Severe Weather 101

The spring months are the most common months for tornadoes in DFW, but tornadoes have been observed year-round in the Metroplex. One important thing members of the UTA community should do is register for MavAlert, the University’s multi-tiered emergency communication system. The system sends electronic notifications by text and email to include not only weather advisories, but any other rapidly changing conditions that affect the University.

Facultv, staff and students can also download MavSafe, an application that provides emergency response procedures and guidelines. MavSafe works on all smart phones, tablets, and computers. Even if the Internet goes down, the resources are still available. Your smartphone is one of the best weapons in your safety arsenal. The Federal Government now sends weather warning text alerts to your phone based on your location. The National Weather Service also makes a great free app for weather-tracking.

BE PREPARED . . .

Before any severe weather happens, it is best to be prepared. The time to act isn’t when severe weather is occurring. Here are the TEN most important things you need to have ready to go:

1. Three days water/non-perishable food per person/pets (can opener/utensils/plates)
2. NOAA weather radio…preferably with a hand crank option
3. Flashlights
4. Extra batteries and USB chargers, especially for cell phones
5. First aid kit and extra prescription medications
6. Clothing…including diapers for infants
7. Cash on hand
8. Copies of important documents in a waterproof bag
9. Sleeping bags
10. Moist towelettes & garbage bags for personal hygiene

When severe weather is approaching, listen to NOAA Weather Radio or to commercial radio or television newscasts for the latest information. Know the difference between watches and warnings. A “Watch” means conditions are right and storms are possible in and near the watch area. A “Warning” indicates imminent danger to life and property. A tornado has been sighted or indicated by radar.

Review University Emergency Procedure 7-3, Tornado and 7-7, Outdoor Group Activities/Weather Hazards. During a tornado warning, the outdoor sirens will sound and the building fire panel voice annunciators will activate and make announcements.

Some basic tornado guidelines include:

In a house with no basement, a dorm, or an apartment: Avoid windows. Go to the lowest floor, small center room (like a bathroom or closet), under a stairwell, or in an interior hallway with no windows. Crouch as low as possible to the floor, facing down, and cover your head with your hands. A bathtub may offer a shell of partial protection. Even in an interior room, you should cover yourself with some sort of thick padding (mattress, blankets, etc.), to protect against falling debris in case the roof and ceiling fail. A helmet can offer some protection against head injury.

In an office or classroom building: Go directly to an enclosed, windowless area in the center of the building—away from glass and on the lowest floor possible. Then, crouch down and cover your head. Interior stairwells are usually good places to take shelter, and if not crowded, allow you to get to a lower level quickly.

Stay off the elevators; you could be trapped in them if the power is lost.

Stay away from windows and large open rooms like gyms and auditoriums.

In the open outdoors: If possible, seek shelter in a sturdy building. If not, lie flat and face-down on low ground, protecting the back of your head with your arms. Get as far away from trees and cars as you can; they may be blown onto you in a tornado.

A common complaint from tornado victims is that they didn’t hear the tornado sirens go off. Siren warning systems are ONLY meant to warn people who are outdoors to seek shelter indoors.

In a car or truck: There is no safe option when caught in a tornado in a car, just slightly less-dangerous ones. If the tornado is visible, far away, and the traffic is light, you may be able to drive out of its path by moving at right angles to the tornado. Never attempt to flee from a tornado in a vehicle.

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Procedures for Handling Expired Chemicals

Not only are expired chemicals useless for an experiment but they can be both volatile and dangerous when they exceed their expiration dates.

A chemical might undergo chemical changes due to different storage conditions: it could react with other chemicals present in the air or in the environment. This change could alter its nature (reaction to create other compounds), properties and/or purity. A chemical might undergo physical changes as well.

Certain chemicals are simply unstable and decay or degrade over time to something else, without the need for external input/changes. Some chemicals are unstable and within a few months or years tend to turn into dangerous substances. For example, there are some Peroxide Forming Chemicals which need to be disposed of after 3-12 months (depending on the chemical and the storage conditions) or they may explode.

Some chemicals will be stable enough not to turn into a hazard, but still have a negative effect on the measurements or syntheses you do with them, because the compounds no longer have the composition listed on the bottle.

