

2006

Spring Severe Weather Awareness in Ohio

Severe Weather Awareness Week: March 26 - April 1

Ohio's Statewide Tornado Drill: Wednesday, March 29th at 9:50 a.m.



Yellowbud, Ohio (Ross County) - 2005

An Emergency Preparedness Guide

Ohio Committee for
Severe Weather Awareness



This publication is available on the
Ohio Emergency Management Web Site:
www.ema.ohio.gov/weather.htm

Bob Taft, Governor

Letter from the 2006 OCSWA Chair



Last year, severe weather affected Ohio in an unusual way.

Severe winter storms and flooding in 32 counties caused nearly \$8 million damage and resulted in a Presidential disaster declaration. The most severe warm weather disaster that affected Ohio happened far away, as Ohio joined other states in sheltering Hurricane Katrina evacuees from the Gulf Coast.

The unprecedented death and destruction wrought by Katrina made everyone question Ohio's preparedness for a disaster of catastrophic proportions and dramatized the absolute necessity of education and planning for potentially severe weather.

The Ohio Committee for Severe Weather Awareness has again produced its preparedness guide that contains valuable information on how to prepare for and stay safe during and after a major weather event.

In addition, the state of Ohio will again participate in two events intended to increase knowledge and awareness of how to prepare for and recover from severe weather, and to test emergency warning systems. Governor Bob Taft has proclaimed **March 26 – April 1, 2006** as **Spring Severe Weather Safety Awareness Week** in Ohio. This week can be the ideal time for homes, schools and businesses to craft disaster preparedness plans. On Wednesday, March 29, Ohio counties will sound their emergency warning systems at 9:50 a.m. for the statewide tornado drill. Schools and businesses are encouraged to conduct their tornado drills at that time.

The third event is a poster contest for elementary school children in first through sixth grades. This competition provides an opportunity for students to demonstrate both their understanding of severe weather threats and safety, and their creativity. Please see Page 2 of this booklet for last year's winning poster and more information about the contest.

The mission of the committee is to remind Ohioans of how severe weather can disrupt our lives. Please help us promote severe weather safety as part of the 2006 Spring Severe Weather Safety Awareness Week.

Sincerely,

Carol Shkolnik
2006 Chair, Ohio Committee for Severe Weather Awareness
Ohio Department of Aging



Severe/Hazardous Weather Terms

Warning - Issued by the National Weather Service (NWS) local offices indicating that a particular weather hazard is either imminent or occurring. A warning indicates the need to take action to protect life and property. Typical warnings include:

- Tornado Warning
- Severe Thunderstorm Warning
- Flash Flood/Flood Warning
- Excessive Heat Warning

Watch - Issued by the NWS, indicating that conditions are favorable for the development of a particular severe weather event. A watch is normally issued for several hours and indicates a need for planning, preparation and an increased awareness of changing weather conditions. Typical watches include:

- Tornado Watch
- Severe Thunderstorm Watch
- Flood Watch

Cold Air Funnels - Weak funnel cloud extensions from cumulus clouds that typically remain aloft. Cold air funnels form in cold, unstable air masses and are not usually associated with thunderstorms or severe weather.

Downburst - Intense gust of wind or down draft that exits the base of a thunderstorm and spreads out horizontally at the earth's surface as a strong wind which often causes damage.

Flash Flood - A flood that can occur very rapidly. Flash floods occur as the result of very heavy rainfall in a short period of time, generally over a relatively small area.

Flood - The condition that occurs when water overflows the natural or artificial confines of a stream or body of water, or accumulates by drainage over low lying areas.

Funnel Cloud - Violently rotating column of air that is not in contact with the ground. A tornado passes through the funnel cloud stage during its development and dissipation.

Gust Front - The leading edge of a mass of cool, gusty air that flows from the base of a thunderstorm and spreads along the ground in advance of the thunderstorm.

Lightning - Generally, any and all of the various forms of electrical discharge produced by the thunderstorms.

Severe Thunderstorm - A thunderstorm producing a tornado, damaging winds of 58 mph or higher, and/or hail 3/4-inch in diameter or larger.

Squall Line - Any line or narrow band of thunderstorms. Squall lines can extend across multiple states.

Thunderstorm - A local storm produced by a cumulonimbus cloud and accompanied by lightning and thunder, usually with strong wind gusts, heavy rain and sometimes hail.

Tornado - A violently rotating column of air that comes in contact with the ground, often descending from the base of a severe thunderstorm. Tornadoes are usually funnel-shaped with the narrow end nearest the ground.

Emergency Preparedness Plans & Disaster Kits



The best defense when faced with severe weather is preparedness. Every household, school and business should have an emergency preparedness plan for natural and man-made disasters. The Ohio Committee for Severe Weather Awareness offers the following tips on preparation for inclement weather.

1. Have a family meeting. Involve everyone in the household in the preparation of a disaster plan. Discuss the types of disasters that can affect you and your home. Ensure that everyone knows the difference between weather watches and warnings. Write down solutions for each kind of emergency. Plan how to care for your pets following a disaster.

2. Develop a family escape and/or shelter plan. Draw an overhead floor plan view of your home. Determine two escape routes per room. Teach children how to open windows and screens. Pick a meeting place outside of the home (a large tree or neighbor's yard) in case of a sudden emergency, like a fire. Determine where to shelter during a tornado (in a basement, centralized closet or bathroom).

3. Practice your plan. Even the best plan is ineffective unless it has been practiced. Conduct fire drills. Activate smoke detectors when the household is asleep. Conduct tornado drills. Practice how to protect yourself and others during severe storms.

4. Organize your disaster preparedness kit. No matter the incident, your kit should have enough supplies to sustain every member of your household for three days.

For the home: NOAA weather radio, flashlight, batteries, nonperishable foods, bottled water and juices, manual can opener, first aid kit, prescription drugs, sleeping bags, important family documents, cash/credit cards, important phone numbers.

