Safety Matters

A Safety & Health Training for Young Workers

Protecting Worker Health

Safety Matters

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OVERVIEW

Millions of teens in the United States work. Recent statistics show that 1.6 million U.S. youth age 15–17 are employed. Surveys suggest that 80% of teens have worked by the time they finish high school. Although work provides many benefits for young people, it can also be dangerous. Every year, nearly 60,000 youths age 15 to 17 get injured on the job seriously enough to seek emergency room treatment. In fact, teens are twice as likely to be injured at work than are adult workers. We also know that those under age 15 suffer high rates of occupational injuries, but accurate numbers are unavailable.

As new workers, adolescents are likely to be inexperienced and unfamiliar with many of the tasks required of them. Yet despite teen workers' high injury rates on the job, safety at work is usually one of the last things they worry about. Many of teens' most positive traits—energy, enthusiasm, and a need for increased challenge and responsibility—can cause them to take on tasks they are not prepared to do safely. They may also be reluctant to ask questions or to speak up when they are feeling unsafe or threatened at work.

Occupational health and safety education is key to preventing injury among working teens, and it provides them with important job and life skills they need, now and in the future. Although workplace-specific training is critical, young people also need to learn and practice general health and safety skills that they will carry with them from job to job. Teens should be able to see the hazards in any workplace. They should understand how hazards can be controlled, what to do in an emergency, what rights and responsibilities they have on the job, and how to speak up effectively when problems arise at work.

The National Institute for Occupational Safety and Health (NIOSH) and the American Industrial Hygiene Association (AIHA) are partnering to help make all young people aware of the critical life skills they need to stay safe and healthy on the job, now and throughout their lives.

INTRODUCTION

The goal of the AIHA/NIOSH Safety Matters program is to raise awareness among young people about workplace safety and health and to provide an understanding of the skills they need to become active participants in creating safe and healthy work environments. The materials presented in this module are based on a full curriculum from NIOSH, Youth@Work—Talking Safety. Talking Safety presents essential information and career-readiness skills through a focus on 8 Core Competencies. It is customized for all U.S. states and territories to reflect their specific child labor laws and resources. The transferable knowledge, skills, and abilities gained through the Talking Safety curriculum will help students stay safe and healthy now and throughout their lives. This module introduces students to the NIOSH 8 Core Competencies through discussion and interactive activities. To access the full curriculum, please visit the NIOSH website: http://www.cdc.gov/niosh/talkingsafety/.

NIOSH 8 Core Competencies

Students:

1. Recognize that, while work has benefits, all workers can be injured, become sick, or even be killed on the job. Workers need to know how workplace risks can affect their lives and their families.
2. Recognize that work-related injuries and illnesses are predictable and can be prevented.
3. Identify hazards at work and predict how workers can be injured or made sick.
4. Recognize how to prevent injury and illness. Describe the best ways to address workplace hazards and apply these concepts to specific workplace problems.
5. Identify emergencies at work and decide on the best ways to address them.
6. Recognize that employers are responsible for, and workers have the right to, safe and healthy work. Workers also have the responsibility for keeping themselves and co-workers safe.
7. Find resources that help keep workers safe and healthy on the job.
8. Demonstrate how workers can communicate with others—including people in authority roles—to ask questions or report problems or concerns when they feel unsafe or threatened.

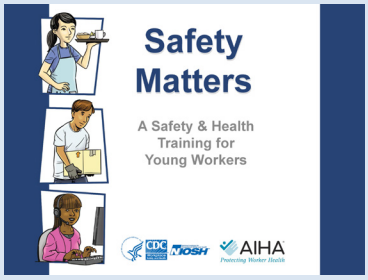
PREPARATION

1. Set up the AIHA/NIOSH Safety Matters PowerPoint on a computer with a projector. Review the step- by-step instructions for the 1 hour interactive session.
2. Preview PowerPoint and videos.
3. Preview the **"Key Points to Keep in Mind"** at the beginning of each part of the lesson.
4. Photocopy Student Handout 14: *Are you a Working Teen?* for your state, district or territory from the NIOSH *Youth@Work- Talking Safety* curriculum. Make sure to have enough copies for each student.

   To access the Handout:

   - Go to the NIOSH Talking Safety web page: http://www.cdc.gov/niosh/talkingsafety/.
   - Click on the link for your state, district or territory.
   - Download the curriculum PDF. Student Handout 14: *Are you a Working Teen?* is found on pages 253–258 of the curriculum.

