



# Training Circular

Volume 16 Issue 04

Risk Management Issues

April 2016



## April



### Severe Weather/Hurricane Season/Heat Preparation

People suffer heat-related illness when their bodies are unable to properly cool themselves. The body normally cools itself by sweating. Under some conditions, sweating just isn't enough. In such cases, a person's body temperature rises rapidly. Very high body temperatures may damage the brain or other vital organs.

#### Recognition of Heat Illness

##### Heat Cramps

- Involuntary muscle spasms following hard physical work in a hot environment
- Heavy perspiration
- Cramping in the abdomen, arms, and calves

##### Heat Exhaustion

- Weakness, anxiety, fatigue, dizziness, headache, and nausea
- Profuse perspiration, rapid pulse, rapid breathing
- Possible confusion or loss of coordination
- May lead to heat stroke if not treated
- **Heatstroke (EMERGENCY!! Death is Imminent)**

- Diminished or absent perspiration
- Hot, dry, and flushed skin
- Increased body temperatures, delirium, convulsions, seizures, possible death
- Rapid pulse, weakness
- Headache, mental confusion, dizziness
- Extreme fatigue
- Nausea/ Vomiting
- Incoherent speech progressing to coma
- Medical care urgently needed



#### Treatment and Prevention of Heat Illness

##### Treatment of heat illness

- Move person out of direct sunlight into air-conditioned environment, if possible
- Remove clothing, maintaining modesty
- Have them drink water if conscious
- Sprinkle water on them. Fan them if there is no breeze
- Get medical attention ASAP

##### Higher Risk for Heat Illness

- Newly assigned to a job
- On psychiatric medications and certain other medications
- Elderly
- High temperature and humidity conditions
- No breeze

##### Prevention of Heat Illness

- Increase frequency of fluid intake when working in hot environments
- Take a break every 30-60 minutes
- Decrease intensity of work under extreme conditions



#### Monitor Those Around You and Ones at High Risk

When working in the heat, monitor the condition of your co-workers and have someone do the same for you. Heat-induced illness can cause a person to become confused or lose consciousness. If you are 65 years of age or older, have a friend or relative call to check on you twice a day during a heat wave. If you know someone in this age group, check on them at least twice a day.

Although anyone at any time can suffer from heat-related illness, some people are at greater risk than others.

Infants and young children are sensitive to the effects of high temperatures, and rely on others to regulate their environments and provide adequate liquids.

People 65 years of age or older may not compensate for heat stress efficiently, and are less likely to sense and respond to change in temperature.

People who are overweight may be prone to heat sickness because of their tendency to retain more body heat.

People who overexert during work or exercise may become dehydrated and susceptible to heat sickness.

People who are physically ill, especially with heart disease or high blood pressure, or who take certain medications, such as for depression, insomnia, or poor circulation, may be affected by extreme heat.

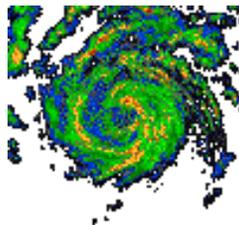


### Use Common Sense

- Remember to keep cool and use common sense:
- Avoid hot foods and heavy meals—they add heat to your body.
- Drink plenty of fluids and replace salts and minerals in your body. Do not take salt tablets unless under medical supervision.
- Dress infants and children in cool, loose clothing and shade their heads and faces with hats or an umbrella.
- Limit sun exposure during mid-day

hours and in places of potential severe exposure such as beaches.

- Do not leave infants, children, or pets in a parked car.
- Provide plenty of fresh water for your pets, and leave the water in a shady area.
- \* More Heat training information will be made available in May's Training Circular



### Hurricane Safety

What You Should Do:

Listen to a NOAA Weather Radio for critical information from the National Weather Service.

Check your disaster supplies and replace or restock as needed.

Bring in anything that can be picked up by the wind.

Close windows, doors and hurricane shutters. If you do not have hurricane shutters, close and board up all windows and doors with plywood.

- Turn the refrigerator and freezer to the coldest setting and keep them closed as much as possible so that food will last longer if the power goes out.
- Turn off propane tanks and unplug small appliances.
- Fill your car's gas tank.
- Talk with members of your household and create an evacuation plan. Planning and practicing your evacuation plan minimizes confusion and fear during the event of a

hurricane.

- Learn about your community's hurricane response plan. Plan routes to local shelters, register family members with special needs as required, and make plans for your pets to be cared for.
- Evacuate if advised by authorities. Be careful to avoid flooded roads and washed out bridges.