For the car: fire extinguisher, tools, first aid kit, sleeping bags or blankets, bottled water, high-energy snacks, flashlight, batteries, battery-operated radio, cell phone, cash/credit cards.

Commercially prepared disaster kits are available at select discount, hardware and military surplus stores or can be purchased via the Internet.

Preparedness Checklist

During times of non-disasters, citizens with special needs or disabilities should contact their local fire department and emergency management agency to inform them of their emergency needs. That way, first responders can ensure that residents will be notified of threatening conditions in their area.

The American Red Cross offers checklists of items that people should include in their disaster kits. The following are suggested items for individuals with special needs. These lists are not exhaustive. Each kit should be designed to meet your family's emergency needs.

Equipment

- Emergency information lists
- Eye glasses
- Eating utensils
- Grooming, dental and dressing devices
- Hearing devices, extra batteries
- Flashlight, extra batteries
- Oxygen
- Suction equipment
- Dialysis equipment
- Sanitary supplies
- Wheelchair, repair kit and/or other mobility aids
- Long canes or sticks to gauge depth of floodwaters
- Monitors
- Bottled water
- Extra medication/prescribed medications

Service Animal/Pet Supplies

- Pet food and water
- Leash/harness
- Collar
- ID tags
- Medications and medical records
- Vaccination tags/papers



National Weather Service Preparedness Program



When Seconds Count, *StormReady* Communities are prepared.



Sandusky County became StormReady in August of 2005. Pictured from left to right: Sandusky County EMA Director Brad Lawrence; County Commissioners Brad Smith, Dan Liskai and Terry Thatcher; and Meteorologist William Comeaux, National Weather Service - Cleveland.

Americans live in the most severe weather-prone country on Earth. Every year, Americans cope with an average of 10,000 thunderstorms, 2,500 floods, 1,000 tornadoes, and an average of six deadly hurricanes. Potentially deadly weather impacts everyone. Communities can now rely on the National Weather Service's StormReady program to help them guard against the ravages of Mother Nature.

Approximately 90 percent of all presidentially declared disasters are weather-related, causing nearly 500 deaths per year and nearly \$14 billion in damage. StormReady, a program started in 1999 in Tulsa, Oklahoma, helps arm America's communities with the communication and safety skills needed to save lives and property - before and during an event. StormReady helps community leaders and emergency managers strengthen local safety programs.

StormReady Communities are better prepared to save lives from the onslaught of severe weather through better planning, education and awareness. No community is storm proof, but StormReady can help communities save lives.

Ohio currently has eight StormReady communities located in the following counties: Allen, Auglaize, Clermont, Huron, Sandusky, Scioto, Union and Van Wert.

To be officially certified as StormReady, a county or community must:

- Establish a 24-hour warning point and emergency operations center.
- Have multiple ways to receive severe weather forecasts and warnings and to alert the public.
- Create a system that monitors local weather conditions.
- Promote the importance of public readiness through community seminars.
- Develop a formal hazardous weather plan that includes training for severe weather spotters and holding emergency exercises.

Ohio has a StormReady committee consisting of representatives from the National Weather Service, the Emergency Management Association of Ohio and the Emergency Management Agency. This committee processes all applications for StormReady designations within the state. The certification lasts three years and then must be reviewed for recognition for an additional term.

For additional information about the StormReady program, visit the National Weather Service site: www.weather.gov/stormready/.

For guidelines specific to Ohio, visit: www.erh.noaa.gov/er/iln/stormready.htm.

EAS and Warning System Testing



The Federal Communications Commission (FCC) designed the Emergency Alert System (EAS) as a tool for officials to quickly send important emergency information targeted to a specific area. After conducting extensive tests of competing technologies, the FCC ruled that EAS would be a digital-based automated system and use coding protocols similar to the NOAA Weather Radio Specific Area Message Encoding (SAME). As a technical and operational structure, EAS accounts for the needs of special populations as the hearing impaired and individuals with differing language requirements.



The Emergency Alert System replaced the Emergency Broadcast System in 1996.

While the NOAA Weather Radio is the National Weather Service's primary entry into EAS, there are other means of entering emergency information to the EAS. Several levels of backup and procedures exist for those areas currently outside the range of a NOAA Weather Radio station. Local and county emergency operations centers have the ability to input messages directly to the EAS in much the same way as the NWS. Radio and television stations have similar capabilities to initiate an EAS message.

Many areas of Ohio have a network of outdoor emergency alert sirens to aid in early notification of weather emergencies. The sirens are designed as an outdoor warning system and may not always be audible in densely populated areas or indoors. The siren systems are activated locally and are designed to alert area residents of threatening conditions. On flat terrain with no wind, most sirens can be heard up to one mile away over normal background noise. Local systems are tested regularly.

A statewide warning system test will be conducted Wednesday, March 29, 2006 at 9:50 a.m. The State Emergency Communications Committee will notify all television and radio stations.

For additional information on Ohio's Emergency Alert System, contact the Ohio Emergency Management Agency at (614) 889-7156 or contact your local emergency management agency to verify your county's participation in the statewide tornado drill/siren testing. County EMA phone listings are available in the back of this campaign.

NOAA Weather Radio - The Voice of the NWS



Known as the “Voice of the National Weather Service,” the National Oceanic and Atmospheric Administration (NOAA) Weather Radio is provided as a public service by NOAA, a division of the Department of Commerce. NOAA Weather Radio includes more than 800 transmitters, covering all 50 states, adjacent coastal waters, Puerto Rico, U.S. Virgin Islands, and U.S. Pacific Territories. NOAA Weather Radio requires a special radio receiver or scanner capable of picking up the signal.

Broadcasts are found in the public service band at these seven frequencies (MHz):

•162.400 •162.425 •162.450 •162.475 •162.500 •162.525 •162.550

NOAA Weather Radio broadcasts NWS warnings, watches, forecasts and other hazard information, 24 hours a day. NOAA Weather Radio is not just for emergencies. It is a round-the-clock source of weather reports and information to help people prepare for the day ahead. Each National Weather Service office tailors its broadcast to suit local needs. Routine programming is repeated every few minutes and consists of the local forecast, regional conditions and marine forecasts. Additional information, including river stages and climatic data is also provided.

