OSHA TRAINING

MODULE 3

WORKPLACE INJURIES

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MODULE 3

Goal: The goal of this module is to explain workplace injuries and illnesses to the participants and discuss potential precautions for each injury and illness.

Objectives: By the conclusion of the Module, participants will be able to:
- Explain what the terms workplace injuries and illnesses mean.
- Describe tools used in the company and ways to handle them safely.
- Discuss where in the workplace hazards may occur.
- Explain protective measures for each of the hazards identified.

Pre-requisites: Module 1: Introduction to OSHA and Module 2: Worker Rights

Total Training Time: 100 minutes

Material Needed: Flip chart, paper, markers; “sticky dots” in different colors of green, red and blue; masking tape; and a stand or easel.

Pre-class preparation:

1. Prepare a flip chart that says “Welcome”.

   Welcome
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2. Prepare flip chart for benefits to the worker and benefits to the organization.

<table>
<thead>
<tr>
<th>Benefits to the Worker</th>
<th>Benefits to Org.</th>
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<tbody>
<tr>
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</table>

3. Prepare flip chart as a reminder for the What I work with questions.

<table>
<thead>
<tr>
<th>What I work with</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is it?</td>
</tr>
<tr>
<td>What is it used for?</td>
</tr>
<tr>
<td>What is the possible injury?</td>
</tr>
<tr>
<td>How do you use safely?</td>
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</tbody>
</table>

4. Prepare a flip chart for the protective measures

<table>
<thead>
<tr>
<th>Protective Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering Control</td>
</tr>
<tr>
<td>Administrative Control</td>
</tr>
<tr>
<td>Safe work Practices</td>
</tr>
<tr>
<td>Training</td>
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</tbody>
</table>
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The Agenda for this Module is as follows:

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 minutes</td>
<td>Welcome and Introductions</td>
</tr>
<tr>
<td>10 minutes</td>
<td>Injuries &amp; Illnesses</td>
</tr>
<tr>
<td>10 minutes</td>
<td>Benefits</td>
</tr>
<tr>
<td>15 minutes</td>
<td>What I work with</td>
</tr>
<tr>
<td>15 minutes</td>
<td>Anecdotes</td>
</tr>
<tr>
<td>15 minutes</td>
<td>Potential Hazards &amp; Protective Measures</td>
</tr>
<tr>
<td>20 minutes</td>
<td>Worksite Mapping</td>
</tr>
<tr>
<td>5 minutes</td>
<td>Summarization of Hazards</td>
</tr>
<tr>
<td>5 minutes</td>
<td>Review Questions</td>
</tr>
<tr>
<td>100 minutes</td>
<td>Total time</td>
</tr>
</tbody>
</table>
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WORKPLACE INJURIES

WELCOME AND INTRODUCTIONS
Time: 5 minutes

1. Welcome participants to the course with a flip chart page that says “Welcome”.

2. Introduce yourself and give a brief background.
   - Touch on your OSHA experience.
   - Summarize your background as a trainer.

3. Have participants introduce themselves by the way of:
   - Their name.
   - The department they work in.
   - Number of years with the organization or experience in this type of work.

4. Tell participants the name of this module is Workplace Injuries.

5. Say that the goal is to “explain workplace injuries and illnesses to the participants and discuss potential precautions for each injury and illness.”

6. The objectives are
   - To explain what the terms workplace injuries and illnesses mean.
   - Describe tools used in the company and ways to handle them safely.
   - Discuss where in the workplace hazards may occur.
   - Explain protective measures for each of the hazards identified.
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INJURIES AND ILLNESSES
Time: 10 minutes

1. Explain to participants that every day, workplace injuries, illnesses and fatalities cause immeasurable pain and suffering to employees and their families. Recent estimates indicate that workplace injuries and illnesses cost businesses more than $170 million per year.

2. Get participants into triads (groups of three) and ask participants for examples of what might cause a workplace injury or illness. Refer participants to handout page 1 where they can list their thoughts.

3. Pull the triads back together to form a full group. From the full group, take some examples of workplace injuries.

Some answers may include:

- A back injury caused by heavy and improper lifting techniques.

- Stacking of heavy food containers.

- Delivery of food in heavy crates or packages.

- Food, beverages or utensils dropped on the floor and not cleaned up which can result in fractured or broken body parts if a worker falls.
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BENEFITS
Time: 10 minutes

1. Using a flip chart divided into 2 sections, list the benefits to the worker and benefits to the organization (management) to reduce injuries and illnesses.

<table>
<thead>
<tr>
<th>Benefits to the Worker</th>
<th>Benefits to Organization</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
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</tbody>
</table>

2. Next, ask participants to think of some of the benefits to the worker for reducing workplace injuries and illnesses (left hand side of the chart). Refer participants to handout page 2 to list some examples.

