

Spring Severe Weather Awareness

Severe Weather Awareness Week: March 13-19, 2005

Ohio's Statewide Tornado Drill: Wednesday, March 16th at 9:50 a.m.



Aerial view of Athens County - May 2004

An Emergency Preparedness Guide

Ohio Committee for
Severe Weather Awareness



This publication is available with Web links on the
Ohio Emergency Management Agency Web page:

www.ema.ohio.gov/weather.htm

Bob Taft, Governor



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Ohio Committee for Severe Weather Awareness



The goal of the Ohio Committee for Severe Weather Awareness is to teach every Ohio resident how to prepare for and respond to threatening weather. We appreciate your efforts to help relay this critical and lifesaving information. This packet is provided as a service to help you educate Ohioans about severe spring weather hazards.

The Ohio Committee for Severe Weather Awareness has conducted statewide safety campaigns for 27 years. Committee representatives are listed below.

For more information on spring weather safety, contact either a committee member or your local emergency management agency listed on page 31.

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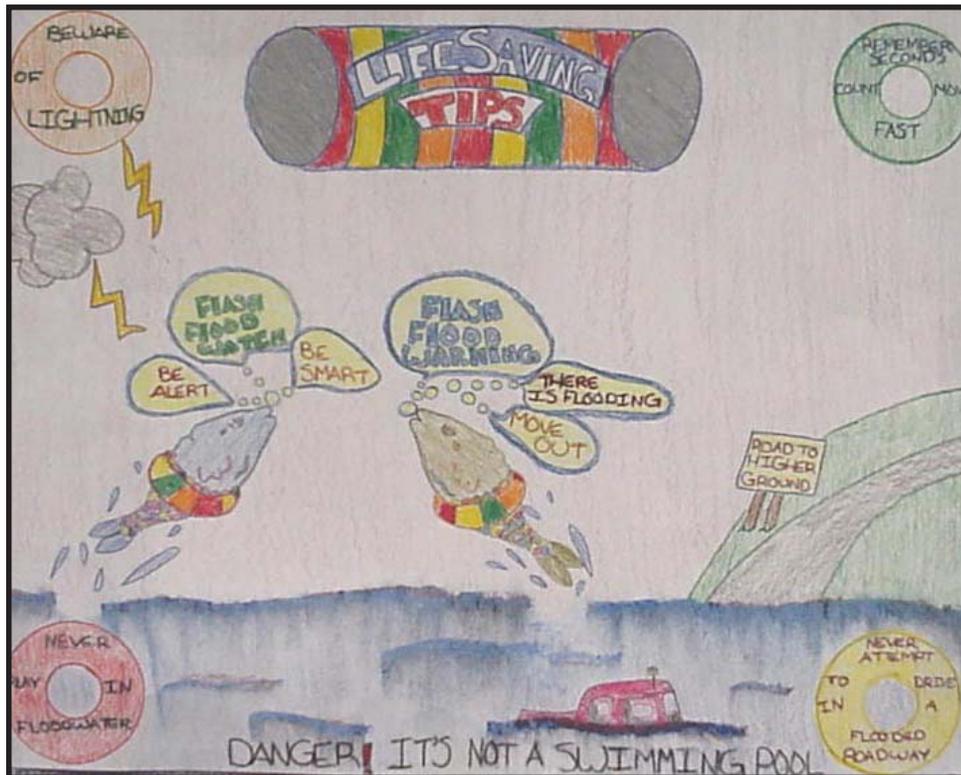
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2004 Severe Weather Awareness Winning Poster



*2004 Overall State Severe Weather Awareness Poster
Artist: Gabriela Torres, 3rd Grade
Salt Creek Elementary School, Pickaway County*

The Ohio Committee for Severe Weather Awareness sponsors an annual statewide poster contest in which first through sixth grade students draw safety posters that demonstrate how to protect or prepare for any severe weather that affects Ohio: thunder or lightning storms, flooding, winter storms, excessive heat, or tornadoes. Elementary school art teachers throughout the state will receive contest information packets by the end of February.

The state is divided into nine regions in order to judge the contest entries. Regional offices of the National Weather Service conduct the judging of all posters sent to them and select one winner from each grade level in each region to forward to the final round of judging. Statewide, up to 63 regional winning posters can be entered for the final state-level judging. All regional winners are invited to attend an awards ceremony in Columbus at the Ohio State Fair. At the ceremony, all poster finalists receive a variety of prizes. One poster from each grade level will be chosen as a state-level winner; each statewide winner receives a \$50 savings bond and prizes. One poster is selected as the overall state-level winner, with its artist receiving a \$100 savings bond, plus additional bonus prizes.

Gabriela Torres, now a fourth-grader at Salt Creek Elementary School, was the overall winner for 2004. Salt Creek Elementary has had a total of five overall state winners and numerous state and regional winners.

Complete rules for the Severe Weather Poster Contest can be found at:
www.ema.ohio.gov/PDFs/Severe_Weather/2005_Poster_Rules.pdf.

Governor's Resolution



STATE OF OHIO

Executive Department

OFFICE OF THE GOVERNOR

Columbus

RESOLUTION

WHEREAS, Ohioans face the yearly threat of potentially devastating tornadoes, floods and other severe weather; and

WHEREAS, it is incumbent upon government, at all levels, to promote effective emergency preparedness and management practices that will better protect the lives and property of the citizens of Ohio; and

WHEREAS, the Ohio Committee for Severe Weather Awareness is committed to educating the public on the methods of preparedness and response to the natural hazards which affect Ohio; and

WHEREAS, Ohio's news media has proven their ability and willingness to educate the public about severe weather safety; and

WHEREAS, these joint educational campaigns have proven effective in educating the citizens of Ohio about the actions they can take to prepare for and respond to tornadoes, floods and other severe weather events.

