

Cuyahoga County Office of Emergency Management

Shelter-in-place and Evacuation Training for Public Officials

June - 2012

Welcome to the Public Officials training course.

The purpose of this course is to train you to safely evacuate and shelter-in-place in an emergency and to help others to do so.

Course Expectations

Throughout the course, you'll come across brief learning checks. At the conclusion, there is a ten-question quiz. In order to obtain a certificate, you'll need to create a user ID and password, register, and pass the quiz with a 70% score. (You can take the quiz more than once, if needed.)

This course should take approximately 2 hours to complete.

Course Overview

This class was developed for Public Officials and describes how they can prepare for emergencies requiring Shelter-in-Place (SIP) and/or evacuation. Because of their vital roles during emergencies, public officials must be familiar with the content prepared for a wide range of people, from the general public to incident commanders.

The training is based on competencies developed by the Cuyahoga County Office of Emergency Management (CCOEM).

Training Objectives

By the end of this class, you should be able to:

- Understand how the target group populations within your jurisdiction should prepare for emergencies at home and in the workplace
- Understand how emergency responders use the National Incident Management System (NIMS) to work together during emergencies in cities and in Cuyahoga County and what their role is as public officials
- Understand how the other targets groups are taught to identify time-limited acute health crises common to Cuyahoga County
- Understand local and county alert and warning systems and communicate with the general public during emergencies
- Understand who has authority to issue an evacuation or SIP order

- Understand your role when populations in your jurisdiction are asked to shelter-in-place or evacuate
- Understand the basic regulatory requirements or generally accepted guidelines for property managers whose responsibilities include reporting emergency releases of hazardous materials
- Understand Ohio Administrative Code requirements for educational and institutional facilities (as categorized by the Ohio Building Code) with respect to SIP and Evacuation
- Understand the risks involved with SIP or evacuation

Introduction

The Cuyahoga County Office of Emergency Management has developed evacuation and shelter-in-place training for everyone in Cuyahoga County so that as a county, we are more prepared for common local emergencies. Public officials need to know their responsibilities for protecting the public during emergencies. One of these responsibilities is to know how the public has been trained in basic home emergency preparedness.



Communication Campaign

A communications campaign will inform the general public. It will include a video broadcast on television. The video can be found online at the following URL: http://emergency-preparedness.elearningclevelandstate.com/emergency_readiness_ad.wmv. It directs people to <http://ready.cuyahogacounty.us>.

KEY POINT

✓ *Basic emergency preparedness at home includes identifying potential hazards and risks, then preparing for these hazards and risks by making an emergency plan and gathering disaster response supplies and tools.*

Emergency Checklist

The family emergency plan should include the following components:

- Escape routes from the home
- Family communication information including an out-of-state contact and a neighborhood meeting place
- Contact numbers for physicians, pharmacies, etc. (Copies of prescriptions for medications)
- Utility shut-off and safety information
- Insurance and vital records
- Special needs
- Caring for animals
- Safety skills such as First Aid and CPR

The family disaster kit should include:

- Provisions for 72 hours for each person
- Kits for at home, at work and in the car
- At least one gallon of water per person per day for 3-4 days
- Non-perishable food
- Portable, battery-powered radio and extra batteries.
- Multi-function crank flashlights/radios
- Flashlight and extra batteries
- First aid kit and manual
- Sanitation and hygiene items
- Matches in a waterproof container
- Multiple cans of sterno
- Whistle
- Extra clothing
- Kitchen accessories and cooking utensils, including a hand can opener
- Cash in small bills and coins
- Special needs items, such as prescription medications, eye glasses, contact lens solutions, and hearing aid batteries
- Items for infants, such as formula, diapers, bottles, and pacifiers
- Plastic trash bags to collect soiled items, dirty clothing, general trash. Large bags can also be used as additional insulation in cold weather, and as “ponchos” in wet weather.
- Other items to meet your unique family needs, including pet food and care items



People in Cuyahoga County may not have heat during an emergency. The temperature and weather may be inclement so emergency supplies should include:

- Jacket or coat
- Long pants
- Long sleeved shirt
- Sturdy shoes and warm socks; boots
- Hat, mittens and scarf
- Sleeping bag or warm blanket