Seconds Save Lives!

Weather radios equipped with special alarm-tone features sound alerts to give immediate information about a life-threatening situation. During an emergency, National Weather Service forecasters will interrupt routine weather radio programming and broadcast a special tone that activates weather radios in the listening area.

Who Needs NOAA Weather Radio?

Public safety experts agree that tone-alert weather radios should be standard equipment in every home. They are especially valuable in places that are entrusted with public safety, including hospitals, schools, places of worship, nursing homes, restaurants, grocery stores, recreation centers, office buildings, sports facilities, theaters, retail stores, bus and train stations, airports, marinas and other public gathering places.

Can NOAA Weather Radios help people who have hearing impairment?

Yes. NOAA Weather Radio offers nonverbal information imbedded in its broadcasts to provide timely, critical warnings of life threatening events to the hearing impaired. Some receivers are equipped with special output connectors that activate alerting devices such as vibrators, bed shakers, pillow vibrators, strobe lights and other alerting systems.

NOAA Weather Radio . . . Improving For the Future

Implementation of additional NOAA Weather Radio (NWR) transmitters will continue to expand the nationwide network coverage. New digital technology (termed “SAME” - Specific Area Message Encoding) now allows lifesaving messages to be targeted to a specific area, like a county or portion of a state. Weather radios come in many sizes and with a variety of functions and costs. Most NWR receivers are either battery-operated portables or AC-powered desktop models with battery backup, so they can be used in the absence of commercial electric power.

NOAA Weather Radios are available at most electronics and department stores. For additional information, visit the National Weather Service Web site: www.nws.noaa.gov/nwr.

Tornado Facts



As the severe weather season approaches, take some time during Severe Weather Safety Awareness Week to make a safety plan for your family, friends, neighbors and co-workers. Planning ahead will lower the chance of injury or death in the event severe weather strikes.

Tornadoes develop from severe thunderstorms. They are usually preceded by very heavy rain and/or large hail. A thunderstorm accompanied by hail indicates that the storm has large amounts of energy and may be severe. In general, the larger the hailstones, the more potential there is for damaging winds and/or tornadoes.

The most violent tornadoes are capable of tremendous destruction with wind speeds of 250 mph or more. Damage paths have exceeded the width of one mile and 50 miles long. Tornadoes generally move from southwest to northeast, but have also been recorded traveling in any direction. The forward speed of a tornado varies from 30 mph to 70 mph.

Even though Ohio had tornadoes in November of 2002 and 2003, the peak tornado season for Ohio is generally April through July.

Fujita Tornado Damage Scale - By Category



The Fujita tornado scale (F scale) was developed by the late Professor Theodore Fujita of the University of Chicago to classify tornadoes according to wind speed and damage.

- **F0: Light Damage** (>73 mph). Some damage to chimneys; branches broken off trees; sign boards damaged.
- **F1: Moderate Damage** (73-112 mph). Peels surface off roofs; mobile homes pushed off foundations or overturned; moving autos blown from road.
- **F2: Considerable Damage** (113-157 mph). Roofs torn off frame houses; mobile homes demolished; large trees snapped or uprooted; light-object missiles generated; cars lifted off ground.
- **F3: Severe Damage** (158-206 mph). Roofs and walls torn from well constructed houses; most trees in forest uprooted; heavy vehicles lifted and thrown.
- **F4: Devastating Damage** (207-260 mph). Well constructed homes leveled; vehicles thrown; large missiles generated.
- **F5: Incredible Damage** (261-318 mph). Strong framed homes lifted from foundations and swept away; large objects easily projected more than 100 meters; trees debarked; incredible phenomena will occur.

Source: www.noaa.gov/tornadoes.html

According to the National Weather Service, throughout 2005, there were only four tornadoes recorded in Ohio, resulting in no injuries or deaths.

National Weather Service (NWS) offices in Wilmington and Cleveland, Ohio; Pittsburgh, Pennsylvania; Charleston, West Virginia; and Syracuse, Indiana provide weather watches and warnings for Ohio.



Tornado Safety Tips

Whether practicing a tornado drill or sheltering during a warning, the Ohio Committee for Severe Weather Awareness encourages Ohioans to **DUCK!**

- D**- Go **DOWN** to the lowest level
- U** - Get **UNDER** something
- C** - **COVER** your head
- K** - **KEEP** in shelter until the storm has passed



- Take responsibility for your safety and be prepared before a watch or warning is issued. Meet with household members to develop a disaster plan to respond to tornado watches and warnings. Conduct regular tornado drills. When a tornado watch is issued, review your plan – don't wait for the watch to become a warning. Learn how to turn off the water, gas and electricity at the main switches.
- Despite Doppler radar, tornadoes can sometimes occur without any warning, allowing very little time to act. It is important to know the basics of tornado safety. Know the difference between tornado watches and tornado warnings.
- Tune in to one of the following for weather information: NOAA Weather Radio, local/cable television (Ohio News Network or the Weather Channel), or local radio station.
- If you are a person with special needs, register your name and address with your local emergency management agency, police and fire departments before any natural or man-made disaster.
- NOAA Weather Radio has available an alerting tool for people who are deaf or have hearing impairments. Some weather radio receivers can be connected to an existing home security system, much the same as a doorbell, smoke detector or other sensor. For additional information, visit: www.nws.noaa.gov/nwr/special_need.htm.
- The safest place to be during a tornado is a basement. If the building has no basement or cellar, go to a small room (a bathroom or closet) on the lowest level of the structure, away from windows and as close to the center of the building as possible.
- Be aware of emergency shelter plans in stores, offices and schools. If no specific shelter has been identified, move to the building's lowest level. Try to avoid areas with large glass windows, large rooms and wide-span roofs such as auditoriums, cafeterias, large hallways or shopping malls.
- If you're outside, in a car or mobile home, go immediately to the lowest level of a nearby sturdy building. Sturdy buildings are the safest structures to be in when tornadoes threaten. Winds from tornadoes can blow large objects, including cars and mobile homes, hundreds of feet away.
- If there is no building nearby, lie flat in a low spot. Use your arms and hands to protect your head. It is not safe to seek shelter under highway overpasses and bridges.



