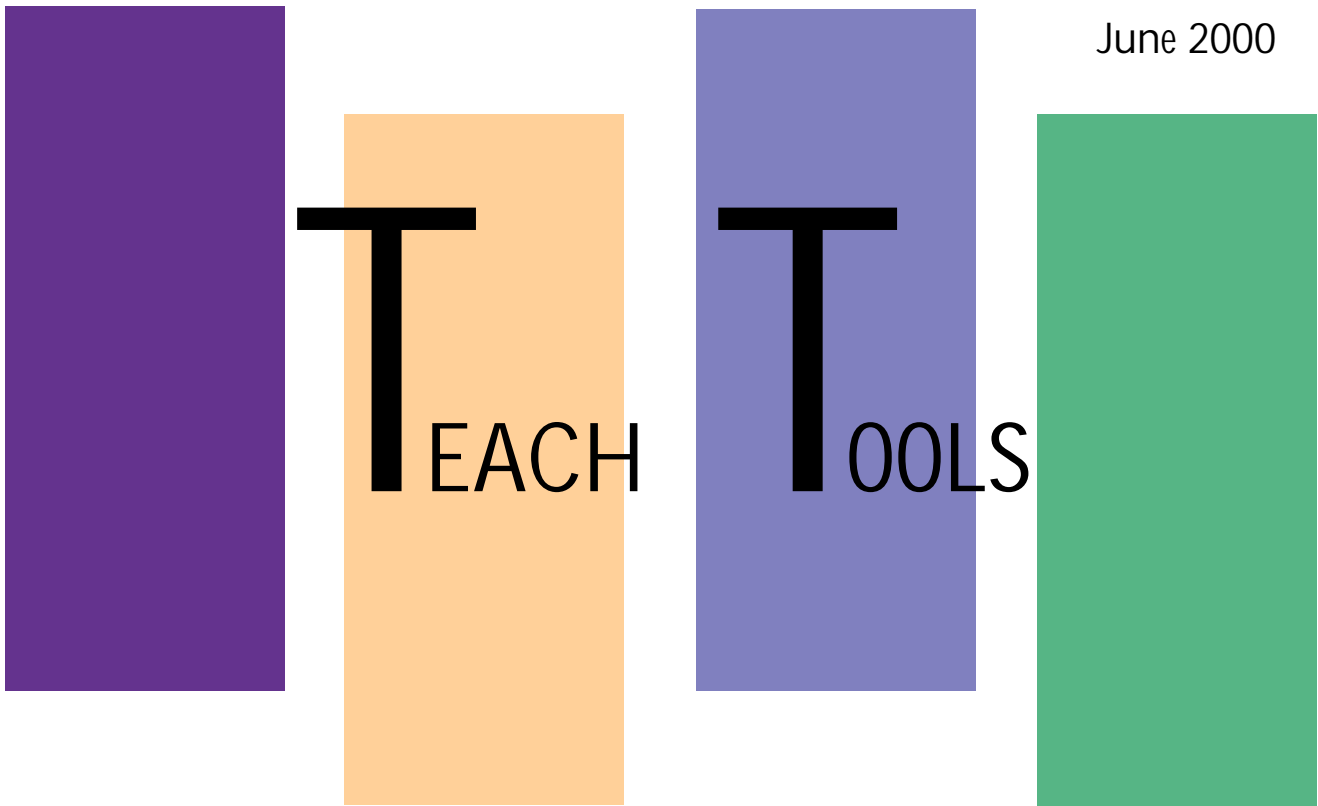


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## #27 - Working in Hot Conditions

A guide to assist in training employees.

provided by:

Kansas Municipal Insurance Trust

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# Working in Hot Conditions



## Meeting Objectives

To understand the potential hazards of working in hot conditions, to recognize the symptoms of heat exhaustion, and how to take preventive and corrective action. The result should be a reduction in illnesses and workplace injuries resulting from working in heat.

## Introduction/Overview

Heat, whether it is inside or outside, can be a health hazard. If you do not know when enough becomes too much, you can suffer from some form of heat stress. This can be a momentary problem or something more serious, and it can effect you at work or at play.

We try to encourage a safe work environment, but some jobs, such as welding or working in confined spaces, can create additional heat. Remember, some people are more easily affected by heat than others.

So we are going to review the conditions that can cause heat-related health problems, the symptoms to watch out for, and the actions to take if they affect you, one of your co-workers, or a family member or friend outside the workplace.

## General Hazards

Your body is designed to operate within a fairly narrow temperature range. If your body temperature goes too high, you could become ill.

Heat exhaustion is a risk when you are physically active and it is hot. You may get dizzy and sweaty, but it is not likely to be life-threatening.

Heatstroke is much more serious. Heatstroke can send your body temperature so high that you become unconscious. Even worse, too much exposure to these conditions can put so much strain on your heart and blood vessels that you are at a greater risk for heart failure or stroke. This risk is greatest for people who already have heart or circulatory problems since their bodies are less likely to be able to take the strain.

If you are working outside you can also be exposed to other hazards from too much sun exposure. One such hazard is skin cancer—the result of too much sun over time. Another problem is sunburn or sunstroke from getting too much sun when you are not used to it.

