TDCJ Risk Management's

Training Circular

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RAIN, RAIN, WHERE'S THE RAIN?

One thing about Texas summers is that it get hot, hot, hot! Dry weather and Texas heat is the talk of the town as we approach the summer months. You may have noticed the effects of dry weather in your own neighborhood. Dry, sandy, cracked dirt, wilting gardens, browning grass, and evaporating ponds are just a few signs that shows the lack of rain this season.

Even though it is hot and dry, we still have to continue with our daily responsibilities and activities in the heat. However, we need to be aware of heat related warnings and weather as well as take precautions to prevent heat related illnesses.

BURN BANS

One thing that is common about spring and summer is the want to burn wood debris piles. Many people spend weekends cleaning their yards and removing the sticks that have fallen over the winter. Many people pile these sticks to burn. But, before you go lighting up that burn pile or setting that summer evening bonfire, make sure to check your county extension office to see if you are under a burn ban.

Burn bans are created by your local county judge or county commissioners court. Several variable contribute to the establishment of a burn ban. The Keetch-Bryam Drought Index is one tool that can be utilized in determining if a burn ban is needed. The index looks at the area's daily water balance based on precipitation and soil moisture content. This index ranges from 0 (no drought) to 800 (extreme drought). Most counties will start to consider burn bans when the index is between 600 and 700.

FIRE WEATHER WATCH

Conditions are favorable for red flag conditions in and close to the watch area in the next 24 to 96 hours.

RED FLAG WARNING

Weather and fuel conditions will meet red flag event criteria within the next 12 to 24 hours or less. A Red Flag event occurs when the following conditions are met simultaneously for any 3 hour period or more:

* Minimum relative humidity of 15% or less
* 20 foot winds of 20 mph or higher and/or gust to 35 mph or more.
* NFDRS adjective fire danger rating of "High" or higher.

NATIONAL FIRE DANGER RATING SYSTEM (NFDRS)

This is a indicator changes daily. It is a daily tool that can be utilized to assist in deciding fire-related business. The rating system consists of five levels: low, moderate, high, very high, and extreme.

* **Low (Green)**

Fire do not readily ignite and spread slowly by either creeping or smoldering.

* **Moderate (Blue)**
Fires can start but the probably is low. In these conditions, the fires will burn briskly and quickly on windy days in grasslands, but will burn slow to moderately fast in areas of high timber. The average fire intensity is moderate. Most fires will not become serious and will be easily controlled.

* **High (Yellow)**
Fires start easily from most causes. Fires spread rapidly with high intensity likely on slopes or areas with small fuel. Campfires and unattended brush fires can escape easily. Fires can become serious and difficult to control if not attacked at a small stage.

* **Very High (Orange)**
Fires start easily and immediately after ignition. The fire will spread rapidly and quickly intensify to a high intensity. Fire whirlwinds can be likely when heavier fuels are burned.

* **Extreme (Red)**
Fires start quickly, burn furiously, and with extreme intensity. Development of small fires into a high intensity fire will be quicker than in the very high rating. The ability to directly attack and extinguish the fire is dangerous and often impossible. Fires that develop a headway are unmanageable while extreme conditions last.

IF YOU SEE A WILDFIRE, CALL 9-1-1!! DON'T ASSUME THAT THE FIRE IS ALREADY REPORTED!!

How do I Prepare for a Wildfire?

When a wildfire is approaching your home, FEMA suggests the following to help prepare:

* Evacuate. Evacuate all people and pets that are not essential to preparing your home. Elderly and people with physical limitations should be evacuated immediately.

* Wear Protective Clothing.
* Remove Combustibles. Clear items from around the house, such as wood piles, lawn furniture, tarps and grills.
* Close/ Protect Openings. Clothes attics, basements, windows, doors, pet doors, etc. Remove flammable drapes and curtains. Close all shutters, blinds, or heavy non-combustible window coverings to reduce radiant heat.
* Close Inside Doors/ Open Dampers. Close all inside doors to prevent draft. Open the damper on your fireplace, but close the fireplace screen.
* Shut Off Gas. Shut off any natural gas, propane, or fuel oil supply source.

* Water. Connect your garden hose and fill any pools, tubs, hot tubs, garbage cans, or large containers.
* Pumps. If you have gas-powered pumps for water, make sure they are fueled and ready.
* Ladder. Place a ladder against the house in clear view.
* Car. Back your car into the driveway and roll up the windows.
* Garage Doors. Disconnect any automatic garage door opener so that the garage can be opened manually if the power goes out. Close all garage doors.
* Valuables. Place any important papers, mementos, medicines, etc. inside the car for a quick departure. Any pets still with you should also be ready to go at a moment's notice.

When you leave your home?

* Turn on an outside light and leave a light on in every room to make your house more visible in heavy smoke.
* Don't Lock Up. Leave doors and windows closed, but unlocked. Firefighters may need to gain quick access in order to fight fires. Don't worry, the entire area will be isolated and patrolled by sheriffs or police.