### Supplies You Need

- Water—at least a three day supply; one gallon per person per day
- Food—at least a three day supply of non-perishable, easy-to-prepare food
- Flashlight
- Battery-powered or hand-crank radio
- Extra batteries
- First aid kit
- Medications (7-day supply) and medical items (hearing aids with extra batteries, glasses, contact lenses, syringes, cane)
- Multi-purpose tool
- Sanitation and personal hygiene items.
- Copies of personal documents (medication list and pertinent medical information, proof of address, deed/lease to home, passports, birth certificates, insurance policies)

- Cell phone and chargers
- Family and emergency contact information
- Extra cash
- Emergency blanket
- Map or maps of the area
- Baby supplies
- Pet supplies
- Tools/supplies for securing your home
- Extra set of car keys and house keys
- Extra clothing, hats and sturdy shoes
- Insect repellent and sunscreen
- Camera for photos of damage



### Tornados and Severe Thunder Storms

- **Tornado Watch: Be Prepared!** Tornadoes are possible in and near the watch area. Review and discuss your emergency plans and check supplies and your safe room. Be ready to act quickly if a warning is issued or you suspect a tornado is approaching. Acting early helps to save lives! Watches are issued by the Storm Prediction Center for counties where tornadoes may occur. The watch area is typically large, covering numerous counties or even states.
- **Tornado Warning: Take Action!** A tornado has been sighted or indicated by weather radar. There is imminent danger to life and property. Move to an interior room on the lowest floor of a sturdy building. Avoid windows. If in a mobile home, a vehicle, or outdoors, move to the closest substantial shelter and protect yourself from flying debris. Warnings are issued by your local forecast office. Warnings typically encompass a much smaller area (around the size of a city or small county) that may be impacted by a forecaster on Radar, or by a trained spotter/law enforcement officer who is watching the storm.
- **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. Watches are issued by the Storm Prediction Center for counties where severe thunderstorms may occur. 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 are issued by your local forecast office. Warnings typically encompass a much smaller area (around the size of a city or county) that may be impacted by an on-going severe thunderstorm.

### Winter Weather Alerts

- **Winter Storm Warnings** are issued for a significant winter weather event including snow, ice, sleet, or blowing snow or a combination of these hazards. Travel will become difficult or impossible in some situations. Delay your travel

plans until conditions improve.

- **Ice Storm Warnings** are usually issued for ice accumulation of around 1/4 inch or more. This amount of ice accumulation will make travel dangerous or impossible and likely lead to snapped power lines and fallen tree branches. Travel is strongly discouraged.
- **Wind-chill Warnings** are issued for a combination of very cold air and strong winds that will create dangerously low wind-chill values. This level of wind-chill will result in frostbite and lead to hypothermia if precautions are not taken. Avoid going outdoors and wear warm protective clothing.
- **Winter Weather Advisories** are issued when snow, blowing snow, ice, sleet, or a combination of these wintry elements is expected, but conditions should not be hazardous enough to meet warning criteria. Be prepared for winter driving conditions and possible travel difficulties. Use caution when driving.

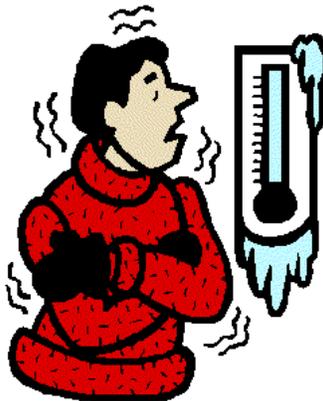


- **Freezing Rain Advisories** are issued when light ice accumulation (freezing rain and/or freezing drizzle) is expected but will not reach warning criteria. Expect a glaze on roads resulting in hazardous travel. Slow down and use caution while driving because even trace amounts of ice on roads can be dangerous.
- **Wind-chill Advisories** are issued when low wind-chill temperatures are expected but will not reach local warning criteria. Extremely cold air and strong winds will combine to generate low wind-chill readings. If you must venture outdoors, take precautions against frostbite and hypothermia.

- **Freezing Rain:** Rain that freezes when it hits the ground; creating a coating of ice on roads, walkways, trees, and power lines.
- **Sleet:** Rain that turns to ice pellets before reaching the ground. Sleet also causes moisture on roads to freeze and become slippery.
- **Wind-chill:** A measure of how cold people feel due to the combined effect of wind and cold temperatures; the Wind-chill Index is based on the rate of heat loss from exposed skin. Both cold temperatures and wind remove heat from the body; as the wind speed increases during cold conditions, a body loses heat quickly. Eventually, the internal body temperature also falls and hypothermia can develop. Animals also feel the effects of wind-chill; but inanimate objects, such as vehicles and buildings, do not. They will only cool to the actual air temperature, although much faster during windy conditions.

### References:

- CDC– Center for Disease Control and Prevention  
⇒ <http://www.cdc.gov/>
- Red Cross  
⇒ <http://www.redcross.org/>
- National Weather Service  
⇒ <http://www.nws.noaa.gov/om/winter/ww.shtml>
- TDCJ-AD10.64



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Paul Morales  
Director, Administrative Review and Risk Management Division

Carol Monroe  
Deputy Director, Administrative Review and Risk Management

Thomas Warren  
Manager II  
Risk Management

The Training Circular, a publication of the Texas Department of Criminal Justice Risk Management Department, is published monthly in an effort to promote and enhance risk management awareness on issues relating to TDCJ employees. Design and layout of the Training Circular is performed by Thomas Warren, Risk Management. Comments, suggestions and safety related items are welcome. Send suggestions to:

Thomas Warren  
Risk Management Department  
1060 Hwy 190 East  
Huntsville Texas 77340  
Or,  
[thomas.warren@tdcj.texas.gov](mailto:thomas.warren@tdcj.texas.gov)

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