

Lesson At A Glance

Length	1 hour
Learning Objectives	<p>Students will:</p> <ul style="list-style-type: none"> • identify 3 causes for the high injury rate to young workers • identify the main types of injury in the workplace • recognize and control common hazards in industry • evaluate hazardous situations to enact a proactive response
Teaching Strategies	<ul style="list-style-type: none"> • transparencies • catch phrases • cooperative groups • questioning • group presentations
Equipment/Instructional Aids	<ul style="list-style-type: none"> • overhead projector • flipchart/whiteboard • visual laminate cards (produce into overheads) • Student Handouts (photocopy for class)
Assessment Strategies	<ul style="list-style-type: none"> • brainstorming activity • presentation

Lesson Breakdown

10 min.	Introductory Activity - Hazards on the Job
20 min.	Learning Activity - Hazards in Specific Industries
25 min.	Group Learning Activity - Hazard Recognition
5 min.	Conclusion / Homework Assignment

Purpose

This module is designed to help students become aware of the main causes of injury and to develop the students' evaluation skills by analyzing a series of unsafe work practices in order to prevent workplace injuries.

Learning Objectives

Students will be able to:

- identify causes for the high rate of injury to young workers
- identify the main types of injury in the workplace
- recognize and control common hazards in industry in order to prevent injuries
- evaluate hazardous situations to enact a proactive response

Duration

1 hour

Instructional Materials

Overheads & Visuals

(optional: produce visual cards into overheads)

1. Six Hazard Recognition Visual Laminate Cards

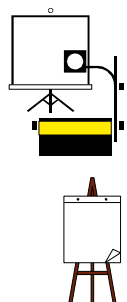
Student Handouts

(photocopy for students)

1. Causes of Injury in Specific Industries
2. Hazard Recognition Group Activity
3. See It. Think It. Do It. Questions)

Equipment

1. Overhead projector and screen
2. White board or flipchart and paper
3. Markers



Introduction - 10 min.

Comment

WCB statistics indicate three causes for the high rate of young worker injuries

1. Lack of supervision or training
2. Minimal knowledge of rights and responsibilities
3. Lack of experience in recognizing hazardous situations

After reviewing these causes, WCB's focus for prevention of injuries to young workers is to build awareness and competence in the principles of hazard recognition in students. With this training, you will be able to make informed choices about the prevention of injury to yourselves and others in the workplace.

Discuss

Have any of you been injured on the job?

Have student(s) share their stories.

A hazard is an action or situation that could cause injury or death.

What are some types of jobs that you think are hazardous?

Record

Record responses on whiteboard or flipchart.

Responses include:

- construction (lifting heavy items, operating equipment without proper training, repetitive work)
- warehouse worker (repetitive lifting of heavy boxes, boxes falling on you, operating forklift)
- waiter (slipping, tripping, handling of hot items, carrying heavy trays of food)
- kitchen worker (contact with hot items or oil, poor housekeeping in kitchen, food debris left on floor)



Comment

There are three steps to controlling a hazard

Write on board

Recognition



Evaluation



Control

Ask

Can you remember a simpler way of remembering these three steps from a previous lesson on Hazard Recognition?

“**See it. Think it. Do it.**” is the theme of this program and we are going to apply these elements in the next activity.

The Hazard Recognition principles in the See It (Recognize), Think It (Evaluate), Do It (Control) strategy provide a framework for a consistent and effective approach to safety. You will ultimately transfer this employable safety skill to your job as you enter the workplace.

Learning Activity - 20 min.

This activity introduces recognizing and controlling hazards in the workplace in order to prevent injuries.

Comment

All accidents and injuries are preventable and students don't have to be a statistic. Use the See It, Think It, Do It strategy (Hazard Recognition) to prevent injuries in the workplace.

Learning Activity - continued

Ask

What are the major causes of injury in the workplace?



Record responses on board or flipchart. Include:

- slips, trips and falls
- improper use of equipment
- not turning power off when repairing equipment
- struck by or against objects
- improper use or storage of chemicals and other hazardous materials
- cut by sharp objects (knives)
- improper lighting
- faulty equipment
- entry of unsafe confined space
- vehicle accidents
- improper lifting

Distribute Student Handout #1

Distribute Student Handout #1 to students. On Handout #1, have students choose three industry sectors and list the possible causes of injury to workers in the industries. An example is:

Industry Sector: Logging

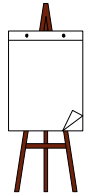
- improper use of tools and equipment
- lack of training
- falls from slipping and rough terrain
- not following safe work procedures
- not paying attention

CAUSES OF INJURY IN SPECIFIC INDUSTRIES	
Name: _____	Date: _____
Industry Sectors: • primary industry (logging, fishing, oil, gas) • health care (home care, hospital work) • food services (restaurants, grocery stores) • business (banks, offices, financial institutions) • construction • transportation (couriers, taxi's) • hospitality (restaurants, food food) • agriculture, farming (greenhouses, landscaping) • manufacturing • other industries	
Choose 3 industry sectors. List possible causes of injuries that are associated with the industry sector:	
Industry	Possible Causes of Injury
Example: Logging	• improper use of tools and equipment, lack of training, falls from slipping or rough terrain, not following safe work procedures, not paying attention
1.	
2.	
3.	

