

YOUTH WORK

Talking Safety

A Safety & Health Curriculum for Young Workers

Excerpts: Scenarios

Full curriculum available at:
cdc.gov/niosh/talkingsafety/



DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Disease Control and Prevention
National Institute for Occupational Safety and Health



Teacher Background Notes: Section A

Real Stories of Teens Injured or Killed at Work

All stories are based on injuries that actually happened.

Jack's Story

Job: Fast food worker

Hazard: Greasy, slippery floors

Injury: Injured tailbone



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Jack worked in the kitchen of a fast food restaurant in the evenings, after school, and on weekends. One Friday afternoon, Jack had to work the fryer. At one point, Jack walked across the floor, carrying a basket of french fries. He didn't see a slick spot on the tile, and he slipped and fell. He landed on his tailbone and was seriously hurt. Jack has pain that won't go away, and he has trouble walking and sitting.

Solutions:

- **Remove the Hazard:** Install grease guards on equipment to keep grease off the floor. Install slip-resistant tiles or flooring. Use floor mats or have non-slip flooring.
- **Work Policies.** Put out "Caution" signs. Clean up spills quickly.
- **Personal Protective Equipment.** Wear slip-resistant shoes.



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Antonio, age 17, worked for a neighborhood builder. One day he was carrying a 12-foot roof rafter along the top of an unfinished house. He backed into an unguarded chimney hole and fell 28 feet to a concrete cellar floor below. He survived, but the fall cracked three bones in his back. His injury forced him to spend the next 3 months locked in a "clamshell" brace from his neck to his hips. Because of his age, he shouldn't have been doing this dangerous work in the first place.¹

Solutions:

- **Remove the Hazard.** There should be a guard on the chimney hole. Use a piece of machinery to transport the board rather than have the worker do it.
- **Work Policies.** Have a spotter watching Antonio as he is carrying the boards to call out when there is something potentially dangerous.

Antonio's Story

Job: Construction helper

Hazard: Unguarded chimney hole (on an unfinished roof)

Injury: Broken back



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Angela, age 16, did a lot of homework on the computer and spent time every day e-mailing and texting her friends. She also worked 3 hours a day after school typing data for a direct mail company. Angela was paid by "piece work." This means she got paid for how much work she did, and not the time she spent doing it. She never took breaks. Her fingers started feeling numb, and in the mornings she woke up with a burning feeling in her wrist. Angela's doctor said she had severe repetitive stress injury (RSI). This happens when you type in an awkward position, over and over again. The motion damages muscles, tendons, and nerves. Now she has to wear braces on her wrists and can't work on a computer for more than 15 minutes at a time. Angela's high school has someone take notes in class for her.

Angela's Story

Job: Office worker

Hazard: Excessive typing in an awkward position

Injury: Repetitive stress injury

Solutions:

- **Remove the hazard.** Provide ergonomic equipment such as an adjustable table and chair set up to minimize awkward positions of hands and wrists.
- **Work Policies.** Provide additional breaks. Vary the work tasks.



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Terrell's Story
Job: Landscape worker
Hazard: Wood chipper
Injury: Death

Terrell was a 15-year-old boy who found work with a landscape company when he moved to Maryland with his family. After only a week on the job, he was told to help grind up tree branches, using a motorized wood chipper. As he fed tree trimmings into the machine, Terrell got tangled in some large branches. The machine pulled him into the feed chute and killed him. A co-worker found his body soon after. He shouldn't have been doing this work because of his age.¹

Solutions:

- **Remove the Hazard.** There should be a guard on the chipper so it's not possible to get pulled into the machine.
- **Work Policies.** There should be rule and training about making sure branches are cut up before being put into the chipper. There should be a co-worker working beside Terrell to help feed the branches and to watch for any danger.



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Cody's Story
Job: Farm worker
Hazard: Tractor without roll bar
Injury: Legs crushed under tractor

Cody, age 16, worked on his family's farm during the summer. One day Cody drove a tractor down a narrow gravel road. The tractor had no seatbelt or roll bar. He moved too close to the right edge of the road and drove into a ditch. This made the tractor roll over. When Cody had felt what was happening, he tried to jump, but his boot got caught between the seat and fender. The tractor's left tire crushed Cody's legs, leaving him paralyzed from the waist down.²

Solutions:

- **Remove the hazard.** There should have been a roll bar on the tractor.
- **Work Policies.** There should be a seat belt on the tractor and a requirement to wear it. There should be a supervisor watching and directing Cody where to drive.



