

# **Summer Weather Preparedness**

# **Heat Index**

#### "160-degree Rule"

The 160 Rule is a formula used to calculate the combined temperature (Fahrenheit) and humidity. If the combination equals 160 or greater, students should remain indoors. Medical conditions of students must also be taken into consideration for involvement of outdoor activities.

The National Weather Service also uses a Heat Index model to measure the true feel of the temperature. The Heat Index is a measure of how hot it really feels when relative humidity is factored in with the actual air temperature. To find the Heat Index temperature, look at the Heat Index Chart below. If the air temperature is 96°F and the relative humidity is 65%, the heat index--how hot it feels--is 121°F. The red area without numbers indicates extreme danger. The National Weather Service will initiate alert procedures when the Heat Index is expected to exceed 105°-110°F (depending on local climate) for at least 2 consecutive days.

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Each <u>National Weather Service</u> Forecast Office issues some or all of the following heatrelated products as conditions warrant. NWS local offices often collaborate with local partners to determine when an alert should be issued for a local area. Such advisories will require a collaboration between building administrators and staff on planning the day's activities in our schools.

### Excessive Heat Warning Take Action!

An Excessive Heat Warning is issued within 12 hours of the onset of extremely dangerous heat conditions. The general rule of thumb for this Warning is when the maximum heat index temperature is expected to be 105° or higher for at least 2 days and night time air temperatures will not drop below 75°; however, these criteria vary across the country, especially for areas not used to extreme heat conditions. If you don't take precautions immediately when conditions are extreme, you may become seriously ill or even die.

### Excessive Heat Watches Be Prepared!

Heat watches are issued when conditions are favorable for an excessive heat event in the next 24 to 72 hours. A Watch is used when the risk of a heat wave has increased but its occurrence and timing is still uncertain.

### Heat Advisory Take Action!

A Heat Advisory is issued within 12 hours of the onset of extremely dangerous heat conditions. The general rule of thumb for this Advisory is when the maximum heat index temperature is expected to be 100° or higher for at least 2 days, and night time air temperatures will not drop below 75°; however, these criteria vary across the country, especially for areas that are not used to dangerous heat conditions. Take precautions to avoid heat illness. If you don't take precautions, you may become seriously ill or even die.

# **Heat-related Illnesses**

### What is heat stroke?

Heat stroke is the most serious heat-related illness. It occurs when the body becomes unable to control its temperature: the body's temperature rises rapidly, the sweating mechanism fails, and the body is unable to cool down. Body temperature may rise to 106°F or higher within 10 to 15 minutes. Heat stroke can cause death or permanent disability if emergency treatment is not provided.

### What are the warning signs of a heat stroke?

Warning signs of heat stroke vary but may include the following:

- An extremely high body temperature (above 103°F)
- Red, hot, and dry skin (no sweating)
- Rapid, strong pulse
- Throbbing headache
- Dizziness
- Nausea
- Confusion
- Unconsciousness

# What should I do if I see someone with any of the warning signs of heat stroke?

If you see any of these signs, you may be dealing with a life-threatening emergency. Have someone call for immediate medical assistance while you begin cooling the victim. Do the following:

- Get the victim to a shady area.
- Cool the victim rapidly, using whatever methods you can. For example, immerse the victim in a tub of cool water; place the person in a cool shower; spray the victim with cool water from a garden hose; sponge the person with cool water; or if the humidity is low, wrap the victim in a cool, wet sheet and fan him or her vigorously.
- Monitor body temperature and continue cooling efforts until the body temperature drops to 101-102°F.
- If emergency medical personnel are delayed, call the hospital emergency room for further instructions.
- Do not give the victim alcohol to drink.
- Get medical assistance as soon as possible.

#### What is heat exhaustion?

Heat exhaustion is a milder form of heat-related illness that can develop after several days of exposure to high temperatures, and inadequate, or unbalanced, replacement of fluids. Those most prone to heat exhaustion are elderly people, those with high blood pressure, and those working or exercising in a hot environment.

#### What are the warning signs of heat exhaustion?

- Heavy sweating
- Paleness
- Muscle cramps
- Tiredness
- Weakness
- Dizziness
- Headache
- Nausea or vomiting
- Fainting

The skin may be cool and moist. The pulse rate will be fast and weak, and breathing will be fast and shallow. If heat exhaustion is untreated, it may progress to heat stroke. See medical attention if symptoms worsen, or last longer than one hour.

#### What steps can be taken to cool the body during heat exhaustion?

- Drink cool, nonalcoholic beverages
- Rest
- Take a cool shower, bath, or sponge bath
- Seek an air-conditioned environment
- Wear lightweight clothing

#### What are heat cramps and who is affected?

Heat cramps are muscle pains or spasms – usually in the abdomen, arms, or legs – that may occur in association with strenuous activity. People who sweat a lot during strenuous activity are prone to heat cramps. This sweating depletes the body's salt and moisture. The low salt level in the muscles causes painful cramps. Heat cramps may also be a symptom of heat exhaustion. If you have heart problems or are on a low-sodium diet, seek medical attention for heat cramps.