Review the handout before you conduct the training. Look up ahead of time the answers to the four questions on page 14 (PowerPoint slide 15).



YOUNG WORKER INJURIES

Learning Objective:
Help students understand that workplace injuries are common, can change their lives forever, but are also predictable and preventable.

Show PowerPoint 1

Key Points to Keep in Mind

Throughout the training, we use the term "injury" or "incident" rather than "accident."

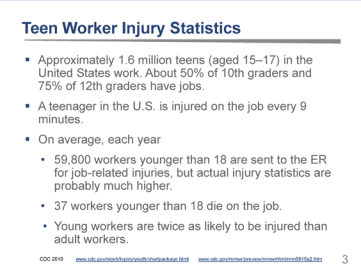
An "accident" happens randomly, by chance, and you can't predict or avoid it. On the other hand, you can predict or avoid an "injury" or "incident." Employers must make their workplaces safe, but young people also have a big role to play in keeping themselves healthy and safe on the job. The point of this lesson is to show how injuries can and do happen every day to young people—just like them.

Many young people believe that, "If you get hurt at work, it's your fault." When talking about the Mallory story, students may find fault or blame with her actions.

Students often blame the victim, rather than looking at all the things that may have added up to cause the injury. Admit that these thoughts are normal. Tell them that the best way to prevent work injuries is to (a) find all the problems that caused the injury, and (b) make plans to prevent injuries, including speaking up effectively.

When asked what they would do if injured on the job, teens learning this material often respond, "I would sue my boss."

Workers generally can't sue their employers in civil court for on-the-job injuries. By law, most employers in the United States must carry workers' compensation insurance. For on-the-job injuries, workers' compensation is usually the only way to get help.



INSTRUCTOR NOTES:

Time: 10 minutes

Show PowerPoint 2

Explain that you will talk about teens staying safe at work.

Explain that many teens have jobs, and that all types of workplaces have hazards.

Start a brief discussion. Ask students:

"Do you know someone who has been hurt at work?"

Let the students briefly explain their answers.

Tell students that one of the reasons both young and older workers are injured at work is because there are hazards (dangers) on the job.

Show PowerPoint 3

Inform students that young workers are twice as likely as adults to be hurt on the job. In the United States, a teenager is injured on the job every 9 minutes.

Inform students that injuries are NOT accidents! An "accident" happens randomly, by chance, and you can't predict or avoid it. But workplace injuries, incidents, and illnesses can be predicted and prevented.

Show PowerPoint 4

Demonstrate to students how work injuries can affect a young person's life by showing a brief video.

Mallory's story (3 mins.). When the video has ended, **ask students:**

- "What are some factors that contributed to this incident?"
- "What could have kept Mallory from being hurt?"
- "How might this affect Mallory's future life choices?"

Students should understand that a work injury can change their lives forever.

FINDING HAZARDS

Learning objective:
Help students identify a variety of health and safety hazards at typical worksites where young people find employment.

Show PowerPoint 5

Key Points to Keep in Mind

Some job hazards teens face are more obvious than others.

Your students should know how to identify different types of hazards on a variety of worksites. This will help them to better protect themselves against possible injury on any job.

Teens should understand concepts of "susceptibility" (how likely is it that this can hurt me?) and "severity" (if this hurts me, how bad could it be?). Knowing these concepts makes them more likely to pay attention to job hazards and to work safer.

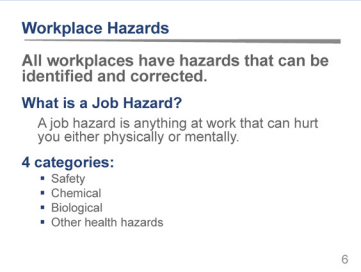
Talking about potential risks and severity of injuries from a variety of hazards can help raise awareness and shape constructive beliefs about the value of workplace safety and health.

Whether a student works in an office, on a farm, in a retail shop, or in a restaurant, all workplaces have hazards that can be identified and corrected.

Students should be aware of hazards on the job so that they can recognize potential health and safety problems. In recognizing these problems, workplace injuries and illnesses can be predicted and prevented.