Per Chemical Safety Procedure 8-11, each CEMS PI/chemical owner shall request the disposal of expired chemicals according to the manufacturer's expiration date by submitting a waste removal request or an extension request (if it is necessary to retain the expired chemical) via CEMS as described in Standard Operating Procedure for Expired Chemicals (see F. Expired Chemicals of Section IX. Management of Chemical Inventory).

Step 1: Click on the link sent by CEMS.
Step 2: Login by entering your email address and CEMS password.
Step 3: Choose Waste Request (find the expired chemicals and place them into the secondary containment in the waste accumulation area of your laboratory) or Extension Request.
Step 4: If an Extension Request has been submitted, the CEMS administrator will approve or deny your request upon which you’ll receive another email notification.

If you have questions or concerns, please contact Elisabeth Rowlett at ext. 2-5573.

Severe Weather Safety Tips

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Seek shelter in a sturdy building, or underground if possible. If you are caught by extreme winds or flying debris, park the car as quickly and safely as possible out of the traffic lanes. Stay in the car with the seat belt on. Put your head down below the windows; cover your head with your hands and a blanket, coat, or other cushion if possible. If you can safely get noticeably lower than the level of the roadway, leave your car and lie flat in a ditch or culvert, covering your head with your hands. Avoid seeking shelter under bridges, which can create deadly traffic hazards while offering little protection against flying debris.

Floods are the most common and widespread of all weather-related natural disasters. Except for heat-related fatalities, more deaths occur from flooding than any other weather-related hazard. In the U.S., floods kill more people each year than tornadoes, hurricanes or lightning. Flash floods are the most dangerous kind of floods, because they combine the destructive power of a flood with incredible speed and unpredictability. Flash floods occur when excessive water fills normally dry creeks or river beds along with currently flowing creeks and rivers, causing rapid rises of water in a short amount of time. They can happen with little or no warning.

* Never drive through a flooded roadway or drive over bridges that are over fast-moving floodwaters. Six (6) inches of moving water can knock you down, and 1 foot of moving water can sweep your vehicle away.
* Stay away from downed power lines and report them immediately.
* If you smell gas or hear a blowing or hissing noise, open a window and get everyone out of the building quickly. At home call 911, or if on campus UTA Police Dispatch at 817-272-3003.

Some guidelines and content for this article were reproduced from the Fox 4 Your Safety website.
The Golden Rules of Biosafety Cabinets

A Biosafety Cabinet (BSC) is a valuable supplement to good sterile technique and a containment device when working with biohazardous agents. If the BSC is not operated correctly, it will not provide adequate protection. Below are some “Golden Rules” when working within a BSC to avoid contamination of samples and exposure of personnel to the agents they are working with.

Plan your experiment. Prepare a written checklist of the items that will be needed for the experiment. Gather these materials before beginning work, and be sure to include personal protective equipment (PPE) and waste disposal containers.

Turn on the cabinet. If the cabinet is not running, turn on the power and let the cabinet run for at least five (5) minutes. This will purge airborne contaminants from the work area before work is started.

Check certification date of the BSC.

Check manehelic gauge. Compare to the performance certification.

Do not work in a BSC if a warning light or alarm is signaling.

PPE should be worn whenever using a BSC. Laboratory coat, gloves (pulled over the wrists of the lab coat, double gloving is recommended for some procedures), and safety glasses. Chemical splash goggles/masks may be required for some procedures.

Disinfect the work surface, side walls, inner back wall, and interior of the glass. Use a disinfectant appropriate for the work being conducted in your lab. Diluted bleach is not recommended since it could corrode the surfaces of BSC if not rinsed off using sterile water.

Prepare to begin work. Wearing PPE, surface decontaminate all materials with 70% alcohol before placing them into the cabinet. Deposit all items as far away from the sash as possible. Avoid overloading the work area, thereby compromising the efficacy of the BSC. Wait five (5) minutes after all materials have been placed in the BSC before beginning work.

Work from clean to dirty. Organize supplies so that work can be segregated from the clean side of the cabinet to the dirty side. Avoid moving dirty items over clean ones to prevent cross-contamination of the experiment. The biohazard collection bag needs to be located inside BSC, not outside. Always use mechanical pipetting aids.

