



TEXAS EMERGENCY MANAGEMENT ONLINE

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The Texas Division of Emergency Management is accepting article submissions for The Texas Emergency Management Online (TEMO) newsletter. If you have an idea for a topic or would like to submit an article, contact [Mike Jones](#) at 512-424-7050.

MESSAGE FROM THE CHIEF – Dec 2015

This year Yogi Berra died. Although he was a Hall of Fame New York Yankee legend, most people nowadays probably remember him more for his quirky sayings rather than for his baseball legacy. Looking back over the past year, two of Berra's best and most famous adages come to mind.

It's déjà vu all over again

After suffering for years under devastating drought, vast areas of Texas were inundated with historic levels of flash flooding this past May and June, leaving a broad path of destruction from the Panhandle to the Gulf Coast. When the last of the flood waters receded, 113 counties had been included in the state and federal disaster declarations. For a short time, the entire state of Texas was actually considered drought free. But it didn't last long.

After Memorial Day weekend, dryness and drought set in again and lingered through the entire summer months for many areas. The dryness created perfect conditions for wildfires, including a 4,500 acre fire that broke out in Bastrop County. Like many around the



A chinook helicopter drops water on the Hidden Pines fire in Bastrop County.



Onion Creek near Driftwood, Texas in Hays County.

state, folks there were still rebuilding from the unprecedented 2011 wildfire season.

How do you end a flash drought? How about a weekend of record rainfall and flash floods in areas still reeling from the Memorial Day flood event. In

Bastrop County, evacuees from the Hidden Pines wildfire returned to assess fire damage only to begin bracing for possible flooding.

It ain't over till it's over

Texas is a great place to live, but living here does come with some risk. As long as people have been writing about Texas, they've been writing about hurricanes, tornadoes, drought, floods and more. That's unlikely to change. As Texans, we can never afford to be unprepared or complacent. Whether its drought or wildfire, ice and snow or severe weather and flooding, we must remain ready and vigilant.

During this holiday season, please keep the families and friends of those who have been affected by disasters in your thoughts and prayers. Remember that severe weather can happen anywhere in this state—even recurrently—and no one is immune to the devastation that natural or man-made disasters can bring. Take the time now to make your safety plan, stock your emergency kits, and talk to your family about what to do during an emergency.

Finally, Texas has not had a fatality-free day on Texas roads since November 7, 2000. Since that day, more than 51,800 people have been killed, and alcohol and distracted driving continue to be significant causes of highway deaths. Starting today: Buckle up. Slow down. Pay attention. Never drink and drive.

[#EndTheStreakTX](#)

Cold and Wet Texas Winter

El Niño Is Here!

El Niño is here to stay for the winter of 2015-2016. The NOAA Climate Prediction Center gives a 95% chance that El Niño will last through the winter, before gradually weakening through the spring and summer of 2016. El Niño has been addressed several times within Texas Emergency Management Online, including the [basics](#) of what it is, and what it meant for last winter and the hurricane season. Check out those past posts for more of a general overview. One thing that briefly should be mentioned is the strength of this El Niño. While it has been reported as a "Godzilla" El Niño, as of the update in early October the 2015 El Niño ranked among the strongest on record, going back to 1950. This year's El Niño is the second or third strongest depending on comparisons to sea surface temperature or the atmospheric response. For more about the strength of this year's El Niño, read this [post](#) from the El Niño Southern Oscillation Blog.

What That Means For Winter

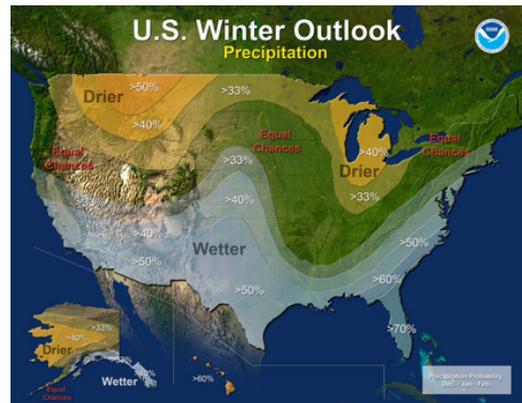


To sum up what a strong El Niño means for Texas requires two words: cooler and wetter. The outlook for the meteorological winter (December through February) shows all of Texas with a greater chance of both cooler and wetter weather than normal. The maps show much of the state will have a greater than 40 percent chance of being cooler than normal along with a greater than 50 percent chance of being wetter than normal. One big outcome of this is reflected in the Climate Prediction Center's [Drought Tendency Outlook](#). Their outlook, which is a prediction from October through January, shows drought conditions improving and/or ending across

the Lone Star State.

The Wet Year and Fall So Far

Despite the dry months at the end of the summer, it has been a wet fall across much of the state of Texas, especially the month of October. This is in addition to the wet and stormy May over much of Texas. Below are some rainfall totals for the year compared to normal, along with October rainfall totals compared to the normal for October.