INSTRUCTOR NOTES:

Time: 10 minutes



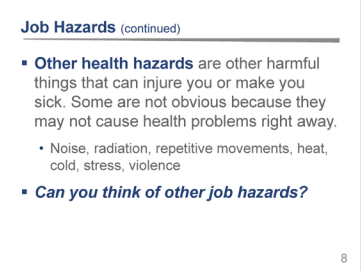
Show PowerPoint 6

Tell students that all workplaces have hazards that can be identified and corrected.

Read aloud the definition of word "hazard:"

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

Inform students that a simple way of looking at hazards is to divide hazards into four categories: Safety hazards; Chemical hazards; Biological hazards; Other health hazards.



Show PowerPoints 7 & 8

Explain:

Safety hazards, such as hot surfaces or slippery floors, can cause immediate injuries.

Chemical hazards—gases, vapors, liquids, or dusts—can harm your body. Examples include cleaning products and pesticides.

Biological hazards—living things that can cause conditions such as flu, HIV/AIDS, hepatitis, Lyme disease, and tuberculosis (TB)—include bacteria, viruses, and molds. In the workplace, you can be exposed through contact with used needles, sick children, or sick animals, for example.

Other health hazards—which are other harmful things that can injure you or make you sick— are sometimes less obvious because they may not cause health problems right away. Examples include noise, stress, harassment and repetitive movements.

Have students brainstorm hazards in each of the categories. Possible answers include:

(See table on the following page...)

Safety Hazards	Chemical Hazards	Biological Hazards	Other Health Hazards
Hot surfaces	Cleaning products	Viruses	Noise
Slippery floors	Pesticides	Bacteria	Vibration
Ladders	Solvents	Molds	Radiation
Machines	Acids	Animal diseases	Heat or cold
Sharp knives	Asbestos	Bird diseases	Repetitive movements
Hot grease	Lead	Insect-borne diseases	Awkward posture
Unsafe electrical circuits	Ozone (from copiers)	Poison ivy	Heavy lifting
Lack of fire exits	Wood dust	Poison oak	Fast pace of work
Motor vehicles	Mercury	Used needles	Discrimination/ harassment
Cluttered work areas	Poor air quality		Stress
Falling objects	Gasoline		
Violence			
Areas too dark or too light			

CONTROLLING HAZARDS

Learning objective:
Help students understand the three main ways to reduce or remove hazards at work, and why some methods are more effective than others.

Show PowerPoint 9

Key Points to Keep in Mind

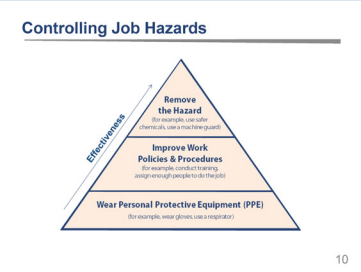
Workplace hazards can be controlled in many different ways, but some methods are better and more effective than others.

The best safety measures remove the hazard from the workplace or keep it away from workers. This way, the workplace is safer, and you don't have to worry about the hazards that were removed or kept away from you. Good safety rules can also protect you from workplace hazards, though not as well as removing the hazard. Finally, you can use personal protective equipment, such as respirators and safety goggles. Personal protective equipment doesn't work as well to protect you from hazards. However, it is important that you use personal protective equipment and follow safety rules and procedures when your workplace has hazards that are not well controlled.

Also, some personal protective equipment can cause its own hazards. For example, respirators need to be fitted to the individual and matched to the agents it is intended to provide protection against. Respirators increase breathing resistance, so some individuals should not wear them.

A hazard can be controlled in more than one way, and sometimes it's best to combine one kind of protection with others.

For example, even if a restaurant kitchen has slip-resistant flooring, workers should still wear slip-resistant shoes to protect themselves even more.



INSTRUCTOR NOTES:

Time: 10 minutes

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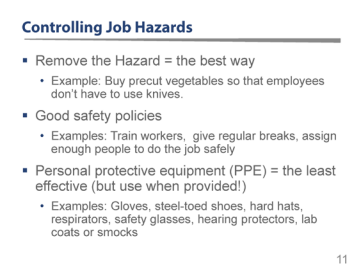
Introduce students to the Hazard Control Game.

Tell students that workplace hazards can be controlled in many different ways, but some methods are better and more effective than others.



Show PowerPoint 11

Inform students that the best safety measures remove (i.e. eliminate) the hazard from the workplace or keep it away from workers. This way, the workplace is safer, and you don't have to worry about the hazards that were removed or kept away from you.