NOW, THEREFORE, I, BOB TAFT, Governor of the State of Ohio, do hereby designate

SEVERE WEATHER AWARENESS WEEK

March 13-19, 2005

throughout the State of Ohio and urge the news media and local government of our state to assist the Ohio Committee for Severe Weather Awareness in educating Ohioans about the dangers of and the safety measures necessary in preparation for tornadoes, floods and other severe weather events.

On this 11th day of March, 2005;

Bob Taft
Governor



Letter from the 2005 OCSWA Chair

What a season of weather we've had.

Throughout the year, Ohioans suffered through snow, ice, floods and tornadoes that caused hundreds of millions of dollars in damage. This 2004-2005 winter alone, emergency declarations were issued for three-fourths of our counties. Hundreds of thousands of people were without electricity.

How will this spring's weather be? Will it be an active storm season? Certainly no one can say for sure - and that is why increased awareness and preparation is the key to your and your family's safety.

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

In addition, the State of Ohio will participate in two events that are focused to increase the knowledge of preparing for and recovering from severe weather, and to test warning systems. Governor Bob Taft has proclaimed March 13-19, 2005 as the Spring Severe Weather Safety Awareness Week. This week can be the opportunity to create a disaster preparedness plan for the home, school or business. On Wednesday, March 16, Ohio counties will sound their warning systems at 9:50 a.m. for the statewide tornado drill. Schools and businesses are encouraged to participate at that time and practice their tornado drills.

A third event, also used to promote weather safety, is geared toward elementary school children. Students in first through sixth grades can create posters for the committee's annual poster contest that promote awareness about severe weather threats and safety. You can find more information about the contest, and see the winning poster for 2004 on Page 3 of this booklet.

The mission of the committee is to help ensure Ohioans remember how much severe weather can affect our lives. We encourage you to join us in promoting severe weather safety as part of the 2005 Spring Severe Weather Safety Awareness Week.

Sincerely,

Bret M. Atkins
2005 Chair, Ohio Committee for Severe Weather Awareness
Public Information Officer
Ohio Department of Health

2004 Ohio Weather Incidents



From the beginning of the year to the end, it seemed like the state of Ohio was under one never-ending disaster. In reality, Ohio received only three federal disaster declarations in 2004 and endured approximately six major storm events. December's severe snow and ice storms continued through January of 2005, with severe flooding, snow and ice storms.

On January 9, 2004, Governor Bob Taft initially declared a state of emergency for 16 counties because of severe rains, freezing temperatures and flooding in central and southern Ohio. By January 27, the state received a presidential disaster declaration due to damages caused by floods, severe storms, freezing temperatures, landslides and mudslides.

Residents and business owners who suffered damages or losses in the following counties were eligible to apply for federal individual assistance: Belmont, Franklin, Jefferson, Licking, Morgan, Ross, Tuscarawas and Washington. Individual assistance of low-interest loans and grants provided for this disaster totaled more than \$2.5 million.

Then there was spring. It seemed to rain every day. Severe storms and floods inundated the state. Because of severe flooding, strong winds, landslides and mudslides, Ohio was granted its second federal disaster declaration of the year on June 1. The incident period was from May 18 to June 21. Flood victims residing in 21 counties were eligible to apply for federal individual assistance: Athens, Carroll, Columbiana, Crawford, Cuyahoga, Delaware, Geauga, Guernsey, Harrison, Hocking, Holmes, Licking, Logan, Lorain, Mahoning, Medina, Noble, Perry, Portage, Richland, Stark, Summit and Tuscarawas. Individual assistance provided for this disaster totaled more than \$19 million.

During the months of August and September, Florida and Alabama wreaked the havoc of hurricanes Frances and Ivan - and Ohio received their aftermath of severe storms, high winds and flooding. By September 20, Ohio received a federal declaration for individual assistance for a total of 15 counties: Belmont, Carroll, Columbiana, Guernsey, Harrison, Jefferson, Monroe, Morgan, Muskingum, Noble, Perry, Stark, Trumbull, Tuscarawas and Washington. This disaster generated more than \$45.1 million in individual assistance loans and grants.

On December 22, the northern half of the state had snow storms and the southern half of the state suffered through severe ice storms that exploded transformers and downed power lines and trees. By the second day, more than 400,000 Ohioans were without power. Over 200,000 residents were left without electricity for more than a week. By December 28, the governor declared a state of emergency for 20 counties.

This winter storm incident carried over to the New Year - by January 6, the southern half of the state experienced days of above 50 degrees temperatures and constant rain, and the northern half suffered through the ice and snow storms and power outages. On January 11, local governments in 17 counties became eligible to apply for federal public assistance (financial reimbursement) for December 22-24, 2004 severe winter storms.

On February 15, 2005, 59 Ohio counties became eligible for federal disaster assistance following the ice storms, snow storms and floods that began December 22 and continued through February 1.



Severe/Hazardous Weather Terms

Warning - A product issued by National Weather Service 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 - A NWS product 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 downdraft 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 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. These lines may be of considerable length, extending across multiple states.

Straight-Line Winds: Thunderstorm winds that may produce damage which typically exhibits a lack of a rotational damage pattern. Straight-line winds are most often produced by a thunderstorm gust front, originating from a downburst.

Thunderstorm: In general, a local storm produced by a cumulonimbus cloud, and accompanied by lightning and thunder, usually with strong wind gusts, heavy rain and sometimes hail. A cumulonimbus cloud is a cauliflower-shaped cloud that has a height taller than or equal to its width.