Learning Activity - continued

Ask

Ask students to share their responses with class. Write some responses on flipchart. Emphasize that eliminating or controlling hazards will reduce the risk of injury.



Teacher's Answer Key (to Handout #1)



Hospitality (restaurants, fast food)

- greasy floors
- struck by objects
- slips and trips
- handling of hot items
- contact with chemical substances
- improper lifting
- contact with hot items
- horseplay

Primary Industries (Logging)

- lack of training
- improper use of equipment or tools
- contact with equipment
- fall from slipping or tripping
- fall from tree
- not following safe work procedures
- not paying attention

Food Service (Grocery store, supermarkets)

- improper lifting
- improper use of box cutter
- repetitive lifting
- poor posture
- heavy loads
- use of mobile equipment
- contact with hot objects
- contact with harmful substances or materials

Sales (Retail)

- improper lifting
- poor posture
- cluttered work area
- improper use of box cutter (or tools)
- repetitive lifting or movements
- lack of safe work procedures

Construction

- repetitive lifting or motion
- heavy loads
- lack of personal protective equipment
- lack of training
- overhead hazards

Business

- improper lifting
- repetitive work activities
- poor indoor air quality
- computer workstation not ergonomically correct
- sitting for extensive periods

Group Learning Activity - 25 min.

Hazard Recognition Scenarios

Explain

This activity allows students to practice, evaluate, and react to hazardous work situations. Each group will use the Hazard Recognition worksheets (Student Handout #2 and 3) to analyze the given situation and then present their findings to the class.

Divide class into groups of 4-6 students.

Distribute one Hazard Recognition Visual (#1-6) and Student Handouts #2 & 3 to each group. Have students brainstorm ideas and answers to the questions on Student Handout #2 & 3.

Use the See it. Think it. Do it. Strategy.

Hazard Recognition Group Activity		
Setting: Activity/Job: Specific Location:	Keep in mind: <ul style="list-style-type: none"> Physical layout Equipment Tool condition Housekeeping Time of Day 	<ul style="list-style-type: none"> Lack of procedures Unnecessary risks Use of protective equipment Location of hazardous materials or substances People movement (actions/errors)
See It (Recognition) What is unsafe?	Think It (Evaluation) Why is it unsafe?	Do It (Control) What must be done to make it safe?

Student Handout #2

Ask groups to present their findings to the class. Use the hazard recognition Overheads 1- 6 (same as Visuals 1-6) for group discussions.

Hazard Recognition Activity See It, Think It, Do It! Questions		
See It (Recognize) What work is being done? Do you see some obvious hazards? Who is at risk? Do you see any unsafe behaviour? Do you see any unsafe conditions or objects in the environment? What are the signals that something may become a hazard?	Think It (Evaluate) What kind of accident or injury could happen here? 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, teacher demands, peer pressure) What equipment do these people need to do their job safely?	Do It (Control) What could be done to remove a danger or risk? What could be done to reduce the risk, if it can't be removed? How should people change their behaviour or attitudes? What could the teacher, parent, supervisor, friend) do to make the job safer? How would you do it?

Student Handout #3

Teacher's Answer Key - Hazard Recognition

Visual Set - Warehouse Worker on Portable Stairs



See it (how many unsafe acts or conditions can you find?)

- leaning over top railing
- overextending for box
- forklift is behind portable stairs
- box is too heavy for lifting up in awkward position



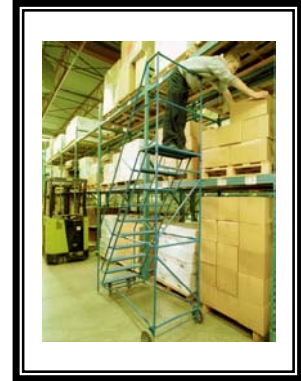
Think it (ask yourself, "Why is this a hazardous situation?")

- worker could fall off the portable stairs
- another worker could operate forklift
- portable stairs could move
- worker could get back/shoulder strain from awkward lifting



Do it (In this scenario, suggest how an accident can be prevented from happening)

- do not lean over top railing of portable stairs
- ensure portable stairs are in locked position
- move portable stairs to correct position in order to lift box
- use proper lifting techniques to lift box
- ensure forklift driver is aware of worker on ladder



Visual #1
O/H #1

Visual Set - Kitchen Worker Carrying Box



See it (how many unsafe acts or conditions can you find?)

- worker cannot see where they are going
- boxes laying on floor
- box too heavy for worker
- worker could bump into another worker
- worker could fall onto hot stove top



Think it (ask yourself, "Why is this a hazardous situation?")

