



Heat Safety: It's Part of the Job!

This Activity at a Glance

In this activity students will learn about how heat can affect their health when they work outdoors, and then act out a skit to learn about what employers and workers need to do to prevent heat illness in outdoor work. Students will work in small groups to develop possible solutions to the problem, and then discuss their solutions with the whole class. If you have time, you may want to have students role play their solutions.

Learning Objectives

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

- Identify key heat illness symptoms.
- Identify at least three steps that can be taken to prevent heat illness.
- Apply health and safety laws to a “real life” situation.

Materials Needed

- Copies for each student:
 - Scenario: Taking Action on Heat
 - Cal/OSHA wallet card: Preventing Heat Illness
 - Fact sheet: Are you a working teen?
- Flipchart or chalkboard

Total Class Time: 45 minutes

What is heat illness?

When we work—and play—outdoors, especially doing physical work, our bodies can overheat. Workers suffer symptoms that range from headaches and nausea to heat stroke—and this can be fatal. We can save lives by teaching teens about heat before they go to work this summer.

Preparing To Teach This Lesson

Before you present this lesson:

1. Review the scenario, fact sheets and instructor's notes below. Make copies of handout and fact sheets.

Instructor's Notes

A. Introduction: How working in hot weather can affect your health.

(15 minutes)

1. Explain to the class that we are now going to talk about a common work hazard that can affect any of us when we're working—and playing—outdoors in the heat. Both workers and athletes have died recently because precautions weren't taken to protect them, and because people didn't recognize the symptoms.

Ask the class:

Have any of you worked out of doors in hot weather?

What kinds of work?

- agriculture,
- parks and recreation clean-up,
- construction
- landscaping
- others?

What are some of the signs you may notice if your body is getting too hot?

- Sweating
- Feeling tired, weak or dizzy
- Headache
- Heat rash—small red bumps on the skin

Explain that these are the early signs that you need to cool off, rest, and drink water to let your body recover. If you don't, you could develop some of the more serious effects of heat.

2. Handout the Cal/OSHA wallet card on preventing heat illness.

What are some of the other symptoms you might feel if you don't take a shade break and get water?

- You may get cramps, muscle pain, or spasms, most commonly in the arms, legs, back or stomach.
- You could get very sweaty, have a pale face and neck, feel your pulse beating rapidly, feel very tired, or have headaches, dizziness, or nausea.

- At this point, you need medical attention. People react differently, so you may have just a few of these symptoms, or most of them.

You may also develop what is called heat stroke. (Point to the “Life-threatening Symptoms” on the second panel.)

- At this point, you may no longer be sweating, and your skin may be dry, red, and hot.
- Sweating is the main way our bodies cool off—so not sweating is a very serious emergency.
- Your body temperature may be very high (over 105 degrees), and you are probably disoriented, confused, or even unconscious. This is a medical emergency. **Get help!** About half the people who get heat stroke end up dying.

3. Add the following points.

Not being used to working in heat is a big problem. Most of the people who have died from heat stress in the past few years were in their first few days on the job or were working during a heat wave. If you haven’t worked in hot weather for a week or more, your body needs time to adjust. You need to take more breaks and not do too much strenuous work during your first weeks on the job.

Some health conditions can put you at greater risk of heat stress. These include diabetes, kidney and heart problems, pregnancy, and being overweight. If you have these, it would be good to talk to your doctor about the work you do and ask whether there are any special precautions you need to take.

B. Skit and discussion

(25 minutes)

1. Explain to students that they will have the opportunity to think about what teens can do when they see a health and safety problem at work—in this case, working in the heat.
2. Pass out the scenario handout “Taking Action on Heat” and the fact sheet “Are You a Working Teen?” Ask for two student volunteers to enact the skit.
3. After the skit, ask everyone to look at the “Are You a Working Teen?” fact sheet. Explain that it has general information about their health and safety rights. Take a minute to review the key sections. Ask students to look at the back page, where they will find ideas about where to go for help. Tell students they should use information from the wallet card on preventing heat illness as well. Then ask students to look at the two discussion questions on the scenario handout. They will discuss the answers in small groups.
4. Divide the class into small groups (4-6 students each). Students will work in these small groups for about 10 minutes, answering the questions together. If you have more time, or a small class, you can ask each group to act out their solutions.