Location	2015 Rainfall Total*	Normal Annual Rainfall	Oct. 2015 Rainfall	Normal Oct. Rainfall
Austin Mabry	53.90 in.	30.13 in.	11.85 in.	3.88 in.
San Antonio	40.26 in.	20.05 in.	7.78 in.	4.11 in.
Dallas	49.25 in.	31.97 in.	9.82 in.	4.22 in.
Houston	61.62 in.	43.20 in.	13.05 in.	5.70 in.
Brownsville	44.91 in.	25.23 in.	13.68 in.	3.74 in.
Corpus Christi	43.32 in.	28.80 in.	3.24 in.	3.64 in.
El Paso	10.72 in.	8.61 in.	3.24 in.	0.61 in.
Amarillo	32.42 in.	19.22 in.	3.48 in.	1.66 in.
Midland	19.78 in.	13.57 in.	4.00 in.	1.73 in.

*2015 Rainfall Total is through November 10, 2015.

For more information on the winter outlook, check out this video from the Climate Prediction Center: <https://www.youtube.com/watch?v=9yZiYtoezlY> or the El Niño Southern Oscillation Blog: <https://www.climate.gov/news-features/blogs/enso/what-expect-winter-noaa%E2%80%99s-outlook-reveals-what-conditions-are-favored>.

Texas Department of Transportation and Winter Weather Preparedness



Folks in Minnesota may chuckle a bit when we here in Texas start talking about winter preparedness. Funny pictures of Texans trying to drive around in a bit of snow circulate across social media pages and the Internet. However, winter in Texas can be significant, costly and dangerous from time to time. In fact, the last two winters for North Texas and as far south as the Rio Grande Valley have proven to be a lot to deal with.

About this time every year, the Texas Department of Transportation (TxDOT) begins its preparedness routine for the winter months in Texas. Keeping 193,925 lane miles and 79,791 center lane miles of roadway clear and safe can be a daunting task.

Some of the first planning activities to occur are meetings with many of our surrounding states. Changes to state laws and department policies that pertain to travel in each state are some of the main topics. For example, plans are made to determine the best methods and timing to broadcast warnings and alerts on other states' dynamic message boards. To the west, meetings are held with New Mexico and Arizona concerning the Interstate 10 corridor. A focus of concern for west Texas is the limited number lodging choices available along I-10 in these parts of New Mexico and Texas. If there are highway closures due to ice and snow, people traveling to Texas from California or Arizona would need to know this and make arrangements before they go to New Mexico or into the West Texas desert.

Other meetings with our surrounding states focus on concerns of the I-40 corridor and travel issues into and out of the Texas Panhandle from the east, west and north. Meeting with northern states include issues about the I-35 corridor and with eastern states about the I-30 corridor, which includes the I-20 corridor.

Internal meetings for TxDOT planners are held to discuss winter weather preparedness. Current weather plans are reviewed as well as equipment and staffing needs and issues.



Crews across the state inspect equipment to make sure it is ready to be deployed in the event of severe winter weather. Snow plows are inspected and maintenance is performed on the vehicles, blades and spreaders. Also, salt piles are inventoried no later than October. TxDOT stations keep enough salt on hand to be able to treat area roadways for 24 hours a day over a four-day period. If the winter conditions last longer than that, which is rare, TxDOT keeps strategic salt piles in unaffected areas ready to be brought in if necessary.

Other preparatory activities include personnel training. Newly-hired staff, as well as staff who live in other regions of the state, attend snow plow simulator training. If there is a need, able staff from unaffected areas of the state can be brought in to help clear roads. To TxDOT, winter storm planning is similar to hurricane planning in regards to how staff and equipment are staged for deployment.

The last two winters in Texas presented some unexpected consequences to deal with, one of which was the massive amount of cobblestone ice in the Dallas/Fort Worth area. This wasn't predicted and TxDOT didn't have the equipment to deal with it on such a scale, so four-wheel drive motor graders from Texas A&M Forest Service, normally used when creating fire breaks, were brought in to help clear it out. TxDOT typically keeps only two-wheel drive motor graders on hand.

One of the new procedures adopted by TxDOT is using liquid brine before winter ice or snow begins to fall. The brine helps prevent ice and snow from sticking to the road surface. Most TxDOT district stations now have their own brine making machines, which is much more economical than purchasing brine from outside vendors. The Childress and Amarillo areas typically get the highest and most numerous snow amounts. So the brine operation pilot programs were first employed there. The results were outstanding.



“Highways Close Themselves”

When it comes to severe winter weather, TxDOT does not encourage closing highways. According to Gilbert Jordan, emergency management coordinator with TxDOT, “highways close themselves,” when the road becomes impassible. TxDOT only closes roads as a last resort, such as when there is a lack of medical support in the area because of mobility issues. If the need arises to close any roads for other reasons, TxDOT coordinates with the Texas Department of Public Safety to determine what needs to take place.



