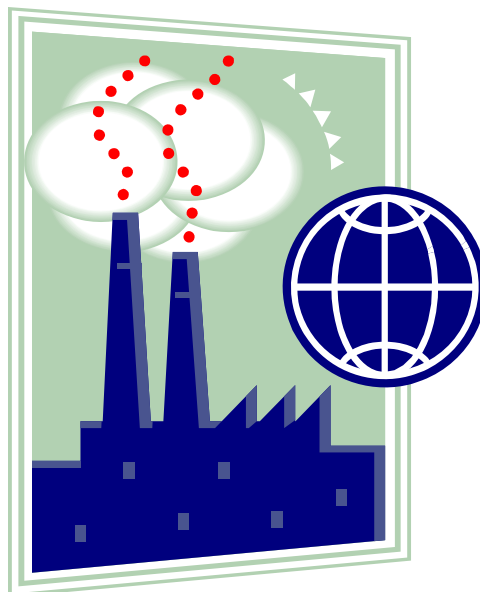


SCHOOL DISTRICT OF PITTSBURGH

Joint Labor/
Management Safety
Committee



THE JOINT LABOR/MANAGEMENT SAFETY COMMITTEE asks that all employees of the District join us in raising awareness of the monthly safety topic by sharing the enclosed information with others.

**School District of
Pittsburgh**

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June 2011 is

Heat Exhaustion Awareness Month

**Please post in a prominent location
at your workplace for the other
employees to see.**

Heat Exhaustion

Heat exhaustion is a heat-related illness that may occur after you've been exposed to high temperatures for several days and have developed dehydration, which is an inadequate or imbalanced replacement of the fluids and electrolytes you've lost through excessive perspiration.

There are two types of heat exhaustion:

- Water depletion. Signs include excessive thirst, weakness, headache, and even loss of consciousness.
- Salt depletion. Signs include nausea and vomiting, frequent muscle cramps, and dizziness.

Although heat exhaustion isn't as serious as another heat-related illness -- heat stroke -- it isn't something to be taken lightly. Without proper intervention, heat exhaustion can progress to heat stroke, which can damage the brain and other vital organs, and even cause death.

Symptoms of Heat Exhaustion

The most common signs and symptoms of heat exhaustion include:

- confusion
- dark-colored urine (which indicates dehydration)
- dizziness
- fainting
- fatigue
- headache
- muscle cramps
- nausea
- pale skin
- profuse sweating
- rapid heartbeat

Treatment for Heat Exhaustion

If you or anyone else has symptoms of heat exhaustion, it's essential to immediately get out of the heat and rest, preferably in an air-conditioned environment. If you can't get inside, try to find the nearest cool and shady place.

Other recommended strategies include:

- Drink plenty of non-caffeinated and non-alcoholic beverages.
- Remove any tight or unnecessary clothing.
- Take a cool shower, bath, or sponge bath.
- Apply other active cooling measures such as fans or ice towels.

If such measures fail to provide relief within 30 minutes, contact a doctor or go to the nearest emergency room because untreated heat exhaustion can progress to heat stroke. Your health care provider may recommend an oral or intravenous saline electrolyte solution.

After you've recovered from heat exhaustion, you'll probably be more sensitive to high temperatures during the following week. So it's best to avoid hot weather and heavy exercise until your doctor tells you that it's safe to resume your normal activities.

Risk Factors for Heat Exhaustion

Heat exhaustion is strongly related to the heat index, which is a measurement of how hot you feel when the effects of relative humidity and air temperature are combined. A relative humidity of 60% or more hampers sweat evaporation, which hinders your body's ability to cool itself.

The risk of heat-related illness dramatically increases when the heat index climbs to 90 degrees or more. So it's important -- especially during heat waves -- to pay attention to the reported heat index, and also to remember that the heat index is even higher when you are standing in full sunshine.

If you live in an urban area, you may be especially prone to develop heat exhaustion during a prolonged heat wave, particularly if there are stagnant atmospheric conditions and poor air quality. In what is known as the "heat island effect," asphalt and concrete store heat during the day and only gradually release it at night, resulting in higher nighttime temperatures.

Other risk factors associated with heat-related illness include:

Age. Infants and children up to age 4, and adults over age 65, are particularly vulnerable because they adjust to heat more slowly than other people.

Health conditions. These include heart, lung, or kidney disease, [obesity](#) or underweight, [high blood pressure](#), [diabetes](#), [mental illness](#), [sickle cell](#) trait, [alcoholism](#), [sunburn](#), and any conditions that cause fever.

Medications. These include diuretics, sedatives, tranquilizers, stimulants, some heart and [blood pressure](#) medications, and medications for psychiatric conditions.

People with diabetes -- who are at increased risk of emergency room visits, hospitalization, and death from heat-related illness -- may be especially likely to underestimate their risk during heat waves, according to a recent study presented at the Endocrine Society's annual meeting by researchers from the Mayo Clinic in Arizona, the National Ocean and Atmospheric Administration, and the National Weather Service.

Check with your doctor to see if your health conditions and medications are likely to affect your ability to cope with extreme heat and humidity.

Preventing Heat Exhaustion

When the heat index is high, it's best to stay in an air-conditioned environment. If you must go outdoors, you can prevent heat exhaustion by taking these steps:

- Wear lightweight, light-colored, loose-fitting clothing, and a wide-brimmed hat.
- Use a [sunscreen](#) with a sun protection factor (SPF) of 30 or more.
- Drink extra fluids. To prevent dehydration, it's generally recommended to drink at least eight glasses of water, fruit juice, or vegetable juice per day. Because heat-related illness also can result from salt depletion, it may be advisable to substitute an electrolyte-rich sports drink for water during periods of extreme heat and humidity.

- Take additional precautions when exercising or working outdoors. The general recommendation is to drink 24 ounces of fluid two hours before exercise, and consider adding another eight ounces of water or sports drink right before exercise. During exercise, you should consume another 8 ounces of water every 20 minutes even if you don't feel thirsty.

Avoid fluids containing either caffeine or alcohol, because both substances can make you lose more fluids and worsen heat exhaustion. If you have epilepsy or heart, kidney, or liver disease; are on fluid-restricted diets; or have a problem with fluid retention, check with your doctor before increasing liquid intake.

By being able to identify the symptoms of heat stroke and taking preventative measures it can be easily avoided.