

Weather /Environmental Guidelines

Time spent outdoors is an important part of the school day. It is difficult to set guidelines that fit every circumstance and condition in regards to outside activities. Principals are advised to use their discretion and good judgment as to whether or not students will go outside, as well as, the duration of the outside activity. Children should be exposed to fresh air and exercise. Time spent outdoors allows students an opportunity to engage activities that allow them to relax from the structure of the classroom for a short while. However, there are times when it is not safe for students to be outside. Please use the guidelines below as a guide for when school recess or other outdoor physical activity or physical education classes should be notified.

Each school is to determine the criteria for such decisions and who will make the judgment call on a day-to-day basis. The decision making process may vary from grade to grade.

Conditions that should be considered in the determination:

- Temperature
- Wind Chill
- Age of Student
- Length of time outdoors
- Adequacy of clothing of the children

Recess and Outdoor Physical Activity

1. When the child is properly clothed, elementary school-aged children can participate in safe, vigorous play in an outdoor environment in most weather conditions. Increased caution should be practiced when temperature reach below 40 degrees including the wind chill factor.

2. When temperature and wind chill falls below 35 degrees including the wind chill, students, are kept indoors.

3. Temperature considerations and proper clothing:

- * Below 60 degrees: Jacket or long sleeve recommended
- * Below 50 degrees: Coat and long pants recommended
- * Below 40 degrees: Gloves and hats with previously recommended gear necessary.
- * Below 35 degrees: Indoor recess or physical activity.

4. Schools should honor reasonable parent request that a student be allowed to stay indoors. Requests based on health reasons must be honored.

a. Particularly asthmatic children may need special accommodation of their needs during cold weather. The parent and school must work to determine a workable system for when the child should not participate in outdoor activities due to health.

Be sure the outer layer of the clothing is tightly woven, preferably wind resistant, to reduce the body-heat loss caused by wind. Wool, silk, or polypropylene inner layers of clothing will hold more body heat than cotton. Stay dry. Wet clothing chills the body rapidly. Excess perspiration will increase heat loss, so remove extra layers of clothing whenever the child feels too warm. These materials in contact with the

skin greatly increase heat loss from the body. Do not ignore shivering. It's an important first sign that the body is losing heat. Persistent shivering is a signal to return indoors.

Avoid Frostbite and Hypothermia

When exposed to cold temperatures, the body begins to lose heat faster than it can be produced. Prolonged exposure to cold will eventually use up your body's stored energy. The result is hypothermia, or abnormally low body temperature. Body temperature that is too low affects the brain, making the victim unable to think clearly or move well. This makes hypothermia particularly dangerous because a person may not know it is happening and won't be able to do anything about it.

Understand Wind Chill

The wind chill index is the temperature the body feels when the air temperature is combined with the wind speed. It is based on the rate of heat loss from exposed skin caused by the effects of wind and cold. As the speed of the wind increases, it can carry heat away from the body much more quickly, causing skin temperature to drop. When there are high winds, serious weather-related health problems are more likely even when temperatures are only cool.

The Wind Chill Chart below shows the difference between actual air temperature and perceived temperature, and amount of time until frostbite occurs.

Wind Speed (mph)	Wind Chill Factor								
	Actual Air Temperature °F								
	40°	30°	20°	10°	0°	-10°	-20°	-30°	-40°
10	34	21	9	-4	-16	-28	-41	-53	-66
20	30	17	4	-9	-22	-35	-48	-61	-74
30	28	15	1	-12	-26	-39	-53	-67	-80
40	27	13	-1	-15	-29	-43	-57	-71	-84
50	26	12	-3	-17	-31	-45	-60	-74	-88
60	25	10	-4	-19	-33	-48	-62	-76	-91

Heat

How heat affects your body

Exercising in hot weather puts extra stress on your body. Both the exercise itself and the air temperature increase your core body temperature. To help cool itself, your body sends more blood to circulate through your skin. This leaves less blood for your muscles, which in turn increases your heart rate. If the humidity also is high, your body faces added stress because sweat doesn't readily evaporate from your skin. That pushes your body temperature even higher.

