



TDCJ Risk Management's Training Circular



Risk Management Issues

September 2018

Cold Weather

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.



Cold Illness and Hypothermia 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), 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 (see page 4), local weather/news stations, or the instruments located on the unit to determine the safety of cold weather working conditions.

Hypothermia

Hypothermia is a condition occurring when the body loses heat faster than it can produce heat. 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:

- If the body continues to lose heat, involuntary shivers begin. This reaction is the way the body produces more heat and is usually the first real warning sign of hypothermia.
- Further heat loss produces speech difficulty, forgetfulness, loss of manual dexterity, collapse, and possibly death.

Treatment and Prevention of Hypothermia and Cold Illness:

- Move person into a warm environment, if possible.
- Remove wet clothing.
- Insulate the person by adding clothing or blankets.
- If frostbite exists, gently heat affected area with warm water or towels, a heating pad, or hot water bottles.
- If conscious, encourage consumption of warm sweetened liquids.
- Monitor breathing.
- If heart has stopped, then judge the possibility of administering CPR.
- Get medical attention ASAP.

Hypothermia Category 1

- 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

- Shivering Stops
- Exhaustion
- Drowsiness
- Confusion
- Sudden collapse
- Slow pulse and breathing
- Pupils dilated
- Cardiac arrest
- May lead to category three if not treated.



Hypothermia Category 3

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

High Risk for Cold Illness

- Newly assigned to job
- Elderly
- Exposed to below freezing temperatures for long period of time without adequate clothing/blankets
- Wet when exposed to cold weather

Prevention of Cold Illness

- Dress appropriately when working in extreme cold conditions
- Drink warm, sweet fluids
- Move extremities often to keep enhanced blood circulation

Be Aware

• **Freezing Rain Advisory**

Issued when freezing rain or freezing drizzle is forecast but a significant accumulation is not expected. However, even small amounts of freezing rain or freezing drizzle may cause significant travel problems.

• **Wind Chill Advisory**

The National Weather Service issues this product when the wind chill could be life threatening if action is not taken. The criteria for this warning varies from state to state.

• **Winter Weather Advisory**

This product is issued by the National Weather Service when a low pressure system produces a combination of winter weather (snow, freezing rain, sleet, etc.) that present a hazard, but does not meet warning criteria.

Determining Extreme Cold Conditions for Staff and Offenders

- Unit Wardens as well as all other TDCJ staff shall use the Wind Chill Index, the local news and weather media, and weather conditions recorded by instruments located on the units in determining the safety of cold weather working conditions.

Types of appropriate clothing:

- Thermal underwear
- Insulated jackets
- Cotton gloves
- Insulated hoods
- Leather gloves
- Work shoes
- Socks

- Appropriate clothing shall be issued even when the Wind Chill Index indicates little danger of exposure injury.
- If guidance is needed, medical staff shall be consulted to assist in determining appropriate clothing and footwear needed to prevent cold injury.
- Care shall be taken to prevent perspiration, which could soak clothing and thus compromise the insulating value of the clothing.
- Layers of clothing shall be removed or added according to the temperature and level of physical activity.

Portable Space Heaters

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.

If approved, administrative areas should exercise caution when using space heaters.

- Purchase only 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.
- There MUST be a radial clearance of three feet of any combustible material. This would include a desk and clothing, so they cannot be placed underneath a desk to keep the feet warm.
- If at any time a breaker trips due to the use of the heater, the heater SHALL be removed immediately and not used on that circuit any longer. Re-setting the breaker and continuing to use the heater on that circuit could result in a short or fire.
- Read and follow all of the manufacturer's instructions for operation and care.
- Check to make sure the heater is clean and in good condition, and have all problems professionally repaired.
- Never use extension cords or multiple plugs with a space heater, and make sure the unit is not plugged into the same circuit as other electric appliances.

Do not overload circuits



**References:**

- AD-10.64-Temperature Extremes in the TDCJ Workplace
 - ⇒ <http://www.tdcj.texas.gov/>
 - OSHA
 - ⇒ <https://www.osha.gov/>
 - National Weather Service
 - ⇒ <https://www.weather.gov>
 - NOAA
 - ⇒ www.noaa.gov
 - *FN-1181 (Rev. 11/15)*
 - *NFPA 101 Life Safety Code*
 - ⇒ <http://www.nfpa.org>

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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 preformed by Cliff Prestwood, Risk Management. Comments, suggestions and safety related items are welcome. Send suggestions to:

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WIND CHILL INDEX

Wind Speed in MPH	ACTUAL THERMOMETER READING (°F)									
	50	40	30	20	10	0	-10	-20	-30	-40
	EQUIVALENT TEMPERATURE (°F)									
CALM	50	40	30	20	10	0	-10	-20	-30	-40
5	48	37	27	16	6	-5	-15	-26	-36	-47
10	40	28	16	4	-9	-21	-33	-46	-58	-70
15	36	22	9	-5	-18	-36	-45	-58	-72	-85
20	32	18	4	-10	-25	-39	-53	-67	-82	-96
25	30	16	0	-15	-29	-44	-59	-74	-88	-104
30	28	13	-2	-18	-33	-48	-63	-79	-94	-109
35	27	11	-4	-20	-35	-49	-67	-82	-98	-113
40	26	10	-6	-21	-37	-53	-69	-85	-100	-116
Over 40 MPH (little added effect)	CAT 1 (for properly clothed person)				CAT 2 (Danger from freezing or exposed flesh)				CAT 3	

Category 1 (Little Danger): Risk of possible hypothermia with prolonged exposure, absent mitigating measures. Staff and offenders are encouraged to wear appropriate clothing, adding or removing layers according to the temperature and level of physical activity. The warden shall make appropriate determinations based on the Wind Chill Index, the local news and weather media, and weather conditions recorded by instruments located at the unit regarding the safety of working conditions during such temperatures.

Category 2 (Increasing Danger): Increasing risk of hypothermia and possible death from freezing or exposed flesh, absent mitigating measures. Staff and offenders are encouraged to wear appropriate clothing. Outside work and recreation shall be restricted.

Category 3 (Great Danger): High risk of hypothermia and possible death from freezing or exposed flesh, absent mitigating measures. Staff and offenders are encouraged to wear appropriate clothing. Outside work and recreation shall be restricted.