Maintaining your disaster supply kit:

- Keep canned foods in a dry place where the temperature is cool.
- Store boxed food in tightly closed plastic or metal containers to protect from pests and extend its shelf life.
- Throw out any canned good that becomes swollen, dented or corroded.
- Use foods before they go bad, and replace them with fresh supplies.
- Place new items at the back of the storage area and older ones in the front.
- Change stored food and water supplies every six months. Be sure to write the date you store it on all containers.
- Re-think your needs every year and update your kit as your family needs change.
- Keep items in airtight plastic bags and put your entire disaster supplies kit in one or two easy-to-carry containers, such as an unused trashcan, camping backpack, duffel bag, or pull-along bag.

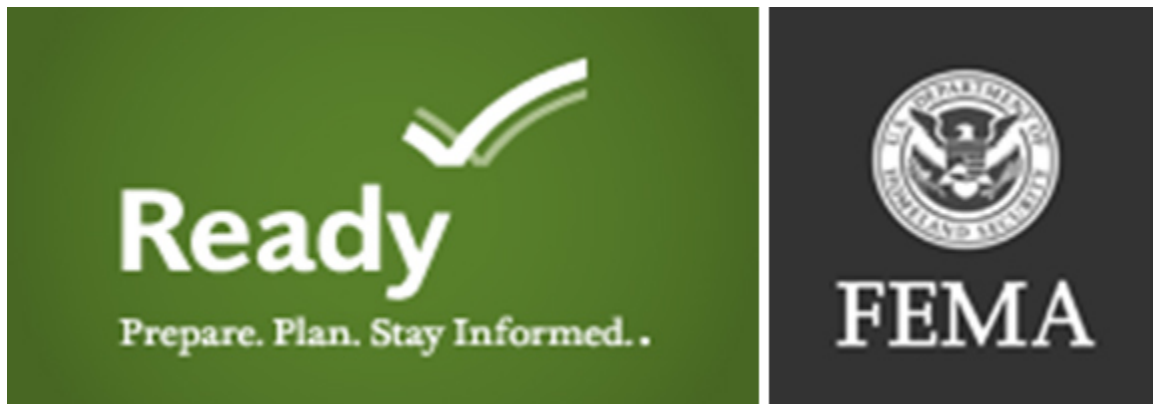
- Never let your vehicle gasoline tank go below one-half tank.

KEY POINT

✓ *A good reference for home emergency preparedness is the FEMA document, “Are You Ready?”*

Online information at ready.gov is another valuable reference that is updated regularly.

Workplace emergency preparedness is similar to home preparedness



KEY POINT

✓ *A time-limited acute health crisis is defined as any short term (i.e. hours) incident that will cause loss of life if no action is taken, loss of life is imminent.*



KEY POINT

✓ Evacuation is the organized, phased, and supervised withdrawal, dispersal, or removal of civilians from dangerous or potentially dangerous areas, and their reception and care in safe areas.

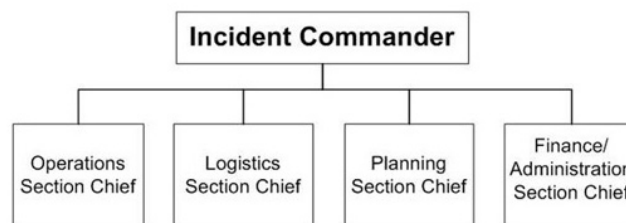
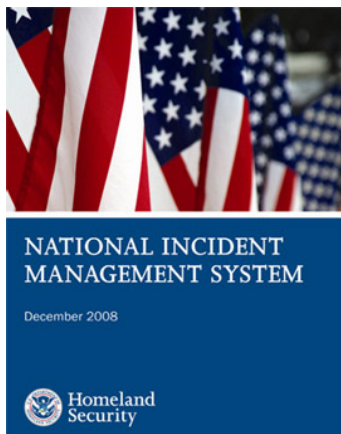
✓ Shelter-in-Place (SIP) is a process for taking immediate shelter in a location readily accessible to the affected individual.