Children take longer to adjust to hot environments than adults do, and their bodies reach core temperature much faster. Children's bodies have greater surface area to body mass ratio, so they absorb more heat on a hot day (and lose heat more rapidly on a cold day). Also, children have considerable lower sweating capacity than adults, and so they are less able to dissipate body heat by evaporative sweating and cooling. Children are less likely to feel thirsty during prolonged play and exercise, and sometimes they just don't want to be interrupted. They need to be reminded to drink water.

The following guidelines should be followed to increase a student's safety during periods of hot weather:

- Ensure children are well hydrated. Provide or encourage frequent drinks to ensure adequate hydration. Plain water is the liquid of choice.
- Limit strenuous activity outdoors especially during when temperature and UV radiation is the most intense, between 10:00 a.m. and 4:00 p.m.
- Check regularly on young children and those children who have chronic illnesses such as asthma.
- Monitor children in wheelchairs and check the temperature of metal and vinyl parts of playground equipment.
- Staff should be aware of the signs and symptoms of heat cramps, heat exhaustion, and heat stroke.

Heat-related illness

Under normal conditions, your skin, blood vessels and perspiration level adjust to the heat. But these natural cooling systems may fail if you're exposed to high temperatures and humidity for too long, you sweat heavily and you don't drink enough fluids. The result may be a heat-related illness. Heat-related illnesses occur along a spectrum, starting out mild but worsening if left untreated. Heat illnesses include:

- **Heat cramps.** Heat cramps are painful muscle contractions, mainly affecting the calves, quadriceps and abdominals. Affected muscles may feel firm to the touch. Your body temperature may be normal.
- **Heat exhaustion.** With heat exhaustion, your body temperature rises as high as 104 F (40 C) and you may experience nausea, vomiting, headache, fainting, weakness and cold, clammy skin. If left untreated, this can lead to heatstroke.
- **Heatstroke.** Heatstroke is a life-threatening emergency condition that occurs when your body temperature is greater than 104 F (40 C). Your skin may be hot, but your body may stop sweating to help cool itself. You may develop confusion and irritability. You need immediate medical attention to prevent brain damage, organ failure or even death.

Heat and exercise: Keeping cool in hot weather

Pay attention to warning signs

During hot-weather exercise, watch for signs and symptoms of heat-related illness. If you ignore these symptoms, your condition can worsen, resulting in a medical emergency. Signs and symptoms include:

- Muscle cramps
- Nausea or vomiting
- Weakness
- Headache
- Dizziness
- Confusion

If you develop any of these symptoms, you must lower your body temperature and get hydrated. Stop exercising immediately and get out of the heat. If possible, have someone stay with you who can help monitor your condition. Remove extra clothing or sports equipment. Drink fluids — water or a sports drink. If possible, fan your body or wet down your body with cool water. If you don't feel better within 30 minutes, contact your doctor. If you have signs of heatstroke, seek immediate medical help.