   Answers may include:

   **Benefits to the Worker**
   - Miss less time = more money
   - Less or no pain
   - No resentment from management

3. Continue by having participants think of benefits to the organization or management (right hand side of the chart).

   Answers may include:

   **Benefits to the Organization or Management**
   - Less time off by workers
   - Happier employees
   - Community saying positive things about workplace
   - Avoid payment of fees due to OSHA infractions

4. Summarize by saying that lowering injuries benefits both the worker and the organization.
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WHAT I WORK WITH

Time: 15 minutes

1. In the full group, ask each participant to share the item that they brought to class or to describe an item they work with at their jobsite. Ask each participant the following questions listed on page 3 of their handout to describe their item. Give the participants a few minutes and then have someone from the group start by sharing their item. Make sure that each participant gets a chance to share and the rest of the participants can see them.

What I Work With

- What is it?
- What is it used for?
- What is the possible injury?
- How do you use safely?

Trainer note: Use the questions listed on the flip chart to guide each participant’s presentation to the group.

Trainer note: Add and share any additional item that is vital to the organization but no participant brought as their example or described.
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ANECDOTES
Time: 15 minutes

1. Have participants get into groups of five (5).

2. Ask the groups to share with their group their responses to questions 1-3 from page 4 of their handout. Read the questions to the groups once they have formed.

   - What injuries or illnesses have you personally (or someone you know) experienced? i.e. What happened?

   - What was the outcome?

   - How could the injury or illness have been prevented?

Trainer note: Remember to remind participants of the Responsibility Chart from Module 2 if the discussion becomes solely focused on employer and what their responsibilities are.
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POTENTIAL HAZARDS and PROTECTIVE MEASURES

Time: 15 minutes

1. Show participants the power point slide show of illustrations representing potential hazards. Ask the participants for examples in each category as you advance the slide show.

- **Knife cuts** are the major causes of cuts to the hands and the torso. Although technology had helped to eliminate a number of hand knife operators, the hand knife cut remains the most common.
  
  o Ask for examples of knife cuts (from the group).

- **Slips, trips and falls** also represent one of the greatest sources of serious injury in the workplace because of the nature of the work, floor surfaces throughout the plants tend to be wet and slippery.

  **Slips** occur when there is too little traction between your shoes and the walking surface.
  
  o Ask for examples of slips (from the group).

  **Trips** occur when your foot comes in contact with an item unexpectedly, causing you to go off-balance.
  
  o Ask for examples of trips (from the group).
Falls occur when you become too far off-balance. There are two major types: the same level or the level below where you are walking.

- Ask for examples of falls (from the group).

• Back Injuries are more common among workers who lift heavy items using primarily their backs.

- Ask for examples of back injuries (from the group).

• Toxic Substances such as ammonia as a liquid, aqueous solution, or ammonia as a gas all can cause irritation of the throat, nose and eyes as well as headaches, salivation, perspiration, nausea and/or vomiting. Another substance could be carbon dioxide which an odorless gas that causes headaches, dizziness, drowsiness, nausea, vomiting and even death when a worker is exposed to the gas.

- Ask for examples of toxic substances (from the group).
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- **Repetitive Motion Injuries** are disorders such as tendonitis and carpal tunnel syndrome. These injuries are caused by doing the same motion over and over again.
  
  o Ask for examples of repetitive motion injuries (from the group).

- **Infectious Diseases** such as:
  
  o Brucellosis which is caused by a bacterium and is transmitted around the site of the infection and transmitted by handling cattle or swine.
  
  o Erysipeloid is caused by bacteria and is transmitted by infection of skin punctures wounds, scratches and abrasions and can be transmitted to the blood stream.
  
  o Leptospirosis is also a bacterium and transmitted through direct contact with infected animals or through water, moist soil or vegetation contaminated by the urine of infected animals.
  
  o Dermatophytoses is a fungal disease and is transmitted by contact with the hair and skin of infected persons and animals. It is also known as ringworm which causes the hair to fall out and small yellowish cuplike crusts to develop on the scalp.
  
  o Warts are caused by a virus that can be spread by infectious worker who have contaminated towels, meat, fish knives, work tables or other objects.
  
  o Pick out an example from above that illustrates infectious diseases and is relevant for your group of participants.
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2. Show participants the illustrations representing each injury or illness in part 2 of the power point. Refer participants to pages 5 & 6 of their handout to list those measures that can be taken to avoid injuries or illnesses.

- **Knife cuts**

  Start with knife cuts and ask the participants what they might do to avoid knife cuts.

  An answer could be: A knife cut can be prevented by using the machines guarding.

- **Slips, trips and falls**

  **Slips**
  
  Ask participants what they might do to avoid slips.
  
