**Tornado Safety and Preparedness**

**Disaster Preparedness Information for Ohio Schools**

A tornado is a violently rotating column of air that comes in contact with the ground, usually descending from the base of a thunderstorm. In Ohio, many tornadoes are obscured by hills, trees or heavy rain. Tornadoes can occur with little, if any, warning. Minutes - even seconds - can mean saving lives.

All schools should have a tornado safety plan developed that is unique to their individual needs. School officials should ensure the safety plans include details to rapidly inform every school in the system of tornado watches and warnings, either by radio, phone or Wireless Emergency Alert messages. All Ohio schools must conduct tornado drills at least once a month, while in session during Ohio’s tornado season (April-July).

**Notifying Teachers and Students to Take Action**

Most schools use a public address (PA) system to talk directly to students and teachers. In some cases, electricity could be lost during a storm before you have activated your plan. Have a back-up alerting device such as a compressed air horn or megaphone.

If your school has mobile classrooms or detached gymnasiums that are not part of a PA or intercom systems, then special arrangements should be made to notify these areas and to direct the occupants to evacuate to a main building before the storm arrives. Sending “runners” outside to mobile classrooms is not advisable, due to the danger posed by lightning and the approaching storm. Wireless communication devices such as “walkie-talkies” may be an effective and less expensive means for such communication.

Students with disabilities may also require special attention. You may want an adult to be assigned to each student requiring special attention to ensure that the student moves to the appropriate place of safety.

**Know the Difference between a Tornado Watch and a Tornado Warning**

A Tornado Watch is issued by the National Weather Service when conditions are favorable for the development of tornadoes. During a watch, review your tornado safety plan and be prepared to move to a place of safety. Listen to a NOAA Weather Radio or local news for weather and storm information.

A Tornado Warning is issued when a tornado is imminent or occurring. Seek safe shelter immediately! Stay in shelter until the warning has expired. Continue listening to weather/storm reports for updates.

**Practice Emergency Procedures - Conduct Tornado Drills**

When students are assembled in school basements or interior hallways during a tornado drill or warning, they should be instructed to respond to a specific command to assume protective postures and to face interior walls when the danger is imminent.

**Emergency planning information provided by the National Weather Service, the Michigan Committee for Severe Weather Awareness, NC State University, and the Ohio Committee for Severe Weather Awareness.**

The Ohio Committee for Severe Weather Awareness is comprised of 16 agencies and organizations that are dedicated in educating Ohioans about the natural disasters that typically affect the state, and how to plan and prepare for severe weather incidents and home emergencies before they happen.

For additional information on tornado and other severe weather hazards, visit the OCSWA website at: [www.weathersafety.ohio.gov](http://www.weathersafety.ohio.gov).
Tornado Emergency Planning for School Buses

Establish guidelines for the use/driving of school buses during tornado watches and warnings. All school buses should be equipped with radios for communicating important weather information. You will want to consider holding the departure of students to buses whenever watches or warnings are in effect. Consider:

- Upon departure, how long before all of the students have arrived safely at home? Include the time for students to walk from their bus stops to their homes.
- How much time do you have before the storms are expected to impact your district? Tornado watches are sometimes issued a couple of hours in advance of thunderstorm development.
- If a warning is in effect for your county at dismissal time, delay departure of school buses. Escort students that have been already loaded on the buses back into the school.

School bus drivers should identify protective areas along each part of their routes where they and the students can take cover if overcome by a tornado or high winds (safe shelter such as a store, another school or recreation center). If necessary, do not hesitate to take cover in ditches or other places below ground level.

- Do not stay in the school bus if caught in a tornado or high winds. Buses provide no protection from severe storms.
- Do not seek protection under an overpass or bridge. An overpass as a tornado shelter can put people at a greater risk of being seriously injured or killed. Flying debris become dangerous projectiles in tornado airflow.
- Do not attempt to outrun tornadoes or other severe weather. If time allows, seek safe shelter in a substantial building.

Tornado Emergency Planning for School Buildings

Have a school safety plan prepared for high risk days, including severe thunderstorms and tornado watches and warnings. In the plan, designate which teaching staff will monitor the NOAA Weather Radio or Public Alert Radio during watches and other severe weather events. Include provisions for all after-hour, school-related activities. Have a back-up source of information, such as television, radio or electronic devices (laptop, tablet, smart phone).

In the plan, identify the staff and method to disseminate all severe weather information to every classroom and activity. Have an alternate method to notify students and faculty in case of power failure.

Schools should be inspected to determine the best designation for protective areas. The most interior areas on the ground floor, away from windows and glass, are best for use as protective areas.

Small, interior rooms, bathrooms and windowless, interior hallways that are away from exterior doors offer the best protection. Interior load-bearing walls with short roof spans offer better protection than temporary or non-load-bearing walls and structures.

If the school building has more than one story, evacuate the upper level(s). The lowest level is always the safest. If the building has a designated tornado safe shelter or room, ensure faculty and students know of its location.

Large, open rooms with big expansive roofs such as cafeterias, gymnasiums and auditoriums, or rooms with exterior or glass walls are dangerous locations and should never be used as protective areas or tornado shelters. The collapse of the room’s load-bearing wall may lead to the failure of the entire roof.

Modular and portable classrooms are also considered unsafe during tornadoes and thunderstorms. A school safety plan must include getting students out of portable classrooms and into a safe area in the main building as quickly as Possible, preferably during a severe thunderstorm or tornado watch. Also, safety plans should allow students and faculty with disabilities to take cover early, before the arrival of impending severe weather.

Faculty and staff in charge of outdoor and after school activities should have access to a weather radio at all times. Ensure staff is knowledgeable of the school safety plan and know where the nearest tornado shelters/protective areas are located.

Prioritize areas within the school building by number of barrier walls, construction material, etc. as protective areas. Create a movement plan to fill the highest-rated areas first.

**Most Safe**
- Tornado safe room/shelter
- Lower Level, Interior Walls
- Small, Interior Rooms
- Windowless, Interior Hallways
- Interior Load-Bearing Walls

**Most Dangerous**
- Windows on Exterior Walls
- Mobile Classrooms
- Cafeterias, Gyms, Auditoriums
- Exterior Walls of Upper Level

Wood County: School buses were tossed like toys during an EF4 tornado in Millbury, Ohio on June 5, 2010. Seven people were killed. Lake High School (pictured) was destroyed. AP File Photo