An example of removing the hazard in a restaurant is to buy precut vegetables so that employees don't have to use knives. This prevents the injury (cuts) from ever happening in the first place!

Explain to students that if you can't completely remove a hazard or keep it away from workers, good safety policies can reduce their exposure to hazards.

Examples of work policies that protect workers include:

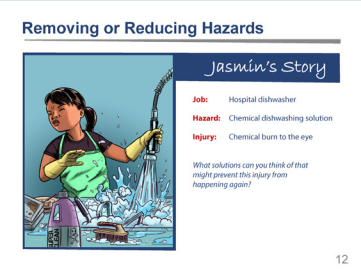
- Train workers on how to do their jobs around hazards.
- Give regular breaks to keep workers from getting too tired.

- Assign enough people to do the job safely (such as lifting).

Tell students that personal protective equipment is the least effective way to control hazards. Despite this, they should use personal protective equipment whenever an employer gives it to them.

Examples of personal protective equipment (PPE) include:

- Gloves, steel-toed shoes, hard hats.
- Respirators, safety glasses, hearing protectors.
- Lab coats or smocks.



Show PowerPoint 12

Read the following, true story of a teen injured at work:

Jasmin 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 Jasmin 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 2 weeks.

Ask the students the following question:

"What solutions can you think of that might prevent this injury from happening again?"

Have students brainstorm possible solutions.

Suggested answers include the following:

Remove the Hazard. Use a different cleaning product that is safer. Use disposable pans. Use a dishwashing machine.

Improve Work Policies. Have workers clean one pan at a time. Give them training about how to protect themselves from chemicals.

Wear Personal Protective Equipment. Goggles.

RIGHTS AND RESPONSIBILITIES

Learning Objective:
Raise students' awareness about the important legal rights and responsibilities they have in the workplace.

Show PowerPoint 13

Key Points to Keep in Mind

Labor laws that protect young people are in some cases different from those that apply to adults.

The Fair Labor Standards Act (FLSA) shapes federal child labor rules in the United States. This law sets minimum wage, overtime pay, record keeping, and child labor rules that apply to full- and part-time workers. The U.S. Department of Labor's Wage and Hour Division (WHD) enforces the rules.

The child labor laws help protect a young worker's opportunity to get an education, and they make it against the law for young people to work too long, too late, and in certain dangerous jobs.

These rules include restricting hours of work for teens younger than 16. They also give lists of jobs and tasks that are too dangerous for workers under age 18 to do. Some exemptions apply to minors employed by their parents. Refer to Student Handout 1 for more information.

All states have child labor standards.

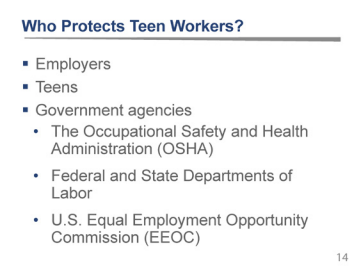
When federal and state standards are different, the rules that protect young workers the most will apply.

Child labor rules vary, depending on the age of the young worker and the job.

When a worker reaches 18 years old, federal and state child labor rules no longer apply.

Employers have a duty to keep their workers safe by keeping the workplace free from hazards.

Working teens, too, have an important role to play in protecting themselves and others from injury and illness.



INSTRUCTOR NOTES:

Time: 10 minutes

Show PowerPoint 14

Tell students that three groups play a critical role in protecting young people at work: employers, teens and government agencies.

Employers have a duty to keep their workers safe by keeping the workplace free from hazards.

Working teens, too, have an important role to play in protecting themselves and others from injury and illness.

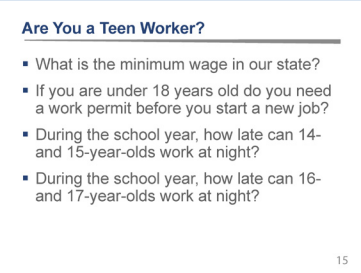
The Occupational Safety and Health Administration (OSHA) enforces health and safety laws for ALL workers.

The Federal and State Departments of Labor enforce child labor laws, which protect young people under age 18 from working too long, too late, and in certain dangerous jobs. These rules include restricting hours of work for teens younger than 16. They also give lists of jobs and tasks that are too dangerous for workers under age 18 to do. Some exemptions apply to minors employed by their parents.