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Lindsey's Story
Job: Pizza shop cashier
Hazard: Violence (by a co-worker)
Injury: Bumps and bruises caused by abusive co-worker

Lindsey, a high school sophomore, worked the front counter of a small local pizza shop after school and on weekends. One Friday night, she worked alone with Brayden, a senior at her school. Brayden was often rude to Lindsey, and he would even bully her in front of customers. This night, Lindsey stood up to Brayden and talked to him to stop bullying her. She told him she would tell their boss. Brayden yelled at Lindsey and pushed her. Lindsey fell and hit her head on a nearby table. Lindsey managed to get up and run outside. She quickly dialed 911 from her cell phone. The police arrived and arrested Brayden. Lindsey had a bump on her head and a lot of other bruises. She still cries a lot and feels sad, and she sometimes can't sleep because of what happened.

Solutions:

- **Remove the Hazard.** Install a surveillance camera.
- **Work Policies.** Establish a clear policy forbidding violence, abuse, verbal and emotional abuse, and harassment of all kinds. Train supervisors and managers to recognize bullying, abuse, and other violations of these policies and know how to respond to violations. Train workers about this policy and the ramifications of violating the policy. Let workers know that they can come to the store manager or supervisor (or other adult) and confidentially relate any concerns about their own safety or the safety of other workers.

Anna's Story**Job:** Smoothie shop worker**Hazard:** Sexual harassment**Injury:** Emotional trauma**Show PowerPoint slide 14.**

Anna, age 15, worked in a smoothie and juice shop. One day, her 34-year-old manager, Dan, began making inappropriate comments about Anna's body in front of other employees. Dan also used foul language around her and told dirty jokes. Though Dan's behavior made her uncomfortable, Anna noticed that none of her co-workers seemed to have a problem with it. Eventually, Dan began to brush against Anna when he walked past or put his arm around her shoulders or waist. One night, Dan invited Anna to his house for dinner. When she refused, Dan became angry, accusing Anna of being a "tease." The next day, Anna got word that she had been fired from her job for "poor performance." Anna felt confused and upset. She blamed herself for what happened.

Solutions:

- **Work Policies.** There should be training about sexual harassment and the different examples of unwanted attention that constitute sexual harassment. The training should include the importance of speaking up when a supervisor or co-worker is being threatening and how to do that safely. It should also include encouraging co-workers to speak up for each other.

**Show PowerPoint slide 15.****Logan's Story****Job:** Farm worker**Hazard:** Unguarded, rotating bar on a tractor**Injury:** Severed arm, broken neck

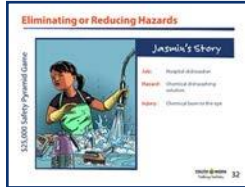
Logan, a 14-year-old high school freshman, worked summers on his grandfather's dairy farm. He often used a tractor to pull the feed wagon, which had a large, turning screw that mixed the feed. The screw was connected by a metal bar to a power source at the back of the tractor. The bar spun rapidly between the tractor and the wagon, and it was not guarded. One day, Logan noticed a problem with the wagon. He left the tractor running and got off to get a closer look. As Logan reached across the bar, his shirt sleeve got caught. Logan's entire body quickly became wrapped around the powerful, spinning shaft. Another farm employee saw what happened and rushed over to help. By the time the ambulance arrived, Logan was unconscious. He woke up in the hospital to discover that he had broken his neck and that his right arm had been torn off at the shoulder.²

Solutions:

- **Remove the Hazard.** There should be a guard on the back of the tractor and where the metal bar and power source are.
- **Work Policies.** There should be training about the importance of never leaving engines running when the driver is not on the vehicle. The engine must be turned off before the driver gets off. There should be a rule that engines are never left on while the driver gets off the vehicle and the rule should be enforced.

1. Instructor Note: Federal law prohibits teenagers under age 18 from working in dangerous or hazardous jobs (such as working with powered equipment; doing roofing, excavation, or demolition; driving a forklift; or working in logging or mining).
2. These stories recognize that many youth work informally on family farms and are not covered under federal child labor laws.