Tornado: A violently rotating column of air that comes in contact with the ground, many times, descending from the base of a severe thunderstorm. Tornadoes are usually funnel-shaped, with the narrow end nearest the ground. In Ohio, most tornadoes are obscured by hills, trees and rain until they are upon you.

Emergency Preparedness Plans & Disaster Kits



The best defense when faced with severe weather warnings is preparedness. Every household and business should have a disaster 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



NWS Preparedness Program

Your County Can Become



Pictured left to right: Ohio EMA Communications Branch Chief Dean Bolton; Clermont County Commissioner Robert Proud; Meteorologist Mary Jo Parker, National Weather Service - Wilmington; and Beth Nevel, Clermont County EMA Director.

StormReady is a nationwide preparedness program of the National Weather Service that uses a grassroots approach to help communities develop plans to handle local severe weather and flood threats. It is a voluntary program and provides communities with clear-cut advice from a partnership between local NWS Weather Forecast Offices and state and local emergency managers. StormReady began in 1999 with seven communities in Oklahoma. Now there are more than 850 StormReady communities in 47 states.

Ohio added its sixth StormReady community in January 2005, located in Clermont County. Other StormReady communities are in Allen, Huron, Scioto, Union and Van Wert counties.

The program encourages communities to take a new proactive approach to improving local hazardous weather

operations and public awareness. It is StormReady's goal to reduce the impact of severe weather throughout the state.

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 Web site: www.nws.noaa.gov/stormready.

For guidelines specific to Ohio, visit the NWS Web site link: www.erh.noaa.gov/er/iln.

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 16, 2005 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 nation-wide 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.

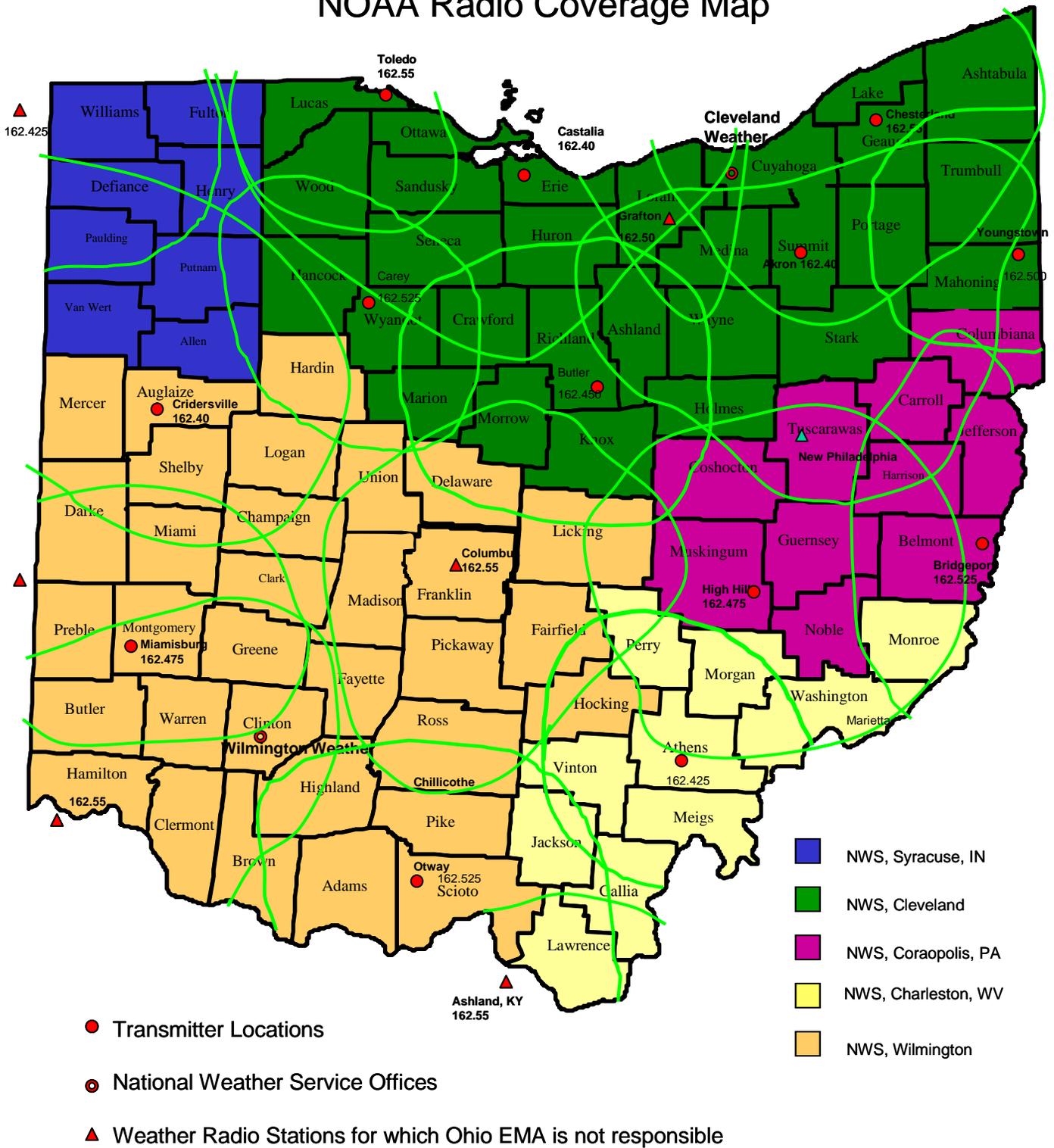
Where Can I Purchase a NOAA Weather Radio? What if I Have Additional Questions?