Tornado Loss Prevention Tips

Before a Tornado

For insurance purposes, tornadoes are considered “windstorms” and are covered under homeowners insurance policies. Homeowners policies cover the building and its contents for damage from tornadoes, hail and other windstorms. If a tornado damages your car, protection is provided under the “other than collision” (comprehensive) portion of your auto insurance policy.

Complete an itemized inventory of your household furnishings and belongings. It will help speed the claims settlement process. Also, photograph or videotape your rooms. This will prove invaluable in the event of a loss. Keep these valuable records, along with receipts, off-premises, preferably in a bank safe deposit box. The Insurance Information Institute offers a home inventory software program that makes conducting a home inventory less time-consuming and easier to complete. Download the free software at www.knowyourstuff.org.

Pick a safe place in your home where the family should gather during a tornado. The safest place to be is underground, such as a cellar or basement, and away from all windows. If you do not have a basement, consider an interior hallway or a room without windows on the lowest floor.

Learn about your community’s warning system. Different communities have different ways of providing warnings. Many communities have sirens intended for outdoor warning purposes. Use a NOAA Weather Radio with tone alert to keep you aware of watches and warnings.

Move vehicles under cover if severe weather threatens. This can help to prevent damage from high winds, flying debris and hail.

Protecting Your Property

Take inventory of your home, inside and out, using video or still photography. Pan the camera around rooms and yards to capture all items. Inside, obtain close-ups of expensive items such as jewelry, china and furs. Narrate the video by noting purchase costs and dates. Include model and serial numbers for appliances and electronic devices.

Keep trees and shrubs trimmed. Make trees more wind resistant by removing diseased or damaged limbs, then strategically remove branches so that wind can blow through. Strong winds frequently break weak limbs and hurl them at great speed, causing damage or injury when they hit.

Remove any debris or loose items from your yard. Branches and firewood may become missiles in strong winds.

After a Tornado

Inspect property and vehicles for damage. Immediately check property for electrical problems and gas leaks; contact appropriate utilities. Photograph any damage and inventory losses.

Contact your insurance company as soon as possible, if extensive damage occurred. Meanwhile, protect your property from further damage or theft.



National Lightning Safety Awareness Week is June 18-24, 2006

Summertime is the peak season for one of the nation's deadliest weather phenomena - lightning. According to the National Weather Service, during the past 30 years, approximately 67 people in the United States are killed by lightning each year, which is more than the average number of people killed annually by tornadoes or hurricanes.

In 2004, there were 32 deaths in the U.S. attributed to lightning. As of October 2005, there were 33 deaths. Documented lightning injuries in the nation average about 300 per year. People survive, but unfortunately, suffer a variety of long-term, debilitating symptoms which include memory loss, muscle spasms, weakness, sleep disorders, numbness, dizziness and stiffness in joints.

Lightning Safety Awareness: Education is Key. Few people really understand the dangers of lightning. Many do not act promptly to protect themselves because they don't understand all of the dangers associated with thunderstorms and lightning. People need to become aware of the behavior that can put them at risk of being struck and know what they can do to reduce that risk.

Lightning Discharge: Stay Out of Its Path - During a thunderstorm, each flash of cloud-to-ground lightning is a potential killer. The determining factor on whether a particular flash could be deadly depends on whether a person is in the path of the lightning discharge. In addition to the visible flash that travels through the air, the current associated with the lightning discharge travels along the ground.

An Approaching Thunderstorm: When to Seek Shelter - Lightning can strike as far as 10 miles away from the rain area in a thunderstorm, which is about the distance one can hear thunder. To be safe, remember: *If you can hear thunder, you are within striking distance. Seek shelter immediately!* If the sky looks threatening, take shelter before hearing thunder.

The 30-30 Rule - Use the 30-30 rule where there is good visibility and nothing is obstructing your view of the thunderstorm. When you see lightning, count the time until you hear thunder. If that time is 30 seconds or less, the thunderstorm is within six miles and is dangerous. Seek shelter immediately. Wait at least 30 minutes after the last clap of thunder before leaving shelter.

Things to Avoid While Sheltering Indoors - People should stay away from windows and doors and avoid contact with anything that conducts electricity, which include using telephones (corded and cordless) during storms. Cellular telephones are the safest to use during thunderstorms.

Do not shower, bathe or wash dishes during thunderstorms. Water is an electrical conductor; you should avoid contact with plumbing.

Helping a Lightning Strike Victim - If a person is struck by lightning, medical care is usually needed immediately to save the person's life. Cardiac arrest and irregularities, burns and nerve damage are typical life-threatening injuries when a person is struck. Knowing first aid measures, which include cardiopulmonary resuscitation (CPR), can help lightning-strike victims survive. American Red Cross chapters and local fire departments often offer first aid and CPR classes.

Shelter from Thunder & Lightning Storms



Safe Shelter from Storms - A house or other substantial building offers the best protection from lightning. For a shelter to provide adequate protection from lightning, it must contain a mechanism for conducting the electrical current from the point of contact to the ground. These mechanisms may be on the outside of the structure, or contained within the walls of the structure, or a combination of the two. On the outside, lightning can travel along the outer shell of the building or follow metal gutters and downspouts to the ground. Inside, lightning can follow conductors such as electrical wiring, plumbing and telephone lines to the ground.