## Identifying Hazards

If you know the symptoms of heat stress, you can keep those symptoms from getting out of hand. The symptoms that indicate heat stress can also be symptoms of other health problems. But if it is hot and you are getting a workout, heat stress may well be the prime hazard you should be aware of.

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You usually start by feeling hot, uncomfortable, and just not ready to do much. This is not serious, but it is probably a sign you should get out of the heat. More about that in a moment. But first, here are the symptoms that could indicate a serious problem:

- Dizziness
- Rapid heartbeat
- Nausea
- Cramps
- Headache
- Excessive sweating
- Chest pain
- Breathing problems
- Great weakness
- Diarrhea

Even worse are these signs of heatstroke:

- High temperature
- Hot, red, dry skin
- Rapid pulse

Assume that any of these symptoms mean a serious problem.

You should also know the signs of skin cancer. See a doctor if you notice a mole or skin spot with these characteristics:

- One half is different from the other
- There are different colors
- The border is irregular
- It seems to be growing

Now let's talk about what to do.

## Protection Against Hazards

As with any hazards, the best way to deal with heat hazards is to try to prevent them.

- Dress for conditions. Lightweight, light-colored, loose clothing is the best. Wear a hat with a wide brim if you are out in the sun. Put sunscreen on exposed body parts.
- Eat a regular well-balanced diet, but try to stay away from hot or heavy food. Also watch your salt consumption. Some people take salt tablets to replace the salt lost in perspiration when it is hot. But too much salt can be bad for you, so do not take salt tablets without the recommendation of a doctor.
- Drink plenty of fluids. Do not wait until you are thirsty. Your body is sweating out a lot of fluid, and you have to keep replacing it. The best thing to drink is water. Avoid anything with caffeine or alcohol.
- Build up your exposure to the sun slowly. Try to stay in the shade or inside between 10 a.m. and 3 p.m. when the sun is strongest.
- You can get sunburned in cloudy weather. The sun is even more potent when it is reflected off water, concrete, or sand.

## Safety Procedures

Take immediate action if it is hot and you feel weak, dizzy, sweaty, or nauseous. Pay attention to cramps and to anyone who tells you that you look pale.



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In any and all of those circumstances, get to a cooler area—shade or a cool building. Lie down, loosen your clothing, and put some cool compresses on your skin. Drink fluids.

If you have, or see someone with, heatstroke or sunstroke symptoms, fast action is a must. Get medical help. And get yourself—or any victim—to a cool spot and loosen clothing. It is important to cool the body down quickly. Use cool compresses, water, even a hose for the job. Do not try to give fluids to an unconscious person.

If you get sunburned, rinse or soak with cool water or cold compresses. If you are sunburned but have not blistered, you can use a mild nonmedicated cream. But blisters can be serious; see a doctor.

### Suggested Discussion Questions

1. What are some of the problems created by too much exposure to heat?
2. What are symptoms of heat stress?
3. What action should you take if you have those symptoms?
4. What are the symptoms of heatstroke?
5. What action should you take for these symptoms?
6. What symptoms could indicate skin cancer?
7. What should you do about sunburn?
8. What are some things you can do to try to prevent problems when working in hot conditions?

### Wrap-Up

You cannot always stay out of the heat, but you can stay out of trouble if you take some sensible precautions and know when you are at risk. Use the checklist as a reminder. And keep a copy at home, too. Heat problems can also crop up when you are working in the yard or playing sports, etc. Forewarned is forearmed.

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## Sample Handout—

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### Staying Safe in the Heat Checklist

#### Prevent problems:

- Wear lightweight, light-colored, loose clothing
- Cover as much of your body as possible
- Wear a broad-brimmed hat in the sun
- Wear sunscreen in the sun
- Eat regular, well-balanced meals
- Avoid hot or heavy food
- Don't take salt tablets without a doctor's permission
- Drink lots of fluids, avoiding alcohol or caffeine
- Build up exposure to sun slowly
- Try to avoid the sun between 10 a.m. and 3 p.m.
- Be aware that water, concrete, and sand reflect the sun and make it stronger

#### Know heat exhaustion symptoms:

- Dizziness
- Fatigue
- Nausea
- Headache
- Excess sweating
- Cold, pale, clammy skin
- Great weakness
- Faintness

#### Act quickly if heat exhaustion strikes:

- Get to shade or a cool area
- Lie down
- Loosen clothing
- Apply cool compresses
- Drink fluids

#### Know heatstroke symptoms:

- High body temperature
- Hot red, dry skin
- Rapid pulse
- Unconsciousness

#### Act quickly if heatstroke strikes:

- Call for medical attention
- Get to a cool spot
- Loosen clothing
- Cool down body quickly with compresses, water

#### Skin cancer:

##### See a doctor if a mole or skin spot has:

- One half different from the other
- Different colors
- An irregular border
- Increased in size

#### Sunburn treatment:

- Rinse or soak with cool water or cold compresses
- If no blisters, apply mild nonmedicated cream
- If blistered, see a doctor