



Work Safe! Activity

Identifying & Controlling Workplace Hazards

THIS ACTIVITY AT A GLANCE

This activity has been adapted from “Work Safe!,” a curriculum for youth employment programs developed by the Labor Occupational Health Program at UC Berkeley.

In this activity students will brainstorm health and safety hazards that might be found on various jobs. They will then work in pairs to identify the hazards found in four different workplace scenarios and report back their findings to the whole class. Finally, the class will discuss stories of injured teens and ways of preventing their injuries.

Learning Objectives

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

- Determine how much they already know about job safety.
- Identify a variety of health and safety hazards found on typical teen jobs.
- Explain three effective ways to reduce or eliminate hazards.

Materials Needed

- Visual Aids #1–4 photocopied for distribution to class.
- Visual Aids #1–7 made into overheads.
- Chalkboard and chalk.

Total Time = 60 minutes

Lesson Plan

Activity	Time	Materials
<p>A. Introduction—Teens and safety.</p> <p>Students discuss their jobs and any job injuries they have had.</p>	5 minutes	<ul style="list-style-type: none"> • Chalkboard & chalk.
<p>B. Brainstorm—What is a hazard?</p> <p>The class develops a list of possible workplace health and safety hazards.</p>	10 minutes	<ul style="list-style-type: none"> • Chalkboard & chalk.
<p>C. Find the hazards in the picture.</p> <p>Pairs of students look at pictures of typical teen workplaces to identify and circle possible hazards.</p>	10 minutes	<ul style="list-style-type: none"> • Photocopies of Visual Aids #1–4. • Pens & pencils.
<p>D. Report back.</p> <p>Students report on the hazards they found in the pictures and compare answers with others.</p>	15 minutes	<ul style="list-style-type: none"> • Visual Aids #1–4. • Chalkboard & chalk.
<p>E. Controlling hazards—Teen stories.</p> <p>The class hears stories about teenagers who got hurt at work, and answers questions about them.</p>	15 minutes	<ul style="list-style-type: none"> • Visual Aids #5–7.
<p>F. Review.</p> <p>Instructor summarizes key points of this lesson.</p>	5 minutes	

Total Class Time: 60 minutes

DETAILED TRAINER'S INSTRUCTIONS

A. Introduction—Teens and safety.

(5 minutes)

1. As a warm up discussion, ask the class:

“What kind of jobs have you had?”

“Have you ever been injured at work, or do you know someone who has? If so, how were they hurt?”

2. Let the class briefly discuss their answers. They are designed to get students thinking about safety issues in their own job experience.

B. Brainstorm—What is a hazard?

(10 minutes)

1. Ask students if they know the definition of a **hazard**. After people respond, write the definition on the board:

A hazard is anything at work that can hurt you, either physically or mentally.

2. Ask the class to quickly brainstorm a list of possible health and safety hazards that might be found on various jobs with which they are familiar. Prompt them to include more obvious hazards, such as heavy lifting or chemicals, as well as hazards that are less obvious because they might not hurt you right away. Examples include noise, infectious diseases, or repetitive motions.

As students call out different hazards record them on the board. Your completed list may be similar to this example.

- Slippery floors
- Knives & other sharp objects
- Poor air quality
- Infectious diseases
- Repeated movements
- Awkward posture
- Noise
- Machines without guards
- Unsafe electric cords or outlets
- Lack of fire exits
- Violence
- Chemicals
- Tools
- Hot grease
- Ovens & other hot surfaces
- Cluttered work areas
- Heavy lifting
- Ladders
- Very hot or cold temperatures
- Fast pace of work
- Stressful work

Note: If students list the **effects** of hazards (for example, cuts or burns), try to get them to say what would **cause** the effect (knives or hot grease). The latter is the **hazard** that should be listed. This approach will help later when students discuss how to eliminate or control the hazard.

C. Find the hazards in the picture.

(10 minutes)

- 1.** Explain that each student will work with a partner on this activity. Divide the class into pairs.
- 2.** Distribute materials. Pass out sets of “Find the Hazards” handouts (the photocopies of Visual Aids #1–4). Each pair of students should receive one set (all four handouts) to work on. Also be sure each student has a pen or pencil.
- 3.** Explain the activity. Each pair of students should look at the four workplaces shown in the handouts. In each workplace, they should try to find as many hazards as they can. Using their pen or pencil, they should circle the hazards they find.

Tell students they will have about 10 minutes to find all the hazards in the four pictures. Tell them they also should think about how each hazard could harm them if they were working in this workplace. They will be asked about this later.

- 4.** After about 10 minutes, bring the class back together.

D. Report back.

(15 minutes)

- 1.** Show overheads of Visual Aids #1–4 one at a time. Have student volunteers call out the hazards they identified in each picture. As students respond, write the answers on the board.

After each Visual Aid is presented, ask the whole class if they can think of additional hazards that the students didn’t find. Or are there hazards that could be present in that workplace, but are not shown in the picture? As students answer, write these additional hazards on the board. If the class misses any hazards, point them out.

Below is a list of hazards that could be present in each workplace.



