

A large, semi-circular graphic resembling a clock face or a gauge, with tick marks around the perimeter. The number "5" is prominently displayed in a large, bold, blue font, followed by the words "minute safety talk" in a smaller, blue, sans-serif font.

5-minute
safety
talk

Heat-Related Illness

For use in conjunction with 5-Minute Safety Talk





The body burns calories and produces heat to maintain 98.6 Fahrenheit temperature.

Two effective ways the body rids itself of heat are:

1. Sweating - Sweat evaporating from skin cools the body
2. Dilation of blood vessels – Blood is brought to the skin surface to release heat





Warning Signs

Problems develop when the body's cooling mechanisms aren't able to work properly, such as when:



- Air temperature exceeds body temperature - the body cannot easily cool itself
- Air is humid - sweat doesn't evaporate quickly
- Sweat doesn't evaporate easily from a person who works/exercises hard while wrapped in heavy clothing or protective gear

**Heat-related illness is a concern in
any weather - anywhere!**





Heat Rash & Heat Cramps



Heat Rash

Occurs when sweat ducts get clogged

Heat Cramps

Painful muscle spasms caused by loss of electrolytes from heavy sweating

If workers develop these conditions, immediately get them out of the heat so they can rest.





Heat Syncope

Victim becomes light-headed and faints when blood flow to the brain decreases. This is because blood pressure is lowered when blood vessels dilate to rid the body of heat.

Blood pressure lowers further when blood volume drops as water is evaporated from the blood.





Heat Exhaustion

Occurs when the body loses too much water and salt

Signs include:

- Weakness
- Dizziness
- Nausea
- Headache
- Heavy sweating
- Clammy skin



Heatstroke



Signs of heatstroke:

- Rapid pulse
- Hot, red skin
- Victim stops sweating
- Possible mental confusion, decreased alertness & blurred judgment

Heatstroke can be extremely serious and lead to brain damage or even death if not treated promptly and properly.





Recognize - Evaluate - Act

Know how to **recognize** a victim of heat-related illness, **evaluate** the symptoms and **act**!

1. Heat Cramps

Have the worker sip water or a sports drink. Gently stretch, massage and ice the muscle. Seek medical attention if the worker has heart problems or if cramps don't get better within an hour.

2. Heat Syncope

Have the worker lie down in a cool area. Call for medical help.

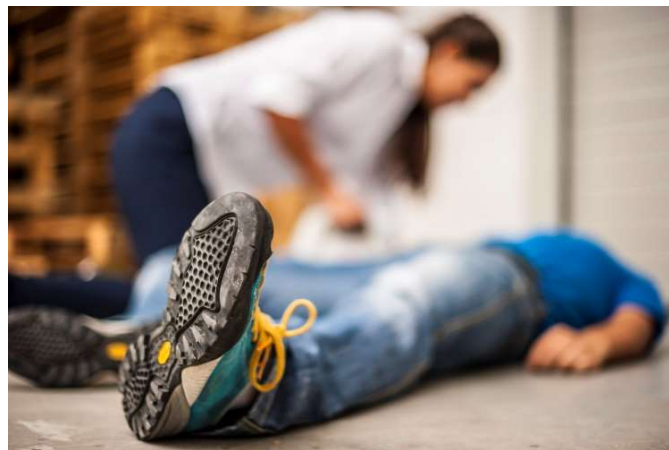




Heat Exhaustion

3. Heat Exhaustion

- Lay the worker down on his or her back in a cool area
- Call for medical help
- Remove excessive layers of clothing
- Give a sports drink or water – don't give anything to drink if the worker vomits
- Cool the worker with a cool water spray or wet cloths and a fan





Heatstroke

4. Heatstroke - Call for medical help immediately!

While you wait for help to arrive, immediately cool the victim with any means at hand, preferably by immersing the victim up to the neck in cold water.



Alternatively:

- Move the worker to a cool place and remove clothing down to the underwear, then apply ice packs at the neck, armpits and groin.
- Or, cover the worker with wet towels or cloths or spray him or her with cool water, and fan the worker to quickly evaporate the dampness on the skin.





Catch it Early

Awareness is vital!

Both supervisors and workers should be on the lookout for warning signs of heat-related illness.

Safety is everyone's responsibility.





Preventive Measures

1. Eat light - The more calories you take in, the more body heat you produce
2. Drink plenty of fluids before work and throughout the day & avoid caffeine
3. Wear lightweight clothing
4. Wide-brimmed hats protect workers from direct sunlight





Heat illnesses are the consequence of not recognizing the warning signs on the job.

Hot conditions don't have to be dangerous if you watch for the warning signs and get cooperation from workers to prevent heat-related illness.





Heat-Related Illness Resources

Available in the Member-Exclusive section of NSC.ORG.





Poster



BEAT THE HEAT!

