Severe Weather Safety

Oklahoma is no stranger to weather extremes. History books discuss the "Dust Bowl" of the 1930's, as well as the annual reminder that we live in "Tornado Alley." In addition to droughts and tornadoes, Oklahomans are also aware of flooding, earthquakes and ice storms. Mother nature will continue to present challenges to our great state, but we can also prepare for these difficult times. Through preparation and education we can protect our #1 resource - our great citizens and families.

Oklahoma Facts to think about:

- The deadliest tornado in Oklahoma history: April 9, 1947 (Woodward, OK). Without warning, the F5 tornado took 116 lives. As a result of tornadoes like this one and with new technology after World War II, the Weather Bureau, now known as the National Weather Service began its tornado watch and warning program in 1953 (NewsOK).
- Ice Storm: December 8th and 9th, 2007 in the Tulsa area: 29 deaths linked to the storm, \$780 million of damage to private homes and more than a half million people lost power statewide.
- Oklahoma experienced 623 magnitude 3+ earthquakes in 2016 (Earthquakes in Oklahoma).

Safety Tips:

- Prepare for severe weather emergencies BEFORE they happen!
- Tornado: Move to an underground shelter, basement or safe room. If none are available, a small, windowless interior room or hallway on the lowest level of a sturdy building is the safest alternative (Red Cross).
- Flooding: "Turn Around, Don't Drown!" Avoid walking or driving through flood waters. Just 6
 inches of moving water can knock you down, and 1 foot of water can sweep your vehicle away.
- Ice Storm: Stay away from downed power lines (treat all downed lines as live).
- Earthquake: Drop! Cover! Hold on!



Severe Weather—Pre-K Safety Bullets

Activity: Severe Weather



MATERIALS:

- * mayonnaise jar or a canning jar
- * clear liquid soap
- * vinegar
- * water

PROCESS:

Fill the jar about three-quarters full of water.

Put a teaspoon of the liquid soap into the jar.

Also, add a teaspoon of vinegar into the jar.

Tighten the lid and shake the jar to mix up the ingredients.

Now, swirl the jar in a circular motion.

The liquid will form a small tornado.

*If you want to get creative, you can also use food coloring to make the tornado have a color and glitter to represent debris.

EXPLANATION:

The swirling motion you give the bottle forms a vortex and is a easy way to create your own tornado.

For additional severe weather activities, please go to the Kids Ahead website: http://kidsahead.com/external/activity/435

Video:

Severe Weather (FEMA): https://www.youtube.com/watch?v=kXw1feTnkU4

Lesson Title: Tornado Warning **Safety Topic:** Severe Weather **Grade Level:** K-2nd Grades

Objective: Students will understand the basics of tornado safety, be able to recognize the difference between a tornado watch and a tornado warning, and recognize safe places to take cover.

Oklahoma Health Education Standard(s):

Standard 1: Students will comprehend concepts related to health promotion and disease prevention to enhance health.

Standard 5: Students will demonstrate the ability to use decision-making skills to enhance health.

Standard 7: Students will demonstrate the ability to practice health-enhancing behaviors and avoid or reduce health risks.

Equipment:

- Tornado siren sound effect
- Various equipment

Ouick Facts:

- Have a plan. Where will my family gather?
- Prepare a disaster kit for your safe place. Include a first aid kit, radio, flashlight, nonperishable food items, and water.
- Your safe place should either be a storm shelter, basement, or interior closet in the middle of the house on the first floor with no windows.
- During a tornado watch (meaning tornadoes are possible in your area) listen to the local news to learn of possible threats. Be prepared to take shelter at any moment.
- During a tornado warning (meaning a tornado has been detected on or near the ground) take shelter immediately.

Activity: Take Cover

Play a tornado siren sound for students to hear. Explain that this siren indicates that tornadoes are possible in your area. For this activity, the basketball court is the house and the center circle is a closet in the middle of the house. The class lives in the basketball court/house. Have students pretend to watch TV, play video games, eat a snack, or anything else they like to do indoors. You may have other equipment available for students to play with while in the house (i.e. hula-hoops, basketballs). The teacher will randomly play a siren sound to signal a tornado. Students must rush to the center of the house, get low, and cover their heads. Play multiple rounds, giving students time to engage in short activities (i.e. hula-hooping, playing catch, shooting a basketball) between sirens.

Lesson Title: Earthquake Safety **Safety Topic:** Severe Weather **Grade Level:** 3rd-6th Grades

Objective: Students will understand basic concepts and safety procedures related to earthquake safety.

Oklahoma Health Education Standard(s):

Standard 1: Students will comprehend concepts related to health promotion and disease prevention to enhance health.

Standard 4: Students will demonstrate the ability to use interpersonal communication skills to enhance health and avoid or reduce health risks.

Standard 7: Students will demonstrate the ability to practice health-enhancing behaviors and avoid or reduce health risks.

Equipment:

- Index cards
- 3 hula hoops (each a different color)
- 3 cones (color coordinated to hula hoops)

Quick Facts:

- Identify a safe place in every room. Earthquakes strike fast, so there is little time to move to a new space.
- Safe places during earthquake tremors include underneath sturdy pieces of furniture.
- Remember DROP, COVER, and HOLD ON.
 - * DROP: Drop under a sturdy piece of furniture.
 - * COVER: Cover your eyes and head as necessary.
 - * HOLD ON: grasp the furniture or floor around you until the earthquake passes.
- Stay away from windows.
- Expect aftershocks and repeat DROP, COVER, and HOLD ON method as needed.

Activity: Safety Card Relay

Prepare index cards with earthquake-safety sentences. For example:

Take	cover	under	sturdy	furniture	if	possible
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Divide students into 3 teams. Each team will start at their cone at the edge of the playing field. In the center of the field/gym there will be 3 hula hoops- one per team, color coordinated to match each team's cone. Students will take turns in their teams going to the cone (via run, skip, hop, walk backwards) and retrieving one index card. Once all cards have been collected, the team will try to put the sentence together. When a team thinks they have it arranged correctly, they will say the sentence out loud together. Other sentences examples:

"Prepare for the aftershock", "Remember to drop, cover, and hold on", "Stay away from windows", "Cover your head and eyes"











National Weather Service

Around Don't Drown

Friendly Review Questions:

- 1. When is the best time to prepare for severe weather? (Before severe weather occurs)
- 2. It takes just _____ of moving water to knock you down. (6")
- 3. If you do not have a basement or safe room, what is the best alternative? (A small, windowless interior room or hallway)
- 4. If you see flooding or large amounts of moving water when driving, what should you do? ("Turn Around, Don't Drown!")
- 5. What should you do if you see a downed power line? (Do not touch, assume it is live)
- 6. What are the three commands you should remember during an earthquake? (Drop, Cover, and Hold On)





Helpful Resources

Severe Weather Safety

Severe Weather 101—NOAA National Severe Storms Laboratory: http://www.nssl.noaa.gov/education/svrwx101/

Safety—National Weather Safety: https://www.weather.gov/safety/

Severe Weather—Ready.gov: https://www.ready.gov/severe-weather

Disaster & Emergency Preparedness—weather.com: https://weather.com/safety