Avoid using open flames inside BSCs. Flames can burn holes through HEPA/ULPA filters or cause explosions in BSCs.

Collect waste materials. Workers using infectious materials should collect their wastes inside of the cabinet. Be sure to seal any bags and cover open containers before removing them from the cabinet.

Clean up. Wipe down all materials with disinfectant before removing them from the BSC. After the cabinet is emptied, wipe down the interior cabinet surfaces with disinfectant. Allow the BSC to run for at least three (3) minutes before turning it off.

UV lights. If the BSC is equipped with ultraviolet (UV) lights, the UV lamp should never be on while an operator is working in the cabinet.

Do not store supplies on top of the BSC. The HEPA/ULPA filter is located there, and it is easily damaged!

This article contains a general synopsis of BSC procedures. For more information, please refer to the EH&ST Biological Safety website for an in-depth three part series on the proper use of BSCs.
Good Hygiene Helps Prevent Spread of Flu/Illness

With the particularly serious outbreak of flu this season, proper hand washing techniques are important for everyone. According to the Mayo Clinic, proper hand washing requires good old fashioned soap, scrubbing, and warm water. Proper hand washing is important to get rid of the dirt you can see and the dirt and germs you can’t.

**Hand Soap**

Use liquid soap or bar soap, it doesn’t matter which. Standard soap is fine for regular or proper hand washing. Your hands do not get cleaner with anti-bacterial soap.

**Wash Thoroughly**

Work the soap into a generous lather. You should wash your hands with warm water rather than cold.

**Scrub Your Hands**

Rub the hands together, scrubbing the backs of both hands and turning over to make sure you get soap up under your nails. Remember if you wash only the surface of your palms and not the backs of your hands, you’re not cleaning thoroughly.

**Rinse Your Hands**

Rinse your hands clean of all soap. Hand washing posters suggest that you rinse before and after you scrub. If you still see traces of dirt on your hands you can scrub them again.

**Towel Dry**

Use a hand towel to dry and turn off the water with the towel if you’re washing your hands at home.

**Hands Free**

Most public bathrooms provide hands free washing options. You waive your hand under the soap dispenser, the water faucet and under the towel dispenser or air dryer. By making the devices hands free you reduce the number of transmitted germs and get hands properly cleaned. This is important because many employees use public bathrooms at their work.

**Always Wash Your Hands:**

- After using the toilet
- After changing a diaper—wash the diaper wearer’s hands, too
- After touching animals or animal waste
- Before and after preparing food, especially before and immediately after handling raw meat, poultry or fish
- Before eating
- After blowing your nose
- After coughing or sneezing into your hands
- Before and after treating wounds or cuts
- Before and after touching a sick or injured person
- After handling garbage

(Reference: www.lovetoknow.com)

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**EH&S TRAINING COURSES**

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**Call us at 817-272-2185 to schedule specific trainings not available online:**

**Radioactive Materials**  **Hot Work Safety**  **Fire Extinguisher**  **Respirator Fit Testing**

The Great Escape/Fire Extinguisher Training and Evacuation Chair in person trainings are offered on a bimonthly basis. Click here for the schedule. Please call to sign up for a date.

**DRIVING UTA VEHICLES**

**Defensive Driving Awareness** - This online course must be completed every 3 years to remain an authorized driver of UTA vehicles. Additionally, an individual driving record check (MVR) must be updated annually.

**12 & 15 Passenger Van Training:** Take the online course first. A behind-the-wheel driving test is also required and will be conducted on the dates and times below at the EH&S office, 500 Summit Ave. Drivers must have already passed the Defensive Driving Course and have a current approved driving record check (MVR) to attend. **Class size is limited, so please call 817-272-2185 to register ahead of time.**

| April 11 (10 am) | May 3 (10 am) | June 6 (2:00pm) | July 12 (10 am) | Aug. 9 (10 am) |
| April 26 (2:00pm) | May 23 (2:00pm) | June 20 (2:00pm) | July 26 (10 am) | Aug. 20 (2:00pm) |