The U.S. Equal Employment Opportunity Commission (EEOC) protects workers from discrimination and harassment at work.

Pass out copies of Student Handout 14: *Are you a Working Teen?* for your state, district or territory from the NIOSH Youth@Work-Talking Safety curriculum.

Give students a minute or two to look over the handout.



Show PowerPoint 15

Ask the students some questions using the handout, and give students the correct answers.

- "What is the minimum wage in our state?"

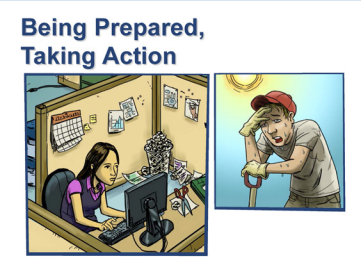
  (You can also check the U.S. Department of Labor website, http://www.dol.gov/whd/minwageamerica.htm, or your state labor department's website).

- If you are under 18 years old do you need a work permit before you start a new job?
- During the school year, how late can 14- and 15-year-olds work at night?
- During the school year, how late can 16- and 17-year-olds work at night?

Time permitting, you can ask additional questions from the handout.

BEING PREPARED, TAKING ACTION

Learning objectives: Help students understand that to actively participate in a safe and healthy workplace they must be prepared to deal with emergencies that occur on the job, and they must communicate with employers about problems at work.



Show PowerPoint 16

Key Points to Keep in Mind

One of the best ways for teens to protect themselves is to know what to do ahead of time if an emergency occurs at work.

Students should take part in all training/practice drills at work. In this way, they will increase their chances of responding appropriately if an emergency arises.

Young people typically try hard to do a good job for employers.

They are eager to prove themselves. Unfortunately, this positive trait can get them hurt if they take on jobs or tasks that the law forbids, or they do work that they have not been trained to do.

Repeatedly remind students that they have rights on the job.

They should never feel bad for seeking help or asking questions about a task that seems dangerous, uncomfortable, or potentially illegal. Teenagers often have good instincts.

If young people have a problem at work, they may not feel comfortable talking directly with their employer.

That's okay. Encourage your students to take up their concerns with any responsible adult—a parent, teacher, principal, or co-worker. These people can give the student good advice and guidance on where to go for help. In some cases, they may be able to help directly.

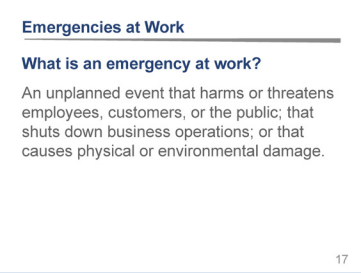
Students must understand that they should not be silent when confronted with problems at work.

The problems could worsen, and they—or someone else—could be hurt.

INSTRUCTOR NOTES:

Time: 20 minutes

Explain to students that while employers must provide a safe and healthy workplace, student workers have a responsibility to be an active participant in safe and healthy workplaces. This involves knowing how to deal with hazards, but also to being prepared for emergencies.



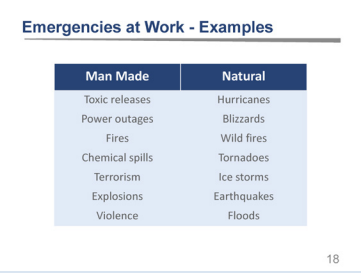
Show PowerPoint 17

Define what is meant by an "emergency":

An emergency is any unplanned event that poses a threat. An emergency can threaten employees, customers, or the public. It might shut down work at a business. It might cause damage, or it could harm the environment.

Explain that emergencies may be natural or man-made.

Brainstorm possible emergencies at work.



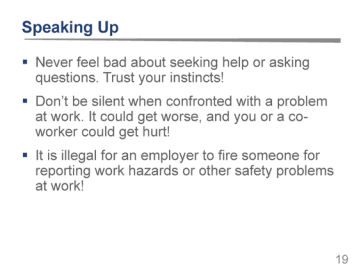
Show PowerPoint 18

Examples of emergencies at work include:

Man Made	Natural
Toxic Releases	Hurricanes
Power Outages	Blizzards
Fires	Wild Fires
Chemical Spills	Tornadoes
Terrorism	Ice Storms
Explosions	Earthquakes
Violence	Floods

Inform students that the best way to deal with an emergency is to know ahead of time what to do if that kind of emergency happens. To be prepared, you should practice the steps to take. OSHA requires some employers to have an Emergency Action Plan that includes information about different kinds of emergencies and how to respond to them.