Check with electronics or department stores, call your local National Weather Service office, or visit the web site: www.nws.noaa.gov/nwr.

NOAA Weather Radio Transmitter Sites



NOAA Radio Coverage Map





Mitigation - Minimizing Future Disaster Damage

Through mitigation, the state of Ohio implements procedures to reduce the cost of damage caused by disasters, and minimize the impact on citizens, businesses and property. Simply defined, mitigation is taking proper measures now to reduce or prevent injuries, loss of lives, and damages from disasters in the future.

There are numerous success stories of effective mitigation projects across the state because of the partnership between Ohio citizens, county emergency management agencies, Ohio EMA, the Ohio Department of Natural Resources and the Federal Emergency Management Agency (FEMA).

Natural disasters such as floods and tornadoes will inevitably occur in Ohio. But, through mitigation, citizens can take protective measures to minimize or prevent extensive damage to their homes, businesses and properties. Some examples of ways to mitigate include:

- Building outside the floodplain, building flood-protected structures and purchasing flood insurance to protect homes and belongings.
- Securing LP (propane) fuel tanks to prevent them from floating away during severe flooding. If there is a potential for flood, shut off the fuel tank valves.
- Raising major appliances located on the lowest level of the home - such as freezers, washers and dryers onto platforms to prevent damage from flooding.
- Reinforcing garage doors to prevent them from detaching during a tornado.
- Attaching bookcases and heavy furniture to the wall to prevent them from falling during an earthquake.
- Cleaning gutters regularly before and during the winter season to prevent ice and snow buildup.

Ohio currently has 77 active mitigation communities. To date, FEMA and Ohio EMA are managing approximately 100 mitigation projects within the state. For additional information on hazard mitigation, contact the Ohio EMA Mitigation Branch at (614) 799-3539.



This Belmont County home would have been flooded worse, had it not been elevated - September 2004.

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. Tornadoes usually occur between 2 p.m. and 10 p.m., but have been known to occur at any hour.

Tornadoes can be classified into one of three types:



Weak Tornadoes (F0/F1) account for approximately 86 percent of all tornadoes; cause less than five percent of tornado deaths; lifetime is usually one to 10 or more minutes; wind speeds are less than 113 mph.

Strong Tornadoes (F2/F3) account for approximately 13 percent of all tornadoes; cause nearly 30 percent of all tornado deaths; may last 20 minutes or longer; wind speeds are 113 mph to 206 mph.

Violent Tornadoes (F4/F5) account for only one percent of all tornadoes; cause 70 percent of all tornado deaths; may last for one hour or more; wind speeds are greater than 260 mph.

- 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.
- Ohio averages 16 tornadoes and five tornado-related fatalities per year.
- In 2004, eight tornadoes were recorded in Ohio, resulting in one injury and no deaths.
- National Weather Service (NWS) offices in Wilmington and Cleveland, Ohio; Pittsburgh, Pennsylvania; Charleston, West Virginia; and Syracuse, Indiana provide warnings for Ohio.
- The NWS uses Doppler weather radars to detect the air movement within thunderstorms. Early detection of increasing rotation aloft within a thunderstorm can allow lifesaving warnings before the tornado forms.



Tornado Safety Tips

Whether practicing in 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 Statistics



Ohio Tornado Statistics: 1940-2004

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1940-49	2	0	5	5	10	6	2	5	3	0	0	0	38
1950-59	1	4	7	8	12	12	12	5	1	2	1	0	65
1960-69	0	1	5	37	26	20	16	12	4	1	8	0	130
1970-79	2	4	3	26	28	50	25	18	14	7	1	2	180
1980-89	1	0	17	19	32	50	16	7	1	2	2	0	147
1990-99	1	5	1	16	21	48	77	17	5	3	3	1	198
2000-03	0	0	0	6	16	4	4	6	2	2	19	0	59
2004	0	0	0	0	5	2	1	0	0	0	0	0	8
1940-04	7	14	38	117	150	192	153	70	30	17	34	3	825

Note: The increase in tornadoes listed in the 1950s and 1960s is not necessarily indicative of an absolute increase in the number of tornadoes, but is more likely the result of better communication, an increase in population and more public awareness of severe weather.



Aftermath of the September 2000 Xenia tornado.



Tornado Loss Prevention Tips

The following steps are suggestions that homeowners should take before a tornado or other natural disaster occurs to assure speedy and hassle-free recovery.

The Insurance Information Institute has a web tool that makes conducting a home inventory a breeze. Now you can catalog your possessions online, room by room. Once completed, you can add items and photos. Maintaining a comprehensive inventory will come in handy, should you need to file a claim or reevaluate the amount of insurance you carry. It's good for renters, too. Visit www.knowyourstuff.org to get started.

Home Coverage and Preparedness Tips

- Tornado losses are most often covered by the “windstorm peril” under the homeowner’s insurance policy.
- Check with your homeowner insurance agency to assure adequate coverage is provided by the policy. Notify the insurance agency of any additions or improvements to the home.
- Consider purchasing the replacement cost coverage endorsement for the home and its contents. It would give the option to rebuild or replace damaged property at current costs rather than depreciated values.
- If you experience a storm-related loss to your home that is covered by your insurance, notify your insurer in a timely manner, as required by your policy.