What about the HEAT!
Now that we understand how to protect ourselves during times of extreme drought and fire, what do we do about the heat?

The Agency has Administrative Directive AD-10.64 that addresses the temperature extremes in the workplace. The Agency takes measures to protect staff and offenders within the agency from heat related illnesses. This directive contains information on the preventive measures to take as well as a Heat and Humidity

Matrix chart. The TDCJ Department of Preventive Medicine in conjunction with UTMB will conduct employee/offender annual heat awareness training.

As summer months approach, the occurrence of heat related illnesses rise. ***Recognition and prompt treatment of these symptoms are imperative.*** Victims of prolonged or high heat can develop heat cramps or heat exhaustion. If heating continues, the condition can progress to a heat stroke and death.

Would you know the symptoms?

Heat Cramps-are the most benign heat syndrome. They develop usually following strenuous exercise in muscles that have been subjected to extensive work. The pain is brief, intermittent and crampy but may be excruciating.

Treatment-consists of rest in a cool environment and replacement of fluids.

Heat Exhaustion-is the most common heat syndrome. The warning signs of heat exhaustion can be mild or severe, but all important danger signals. Symptoms include weakness, anxiety, fatigue, thirst, dizziness, headache, paleness, muscle cramps, nausea or vomiting and faintness. The onset is usually sudden and duration of brief collapse.

Treatment-consists of moving the patient to a cool area and having them lie down and elevate the feet. Spontaneous recovery then usually starts taking place. If the patient is fully alert encourage small sips of water.

Heat Stroke-is a true medical emergency. Heat exhaustion can progress to a heat stroke. A sudden change in the level of consciousness in a setting of heat exposure suggests the possibility of a heat stroke. Heat strokes occur when the body's cooling system fails. The skin is hot and dry, pulse rate, respirations are rapid and weak. Coma, paralysis and death can follow if emergency treatment is not immediately given.

Treatment-once a heat stroke is suspected rapid, aggressive therapy aimed at lowering the body temperature should be initiated immediately by whatever means available. In field, remove the patient from the external sources of heat, remove clothing, and promote evaporative cooling by applying cool or iced water to the entire skin by surface sponging or splashing, accompanied by fanning either by hand or mechanical means. This should be continued throughout transportation to an emergency room receiving facility as well. Always transfer heat stroke victims to a medical facility.

Do you know how to avoid a heat illness during excessive heat?

As record-breaking high temperatures are here to stay for a few months throughout Texas, the Texas Department of Health (TDH) has issued a list of precautions people can take to reduce the risk of heat exhaustion and heat stroke. All Texans are urged to follow these precautions.

* Drink two to five times more water and non-sugar, non-alcoholic beverages to replace fluids lost in perspiration.
* Wear loose-fitting, light-weight, light-colored clothing and wide brimmed hats while in the sun.
* Use sunscreen with an SPF-15 or more.

* Take frequent breaks limiting physical activity.
* Rest in a cool place
* Stay in an air conditioned area if possible. If no air conditioning is available, fans are helpful.

* Use the buddy system between co-workers in high heat jobs.
* Older people should have a friend or relative check on them or call twice a day.
* When planning activities choose cooler hours to be outdoors.
* Before prolonged work or exercise outdoors, listen to weather forecasts and give special attention to Advisories

Heat Advisory

The national weather service issues alerts for excessive heat on a county-by-county basis. The alerts are broadcast on NOAA Weather radio and on local radio and television stations. The parameters of an excessive heat watch, warning, and advisory vary by location.

* **Excessive Heat Watch–** means conditions are favorable for an event to meet or exceed local excessive heat warning criteria in the next 12 to 48 hours.
* **Excessive Heat Warning-** means that heat values are forecast to meet or exceed locally defined warning criteria for at least two days.
* **Excessive Heat Advisory-** means hazardous heat conditions have begun or will begin within 36 hours and, if caution is not exercised, they could become life threatening

Your Pet

Animals are also susceptible to heat stroke, or hyperthermia, which is considered an emergency as it is with people. Signs in animals include excessive panting, increased body temperature, heart rate, or respiratory rate, unusual salivation, collapse, stupor, seizures, or coma, redder than normal gums.

Make sure your pet has shade or shelter and plenty of fresh water. Try to limit long walks or extensive exercise.

Final Reminder

Heat related illnesses can strike anyone in any occupation. The occupations from which heat related injuries are reported to Risk Management range from field security staff working outdoors in the sun to administrative staff working indoors at a cubicle. So, remember, drink plenty of liquids to keep your body hydrated and ***stay cool!***

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Director, Administrative Review and Risk Management
Jackie Edwards

Program Administrator
Risk Management
Elizabeth Boerlin

Audit & Inspection Manager
Risk Management
Jerry Bailey

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

Elizabeth Boerlin
Risk Management Department
1060 hwy 190 east
Huntsville, Texas 77340
or
elizabeth.boerlin@tdcj.state.tx.us