Practice Round: Jasmine's Story



Read the story aloud:

Jasmine 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 Jasmine 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 class the following question:

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

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.

Teacher Background Notes: Section A

Mini case studies for the \$25,000 Safety Pyramid game

Round 1: Will's Story



Read the story aloud:

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

Ask the teams:

“What solutions might keep this injury from happening again?”

Give the teams one minute to write their solutions and put them on the board. Then compare them with the suggested answers below.

- **Remove the Hazard.** Design the grill so the bar is not so close to the grill. Cover the floor with a nonskid mat. Install nonskid flooring. Put a shield on the grill when not in use to prevent people from accidentally touching it. Put a cover on the french-fry basket so grease won't splatter out.
- **Work Policies.** Have workers immediately clean up spilled grease. Design the traffic flow so workers don't walk past the grill.
- **Personal Protective Equipment.** Have workers wear nonskid shoes and gloves.

Round 2: Andre's Story



Read the story aloud:

Andre is a 17-year-old who works in a grocery store. One day while unloading a heavy box from a truck onto a wooden pallet, he felt a sharp pain in his lower back. Andre tried to keep working. His back kept bothering him, so he finally went to the doctor. Andre had to miss work for a week to recover. His back still hurts sometimes.

Ask the teams:

“What solutions might keep this injury from happening again?”

Have the teams post their solutions and compare them with the suggested answers below.

- **Remove the Hazard.** Use a mechanical lifting device. Pack boxes with less weight. Unload trucks in a sheltered area so workers aren't exposed to weather, wind, or wet surfaces.
- **Work Policies.** Assign two people to do the job. Train workers how to lift properly. Enforce a policy that teens never lift more than 30 pounds at a time, as recommended by the National Institute for Occupational Safety and Health (NIOSH).
- **Personal Protective Equipment.** Wear nonslip shoes. (Note: A NIOSH study found no evidence that back belts help.)

Ask the class:

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

Demonstrate the following. Tell the class the rules for safe lifting:

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

Round 3: Molly's Story



Read the story aloud:

Molly is a 16-year-old who works in the deli department at a grocery store. Her supervisor asked her to clean the meat slicer, although she had never done this before and had never been trained to do it. Molly thought the meat slicer was turned off before she began cleaning it. Just as she started to clean the blades, the machine started up. The blade cut a finger on Molly's left hand all the way to the bone.

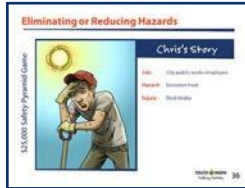
Ask the teams:

"What solutions might keep this injury from happening again?"

Have the teams post their solutions and compare them with the suggested answers below.

- **Remove the Hazard.** The machine should have a guard to protect fingers from the blade. The machine should have an automatic shut-off.
- **Work Policies.** A rule should require that the machine be unplugged before cleaning. No one under 18 should use or clean this machine, because doing this kind of work is against child labor laws.
- **Personal Protective Equipment.** Have workers wear gloves that protect against cuts.

Round 4: Chris's Story



Read the story aloud:

Chris works for a city public works department. One hot afternoon, the temperature outside reached 92 degrees. While Chris was shoveling dirt in a vacant lot, he started to feel dizzy and disoriented. He fainted from the heat.

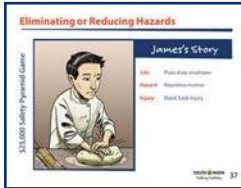
Ask the teams:

“What solutions might keep this injury from happening again?”

Have the teams post their solutions and compare them with the suggested answers below.

- **Remove the Hazard.** Limit outdoor work on very hot days.
- **Work Policies.** Limit outdoor work on very hot days. Have a cool place to go for frequent breaks. Have plenty of water available. Train workers about heat stress symptoms and how to keep from becoming overheated. Work in teams to watch one another for symptoms of overheating (such as disorientation and dizziness).
- **Personal Protective Equipment.** Have workers wear a hat, to provide shade, and a cooling vest.

Round 5: James's Story



Read the story aloud:

James is a 16-year-old who works in a busy pizza shop. His job is to pat pizza dough into pans. He prepares several pans per minute. Lately James has noticed that his hands, shoulders, and back are hurting from the repetitive motion and standing for long periods.