Home Inventories Assist in Settling Claims

- Videotape, photograph or compile a written inventory of your home and belongings.
- Keep the inventory off premises in a bank safe deposit box. The inventory will provide a record for you and the insurance company, should a loss occur.
- Update your inventory every time you move or every two to three years.
- Written Inventory Tips
 - Go through each room of the home and list every item. Include the purchase date, price and model numbers.
 - Include professional, written appraisals of antiques, jewelry and other costly possessions.
 - Visit www.ohioinsurance.org/renters_insurance/images/inventory.pdf to download a sample of a personal property inventory form.
- Video or Photo Inventory Tips
 - Pan the camera around the room to capture all items. Obtain close-ups of expensive items such as jewelry, china and furs.
 - Consider grouping items for easier inventory.
 - Narrate the video by noting purchase costs and dates. Include model and serial numbers for appliances and electronic devices.

Auto Coverage and Preparedness Tips

- If there is threatening weather, shelter vehicles to prevent damage from winds, flying debris and hail.
- Vehicles are protected under the “other than collision” (comprehensive) portion of an auto insurance policy, if damaged by windstorms or hail.

After the Loss - Insurance Tips

- Photograph any damage and inventory losses. Photos will assist when settling claims.
- Secure property from further damage or theft and save related receipts, since many insurers will reimburse for these expenses.
- If required to seek temporary housing due to a covered loss such as a tornado, check your policy for “loss of use” coverage. Many policies cover such expenses up to a stated amount.

Thunderstorm / Lightning Facts



Thunderstorms are a common spring and summer occurrence throughout the state of Ohio. Many Ohioans may not realize that thunderstorm winds and lightning kill more people every year than tornadoes.

National Lightning Awareness Week is June 19-25, 2005.

- Although hurricanes and tornadoes receive most of the recognition, lightning occurs more often in the United States. More than 40 million lightning strikes occur every year, resulting in nearly 100 deaths.
- All thunderstorms produce lightning. Lightning often strikes outside of heavy rain and may occur as far as 10 miles away from any rainfall.
- Lightning results from the buildup and discharge of electrical energy between positively and negatively charged areas. The action of rising and descending air within a thunderstorm separates positive and negative charges.
- An average flash could illuminate a 100 watt light bulb for more than three months.
- The air near a lightning strike is heated to 50,000 degrees which is hotter than the surface of the sun. The rapid heating and cooling of the air near the lightning channel causes a shockwave that results in thunder.
- Ohio experiences 30 to 50 days annually of thunderstorm activity.
- The typical thunderstorm is 15 miles in diameter and lasts 30 minutes.
- Of the estimated 100,000 thunderstorms that occur each year in the United States, only about 10 percent are classified as severe.
- Severe thunderstorms can produce damaging winds as strong as the winds in a weak tornado and can be life threatening.
- A severe thunderstorm can produce hail that is 3/4 inch in diameter or larger and/or winds of 58 mph or higher and can produce tornadoes.
- Large hail causes nearly \$1 billion in damage to property and crops annually.
- The costliest U.S. hailstorm occurred in Denver, July 11, 1990. Total hail damage was estimated at \$625 million.
- Lightning strikes the earth 100 times every second.



Thunderstorm / Lightning Safety Tips

The following safety tips can protect you during a thunderstorm:

- If you can hear thunder, you are close enough to the storm to be struck by lightning. Go to safe shelter immediately, such as a sturdy building or car. Do not take shelter in small sheds, under isolated trees or in convertible automobiles.
- Telephone lines and metal pipes can conduct electricity. Do not use a telephone during a storm unless it is an absolute emergency. Unplug all unnecessary appliances BEFORE the storm approaches. Avoid using electrical appliances during the storm.
- Turn off air conditioners. Power surges from lightning can overload the compressors.
- Do not take a bath or shower during a storm. Water is an electrical conductor.

The following safety tips can help when you are caught outdoors and no shelter is nearby:

- If lightning is occurring and a shelter is not available, get inside a hard top automobile and keep the windows up. The roof of the vehicle protects you, not the rubber tires.
- If no automobile is available, find a low spot away from trees, fences and poles. Be alert to the possibility of flash flooding.
- If you are in the woods, take shelter under short trees or bushes.
- If you feel your skin tingle or your hair stand on end, squat low to the ground on the balls of your feet. Place your hands on your knees with your head between them. Make yourself the smallest target possible and minimize your contact with the ground.
- If you are boating or swimming, get to land and find shelter immediately.
- Stay away from open outdoor spaces.

For more information on lightning safety and education, visit the National Weather Service Web site at www.lightningsafety.noaa.gov, and the Lightning Protection Institute Web site at www.lightning.org.



Flood Facts



Floods and flash floods are two leading severe weather-related killers in the United States. In Ohio alone, there have been more than 50 flood-related deaths during the last 10 years. Five Ohioans suffered flood-related deaths in September 2004, and of the nine storm-related deaths that occurred during the December 2004-January 2005 snow, ice and flood emergency, two were flood-related.

Approximately 90 percent of all federally declared disasters include flooding. It is important to note that not all disasters are of the magnitude to receive a federal or presidential declaration.

The state of Ohio received three federal disaster declarations in 2004, all due to severe flooding.

- Eight counties were eligible for federal assistance from the January floods.
- Twenty-one counties received federal assistance from the May and June storms and flooding.
- Fifteen counties received federal assistance from the August and September storms and flooding.
- Individual assistance provided for these three Ohio flood disasters totaled more than \$66.6 million.

Though “special flood hazard areas” have been mapped for most Ohio communities, about one in four floods occur in areas with a low to moderate risk of flooding. U.S. property damage from flooding now exceeds \$1 billion every year.

Three types of flooding occur in Ohio:

General River Flooding occurs after long-term heavy rain, snow melt or a combination of the two. It usually occurs slowly, allowing more time to move people and property to safety.