Unsafe Sheltering - Unless specifically designed to be lightning safe, small structures do little, if anything to protect people from lightning. Many small, open shelters on golf courses, parks and athletic fields are designed to protect people from rain and sun, but not lightning. A shelter that does not contain plumbing or wiring throughout, or some other mechanism for grounding from the roof to the ground is not safe. Small wooden, vinyl or metal sheds offer little or no protection from lightning and should be avoided during thunderstorms.

Stay Safe While Inside - Corded telephone use is the leading cause of indoor lightning injuries in the United States. Lightning can travel long distances on phone and electrical wires, particularly in rural areas. If you must use a phone during a storm, a cellular phone is safest. Stay away from windows and doors, as these can provide the path for a direct strike. Basements are generally safe places to go during thunderstorms, but avoid contact with concrete walls that may contain metal reinforcing bars. Also, avoid washers and dryers because they have contacts with plumbing and electrical systems and contain an electrical path to the outside through the dryer vent.

Protect Your Pets - Outside dog houses are not lightning-safe. Dogs that are chained to trees or wire runners can easily fall victim to lightning strikes. You may want to consider bringing your pets inside the home or garage during thunderstorms.

Protect Personal Property - Lightning generates electrical surges that can damage electronic equipment some distance from the actual strike. Typical surge protectors WILL NOT protect equipment from a lightning strike. Before a thunderstorm threatens, unplug any unnecessary appliances and electronic equipment from conductors.

For additional information, visit the National Weather Service Web at www.lightningsafety.noaa.gov.





National Flood Safety Week is March 20-24, 2006

Most communities in the United States can experience some kind of flooding after spring rains, heavy thunderstorms or winter snow thaws. Floods can be slow or fast-rising, but generally develop over a period of days. Flash floods usually result from intense storms dropping large amounts of rain within a brief period. Flash floods occur with little or no warning and can reach full peak in only a few minutes.

Emergency Information

Flood waters can be extremely dangerous. The force of six inches of swiftly moving water can knock an adult person off his or her feet. The best protection during a flood is to leave the area and seek shelter on higher ground.

Flash flood waters move very quickly and can roll boulders, tear out trees, destroy buildings and obliterate bridges. Walls of water can reach heights of 10 to 20 feet and generally are accompanied by a deadly cargo of debris. The best response to any signs of flash flooding is to move immediately and quickly to higher ground.

Just two feet of moving water can float and carry away most vehicles, including sport utility vehicles (SUVs) and pickup trucks. You can protect yourself best by being prepared and having time to act.

Before a Flood

- Check with your local floodplain administrator to determine if you live in a flood-prone area. Visit the FEMA Flood Map Store at www.fema.gov/nfip/fmapinfo.shtm to review the flood map for your property online. Visit the Ohio Dept. of Natural Resources, Division of Water's web site at www.dnr.state.oh.us/water/ for a list of Ohio's local floodplain administrators.
- Consider installing check valves in building sewer traps to prevent flood waters from backing up in sewer drains.
- Plan and practice an evacuation route.
- Have disaster supplies on hand.
- Develop an emergency communication plan.
- Make sure all family members know how to respond in case of a flood.

During a Flood Watch

- Listen to a radio or television for the latest storm information.
- Fill bathtub, sinks and jugs with clean water in case water becomes contaminated.
- Move valuable household possessions to upper floors or to safe grounds if time permits.
- If you are instructed by local authorities, turn off all utilities at the main power switch and close the main gas valve.
- Be prepared to evacuate.



Flood Safety

During a Flood Warning

- If indoors, turn on a battery-powered radio or NOAA Weather Radio to get the latest emergency information. If your area is advised to evacuate, do so immediately.
- If outdoors, climb to high ground and stay there. Avoid walking through any flood waters.
- If you are driving and have come to a flooded area, turn around and go the other way. Many deaths have resulted from attempts to move stalled vehicles from flooded roadways.

During an Evacuation

- If advised to evacuate, do so immediately.
- Evacuation is much simpler and safer before flood waters become too deep for ordinary vehicles to drive through. Leave early enough to avoid being marooned by flooded roads.
- Never attempt to drive or walk through flood waters. Water could be deeper than it appears and floodwater currents can be deceptive. Remember, it only takes two feet of water to carry away most vehicles.
- Listen to a battery-operated radio or TV for evacuation instructions.
- Follow recommended evacuation routes. Shortcuts may be blocked.

After a Flood

- Flood dangers do not end when the water begins to recede. Listen to a radio or television and do not return home until authorities indicate it is safe.
- Remember to help those who may require special assistance: infants, young children, the elderly and people with disabilities.
- Before entering a flood-damaged building, check the foundation for cracks and inspect porch roofs and overhangs to be sure they are adequately supported. Ask a building inspector to check the house before you go inside.
- Be alert for gas leaks. Do not strike a match or use open flame when entering a building unless you know the gas has been turned off and the area ventilated.
- Do not use appliances or motors that have gotten wet unless they have been taken apart, cleaned and dried.
- For more information on floods or flood safety, contact your state or local emergency management agency; the Ohio Department of Natural Resources, Division of Water; the National Weather Service; or your local American Red Cross chapter.

Web Resources: www.ohioinsurance.org/pdf/flood.pdf,
www.disastereducation.org/guide.html, www.fema.gov/hazards/floods/

Flood Insurance & Disaster Assistance Info



Flooding can occur during any season. In fact, Ohio has been granted federal disaster declarations for winter flooding two years in a row. The National Flood Insurance Program (NFIP) estimates that 90 percent of all natural disasters involve flooding. A home has a four-times greater risk of flooding than burning, during the course of a 30-year mortgage.