- worker could get a strained back from lifting heavy box
- worker could trip or slip on boxes laying on floor
- worker could bump another worker with box
- possible fall onto hot stove or cause another to fall



Do it (In this scenario, suggest how an accident can be prevented from happening)


- remove debris / boxes laying on floor
- do not walk without seeing pathway
- awareness of other workers working around you
- get assistance with carrying box
- use handcart to move box
- ensure nothing is in pathway
- use proper lifting / carrying techniques





Visual #2
O/H #2

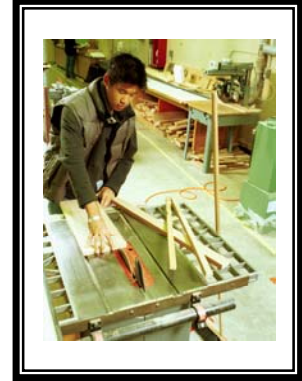
Teacher's Answer Key - Hazard Recognition

Visual Set - Worker on Table Saw

-  **See it** (how many unsafe acts or conditions can you find?)
- hand is too close to blade
 - extra wood pieces in the way of work
 - broom leaning on work table
 - extension cord behind worker
 - general mess in shop
 - no guard on saw
 - loose jewellery and clothing on worker


-  **Think it** (ask yourself, "Why is this a hazardous situation?")
- worker's fingers / hand could get cut on blade
 - loose clothing could get caught
 - dangling jewelry could get caught in blade
 - broom could fall
 - worker could trip on extension cord and fall


-  **Do it** (In this scenario, suggest how an accident can be prevented from happening)
- keep fingers at least 3 inches from saw blade
 - ensure there is no clutter around saw area
 - move broom away from table saw
 - have guard on saw
 - ensure safe work procedures are followed for working on saw
 - clean up work area
 - do not wear loose jewelry or clothing while working on saw




Visual #3
O/H #3

Visual Set - Supermarket Worker

-  **See it** (how many unsafe acts or conditions can you find?)
- lifting heavy box in awkward position
 - lifting box with box cutter in hand
 - turning while lifting
 - improper footwear
 - repetitive lifting of boxes

-  **Think it** (ask yourself, "Why is this a hazardous situation?")
- worker could get back strain due to improper and repetitive lifting
 - hand could get cut from box cutter
 - boxes could fall onto foot
 - cart could move throwing worker off balance

-  **Do it** (In this scenario, suggest how an accident can be prevented from happening)
- use proper lifting techniques
 - do not turn body while lifting
 - do not lift boxes with box cutter in hand
 - wear proper footwear
 - position cart in better position
 - get assistance if boxes are too heavy



Visual #4
O/H #4

Teacher's Answer Key - Hazard Recognition

Visual Set - Mechanic



See it (how many unsafe acts or conditions can you find?)

- worker not wearing face mask
- worker not wearing safety glasses
- distracted by other person
- other person sitting on unstable stack of tires



Think it (ask yourself, "Why is this a hazardous situation?")

- asbestos dust is airborne
- debris can get into worker's eyes
- stack of tires could collapse - other person could fall
- other person could fall onto worker or car



Do it (In this scenario, suggest how an accident can be prevented from happening)

- wear proper personal protective equipment (dust mask, safety eyewear)
- move tires away from car
- do not sit on stack of tires
- clean up work area
- pay attention to task



Visual #5
O/H #5

Visual Set - Server and Busperson



See it (how many unsafe acts or conditions can you find?)

- server holding tray in unstable position (over shoulder)
- server cannot see busboy coming around corner
- server not paying attention to potential oncoming traffic
- server could lose balance



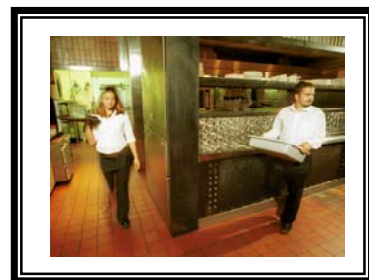
Think it (ask yourself, "Why is this a hazardous situation?")

- workers could collide coming around corner
- workers could fall due to collision
- both workers could get hurt from broken glass
- both workers could get burned by hot liquids



Do it (In this scenario, suggest how an accident can be prevented from happening)

- both workers need to pay attention for oncoming traffic
- mirror could be installed so that workers can see oncoming traffic
- use proper technique for carrying tray
- use both hands for carrying tray
- proceed cautiously around corner



Visual #6
O/H #6

Conclusion - 5 min.

Reflect/Conclude

See It. Think It. Do It.
Strategy can prevent accidents from happening.



Explain

Homework Assignment

Distribute Student Handout #4 and have the students read the young worker profile as homework.

Have students write their thoughts on how the incident to the young worker could have been prevented and how the young worker's attitude and behavior towards safety have changed.



Student Handout #4