After 10 minutes, bring the class back together. Ask each small group for their answers to each discussion question. As people respond, list their answers on the chalkboard or a flipchart. Use the answers to trigger a class discussion about what problems the teens in the skit face and what they could do about them.

The discussion questions and some possible answers are:

1. What is the problem here?

- Heat, which can cause serious health problems. If you don't rest and get water, your body may overheat.
- Suzanne may be starting to experience heat illness.
- Lack of easy access to water.
- Suzanne and Eddie are afraid to talk to the supervisor about the problem.

2. What can Eddie and Suzanne do about the problem?

- **What can be done to prevent heat illness? What is required by law? Who could they turn to for help? What would you do?**

What can be done to prevent heat illness?

- The employer is **required by law** to provide easy access to water, shaded breaks, and training on heat illness prevention.
- Drink water frequently throughout the day.
- Wear loose fitting, light-weight and light-colored cotton clothes, and hats or caps for protection against the sun.
- Take their breaks in the shade.

Who can they turn to for help?

- Ask the supervisor to have water close by and accessible, since it's required by law.
- Ask the supervisor for training about heat illness symptoms.
- Ask a co-worker, friend, or teacher for advice.
- Talk to parents about the problem.
- Find out if anyone has asked for water before.
- Talk to co-workers and see if people want to approach the supervisor as a group.
- If nothing else works, file a complaint with Cal/OSHA

It can be hard to ask your supervisor for changes. You should think about who can help you figure out how to solve the problem.

C. Conclusion

(5 minutes)

1. Tell students that this concludes the lesson on preventing heat illness. This kind of problem solving can be used to take action on any kind of health and safety problem at work. Hang on to both of these fact sheets so that you know where to find the information when you need it.

Remember, key points to planning for action:

- 1) Get advice and support from co-workers, friends, and responsible adults.
- 2) Find out all you can about the problem and possible solutions. Know your rights and responsibilities.
- 3) Decide what solution is best and work towards that goal.
- 4) Approach your supervisor politely. Suggest solutions. Bring someone with you for support if you can.
- 5) Call a government agency for help if all else fails.

Scenario: Taking Action on Heat

Scene: Eddie and Suzanne are high school students. They have just started working at a summer job with the parks department. They are clearing brush to reduce the fire hazard. It is a very hot day, and it is now 11:30 in the morning.

Eddie: Man! It's hot today. I am sweating a lot.

Suzanne: I know. I'm really thirsty and so tired. We've been working for 4 hours already without a break. I finished my water bottle two hours ago.

Eddie: You don't look so good. I know they wanted us to finish this section before lunch, but maybe we should try to go find some water.

Suzanne: I wish we didn't have to walk so far to get water—I do kind of have a headache. But I really need to keep this job and they said we had to finish. That supervisor was mean to me yesterday. It's not too much more. Let's get it done, and hope there's a shady place for lunch!

Discussion Questions

1. What is the problem here?
2. What can Eddie and Suzanne do about the problem?
 - What can be done to prevent heat illness? What is required by law?
 - Who could they turn to for help?
 - What would you do?

Heat Kills



Heat illness includes **heat cramps, fainting, heat exhaustion, and heatstroke.**

Workers have died or suffered serious health problems from these conditions.

Heat illness can be prevented.



Know the symptoms of heat illness

Watch for symptoms in yourself and your coworkers. *If you feel any symptoms, tell your coworkers and supervisor immediately because you may need medical help. Know who to talk to and how to get help before you start each workday.*



Early symptoms

Fatigue
Heavy sweating
Headache
Cramps
Dizziness
High pulse rate
Nausea/vomiting



Life-threatening symptoms

High body temperature
Red, hot, dry skin
Confusion
Convulsions
Fainting



Preventing Heat Illness

Tell your supervisor if you are new to working in the heat or have had heat illness before.