FLOOD INSURANCE FACTS

- Losses caused by flooding are not covered by homeowners or renters insurance. Coverage is available through a separate flood insurance policy. The program is administered by the Department of Homeland Security's Federal Emergency Management Agency (FEMA).
- Flood coverage is available for any building located in a community that has qualified for the NFIP. Buildings do not have to be located in a floodplain to be eligible for flood insurance.
- Most Ohio communities qualify for the NFIP. According to FEMA, approximately 280,000 structures are located in Ohio's mapped floodplain areas with a value of \$11 billion. About 10 percent of these structures are protected by flood insurance. To view a list of communities participating in the National Flood Insurance Program, visit: www.fema.gov/cis/OH.pdf.
- As of September 2005, the average Ohio premium for a NFIP policy was \$592 annually, compared to \$450 per year, nationally.
- Licensed property/casualty insurance agents or brokers can sell flood insurance. The NFIP's toll-free agent referral program number is 1-800-427-4661, for those having difficulty finding flood coverage.
- Flood damage to vehicles is covered by auto insurance when comprehensive coverage is purchased.

ABOUT THE POLICY

- There is a 30-day waiting period before a new or modified flood insurance policy goes into effect, unless it is a condition for obtaining a mortgage.
- The standard flood insurance policy covers direct losses caused by a flood, less an insurance deductible.
- Flood insurance protects against damages caused by surface flooding, with limited coverage in basements. It does not usually cover damages from sewer backup or sump pump failure.
- Two types of coverage are available: **Structure Coverage** for walls, floors, insulation and furnace, and **Contents Coverage** for items permanently attached to the insured structure.
- Homes can be insured up to \$250,000; furnishings and contents coverage is available up to \$100,000. Commercial (business) coverage is available up to \$500,000.
- To file a flood insurance claim, contact the insurance agent or company who sold you the policy.

Flood Insurance & Disaster Assistance Info



DISASTER ASSISTANCE AVAILABILITY

- Most forms of federal disaster assistance are available to individuals and businesses only if the president declares a federal disaster for a specified area(s).
- With a federal declaration, individuals may be eligible to apply for either the FEMA Individuals and Households Program, the low-interest Small Business Administration (SBA) Home/Personal Property Loans or SBA Business Loans.
- The average federal individual and family grant is usually less than \$2,500.
- The average duration and loan payment of a SBA loan is 18.5 years and \$140 per month.
- The State of Ohio Individual Assistance Grant Program (State IA Program) may also be available to flood victims for losses and expenses incurred by individuals and families who do not qualify for the SBA loan program.

Additional information on flood insurance is available at www.fema.gov.



Aerial view of southeastern Ohio, September 2004

Health & Safety Concerns -Power Outage



Sudden power outages can be frustrating and troublesome, especially when they are prolonged. Hundreds of thousands of Ohioans experienced power outages during the winter that lasted for some, a couple of days to, for others, nearly two weeks.

What should people do if a power outage lasts longer than two days? Plan ahead. Be prepared. When making a disaster preparedness plan and when preparing disaster kits, have enough supplies, food and bottled water/drinks to sustain everyone in the household for at least 72 hours. Consider buying a gasoline-powered generator. Never run a generator in an enclosed area such as a garage or basement. People could die of carbon monoxide poisoning.

The American Red Cross has a link on its Web site that provides information on blackouts. Visit www.redcross.org/services/disaster/0,1082,0_133_,00.html.

What Do I Need?

- **One or More Coolers** - Inexpensive, styrofoam coolers can do an excellent job.
- **Ice** - Surround your food with ice in a cooler to ensure the food will stay cold.
- **Shelf-Stable Foods** - Such as canned goods and powdered or boxed milk can be eaten cold or heated on the grill.
- **A Digital, Quick-Response Meat Thermometer** - To quickly check the internal temperature of food for safety.

What To Do?

Do NOT open the refrigerator or freezer unnecessarily. An unopened refrigerator will keep foods cold enough for a couple of hours. A half-full freezer will hold up for up to 24 hours, a full freezer, up to 48 hours.

If it looks like the power outage will be longer than two to four hours, pack refrigerated milk, dairy products, meats, fish, poultry, eggs and leftovers in your cooler and surround with ice. If it looks like the power outage will be even longer, prepare a cooler with ice for your freezer items.

Common Questions and Answers

Q: What if I go to bed and the power is still not on?

A: Before you go to bed, pack your perishables into your cooler, if you haven't already done so, and put in as much ice as you can. Also, when you go to bed, leave a bedroom light switched on. That way, if the power comes back on, the light may wake you so you can check the condition of your food in the freezer. If your freezer food still has ice crystals on them, they can be refrozen.

Q: What if the power goes out while I'm at work or out of the house, and it has been more than a few hours before I return home?

A: Try to determine how long the power has been out. Check the internal temperature of the food in your refrigerator with your quick-response thermometer. A liquid such as milk or juice is easy to check. Spot-check other items like steaks or leftovers. If the internal temperature of the food is about 40 degrees, it is best to throw it out. If the food in the freezer is not above 40 degrees and there are still ice crystals, you can refreeze.

Q: What if the power goes out and comes back on while I am out?

A: If your freezer is fairly full and you know it has not been longer than 24 hours, the food should be OK. There will be loss of quality with refreezing, but the food will be safe. If the refrigerator was out for more than two to four hours, you are best to discard the perishables.

Health & Safety Concerns - Floods



Flooding affects hundreds of thousands of Americans every year. The Ohio Department of Health (ODH) offers these tips to help Ohioans protect themselves and their children from potential hazards during and after a flood.

Don't let children drink or put toys in flood waters. Don't allow your children to play or swim in flood waters. If your child shows any signs or symptoms of illness after being in flood waters such as nausea, vomiting or diarrhea, contact your physician as soon as possible.

If a person receives a cut, burn or puncture wound, make sure it does not come in contact with flood waters. Flood water may contain various bacteria, viruses and other infectious organisms that may cause disease. Flood water may also contain fecal material from overflowing sewage systems. If you are concerned about an injury, check with your physician to see if a tetanus booster is necessary.