Flash Flooding named for its sudden, in-a-flash occurrence, is deceptively dangerous. In a few moments, the flow in a small, almost unnoticed stream or ditch can become a deadly and destructive torrent. Then, just as suddenly, it can drop back to a normal flow. Flash flooding can occur anywhere that the amount of water exceeds an area’s capability to absorb it or convey it within the banks of existing channels.

Urban and Small Stream Flooding is a subtle flood threat. It can occur when heavy rain falls in an urban or rural area, resulting in flooded streets, underpasses and drainage ditches. It is not normally a threat unless motorists drive through flooded roads or children play in flood waters. Small stream flooding can be hazardous if people get too close to a swollen creek.

Levels of flooding can be categorized as the following:

Minor Flooding - the accumulation of excessive surface runoff.

- Flood waters consigned to the floodplain immediately along a river/channel or in random low-lying and topically depressed areas.
- Flooding is relatively shallow with no perceptible flow of water as when inundation is rapidly spreading to adjacent areas.

Major Flooding - the overflowing of rivers, lakes and can cause breaks in dikes, levees and other protective structures or uncontrolled releases of dam water.

- Coverage of a wide continuous area and rapid spreading to adjacent areas of relatively lower elevation.
- Flooding is relatively deep in most parts of the flood-stricken areas. Currents of flood water will be swift as the flood spreads to other areas.



Flood Safety Tips

Flood-related injuries and fatalities can be greatly reduced by increasing public awareness of the dangers involved in floods and flash floods. These tips can potentially save your life during flood events:

- About 40 percent of flood-related deaths occur in motor vehicles. Never attempt to drive into a flooded roadway. It only takes about two feet of water to float most cars. Motorists who survived driving through a flooded road and were swept away commonly say that they thought the water was only a few inches deep.
- Even if the vehicle in front of you successfully crosses a water-covered road, it is best to find an alternate route or to wait. If you get stuck, you are not only risking your own life, but the lives of rescue personnel.
- In the past 10 years, most of the deaths due to flooding in Ohio have been motorists driving through flooded roads or people refusing evacuation requests.
- Most flood-related deaths occur when people attempt to walk or drive into a flooded area. Many flood-related deaths also occur at night, when it is difficult to distinguish between a wet roadway and a water-covered roadway; heavy rainfall at night greatly reduces visibility.
- Trucks and four-wheel drive vehicles are also susceptible to being swept away by high water. Such vehicles often give motorists a false sense of security, believing they can drive through high water. This belief results in numerous deaths or emergency rescues of motorists in vehicles either stuck in or swept away by floodwaters.
- If you live in a low-lying area or near a creek, pay close attention to water levels during heavy rain events. Water rises rapidly during flash floods, often taking victims by surprise. Be prepared to move quickly to higher ground if water levels begin rising rapidly.
- Never let children play near creeks or storm drains. Every year, deaths or injuries occur because rushing flood waters sweep people into a storm drain or body of water. Last year, a young Ohio girl drowned when flood waters washed her from a bridge as she was walking home from school.
- If you are camping, never place your tent or camper on the bank of a river or creek. Allowing some distance between your campsite and the creek is best, so if a flash flood does occur, you will have more time to move to higher ground.
- Six inches of rapidly moving flood water can knock a person down. A mere two feet of water can float a large vehicle - even a bus.

See www.floodsmart.gov for additional information.

Flood Insurance Facts



- Flood insurance claims are paid even if a disaster is not declared by the president.
- Homeowners' insurance policies do not cover flood damages.
- Only about 10 percent of structures in Ohio's floodplain areas are currently covered by a flood insurance policy.
- Federal flood insurance is only available in communities that participate in the National Flood Insurance Program (NFIP). In Ohio, every city, town, village and county (unincorporated areas) can choose to be an NFIP-participating community.
- Any walled and roofed building in an NFIP-participating community is eligible for flood insurance, whether or not it is in a regulated floodplain.
- Manufactured (mobile) homes can be insured if installed on a permanent site and flood-anchored.
- There is a 30-day waiting period after a policy is purchased before coverage becomes effective. However, if a policy is required by a lender as a condition for obtaining a mortgage, then the coverage takes effect at closing.
- Any licensed property casualty insurance agent or broker can sell the Standard Flood Insurance Policy. Two types are available:
 - (1) **Structural Coverage** on walls, floors, insulation, furnace and items permanently attached to structure.
 - (2) **Contents Coverage** for items such as furniture, appliances and other household items (must be purchased separately from Structural Coverage).

National Flood Insurance Program Ohio Summary (as of November 2004)

Communities with federally identified flood hazard areas	771
NFIP-participating communities.....	724 (638 municipalities, 86 counties)
Non-NFIP-participating communities with identified flood hazard areas	73 (71 municipalities, 2 counties)
Municipalities participating in NFIP without identified flood hazard areas	46
Number of flood insurance policies sold	35,189
Face value	\$3.6 billion
Average cost per policy	\$560
Number of claims paid (since 1978)	16,987
Value of claims	\$119,043,148

Source: www.fema.gov.



A car is submerged after a flashflood in Belmont County (September 2004).

For additional information on standard flood insurance policies, visit the Federal Emergency Management Agency Web site at www.fema.gov/nfip/pcstat.shtm. To download a brochure on flood insurance, visit the Ohio Insurance Institute Web site at www.ohioinsurance.org/pdf/flood.pdf.



Flood Insurance & Disaster Assistance

“Will disaster assistance be available if my home or business is flooded?”

“How expensive is flood insurance?”

“Is my home at risk if we’ve never been flooded before?”