#### What should I do if I have heat cramps?

If medical attention is not necessary, take the following steps:

- Stop all activity and sit quietly in a cool place
- Drink clear juice, or a sports beverage
- Do not return to strenuous activity for a few hours after the cramps subside because further exertion may lead to heat exhaustion or heat stroke
- Seek medical attention for heat cramps if they do not subside in 1 hour

#### What is heat rash?

Heat rash is a skin irritation caused by excessive sweating during hot, humid weather. It can occur at any age but is most common in young children. Heat rash looks like a red cluster of pimples or small blisters. It is more likely to occur on the neck and upper chest, in the groin, under the breasts, and in elbow creases.

#### What is the best treatment for heat rash?

The best treatment for heat rash is to provide a cooler, less humid environment. Keep the affected area dry. Dusting powder may be used to increase comfort.

## **Severe Weather**

Severe weather frequently occurs during the summer months. When severe weather is forecasted, staff should be alert for predicted weather, and be prepared to take action if necessary. Knowing the emergency protocols will assist in response. Taking time to practice drills of Shelter in Place, Duck and Cover, and Evacuation will assist in identifying safe locations to go to. Staff should also be mindful of the following terminology related to severe weather forecasts:

### Severe Thunderstorm WATCH Be Prepared!

Severe thunderstorms are possible in, and near, the watch area. Stay informed and be ready to act if a severe thunderstorm warning is issued. The watch area is typically large, covering numerous counties, or even states.

### Severe Thunderstorm WARNING Take Action!

Severe weather has been reported by spotters or indicated by radar. Warnings indicate imminent danger to life and property. Take shelter in a substantial building. Get out of mobile homes that can blow over in high winds. Warnings typically encompass a much smaller area (around the size of a city, or small county) that may be impacted by large hail, or damaging wind, identified by an NWS forecaster on radar, or by a trained spotter/law enforcement who is watching the storm.

### **Follow National Weather Service (NWS) Notifications**

#### Utilize weather radios

Ensure they are operational to receive severe weather alerts for your specific area, and that the radios can be heard.

#### NY ALERT

Sign up for the New York State Alerting system at https://www.nyalert.gov/

#### Social media

Get notification apps for your phone through local news stations or the NWS. Turn on the emergency notification warning feature for the selected apps.

### Lead Time for Severe Weather Notifications Severe Thunderstorms > 20 minutes Tornadoes = 10 minutes

In the event there is an imminent severe weather threat, the following actions should be considered:

- Get inside!
  - Go inside a sturdy building immediately if severe thunderstorms are approaching. Sheds and storage facilities are not safe. Taking shelter under a tree can be deadly. The tree may fall on you. Standing under a tree also puts you at a greater risk of getting struck by lightning.
- Avoid exterior doors and windows.
  - Stay away from windows if you are in a severe thunderstorm warning and damaging wind or large hail is approaching.
  - Do not go to large open rooms such as cafeterias, gymnasiums or auditoriums.

- If there is a tornado identified in the area, get into a basement under sturdy protection. If no basement is available, go to lowest floor level and into a small room in the center of the building.
  - Create separation from the tornado with a minimum of 2 barriers (i.e. 2 interior walls)
  - If caught outdoors, lie flat and face-down on low ground, protecting the back of your head with your arms.

Additional information is available from the following:

- Centers for Disease Control website at: <u>http://emergency.cdc.gov/</u>
- National Weather Service <u>http://www.nws.noaa.gov/</u>
- New York State Center for School Health- <u>https://www.schoolhealthny.com/</u>



# **HEAT-RELATED ILLNESSES**

#### WHAT TO LOOK FOR

#### WHAT TO DO

#### HEAT STROKE

- High body temperature (103°F or higher)
- Hot, red, dry, or damp skin
- Fast, strong pulse
- Headache
- Dizziness
- Nausea
- Confusion
- Losing consciousness (passing out)
- Call 911 right away-heat stroke is a medical emergency
  Move the person to a cooler place
- Help lower the person's temperature with cool cloths or a cool bath
- Do not give the person anything to drink
- HEAT EXHAUSTION
- Heavy sweating
- Cold, pale, and clammy skin
- Fast, weak pulse
- Nausea or vomiting
- Muscle cramps
- Tiredness or weakness
- Dizziness
- Headache
- Fainting (passing out)

- Move to a cool place
  - Loosen your clothes
  - Put cool, wet cloths on your body or take a cool bath
  - Sip water

#### Get medical help right away if:

- You are throwing up
- Your symptoms get worse
- Your symptoms last longer than 1 hour

#### HEAT CRAMPS

- Heavy sweating during intense exercise
- Muscle pain or spasms

- Stop physical activity and move to a cool place
- Drink water or a sports drink
- Wait for cramps to go away before you do any more physical activity

#### Get medical help right away if:

- Cramps last longer than 1 hour
- You're on a low-sodium diet
- You have heart problems

#### SUNBURN

- · Painful, red, and warm skin
- Blisters on the skin

- Stay out of the sun until your sunburn heals
- Put cool cloths on sunburned areas or take a cool bath
- Put moisturizing lotion on sunburned areas
- · Do not break blisters

#### HEAT RASH

- Red clusters of small blisters that look like pimples on the skin (usually on the neck, chest, groin, or in elbow creases)
- Stay in a cool, dry place
- Keep the rash dry
- Use powder (like baby powder) to soothe the rash