Cleanup

Mold is a likely problem in flooded homes. Mold has the potential to affect the health of all family members. It is important to remove all water and fix any leaks before cleaning. Clean hard surfaces with a solution of bleach and water; make sure to ventilate the area when using chlorine bleach. Wear a filter mask and gloves to avoid contact with the mold. Let the bleach and water sit for 15 minutes and then dry the area thoroughly. Wet, porous materials, such as carpeting, wallboard, insulation, wallpaper and furniture should be discarded because they remain a source of mold growth.

Use fans and dehumidifiers to air and dry out the home. If weather permits, open doors and windows.

Food Safety

Food that comes in contact with flood water can also pose a serious health risk. ODH recommends throwing away any product if there is any doubt about its safety.

ODH also recommends throwing away home-canned goods if the tops have been exposed to flooding. Food in paper containers, cloth or cardboard packaging that has been exposed to flood water should also be discarded, along with soft drinks and condiments using capped containers.

Store-bought canned goods may be saved if they are disinfected prior to opening. Label the can with a waterproof marker, remove the paper label and wash the can thoroughly in hot, soapy water. Rinse well; after washing and rinsing, disinfect can by soaking it for five minutes in a chlorine solution using one tablespoon of bleach (labeled 5.25 percent sodium hypochlorite) for each gallon of cool water.

Water Safety

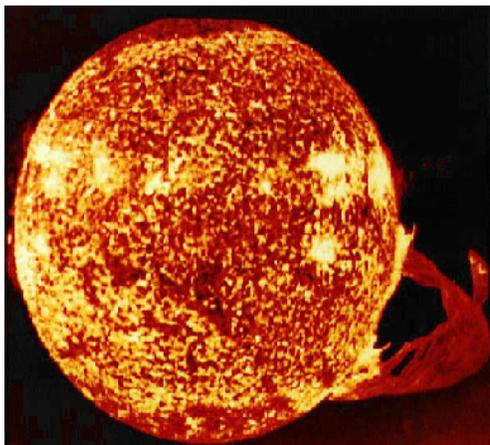
If you have a private well, run cold water for about 30 minutes to allow the well to recharge naturally. Do not save the water. Have the well disinfected and tested before drinking or using for cooking. If you must use tap water, boil it vigorously for at least one minute. If you cannot boil it, add 16 drops of bleach to each gallon of water. Mix thoroughly and allow to stand for 30 minutes. This method should be used only with water that is clean in appearance and free of odors.



Bolivar, Ohio flooded severely in January 2005. Interstate-77 is submerged. Bolivar is located in southern Stark County, near the Tuscarawas County line.

View ODH flood manual at: www.odh.state.oh.us/odhprograms/disprep/DP_facts/FloodManual.pdf

Health & Safety Concerns - Extreme Heat



With heat and humidity common during summer months, the Ohio Department of Health urges everyone to use extra care in avoiding heat-related stress.

Some medications affect the body's ability to deal with excessive heat. People should be aware of the possible side effects of their medications and avoid high-heat situations. Pet owners should make sure animals, especially those outside, have plenty of water and a place to get out of the sun and cool down.

Studies show people suffer heat-related illnesses such as heat stroke and heat exhaustion when the body's temperature control system is overloaded. Sweating is the body's natural coolant. In some situations, especially during periods of high humidity, sweating alone will not provide an adequate release of body heat.

Summer activities should be balanced with measures to help the body stay cool. Hot weather demands increased fluid intake.

Drinking plenty of cool (not cold) fluids is the key to avoiding heat problems. Active people should drink two to four glasses of cool, nonalcoholic fluids each hour. Do not take salt tablets without a doctor's advice; avoid fluids that contain alcohol or caffeine. They can add to dehydration and increase the effects of heat illness.

Children and teens involved in team sports should be closely monitored for signs of heat stress. Coaches should consider rescheduling practice or play held during the hottest parts of the day. Young children may become preoccupied with outdoor play to realize they are overheated. Adults should insist on frequent breaks and bring children indoors for a cool drink.

Plan outdoor activities for either the early morning or late evening, when the sun is less direct. Wear loose-fitting, light-colored clothing and a wide-brimmed hat to protect against sunburn. Move to the shade or into an air-conditioned building at the first signs of heat illness. Remember, heat-related symptoms can come on quickly.

Symptoms of heat exhaustion: heavy sweating, paleness, muscle cramps, tiredness, weakness, dizziness, headache, nausea or fainting. People experiencing these symptoms should be moved to a cool, shady or air-conditioned area, and provided cool, nonalcoholic beverages.

Heat stroke is a potentially life-threatening condition, characterized by a body temperature of 103 degrees or more; red, hot and dry skin with no sweat; rapid pulse; headache; dizziness; nausea; confusion; may be unconscious; and skin color may be gray.

Heat stroke victims need immediate medical assistance. Before help arrives, begin cooling the victim with any means possible, such as spray from a garden hose or by placing the person in a cool tub of water.

Summer is also the time for good Samaritans. Citizens should periodically check on their neighbors - especially if they are older or have disabilities. They are of higher risk to suffer heat-related illnesses.



Public Service Announcements

The PSAs located on this page and the next are suggestions for media's unrestricted use. Speaking times of the PSAs are approximate.

Disaster Preparedness Kit **0:18**

Be prepared for severe weather. Keep your disaster preparedness kit in your home and vehicle well-stocked. In each kit you should have a flashlight and fresh batteries, a battery operated radio, a first aid kit, emergency food and water and some cash. For more information on severe weather preparedness, call your local emergency management agency.

Preparing for a flood **0:40**

If there is a flood watch issued for your area, would you know what to do? Being prepared and staying alert means safety for both your family at home and your co-workers at the job. First, have a tone-alert NOAA Weather Radio to hear weather and storm updates. If there is time, move furniture and valuables to higher levels of the home. Be prepared to evacuate. If water is rapidly rising, do not try to walk through it. As little as six inches of swiftly moving water can sweep you off your feet. If you're in your vehicle, do not attempt to drive across a flooded road. For additional information about severe weather awareness and preparedness, contact your county emergency management agency.