Hang this poster in high traffic areas to share tips about how everyone can help prevent heat-related illnesses





Summer Safety Checklist



Summer Safety Checklist

A healthy body temperature is maintained by the nervous system. As the body temperature increases, the body tries to maintain its normal temperature by transferring heat. Sweating and blood flow to the skin help us keep our bodies cool. A heat-related illness occurs when our bodies can no longer transfer enough heat to keep us cool.

Stay safe during extreme heat

- ☐ Listen to local weather forecasts and stay aware of upcoming temperature changes
- ☐ Eat light – the more calories you take in, the more body heat you produce
- ☐ Stay hydrated and drink plenty of water before work and throughout the day
- ☐ Drink at least 8 ounces of fluid per half hour
- ☐ Avoid liquids that contain alcohol, caffeine or large amounts of sugar
- ☐ Choose the proper type and amount of clothing – cotton allows skin to breathe and absorbs sweat
- ☐ Take frequent breaks in shady areas
- ☐ Always wear a sunscreen with an SPF of 15 or higher
- ☐ Apply sunscreen at least 20 minutes before going outdoors
- ☐ If you take medicines regularly, ask your doctor for advice about hot-weather activity and your risk of getting a heat-related illness
- ☐ Get trained in first aid to learn how to treat heat-related emergencies

Don't sweat through the symptoms

Symptoms of heat exhaustion include:

- Headache
- Dizziness
- Weakness
- Light-headedness
- Heavy sweating
- Confusion
- Clammy skin
- Nausea and vomiting may occur

If you or someone you know experiences these types of symptoms, lay the worker down in a cool area with his or her legs raised. Remove excessive layers of clothing. Give up to 1 liter of water. Do not give anything to drink if the worker vomits. Cool the worker with cold, wet cloths and a fan. If symptoms persist, seek medical attention.



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members get more

Don't Sweat It!

*Share this checklist to
help everyone stay
safe during extreme
heat!*





Summer Safety Tips



FIRST AID TIPS

Untreated heat stress can quickly lead to heat stroke, a life-threatening condition:

- Call 9-1-1
- Move the victim to a cool place and remove outer clothing
- Immediately cool the victim with any means at hand, preferably by immersing them up to the neck in cold water or apply ice bags or cold packs beside the neck, armpits and groin
- Do not give the victim anything containing caffeine or alcohol
- Be ready to provide CPR if breathing stops

NSC provides CPR & AED training through both classroom and online courses. Find a training location near you, or view a demonstration of NSC online training at nsc.org/online/training.

Get certified through NSC!

Summer Safety TIPS

Fun in the Sun

Everyone enjoys a little bit of summer fun, but it's always important to monitor the weather conditions in extreme heat – especially if you plan on being outside.

Here are some tips to keep in mind:

- No matter how long you plan on being out, wear sunscreen with an SPF of at least 15
- Take water breaks every 15 minutes when working or playing outdoors – try to set up a shady or air conditioned recovery area
- Wear a hat and UV-absorbent sunglasses
- Eat small, light meals before outdoor activity

Listen to Your Body

Even after following all the necessary precautions, you should still be on the lookout for overexertion. Overexertion accounts for about 3.3 million emergency room visits a year in the United States, and symptoms can be heightened in the heat.

Stop and take a break if you experience the following:

- Dizziness
- Sore or painful muscles
- Pulse higher than recommended exercise pulse for your size and physical condition
- Feeling very hot and sweating profusely
- Low abdominal pain
- Nausea

Yard Safety

Yard upkeep is essential during the warmer months, but is also a common cause of injury. Lawnmowers alone send tens of thousands of people to the emergency room each year.

Don't start mowing until you:

- Know how to operate the equipment and follow safety instructions
- Fill up the gas tank when the engine is cold
- Clear the area from rocks and sticks to prevent flying debris
- Wear eye and ear protection, and appropriate shoes and clothing when operating the lawnmower or working nearby
- Keep children and pets away from the area

Bring these summer safety and first aid tips home and help keep the whole family safe.





Summer Safety Quiz

Summer Safety QUIZ

1. Before you head outside, you should always wear sunscreen with an SPF of at least:

- a. 5
- b. 8
- c. 10
- d. 15

2. _____ accounts for about 3.3 million emergency room visits a year in the United States.

- a. Chest pain
- b. Overexertion
- c. Abdominal discomfort

3. **True or False:** If heat stress goes untreated, it can quickly lead to heat stroke – a life-threatening condition.

- a. True
- b. False

4. Which of the following are symptoms of heat exhaustion:

- a. Headache
- b. Dizziness
- c. Weakness
- d. Light-headedness
- e. All of the above

5. **True or False:** Before participating in outdoor activities in the summer, you should eat a large and hearty meal.

- a. True
- b. False

Answer Key: 1-D / 2-B / 3-A / 4-E / 5-B

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Are you ready for the heat?

Brush up on summer safety using the Summer Safety Tips sheet and test your knowledge.





For more member-exclusive safety presentations, webinars, posters and resources visit: **nsc.org/members**

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