

Safety Circular

Winter Weather Awareness

One thing to remember about Texas, is that if you do not like the weather, just wait a minute and it will change. Even though temperatures are still some of the hottest of the year, during September it can be expected that cold fronts will begin to move across the state. Addressed here are some concerns about cold weather exposures.

Hypothermia and frostbite are two serious consequences of working outdoors in the winter months. TDCJ has a lot of positions that require employees and offenders to be outdoors, regardless of the temperature or any other weather conditions. We cannot stop winter, therefore we need to protect ourselves from the cold by being familiar and prepared. Each year Administrative Directive AD-10.64 (Temperature Extremes in the TDCJ Workplace) and cold weather training is provided to unit staff and offenders by Health Services, with the assistance of Risk Management. Unit wardens use the wind-chill index located in AD-10.64, local weather/news stations, or the instruments located on the unit to determine the safety of cold weather working conditions.

Hypothermia

Hypothermia occurs when body heat is lost faster than it can be replaced, and the normal body temperature (98.6°F) drops to less than 95°F. Hypothermia is most common in very cold temperatures, but it can occur even in cool temperatures (above 40°F), if a person becomes chilled from rain, sweat, or submersion in cold water. With the onset of this condition, blood vessels in the skin tighten in an attempt to conserve vital internal body heat, affecting the hands and feet first.

Symptoms:

Hypothermia Category 1

Injured individuals are conscious, but cold, with a rectal temperature above 90°F. These individuals should be handled carefully, insulated from further heat loss, and transported to the medical department for additional care.

- Loss of body heat
- Shivering
- Lack of interest or concern
- Speech difficulty
- Forgetfulness
- Mild unsteadiness in balance or walking
- Loss of manual dexterity
- Lips turn blue

Hypothermia Category 2

Injured individuals are unconscious and with a rectal temperature of 90°F. These individuals should be handled carefully, insulated from further heat loss, and transported to the medical department for additional care.

- Shivering stops
- Exhaustion
- Drowsiness
- Confusion
- Sudden collapse
- Slow pulse or breathing
- Pupils dilated
- May lead to category three if not treated

Hypothermia (continued)

Hypothermia Category 3

Injured individuals are comatose with no palpable pulse and no visible respiration. Although these individuals appear to be deceased, there may be a slight chance of recovery if the rectal temperature is 60.8°F or higher. If indicated, medical staff shall proceed with life-saving measures.

If medical staff is unavailable, correctional staff shall follow the procedures outlined in section V.A of AD-10.64 and contact emergency medical services.

- Individual is comatose
- No palpable pulse
- No visible respiration
- Confusion

Taking Action:

- Seek medical assistance as soon as possible.
- Move the person to a warm, dry area.
- Remove wet clothes and replace with dry clothes and cover the body (including the head and neck) with layers of blankets or with a vapor barrier (e.g. tarp, garbage bag). Do not cover the face.
- Give warm sweetened drinks, if conscious (no alcohol), to help increase the body temperature. Never try to give a drink to an unconscious person.
- Monitor breathing.
- If the heart has stopped, then judge the possibility of administering CPR.
- Get medical attention ASAP.

Frostbite

Frostbite is an injury to the body that is caused by freezing of the skin and underlying tissues. The lower the temperature, the more quickly frostbite will occur. Frostbite typically affects the extremities, particularly the feet and hands. Amputation may be required in severe cases.

Symptoms:

- Reddened skin develops gray/white patches.
- Numbness in the affected part.
- Feels firm or hard.
- Blisters may occur in the affected part, in severe cases.

Taking Action:

- Follow the recommended treatment for hypothermia.
- Do not rub the affected area to warm it because this action can cause more damage.
- Do not apply snow/water.
- Do not break blisters.
- Loosely cover and protect the area from contact.
- Do not try to rewarm the frostbitten area before getting medical help; for example, do not place in warm water. If a frostbitten area is rewarmed and gets frozen again, more tissue damage will occur. It is safer for the frostbitten area to be rewarmed by medical professionals.

Be Aware

Winter Weather Advisories are issued when snow, ice, sleet, or a combination of these wintry elements are expected. The conditions should not be hazardous enough to meet warning criteria. 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.

Staff and Offender Care

Portable Space Heaters

Staff and offenders who work outside and will be exposed to cold weather conditions for extended periods should take extra precaution. Areas such as agriculture and outside industrial areas should dress with the necessary clothing to help prevent cold weather exposure. Here are the types of clothing that may be appropriate:

- Thermal underwear
- Insulated jackets
- Cotton/leather gloves
- Insulated hoods
- Heavy work shoes
- Heavy socks

Care should be taken to prevent perspiration, which could soak clothes and compromise the clothing's insulation.

Remember, layers of clothing should be removed or added according to the temperature and physical activity.

Colder temperatures often prompt the use of portable space heaters. The National Fire Protection Association (NFPA) 101 Life Safety Code prohibits the use of portable space heaters in correctional/detention occupancies. Other administrative areas should exercise caution when using space heaters.

Purchase space heaters that have been safety tested and UL approved. Make sure the unit is equipped with an emergency tip-over shut-off feature and heating element guards. If the heater trips the breaker you must disconnect immediately. There should be a 36" radius of clearance while the heater is in use. Read and follow all of the manufacturer's instructions for operation and care.

Check to make sure that the heater is clean and in good condition, and have all issues professionally repaired. Never leave a heater on while unattended.

Safety Circular TDCJ Risk Management Department

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The Safety 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. Comments, suggestions and safety related items are welcome.

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References: ♦ tdcj.texas.gov ♦ osha.gov ♦ nfpa.org ♦