If you have questions as to whether or not you need flood insurance, consider the following:

- Most forms of federal disaster assistance are only offered if the president declares a major disaster.
- Approximately 90 percent of disasters that occur are not of the severity to warrant a federal declaration.
- Both the federal and state of Ohio Individual Assistance Grant programs (to reimburse disaster victims for up to \$14,400 of their essential, uninsured personal property losses) are available only if the governor, president or Small Business Administration (SBA) declares a major disaster.
- The most typical form of federal disaster assistance is a loan that must be paid back with interest.
- The average Individuals and Households Program grant is less than \$2,500.
- To qualify for home repair assistance, your home must have relatively minor damage that can be repaired quickly. No rental assistance is available unless your home has been destroyed or significantly damaged.
- The average duration and loan payment of a Small Business Administration disaster home loan is 18.5 years and \$140 a month.
- Floods are the most common natural disaster with 80% of all presidentially declared disasters involving floods.
- Buildings in flood hazard areas have a 26 percent chance of being flooded during a 30-year mortgage.
- In 2001, the average premium for a National Flood Insurance program policy in Ohio was \$508 per year.
- Home owners, business owners, and renters can purchase flood insurance as long as their community participates in the NFIP. Flood insurance claims are paid even if a disaster is not declared by the president.
- When you have purchased a flood insurance policy and file a flood insurance claim, you usually can get a partial payment immediately.
- Flood insurance reimburses you for all covered losses. Disaster aid is limited to replacing essential items only. Homeowners can obtain coverage limits up to \$250,000 of coverage, and businesses up to \$500,000. Separate contents coverage is also available.
- Maintaining a flood insurance policy is one of the most important things you can do to protect yourself and reduce your cost of a flood disaster.

Source: Ohio Insurance Institute and Ohio Department of Insurance.

Insurance Tips During Rebuilding



Take the following steps to ensure an effective repair:

- If you feel the settlement offered by your insurer is not fair or complete, contact the company and be ready to provide information to support your claim.
- Protect yourself from shoddy workmanship by using licensed, reputable contractors. Be sure they secure the proper building permits. Beware of contractors requiring a large payment up front or whose bids are amazingly low.
- If your home was destroyed beyond repair and you decide to rebuild on another lot or purchase another home instead of rebuilding, check your insurance policy and discuss this with your insurance agent or company representative. There may be limitations on what your insurer will pay for if you do not rebuild on the same property.
- If you choose to build or rebuild, check with your community's floodplain administrator to learn about your community's flood safety standards. These standards are required for all new floodplain development or substantially damaged/improved structures in the floodplain and can help avoid having your home and property damaged or destroyed by flood again. In addition, flood insurance premiums are much lower for structures built in compliance with your local flood damage prevention regulations.
- Remember, your settlement will not necessarily be the same as your neighbors'. Your coverages may be different, as well as the level of damage caused by the storm.
- Your insurance policy provides coverage to repair or replace property you had prior to the storm. It will not pay for improvements.
- If you know your home is not up to local building code standards, you may be required to rebuild the damaged sections according to current codes. In some cases, this may mean a design or building material change that may cost more. Generally, a standard homeowners insurance policy does not cover such additional expenses. You may want to consider a policy endorsement that pays a specified amount toward such required improvements.

Damage Caused by Flooding - Limitations of the Flood Insurance Policy

- If your home or business is damaged by a flood, you may be required to meet certain building requirements in your community to reduce future flood damage before you repair or rebuild. To assist you in covering the cost of meeting those requirements, the Increased Cost of Compliance (ICC) endorsement has been added to the standard flood insurance policy.
- If you own structures determined by the community to be substantially damaged or repetitively damaged by a flood, you may file an ICC claim. Up to \$20,000 may be available to help bring your home or business into compliance with the local floodplain code.



Insurance Tips During Rebuilding

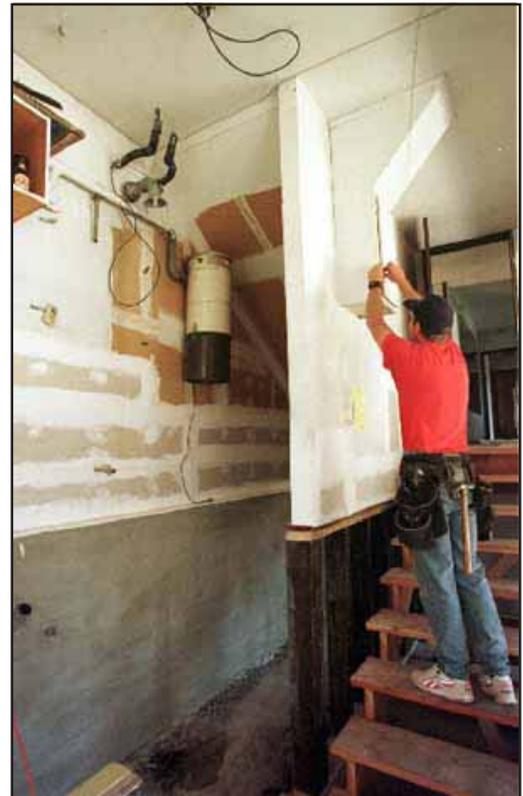
DON'T BE VICTIMIZED TWICE - Avoid Disaster Fraud

After a disaster, you are often confronted with making difficult repair decisions in a short period of time. It is important that you educate yourself to avoid dishonest contractors during these hectic times.

Victims of any recent storm or flooding should be extremely cautious and not let the sense of urgency to repair lead them into making a regrettable decision. Before hiring contractors, check their references and clear them through a local Better Business Bureau or the Ohio Attorney General's Consumer Protection Section online at www.ag.state.oh.us or by calling toll-free at 1-800-282-0515.

