://www.safemanitoba.com website for all your information and safety resources.</p> <p>All regulation summary sheets located here http://safemanitoba.com/wsh-regulations</p>

Lesson 9

Learning Activity #9.1

Confined Space-Hazards and Necessary Preparation - HANDOUT

What is a confined space?

- Any space not intended for continuous worker occupancy
- Any space which has a limited or restricted way of entering or leaving
- Any space in which there is a chance that normal levels of oxygen may be reduced, or some toxic or explosive gases may be accumulated or released
- Any space where there is the presence of mechanical hazards

Some examples of confined spaces are:

- Holding tank
- Empty water well
- Septic tank
- Culvert
- Grain bin
- Tanker trailer

What are the two types of hazardous conditions while working in confined spaces?

Physical Conditions:

- Space is tight, should an injury occur, it may be difficult to get out
- Light may be limited
- Surfaces may be uneven or slippery
- There may be machinery or moving parts within the confined space

Biological/Atmospheric Conditions:

- Lack of air movement in confined spaces may cause unsafe proportions of nitrogen, oxygen, carbon dioxide and other gases, vapours and dust particles
- Germs in sewer; pit work; mould in tanks

Lesson 9

Confined Space-Hazards and Risk Assessment

Learning Activity #9.2

Time - 20 minutes

LEARNING ACTIVITIES	RESOURCES
<p>VIDEO/DVD, DISCUSSION AND VISUAL AIDS</p> <ul style="list-style-type: none"> ▪ Refer to the video/CD “Steve’s Story” ▪ Guide a discussion around the importance of preparation before working in a confined space. <ul style="list-style-type: none"> ○ Spot the hazards; ○ Assess the risks; <ol style="list-style-type: none"> 1. Training 2. Equipment 3. Ventilation and air supply 4. Emergency Plan <p style="text-align: center;">POWERPOINT Slide #5 </p> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <p>VIDEO “Steve’s Story” (18 minutes) - Learning Activity #9.2 - CBC I-Team Report Power Vac 1996 </p> </div> <p style="text-align: center;">POWERPOINT Slide #6 - #13 </p>	<p>NOTE: If this unit of instruction is taught over a series of classes/days, replay sections of the video/CD specifically on confined spaces.</p> <p>Code of Practice for Confined Entry Work and SAFE Farms Bulletin #11 http://www.safemanitoba.com/code-practice-confined-spaces http://safemanitoba.com/SFBulletin_11</p>

Lesson 9
Learning Activity #9.2
“Steve’s Story” (18 minutes)
CBC I-Team Report Power Vac 1996 - VIDEO

NOTE: The video is also used in Lesson #1

Lesson 10

Summary Lesson

Total Lesson Time - 10 minutes

Learning Outcomes:

- Review all learning outcomes.

Contents:

- Time allotments for learning activities.
- Learning activities.
- Resources and equipment.
- Go to the Safe Manitoba <http://www.safemanitoba.com> website for all your information and safety resources.
- All regulation summary sheets located here <http://safemanitoba.com/wsh-regulations>

Lesson 10
Summary Lesson
Learning Activity #10.1
Time - 10 minutes

LEARNING ACTIVITIES	RESOURCES
<p>LECTURE – DISCUSSION and VISUAL AIDS - Briefly summarize the 9 lessons and the key content.</p> <p>Lesson 1 - Workplace Safety and Health Issues and Their Importance</p> <p>Lesson 2 - Workplace Safety and Health: Legal Rights and Responsibilities of Employers, Supervisors and Employees</p> <p>Lesson 3 - S.A.F.E.</p> <p>Lesson 4 - Safety Hazard Recognition and Control Measures</p> <p>Lesson 5 - Workplace Hazardous Material Information System (WHIMIS) and Material Data Safety Sheet (MSDS)</p> <p>Lesson 6 - Personal Protective Equipment (PPE)</p> <p>Lesson 7 - Electrical Safety</p> <p>Lesson 8 - Fire Safety</p> <p>Lesson 9 - Confined Space-Hazards and Risk Assessment</p> <p style="text-align: center;">POWERPOINT Slide #1 - #10 </p>	<p>Go to the Safe Manitoba http://www.safemanitoba.com website for all your information and safety resources.</p> <p>All regulation summary sheets located here http://safemanitoba.com/wsh-regulations</p>