Stay alert to the weather During a heat wave you are at greater risk of getting sick. You need to watch yourself and coworkers more closely, and may need to drink more water, take more breaks, and use other measures.



Drink enough cool, fresh water

Drink at least one 8-ounce cup (3 cones) every 15 minutes during your entire work shift. *Do not wait until you are thirsty to drink water.*

Do not drink alcohol. Avoid coffee. Choose water over soft drinks.



Take rest breaks in the shade to cool down.

Wear proper clothing Loose fitting, light-weight and light-colored cotton clothes, a wide-brimmed hat or cap, and a bandana.

Talk to your doctor if you have illnesses like diabetes, are taking medicines or are on a low salt diet.

Know Your Rights

If you work outdoors, by law, your employer must provide you:

- Enough cool, fresh drinking water throughout the day.
- Access to shade or an equally cool spot for at least 5 minutes at a time.
- Training on how to prevent heat illness and how to call for emergency services.



For more information call the worker hotline at 1-866-924-9757

California Department of Industrial Relations



Illustrations by Kate Oliver and Adria Wells



Las enfermedades causadas por el calor incluyen los calambres musculares, el desmayo, el agotamiento debido al calor y la insolación.

Los trabajadores han muerto o sufrido problemas graves de salud debido a estas condiciones.

Las enfermedades causadas por el calor pueden ser prevenidas.



Conozca los síntomas de las enfermedades causadas por el calor.

Esté alerta a estos síntomas en sí mismo y en sus compañeros de trabajo. Si usted siente cualquiera de estos síntomas, informe de inmediato a sus compañeros de trabajo y supervisor porque puede ser que usted necesite atención médica. Antes del comienzo de cada día de trabajo sepa con quien debe hablar y cómo obtener ayuda en caso de emergencia.



Síntomas iniciales

Fatiga
Sudor abundante
Dolor de cabeza
Calambres
Mareos, Pulso alto
Nausea/vómito

**BUSCA
ATENCIÓN
MÉDICA**



Síntomas de emergencia

Temperatura de cuerpo alta
Piel seca, enrojecida y caliente
Confusión mental
Convulsiones, Desmayo

Informe a su supervisor si usted está comenzando a trabajar en el calor o si ya ha sufrido de las enfermedades causadas por el calor.

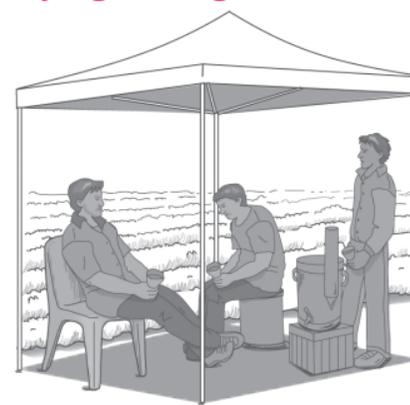
Esté alerta al tiempo. Durante la ola de calor usted está a mayor riesgo de enfermarse. Usted necesita estar muy atento a sí mismo y a sus compañeros de trabajo, necesita beber más agua, tomar más descansos y usar otras medidas preventivas.



Tome suficiente agua fresca

Tome por lo menos una taza de 8 onzas (3 conos) cada 15 minutos durante toda la jornada de trabajo. *No espere hasta sentir con sed para tomar agua.*

No tome bebidas alcohólicas. Evite el café. Elija agua en lugar de sodas.



Descanse en la sombra para tomar alivio del calor.

Use ropa apropiada. Ropa de algodón liviana, suelta y de color claro, gorra o sombrero de ala ancha y un pañuelo.

Consulte con su doctor si usted tiene enfermedad como la diabetes, está tomando medicinas o está en una dieta baja de sal.