Fast Food

- Hot grill
- Fire
- Cooking grease
- Heavy lifting
- Cleaning chemicals
- Stress
- Steam
- Hot oven
- Knives
- Slippery floor
- Pressure to work fast

Grocery Store

- Heavy lifting
- Meat slicer
- Repetitive motion
- Standing a lot
- Box cutter
- Cleaning chemicals
- Bending or reaching
- Stress

Office

- Computer work
- Awkward posture
- Stress
- Cluttered workplace
- Copier and other chemicals

Gas Station

- Gasoline
- Heat or cold
- Stress
- Other chemicals
- Tools and equipment

E. Controlling hazards—Teen stories.

(15 minutes)

1. Introduce the idea of controlling hazards. There are often several different ways to control a hazard, but some may be better than others.
 - a. The best control measures **remove** the hazard from the workplace altogether, or keep it **isolated** (away from workers) so it can't hurt anyone. This way, the workplace itself is safer, and all the responsibility for safety doesn't fall on individual workers.

Here are some examples:

- Use safer chemicals, and get rid of hazardous ones
- Store chemicals in locked cabinets
- Use machines instead of doing jobs by hand
- Have guards around hot surfaces.

- b.** Good work rules and procedures can reduce your exposure to hazards.

Here are some examples:

- Safety training
- Regular breaks
- Assigning enough people to do the job safely (lifting, etc.).

- c.** Protective clothing and equipment are the **least** effective way to control hazards. The equipment may not fully protect you, and may be uncomfortable or complicated to use. However, you should use it if it's all you have.

Here are some examples:

- Gloves
- Respirators
- Lab coats or smocks.

- 2.** Explain that you are going to tell some true stories of teenagers who got hurt at work. Read the three teen stories below to the class. Ask people to think about how these injuries could have been prevented. Visual Aids #5–7 illustrate the three stories. Show the appropriate picture as you read each story.

After you read each story, follow up with a short class discussion of the issues it raises. Discussion questions and possible answers are provided immediately below the story.



Jaime's Story

Jaime is a 17-year-old dishwasher in a hospital kitchen. To clean cooking pans, she soaks them in a powerful chemical solution. She uses gloves to protect her hands and arms. One day, as Jaime was lifting three large pans out of the sink at once, they slipped out of her hands and back into the sink. The cleaning solution splashed all over the side of her face and got into her right eye. She was blinded in that eye for two weeks.

Follow-up questions:

“What changes in the workplace might have prevented Jaime's eye injury?”

Possible answers: Use less toxic cleaning products. Use a dishwashing machine. Use disposable pans so they don't need to be cleaned. Wear goggles so the solution can't get into the eyes.

“How could Jaime have found out more about the cleaning product?”

Possible answers: She should have received training about the chemicals before using them. She could ask her supervisor: What is in this product? What can it do to me? What can I do to protect myself?



Billy's Story

Billy is a 16-year-old who works in a fast food restaurant. One day Billy slipped on the greasy floor. To catch his fall, he tried to grab a bar near the grill. He missed it and his hand touched the hot grill instead. He suffered second degree burns on the palm of his hand.

Follow-up question:

“What changes in the workplace might have prevented Billy from slipping and falling?”

Possible answers: If the floor was kept clean all the time, it wouldn't be greasy and Billy wouldn't have slipped. Or if there had been a mat on the floor, it wouldn't have been slippery. If the grill had been designed so the bar wasn't so close to the hot surface, Billy wouldn't accidentally have touched the hot surface.



Stephen's Story

Stephen is a 17-year-old who works in a grocery store. One day while unloading heavy boxes from a truck onto a wooden pallet, he slipped on a piece of paper and fell. He felt a sharp pain in his lower back. He was embarrassed, so he got up and tried to keep working. It kept bothering him, so he finally went to the doctor. He had to stay out of work for a week to recover. His back still hurts sometimes.

Follow-up questions:

“What would be a safer way of doing this job?”

Possible answers: Divide the boxes into smaller loads. Have a co-worker help with the boxes. Watch for hazards (like the paper) that might cause falls.

“What is the proper way to lift heavy objects?”

Answer: Demonstrate the following. Tell the class that the rules for safe lifting are:

1. Don't pick up objects over 30 pounds by yourself.
2. Keep the load close to your body.
3. Lift with your legs. Bend your knees and crouch down, keep your back straight, and then lift as you start to stand up.
4. Don't twist at your waist. Move your feet instead.

F. Review.

(5 minutes)

1. Tell the class that this ends the lesson. We have talked about the kinds of hazards teens and older workers find on the job. We've also looked at ways to **control** job hazards to prevent injuries and illnesses.

Visual Aid #1

Find the Hazards—Fast Food



Visual Aid #2

Find the Hazards—Grocery Store



Visual Aid #3

Find the Hazards—Office



Jaime's Story



Age: 17

Job: Hospital dishwasher

Injury: Dishwashing chemical splashed in eye

Billy's Story



Age: 16

Job: Fast food worker

Injury: Burned hand on grill

Stephen's Story



Age: 17

Job: Grocery store clerk

Injury: Hurt back while loading boxes