NOAA Weather Radio **0:20**

The best source to receive up-to-date weather information is from a tone-alert NOAA Weather Radio. This device automatically sounds when the National Weather Service issues a severe weather watch or warning. Every home and business should have a weather radio. It is a crucial step toward safety and preparedness. For more safety information, contact your county emergency management agency or American Red Cross chapter.

When the Waters Recede **0:40**

Flood dangers don't end when the waters recede. Remember to check on and help your neighbors who may require special assistance including parents with young children, older people and people with physical disabilities. If you had to evacuate your home because of flooding, be sure to check your foundation for cracks or other damage when you return, and carefully examine interior walls, if water got inside. Even a small flood can deposit a lot of debris inside and outside your home. Take pictures for insurance claims and hire an expert to check your utilities. For more information on what to do after the flood, contact your county emergency management agency.

Thunderstorm Safety **0:26**

Severe thunder and lightning storms are one of most dangerous and deadly weather events. The average thunderstorm is 15 miles in diameter and lasts about 20 to 30 minutes. If you are caught outside when a thunderstorm hits, seek shelter immediately. If you are inside, stay there until the storm passes. For more information about severe weather preparedness, contact your local emergency management agency or American Red Cross chapter.

Public Service Announcements



Weather Awareness

0:20

Severe weather can trigger an emergency situation anytime and anywhere. Stay aware of weather conditions. Have a NOAA Weather Radio in your home and at work. Good safety preparation can save lives and reduce property damage. Your local emergency management agency can help you prepare a severe weather safety plan. For more information, call your local emergency management agency.

Tornado Safety

0:29

Tornadoes can strike at any time during any month. If you're driving and see a funnel cloud, do not try to outrun it. If possible, get out of the vehicle and seek shelter in a building. If no shelter is nearby, lie down in a low area and cover your head and neck with your hands. Never seek shelter in a mobile home. Plan what to do and where to go if a tornado warning is issued for your area. For additional information about tornado and other severe weather safety, call your local emergency management agency.

Flood Safety

0:27

Flooding is Ohio's most frequent and most costly severe weather hazard. Brief, heavy rains can trigger flash flooding. If you are in your car and come upon rushing, rising water across the road, do not try to drive through it. The road may have washed away. It takes only two feet of rushing water to lift most vehicles off the pavement and into very hazardous situations. For more information on flooding and other severe weather situations, call your county emergency management agency.

Beat the Heat

0:32

There are lots of things we all can do to beat the heat - and save money, as well. When the thermometer rises above 90 degrees, it's time to take action! Lower the shades or close the blinds in your house, particularly, windows that face the west or south. Turn on a ceiling fan, if you have one. Turn off unnecessary lights. It won't take long to make your home more comfortable. You'll also save some money on your utility bill. To learn more tips on how to beat the heat, contact your county emergency management agency or health department.

Hot Weather Safety Tips

0:20

Hot weather can be a personal safety hazard. If the temperature is above 80 degrees outside, ***never*** leave children or pets in a parked car with the windows rolled up and without the air conditioner on. The temperature inside a vehicle can rise to more than 100 degrees in a matter of minutes. For more beat-the-heat information, contact your local emergency management agency or American Red Cross chapter.

More Hot Weather Safety Tips

0:17

On hot, sunny days, wear a hat and drink plenty of fluids - preferably water. If you have trouble catching your breath while walking outside, sit down in the shade and sip on a cool drink. There are lots of ways to beat the heat. Your county emergency management agency and county health department have additional information. Call today.



Storm Safety and Preparedness

Tornado Safety Tips for School Administrators

The most important part of tornado safety in schools, and in similar logistical arrangements such as nursing homes, is to develop a good tornado safety plan tailored to your building design and ability to move people.

www.spc.noaa.gov/faq/tornado/school.html

Urban Survival Tools for a Tornado

Site gives bulletized points on preparing a home tornado plan; assembling a disaster supplies kit; and tells what to do during tornado watches and warnings.

www.urbansurvivaltools.com/tornado.html

National Weather Service: Flood Safety National Flood Safety Week is

March 20-24, 2006. National Flood Safety Awareness Week is intended to highlight some of the many ways floods can occur, the hazards associated with floods, and what you can do to save life and property.

www.floodsafety.noaa.gov/

FloodSmart.gov: Your Premier Resource for Flood Insurance Information

Sponsored by the National Flood Insurance Program, this site tells the importance of community involvement and describes the types of flood insurance coverage available.

www.floodsmart.gov

Blackouts

The American Red Cross provides safety information for short-term power outages or "rolling blackouts." Information is also available for people with disabilities.

www.redcross.org/services/disaster/0,1082,0_133_,00.html

FEMA: Are You Ready? Extreme Heat

The Federal Emergency Management Agency's in-depth guide on extreme heat, heat-related illnesses and how to protect against and/or treat extreme heat illnesses.

www.fema.gov/areyouready/heat.shtm

OCSWA Offices' Web Sites

American Red Cross

<http://columbus.redcross.org>

National Weather Service Offices

Cleveland: www.erh.noaa.gov/cle/

Wilmington: www.erh.noaa.gov/iln

Charleston WV:

www.weather.gov/charlestonwv

N. Indiana: www.crh.noaa.gov/iwx/

Pittsburgh: www.erh.noaa.gov/er/pit/

Ohio Dept. of Aging

www.goldenbuckeye.com/

Ohio Dept. of Education

www.ode.state.oh.us/

Ohio Dept. of Health

www.odh.ohio.gov

Ohio Dept. of Insurance

www.ohioinsurance.gov/

Ohio Dept. of Natural Resources

www.dnr.state.oh.us

Ohio Emergency Management Agency

www.ema.ohio.gov

Emergency Management Assoc. of Ohio

www.ohioema.org

Ohio Insurance Institute

www.ohioinsurance.org

Ohio News Network

www.OhioNewsNow.com

State Fire Marshal

www.com.state.oh.us/sfm/