  Answer may include: use an anti-skid adhesive tape in all high traffic areas.

  **Trips**
  
  Ask participants what they might do to avoid trips.
  
  Answer may include: practice good housekeeping to avoid trips, not only depending on the custodial staff but making good housekeeping everyone’s responsibility. For example, it should be everyone’s responsibility to keep aisle ways clear of boxes and other debris.

  **Falls**
  
  Ask participants what they might do to avoid falls.
  
  Answer may include: Falls can be prevented by cleaning up spills when they happen or the addition of no-skid flooring or mats.
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- **Back injuries**

  Ask participants what they might do to avoid back injuries.

  An answer could be: Back injuries can be prevented by learning the proper techniques for picking up heavy items.

- **Exposure to toxic substances**

  Ask participants what they might do to avoid exposure to toxic substances.

  An answer could be: Exposure to toxic substances can be reduced by wearing protective gear such as gloves, eye protection and gas masks, labeling chemicals.

- **Repetitive motion injuries**

  Ask participants what they might do to avoid repetitive motion injuries.

  An answer could be: Repetitive motion injuries can be reduced by proper posturing.
Ask participants what they might do to avoid infectious diseases.

*An answer could be: Infectious diseases can be reduced by keeping work areas cleaned and sanitized.*

3. **Say that protective measures can be divided into several categories.** They are:

   1. **Administrative control**
   2. **Safe work practices**
   3. **Protective clothing and equipment used by the worker** (often called PPE for *Personal Protection Equipment*)
   4. **Training**
4. Ask participants for an example of each category starting with Engineering Control. Answers may include the following:

   Engineering Control:
   Longer shower curtains to protect floor from getting wet.

   Administrative control:
   Policy or rule change such as adding exercise breaks or the rotation of workers.

   Safe Work Practices:
   Hazard Communication

   Protective Clothing and Equipment:
   Foot protection to avoid falls or hand protection to help avoid cuts.

   Training:
   Ensure all workers have received training or instruction and understand their role.

5. Summarize by saying that Engineering Control is both the first and best strategy that removes the hazard from the worksite. The other strategies still have the worker exposed to the hazard.
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WORKSITE MAPPING
Time: 20 minutes

We are now going to turn our attention to a method of determining where hazards might lie by drawing a map. This process is called worksite mapping.

1. **Explain** that worksite mapping is a map of a workplace or section of a workplace which shows the locations that workers identify as workplace hazards and unsafe conditions. These can be places which cause the workers symptoms, injuries, illnesses or job stresses.

2. **Next**, ask participants to get into groups of four to six (4-6).

3. **Give each group** a blank piece of flipchart paper, a marker and a group of different colored “sticky dots”. **Explain** that the different colors represent the following:
   - **Green** represents Safety Hazard
   - **Red** represents Health Hazard
   - **Blue** represents Ergonomic Hazard
4. Ask each group to draw a map of their workplace (the department they work in) using a blank chart page and a marker. An example of the map below is on the handout on page 7.

5. Next, their group should place the specific colored sticky dots (green for safety, red for health and blue for ergonomic) where a hazard or risk may be found.

Trainer note: Give the group about 10-15 minutes to work on their hazard map.
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SUMMARIZATION OF HAZARDS
Time: 5 minutes

1. Have one participant from each group tape their map to a wall and summarize the hazards or risks they have identified.

2. Then, ask the full group if they see any patterns or can make any observations based on the placement of the dots.

3. Have participants get back into their groups and have them brainstorm a list of either how to avoid the hazard or change the circumstance (engineer) so that the danger no longer exists.

4. Summarize by making any additional observations that you see.

5. Say that you will pass on their maps and lists of suggestions to management (anonymously).
MODULE 3

REVIEW QUESTIONS
Time: 5 minutes

1. Give two (2) benefits to the worker and two (2) benefits to the organization for preventing injuries of illnesses at the workplace.

2. Describe a potential hazard and what you might do to prevent this hazard.

3. Give the location of 2 workplace hazards from your workplace mapping activity.

4. List 3 examples of what might cause a workplace injury.
MODULE 3

APPRECIATION

1. Reiterate the goal which was to explain workplace injuries and illnesses to the participants and discuss potential precautions for each injury and illness.

2. Thank participants for their attention and participation throughout the session.

3. Encourage them to use what they have learned to explain what the terms workplace injuries and illnesses mean, describe tools used in the company and ways to handle them safely, discuss where in the workplace hazards may occur, and to explain protective measures for each of the hazards identified.
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ACKNOWLEDGEMENTS


8. www.ehs.indiana.edu


10. UWSP- Preventing Injuries from Trips, Slips and Falls, website www.uwsp.edu