However, TxDOT districts are able to practice their own planning when it comes to closing roads. In the Pharr area, for example, if there are issues with ice and snow on the roads, they may decide to close the highways. People in the area are used to it, and the ice there tends to melt pretty quickly, usually as soon as the sun begins to shine.

In Texas, winter weather may not always be a top concern for us, however, even short winter storm can create havoc on our roads for millions of people. You can keep current on area road conditions any time at DriveTexas.org. If winter weather or other hazardous conditions are imminent, use [TxDOT Twitter feeds](#) to keep apprised of road conditions in your area.

The Texas Division of Emergency Management along with TxDOT recommends preparing and maintaining an [emergency supply kit](#) in your vehicles, especially when it comes to potentially dangerous winter weather. Keeping a portable emergency supply kit will assist in a speedy evacuation, ensuring you have everything you need until you are able to return home.

The Silent Killer: Carbon Monoxide Poisonings



Carbon monoxide (CO) is a colorless, odorless, poisonous gas that causes vague flu-like symptoms that are often misinterpreted after an exposure. Initial symptoms of carbon monoxide poisoning, such as headaches, nausea and fatigue, are often mistaken for the flu, because the deadly gas was undetected in a home. Carbon monoxide poisoning is caused by inhaling combustion fumes, and, when too much carbon monoxide is in the air you're breathing, your body replaces the oxygen in your red blood cells with carbon monoxide. This prevents oxygen from reaching your tissues and organs.

Carbon monoxide poisoning can be especially dangerous for people who are sleeping or intoxicated. People may have irreversible brain damage or even die before anyone realizes there's a problem. According to the Centers for Disease Control and Prevention (CDC), carbon monoxide causes thousands of deaths each year in the United States and is the leading cause of accidental poisoning deaths in America. Patients who survive the initial poisoning still face the prospect of delayed neurologic dysfunction, which occurs in 14 to 40 percent of serious cases.

Common symptoms of carbon monoxide poisoning:

- Dull headache
- Weakness
- Dizziness
- Nausea or vomiting
- Shortness of breath
- Fast heart rate
- Chest pain
- Blurred vision
- Confusion and drowsiness.
- Seizures.
- Loss of consciousness

Common risk factors associated with carbon monoxide poisoning:

- Children: Young children take breaths more frequently than adults do, which may make them more susceptible to carbon monoxide poisoning.
- Older adults: Older people who experience carbon monoxide poisoning may be more likely to develop brain damage.
- Depending on the degree and length of exposure, carbon monoxide poisoning can cause:
 - Permanent brain damage
 - Damage to your heart, possibly leading to life-threatening cardiac complications
 - Death

Common causes of carbon monoxide poisoning:

Carbon monoxide can come from any source that burns fuel. Common sources are cars, fireplaces, powerboats, wood stoves, kerosene space heaters, charcoal grills and gas appliances, such as water heaters, ovens and dryers. Usually these cause no problems, but trouble comes when:

- Cars, trucks or other engines are left running in enclosed spaces, such as garages. Carbon monoxide can build up in a garage and leak back into the house. Even sitting in an idling car in an open garage or swimming behind an idling boat can be dangerous.
- Fuel-burning appliances are not installed or used properly. Dangerous levels of carbon monoxide can build up inside houses and other buildings.

- Fuel-burning heating systems and appliances are used during cold weather, when doors and windows are closed. Chimneys in older buildings become blocked and release fumes into the homes or offices. Newer houses that are well insulated and tightly sealed can trap carbon monoxide inside. If you have a leak in the ventilation system, carbon monoxide can spread through your home and lead to the exposure.

Simple precautions can help prevent carbon monoxide poisoning

Install carbon monoxide detectors. Put one in the hallway near each sleeping area in your house. Check the batteries every time you check your smoke detector batteries at least twice a year. If the alarm sounds, leave the house and call 911 or the fire department. Carbon monoxide detectors are also available for motor homes and boats. Understand that carbon monoxide detectors are a backup safety measure. They do not replace the need to check appliances regularly and use them safely.



Open the garage door before starting your car. Never leave your car running in your garage. Be particularly cautious if you have an attached garage. Leaving your car running in a space attached to the rest of your house is never safe, even with the garage door open.

Use gas appliances as recommended. Never use a gas stove or oven to heat your home.



Use portable gas camp stoves outdoors only. Use fuel-burning space heaters only when someone is awake to monitor them and doors or windows are open to provide fresh air. Don't run a generator in an enclosed space, such as the basement or garage.

Keep your fuel-burning appliances and engines properly vented.