Si trabaja al aire libre, por ley, su patrón debe proveer:

- Suficiente agua fresca para beber durante todo el día
- Acceso a la sombra o un lugar igualmente fresco por un periodo mínimo de cinco minutos para que pueda refrescarse.
- Entrenamiento sobre cómo prevenir las enfermedades causadas por el calor y cómo llamar a los servicios de emergencia.



Para más información llame gratis al

1-866-924-9757

(Oprima el "1" para escuchar los mensajes en español)

**Departamento de Relaciones
Laborales de California**



Are You a Working Teen?

Protect Your Health! Know Your Rights!



Could I Get Hurt or Sick on the Job?

- 18-year-old Sylvia caught her hand in an electric cabbage shredder at a fast food restaurant. Her hand is permanently disfigured and she'll never have full use of it again.
- 17-year-old Joe lost his life while working as a construction helper. An electric shock killed him when he climbed a metal ladder to hand an electric drill to another worker.
- 16-year-old Donna was assaulted and robbed at gunpoint at a sandwich shop. She was working alone after 11 p.m.

Every year nearly **50 teens under 18 die** from work injuries in the United States. Another **53,000 get hurt** badly enough that they go to a hospital emergency room.

Why do injuries like these occur? Teens are often injured on the job due to unsafe equipment, stressful conditions, and speed-up. Also they may not receive adequate safety training and supervision.

Teens are much more likely to be injured when they work on jobs they are not allowed to do by law.

What Hazards Should I Watch Out For?

Type of Work	Examples of Hazards
Janitor/Clean-up	<ul style="list-style-type: none">• Toxic chemicals in cleaning products• Blood on discarded needles
Food Service	<ul style="list-style-type: none">• Slippery floors• Hot cooking equipment• Sharp objects
Retail/Sales	<ul style="list-style-type: none">• Violent crimes• Heavy lifting
Office/Clerical	<ul style="list-style-type: none">• Stress• Harassment• Poor computer work station design

What Are My Rights on the Job?

By law, your employer must provide:

- A safe and healthful workplace.
- Training on chemicals and other health and safety hazards.
- Protective clothing and equipment.
- At least the California minimum wage, \$8.00 an hour. (City minimum wages may be higher.) In some cases, employers can pay less than minimum wage during your first 160 hours of work, if you have no previous similar experience. For more information, ☎ (888) ASK-WAGE (275-9243).
- 1/2 hour meal period after no more than 5 hours, 10 minute rest period after each 4 hours.
- Workers' compensation benefits if you are hurt on the job. These include:
 - Medical care for your injury, whether or not you miss time from work.
 - Payments if you lose wages for more than 3 days.
 - Other benefits if you become permanently disabled.

You also have a right to:

- Report safety problems to Cal/OSHA.
- Work without racial or sexual harassment.
- Refuse to work if the job is immediately dangerous to your life or health.
- Join or organize a union.

Is It OK to Do Any Kind of Work?

NO! There are laws that protect teens from doing dangerous work.

In California no worker under 18 may:

- Drive a motor vehicle on public streets as a main part of the job (17-year-olds may drive in very limited circumstances)
- Drive a forklift or other heavy equipment
- Use powered equipment like a circular saw, box crusher, meat slicer, or bakery machine
- Work in wrecking, demolition, excavation, or roofing
- Work in logging or a sawmill
- Prepare, serve, or sell alcoholic beverages
- Work where there is exposure to radiation

Also, no one 14 or 15 years old may:

- Do any baking activities
- Cook (*except* with electric or gas grills that do not involve cooking over an open flame and with deep fat fryers that automatically lower and raise the baskets)
- Work in dry cleaning or a commercial laundry
- Do building, construction, or manufacturing work
- Load or unload a truck, railroad car, or conveyor
- Work on a ladder or scaffold



Are There Other Things I Can't Do?

YES! There are other restrictions on the type of work you can and cannot do. **Age 14** is the minimum for most employment, except for informal jobs like babysitting or yard work. Check with your state labor department, school counselor, or job placement coordinator to make sure the job you are doing is allowed.