Discuss with students that, while employers must provide a safe and healthy workplace, student workers have a responsibility to talk with employers, co-workers, union representatives, or other responsible adults about problems they see on the job.



Show PowerPoint 19

Tell students that they should never feel bad about seeking help or asking questions if a task seems dangerous, uncomfortable, or potentially illegal. Teenagers often have good instincts and they should trust them.

Inform students not to be silent when confronted with a problem at work since the problem could worsen, and they—or someone else—could be hurt.

Tell students that it is illegal for an employer to fire someone for reporting work hazards or other safety problems at work!

Show PowerPoint 20

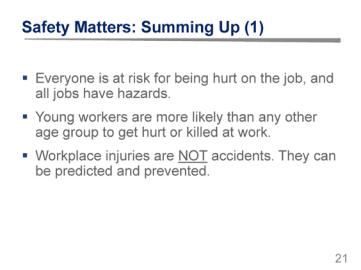
Explain to students that there are other people, called occupational safety and health (OSH) professionals that help prevent harm to workers, the environment, and the general public. For example, they might design safe workspaces, study or treat work-related diseases, inspect machines, or test air quality.

Explain to students that they will now hear about one specific group of OSH professionals, industrial hygienists.

Show the video, "The Right Thing to Do: What is Industrial Hygiene?" (7 mins. 35 secs.).

SUMMING UP…

Conclude by reminding students about the main points of the training.



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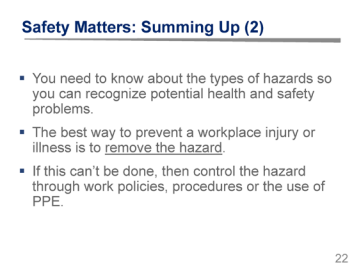
All people are at risk for being hurt on the job, and all jobs have hazards. But young workers are more likely than any other age group to get hurt or killed at work.

Workplace injuries are not accidents. They can be predicted and prevented.



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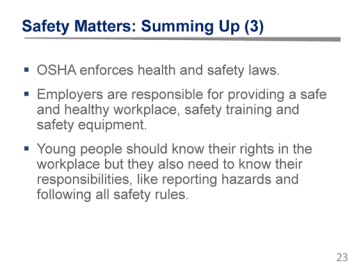
Workers need to be aware of the hazards on their job so they can recognize potential health and safety problems.

The best way to prevent a workplace injury or illness is to remove the hazard. If this can't be done, then hazards can be controlled through work policies and procedures or the use of PPE.



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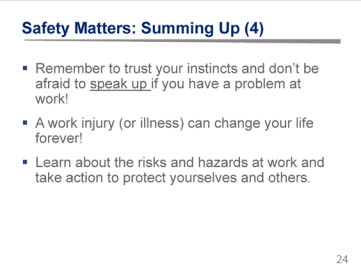
OSHA enforces health and safety laws for ALL workers.

Employers are responsible for providing a safe and healthy workplace, safety training and safety equipment.

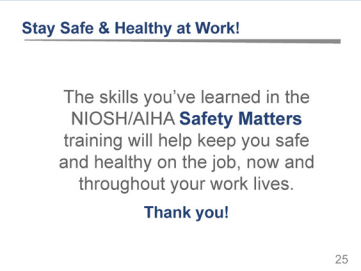
Young people can work more safely if they know their rights but they also have important responsibilities, like reporting hazards and following all safety rules.



Show PowerPoint 24

Remember to trust your instincts and don't be afraid to speak up if you have a problem at work!

A work injury (or illness) can change your life forever! You can—and must—learn about risks and hazards at work and take action to protect yourselves and others.



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Conclude the NIOSH/AIHA Safety Matters program by saying:

"The skills you've learned in the NIOSH/AIHA training will help keep you safe and healthy on the job, now and throughout your work lives."

Questions?

Thank you!

Delivering on the Nation's promise: Safety and health at work for all people through research and prevention

To receive NIOSH documents or more information about occupational safety and health topics, contact NIOSH:

1-800-CDC-INFO (1-800-232-4636)
TTY: 1-888-232-6348
CDC INFO: cdcinfo@cdc.gov

or visit the NIOSH website at www.cdc.gov/niosh.

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