These include:

- Space heaters
- Furnaces
- Charcoal grills
- Cooking ranges
- Water heaters
- Fireplaces
- Portable generators
- Wood-burning stoves
- Car and truck engines

If you have a fireplace, keep it in good repair. Clean your fireplace chimney and flue every year. Keep vents and chimneys unblocked during remodeling. Check that they aren't covered by tarps or debris.

Do repairs before returning to the site of an incident. If carbon monoxide poisoning has occurred in your home, it's critical to locate and repair the source of the carbon monoxide before you stay there again. Your local fire department or utility company may be able to help. Ask your utility company about yearly checkups for all gas appliances, including your furnace.

If you suspect an environment to have high levels of carbon monoxide or have symptoms that you think could be caused by carbon monoxide poisoning, leave the area immediately, call 911 and let the fire department assess and manage the cause and ventilation of carbon monoxide gases. If you have symptoms call 911 or go to the emergency room.

[Centers for Disease Control and Prevention](#)
[Texas Department of State Health Services](#)
[United States Coast Guard](#)

December 2015 News Briefs

Save the Date:

[2016 Texas Emergency Management Conference!](#)

Tuesday, April 5 – Friday, April 8, 2016

Henry B. Gonzalez Convention Center, San Antonio, Texas

Registration opens Monday, April 4, 2016

**New family track workshops are coming!

Save the Date:

[Ninth Annual EMAT Leadership Symposium](#)

Sunday, February 7 – Wednesday, February 10, 2016

Embassy Suites Hotel and Conference Center, San Marcos, Texas

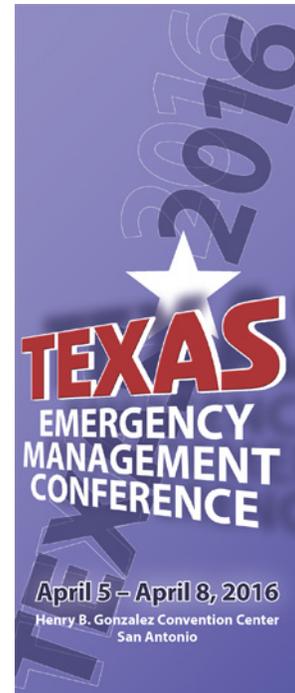
Save the Date:

[TEEX Leadership Development Symposium](#)

San Marcos, Texas | January 11-13, 2016

Mark your calendars for the 2016 Leadership Development Symposium January 11-13 in San Marcos, Texas. A dynamic line up of speakers is set for the three-day event, now in its eighth year. Attendees have the opportunity to grow their leadership skills, network with colleagues, reacquaint with old friends and make new ones. Don't miss out on this year's event as we focus on the message of Seizing Today-Forging Tomorrow!

- \$150 for Out-of-State Attendees
- No Admission fee for Texas emergency response personnel



Winter Travel

As the possibility of winter weather makes driving conditions unpredictable and dangerous, the Texas Department of Transportation reminds drivers to stay off the roads as much as possible and use extreme caution when travel is necessary.

If you must drive, please keep in mind that sleet or freezing rain can make driving and walking extremely hazardous. Roadway conditions motorists could encounter during adverse winter weather include:

- Loss of pavement friction due to wet, snow-covered or icy conditions
- Restricted visibility due to fog, falling rain or vehicle spray
- Lane obstruction due to standing water or plowed or blowing snow
- Infrastructure damage (such as a washed-out road)

Winter Driving Safety Tips

- Reduce speed. Speed limits are based on normal road and weather conditions, not winter road conditions
- Maintain at least three times the normal following distance on snow or ice



- Watch carefully for snow removal equipment and stay at least 200 feet back if you are behind a snow plow
- Use extra caution on bridges, ramps, overpasses and shaded areas as they tend to freeze first
- If you start to slide, ease off the gas pedal or brakes. Steer into the direction of the skid until you feel you have regained traction then straighten your vehicle

For additional road safety preparedness information and tips, download the [TxDOT Safety Guide for Winter Travel](#).

Highway Road Conditions Hotline

Call (800) 452-9292 for current information. For non-emergency roadside assistance, motorists can call the Texas Department of Public Safety at (800) 525-5555.

Social Media

Follow the [TxDOT Twitter feeds](#) or [TxDOT's Facebook page](#) for more road information.

For more information, contact TxDOT Media Relations at MediaRelations@txdot.gov or (512) 463-8700.

Flu Near You Website



FluNearYou.org is a community health project for North America. Created by epidemiologists at Harvard, Boston Children’s Hospital and The Skoll Global Threats Fund, Flu Near You is a website where the general public can post real time status of their health as it pertains to flu season. You can also see real time flu activity in your area.

Operators of the website analyze thousands of reports and map them to generate local and national views of influenza-like illness, providing public health officials and researchers with real-time, anonymous information that could help prevent the next pandemic.

December 2015: Credits

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