Consider this checklist before you arrange for repairs:

- Obtain more than one estimate. Don't be bullied into signing the first contract that is presented to you.
- Obtain ALL information in the written bid - costs, work to be completed, repair time and payment schedules, contractor guarantees - and make sure all details are provided.
- Ask for references and check them out!
- Ask for the contractor's driver's license. Write down his license number along with a description of the vehicle and the vehicle's license plate number. Often, contractors come in from out of state.
- Never sign a contract that is incomplete or blank.
- Do not pay for the repairs or sign a certificate of completion until all work has been completed in accordance with the contract specifications.
- Disaster repairs often heighten the opportunity for insurance fraud and abuse. Do not be tempted to conspire in a fraudulent insurance claim. Insurance fraud is a felony. Also, be aware that insurance coverage may be void if policyholder misrepresentation is discovered.



Mitigate while rebuilding. Moving a water heater above ground level will help save the appliance and keep it working during a flood. (FEMA News Photo by Gave Gatley.)

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 some suggestions listed in its brochure, "Help! The Power is Out..."

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.



Yellowbud, Ohio - January 2005

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.

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

Health & Safety Concerns - Excessive 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 are disabled. 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.



County Emergency Management Agencies

Adams County 937-544-6123	Fairfield County 740-654-4357	Licking County 740-670-7755	Portage County 330-297-3607
Allen County 419-993-1404	Fayette County 740-335-8264	Logan County 937-593-5743	Preble County 937-456-5647
Ashland County 419-282-4272	Franklin County 614-794-0213	Lorain County 440-329-5117	Putnam County 419-538-7315
Ashtabula County 440-739-6725	Fulton County 419-337-9207	Lucas County 419-213-6503	Richland County 419-774-5686
Athens County 740-594-2261	Gallia County 740-441-2036	Madison County 740-852-4200	Ross County 740-773-1700
Auglaize County 419-738-9637	Geauga County 440-285-9200	Mahoning County 330-740-2200	Sandusky County 419-334-8933
Belmont County 740-695-5984	Greene County 937-562-5994	Marion County 740-494-9911	Scioto County 740-355-8300
Brown County 937-378-5100	Guernsey County 740-432-9292	Medina County 330-722-9240	Seneca County 419-447-0266
Butler County 513-785-5810	Hamilton County 513-851-7080	Meigs County 740-992-4541	Shelby County 937-492-5635
Carroll County 330-627-0003	Hancock County 419-424-7092	Mercer County 419-586-6468	Stark County 330-451-3900
Champaign County 937-484-1642	Hardin County 419-674-2276	Miami County 937-339-6400 ext. 230	Summit County 330-643-2558
Clark County 937-328-4586	Harrison County 740-942-3922	Monroe County 740-472-2144	Trumbull County 330-675-2666
Clermont County 513-732-7661	Henry County 419-599-6432	Montgomery County 937-224-8936	Tuscarawas County 330-308-6670
Clinton County 937-382-6673	Highland County 937-393-5880	Morgan County 740-962-2424	Union County 937-645-3175
Columbiana County 330-424-9725	Hocking County 740-385-6168	Morrow County 419-947-4041	Van Wert County 419-238-1300
Coshocton County 740-622-1984	Holmes County 330-674-0989	Muskingum County 740-453-1655	Vinton County 740-596-3524
Crawford County 419-562-6009	Huron County 419-663-5772	Noble County 740-732-7387	Warren County 513-695-1315
Cuyahoga County 216-443-3196	Jackson County 740-286-5630	Ottawa County 419-734-6900	Washington County 740-373-5613
Darke County 937-548-1444	Jefferson County 740-283-8542	Paulding County 419-399-3500	Wayne County 330-262-9817
Defiance County 419-782-1130	Knox County 740-393-6772	Perry County 740-342-1141	Williams County 419-636-8497
Delaware County 740-833-2180	Lake County 440-256-1415	Pickaway County 740-477-1165	Wood County 419-354-9269
Erie County 419-627-7617	Lawrence County 740-532-0911	Pike County 740-947-7346	Wyandot County 419-294-6406



Storm Safety and Preparedness

www.noaa.gov/lightning.html

The National Oceanic and Atmospheric Administration site provides links to outdoor safety tips, severe weather preparedness guides and the NOAA photo library.

www.lightningsafety.com/nlsi_pls/1st.html

The National Lightning Safety Institute lists evacuation and safety measures to take to protect oneself during a thunder and lightning storm.

www.wx1der.com/stm.htm

A combination of several weather safety files - including thunderstorms, tornadoes, lightning, hail and flash flooding.

www.nws.noaa.gov/nwr

The National Weather Service NOAA Weather Radio site is a nationwide network of radio stations that broadcast continuous weather information. Stations and coverage are listed.

www.redcross.org/services/disaster/keepsafe/readyflood.html

At this American Red Cross site, find detailed instructions on preparing a disaster supply kit, minimizing flood damage, and knowing what to do when a flood warning is issued.

www.floodsmart.gov

An official site of the National Flood Insurance Program. Provides a resource for flood insurance information.

www.tornadoproject.com/safety/safety.htm

In the USA, tornadoes have occurred in every month - so any time is a good time to review tornado safety procedures for home, school, work, in the car, and while out and about.

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

The online tornado FAQ - Frequently Asked Questions about tornadoes.

http://sportsmedicine.about.com/library/bl_heat.htm

Extreme Heat - A prevention guide to promote your personal health and safety.

www.fema.gov/areyouready/heat.shtm

Become familiar with terms to identify an extreme heat hazard. Learn protective measures to take to prepare for extreme heat.

OCSWA Offices' Web Sites

American Red Cross

www.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/ODOC/sfm/