Do I Need a Work Permit?

YES! If you are under 18 and plan to work, you must get a work permit from your school or school district office (unless you have graduated).



What Are My Safety Responsibilities on the Job?

To work safely you should:

- Follow all safety rules and instructions; use safety equipment and protective clothing when needed
- Look out for co-workers
- Keep work areas clean and neat
- Know what to do in an emergency
- Report any health and safety hazard to your supervisor
- Ask questions if you don't understand

Should I Be Working This Late or This Long?

Child labor laws protect teens from working too long, too late, or too early.

This table shows the hours teens may work. (Some school districts may have more restrictive regulations. Also, there are some exceptions for teens in work experience education programs.)

Work Hours for Teens		
	Ages 14 and 15	Ages 16 and 17
Work Hours	<ul style="list-style-type: none"> • 7 am–7 pm, from Labor Day–June 1 • Not during school hours • 7 am–9 pm, from June 1–Labor Day 	<ul style="list-style-type: none"> • 5 am–10 pm when there is school the next day • 5 am–12:30 am when there is no school the next day
Maximum Hours When School Is in Session	18 hours a week, but not over: <ul style="list-style-type: none"> • 3 hours a day on school days • 8 hours a day Saturday–Sunday and holidays 	48 hours a week, but not over: <ul style="list-style-type: none"> • 4 hours a day Monday–Thursday • 8 hours a day Friday–Sunday and holidays
Maximum Hours When School Is <i>not</i> in Session	<ul style="list-style-type: none"> • 40 hours a week • 8 hours a day 	<ul style="list-style-type: none"> • 48 hours a week • 8 hours a day



What If I Get Hurt on the Job?

- Tell your supervisor right away. If you're under 18, tell your parents or guardians too.
- Get emergency medical treatment if needed.
- Your employer must give you a **claim form**. Fill it out and return it to your employer. This helps ensure that you receive workers' compensation benefits.

Workers' Compensation: Did You Know?

- You can receive benefits:
 - Even if you are under 18.
 - Even if you are a temporary or part-time worker (in most cases).
- You receive benefits no matter who was at fault for your job injury.
- You don't have to be a legal resident of the U.S. to receive workers' compensation benefits.
- You can't sue your employer for a job injury (in most cases).

You have a right to speak up!

It is illegal for your employer to fire or punish you for reporting a workplace problem or injury, or for claiming workers' compensation.

The information in this factsheet reflects your state and/or federal labor laws, whichever are more protective. The more protective laws usually apply. Check with your state agencies listed at the right.

What If I Have a Safety Problem?

- Talk to your supervisor, parents, teachers, job training representative, or union representative (if any) about the problem.
- If necessary contact one of these agencies.

For health and safety information and advice:

- **California Partnership for Young Worker Health and Safety**
Materials available in English and Spanish
☎ (888) 933-TEEN www.youngworkers.org
- **UC Berkeley Labor Occupational Health Program**
☎ (510) 642-5507 www.lohp.org
- **UCLA Labor Occupational Safety and Health Program**
☎ (310) 794-5964
www.losh.ucla.edu/youngworkers

To make a health or safety complaint:

- **OSHA (Occupational Safety and Health)**
☎ (800) 321-OSHA www.osha.gov
- **Cal/OSHA**
☎ (800) 963-9424 www.dir.ca.gov/DOSH

To make a complaint about wages or work hours:

- **California Labor Standards Enforcement**
☎ (415) 703-5300 www.dir.ca.gov/DLSE
- **US Department of Labor**
☎ (866) 487-9243 www.wagehour.dol.gov

To make a complaint about sexual harassment or discrimination:

- **California Fair Employment and Housing**
☎ (800) 884-1684 www.dfeh.ca.gov
- **US Equal Employment Opportunity Commission**
☎ (800) 669-4000 www.youth.eeoc.gov

For information about benefits for injured workers:

- **California Workers' Compensation—Information and Assistance**
☎ (800) 736-7401 www.dir.ca.gov/DWC