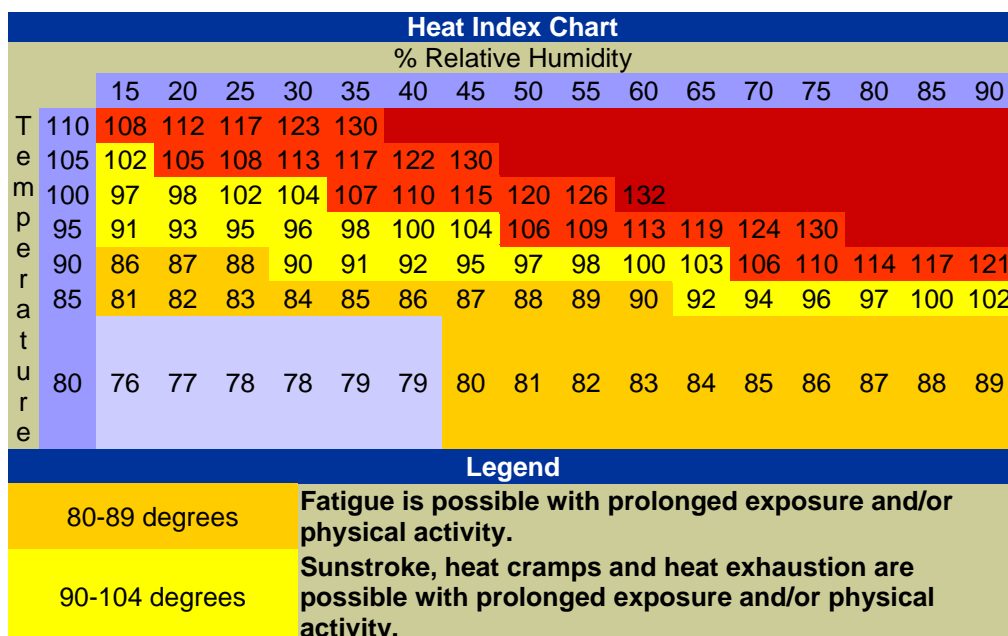
Once you've had heatstroke, you're at a higher risk of getting a heat illness again. Get cleared by your doctor before you return to exercise if you've had heatstroke.

How to avoid heat-related illnesses

When you exercise in hot weather, keep these precautions in mind:

- **Watch the temperature.** Pay attention to weather forecasts and heat alerts. Know what the temperature is expected to be for the duration of your planned outdoor activity.
- **Get acclimated.** If you're used to exercising indoors or in cooler weather, take it easy at first when you exercise in the heat. As your body adapts to the heat over the course of one to two weeks, gradually increase the length and intensity of your workouts.
- **Know your fitness level.** If you're unfit or new to exercise, be extra cautious when working out in the heat. Your body may have a lower tolerance to the heat. Reduce your exercise intensity and take frequent breaks.

- **Drink plenty of fluids.** Dehydration is a key factor in heat illness. Help your body sweat and cool down by staying well hydrated with water. Don't wait until you're thirsty to drink. If you plan to exercise intensely or for longer than one hour, consider a sports drink instead of water. Sports drinks can replace the sodium, chloride and potassium you lose through sweating.
- **Dress appropriately.** Lightweight, loose fitting clothing helps sweat evaporate and keeps you cooler. Avoid dark colors, which can absorb heat. If possible, wear a light-colored, wide-brimmed hat.
- **Avoid midday sun.** Exercise in the morning or evening, when it's likely to be cooler outdoors. If possible, exercise in shady areas — or do a water workout in a pool.
- **Wear sunscreen.** A sunburn decreases your body's ability to cool itself.
- **Understand your medical risks.** Certain medical conditions or medications can increase your risk of a heat-related illness.



105-129 degrees	Sunstroke, heat cramps and heat exhaustion are likely. Heat stroke is possible with prolonged exposure and/or physical activity.
130+ degrees	Heatstroke/sunstroke is highly likely with continued exposure.

Temperature Humidity Index (THI) Chart

Heat index (or apparent temperature) is how the heat and humidity in the air combine to make us feel. Higher humidity plus higher temperatures often combine to make us feel a perceived temperature that is higher than the actual air temperature. See the chart above showing various combinations of air temperature versus relative humidity to help you gauge for yourself.

To use the chart, locate the air temperature along the left column and the relative humidity along the top. The cell where the two intersect is the heat index.

For example, an air temperature of 90 degrees Fahrenheit and a relative humidity of 60 percent intersect at a heat index of 100 degrees. In other words, the temperature would feel like 100 degrees with this humidity/temperature combination.

Heat index values were devised for shady light wind conditions. Exposure to full sunlight can increase values by up to 15 degrees Fahrenheit.