Ask the teams:

“What solutions might keep this injury from happening again?”

Have the teams post their solutions and compare them with the suggested answers below.

- **Remove the Hazard.** Have adjustable working surfaces, so James can pat the dough at a height that causes less strain on his shoulders and back. For hand strain, use a pizza dough roller—either manual or power-driven—instead of patting by hand (Note: Federal law says that 16- and 17-year-olds may operate, but not set up, adjust, repair, oil, or clean pizza dough rollers/sheeters with proper safeguards. If you are under age 16, you may not operate these machines).
- **Work Policies.** Vary the job so no one has to make the same movements repeatedly. Provide regular breaks.
- **Personal Protective Equipment.** None.

Round 6: Maria's Story



Read the story aloud:

Maria's job is to pick strawberries on a 16-acre farm. One day she was sent into the field too soon after it had been sprayed. No one told her that the moisture on the plants was a highly toxic pesticide. Soon after she began to work, Maria's arms and legs started shaking. When she stood up, she got dizzy and stumbled. She was taken by other farm workers to a nearby clinic. Three weeks later she continues to have headaches, cramps, and trouble breathing.

Ask the teams:

"What solutions might keep this injury from happening again?"

Have the teams post their solutions and compare them with the suggested answers below.

- **Remove the Hazard.** Use pesticide-free farming methods, or use a less toxic pesticide.
- **Work Policies.** Wait the required number of hours or days after the crops are sprayed before having workers re-enter the field. The required wait time should be on the pesticide label. When pesticides are used, the law requires the employer to let workers know. Employers must post warning signs or tell workers. Workers should be trained and informed about chemicals they may be exposed to.
- **Personal Protective Equipment.** Wear gloves and work clothes that protect against the pesticide/s that was/were used. If needed, wear a respirator approved for the individual that provides protection against the pesticide/s used.

Round 7: Jada's Story



Read the story aloud:

Jada works as a nursing aide at a local hospital. She cleans bedpans and sometimes changes sheets, which requires lifting patients. Lately Jada has been feeling twinges in her back when bending over or lifting. She knows she is supposed to get help when lifting a patient, but everyone in the unit is so busy that she is reluctant to ask. At home, as Jada is going to sleep, she often feels shooting pains in her back, neck, and shoulders. These pains seem to be getting worse every day.

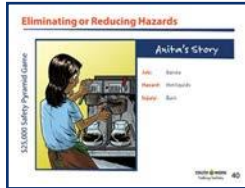
Ask the teams:

“What solutions might keep this injury from happening again?”

Have the teams post their solutions and compare them with the suggested answers below.

- **Remove the Hazard.** Stop lifting alone. Lift patients only when other people are available to help, or use a mechanical lifting device. Note: Federal Child Labor laws prohibit anyone under the age of 18 to operate patient lifting devices. However, they may move patients as part of a team in which the lift operator is over age 18.
- **Work Policies.** Make sure workers who have already been injured are not required to lift. Have a policy that workers may lift patients only in teams and when using a lifting device. Train workers about ways to safely lift patients.
- **Personal Protective Equipment.** None.

Round 8: Anita's Story



Read the story aloud:

Anita is a 16-year-old barista in a small coffee shop. One morning, the coffee shop was short-staffed because another worker had called in sick. During the breakfast rush, Anita worked the register and took orders from customers while she also hurried to make a new pot of coffee. She didn't realize that the other barista had already started a pot, and she pulled out the brew basket while the machine was brewing. Boiling water and coffee grounds spilled all over her hand, causing second-degree burns. She went to the emergency room for treatment. Anita had to cut down on her day-to-day activities for 3 months, and she still has sensitivity in her hand and scarring from the burn.

Ask the teams:

"What solutions might keep this injury from happening again?"

Have the teams post their solutions and compare them with the suggested answers below.

- **Remove the Hazard.** The machine might be designed so that the brew basket can't be pulled out when it's in use.
- **Work Policies.** The coffee shop should have a plan for bringing in extra help when someone calls in sick so that they are not understaffed. Only one worker should be assigned to work the coffee maker, so that person can keep track of when coffee is brewing. The boss could make a sign that hangs next to the coffee maker that shows whether it's in use or not.
- **Personal Protective Equipment.** None.