KEY POINT

✓ The National Incident Management System or NIMS is used to coordinate emergency response locally and throughout the U.S.

NIMS is a simple framework and easy to implement.

Anyone can take the training for free on the web at <http://training.fema.gov/>.



The NIMS activation level is the organizational structure required to coordinate the response. There are five activation levels, from *least to most severe*.

- **TYPE 5** can be handled by the Incident Commander (IC) with one or two resources
- **TYPE 4** incidents require more resources, such as mutual aid, but usually is resolved within one workshift
- **TYPE 3** requires an expanded IC Structure, a written Action Plan and multiple work periods
- **TYPE 2** local capacity is exceeded, has full IC Staffing but less than 500 people
- **TYPE 1** requires National resources

Most incidents in Cuyahoga County are type 5 or 4

Information about NIMS

The overall NIMS structure emphasizes a consistent methodological approach to incident management, while allowing for flexibility. NIMS is based on six key components:

1. Command and management, including the use of Incident Command System (ICS)/unified command, multiagency coordination systems, and public information systems;
2. Preparedness, including preparedness planning, training and exercises, personnel qualifications and certification, and mutual aid agreements;
3. Resource management, including resource typing, mobilizing and tracking resources, and reimbursement;
4. Communications and information management, including interoperable communications and information databases;
5. Support technologies, including specific support and research; and
6. Ongoing management and maintenance, using a multiagency, multidisciplinary approach based on lessons learned and best practices.

Role of Elected and Appointed Officials during an Incident

Generally, elected and appointed officials are not at the scene of the incident, but should have the ability to communicate and meet with the Incident Commander (IC) and/or Unified Command (UC), as necessary.

Typically, Incident Commanders keep elected officials well informed, and elected officials convey the information to their constituents. Depending on the nature of the incident or level of the overall emergency, elected and appointed officials could function from the following locations:

- The agency or jurisdictional offices.
- An Emergency Operations Center.
- A location housing multiagency coordination.

Elected and appointed officials should provide input on policy, direction, and authority to the IC/UC. Proper coordination between elected and appointed officials and the IC/UC can be crucial to the successful management of an incident.

As time and agency policy dictate, the following considerations should be clearly communicated, documented, and provided to the IC/UC:

- Safety considerations.
- Environmental issues.
- Legal and policy limitations.
- Issues relating to critical infrastructure services or restoration.
- Economic, political, and social concerns.

- Cost considerations.

In some circumstances, if information is not delineated in policies or laws, it should be defined through a formal delegation of authority or letter of expectation.

KEY POINT

✓ *Awareness of emergencies occurs through:*

- Our senses (e.g. sight, smell and hearing)
- Sirens, the Emergency Alert System (EAS)
- The media and Public Information Officers (PIOs)
- Special alarms at facilities with hazardous materials



KEY POINT

✓ *Emergencies common to Cuyahoga County are tornadoes, winter storms, floods, hazardous material releases, terrorism, radiological events, earthquakes, mudslides/landslides, and seiches (sudden fluctuations in Lake Erie's water level).*



The following is more specific information about these disasters.

TORNADOES:

A tornado appears as a rotating, funnel-shaped cloud that extends from storm clouds to the ground, but rain or clouds can hide them. Tornadoes may be hard to see until they pick up dust or debris.

The sky is often a dark, greenish color before and during a tornado. Tornadoes often sound like a freight train and include hailstones.

A tornado **watch** means that tornadoes are possible. People should remain alert, watch the sky and stay tuned to NOAA Weather Radio, commercial radio or television for information. A tornado **warning** means that a tornado has been sighted or indicated by weather radar. People should take shelter immediately.

SEVERE WEATHER:

The Cuyahoga County Emergency Communications System (CECOMS) is staffed 24 hours a day and provides monitoring, notification, and warning to emergency response agencies and municipalities.

The National Weather Service (NWS) office provides the official weather forecast data, including winter storms, floods, tornadoes, thunderstorms, hailstorms, and any other weather related events.



FLOODING:

The NWS issues flood advisories. A flash flood occurs within 6 hours of excessive rainfall and poses a threat to life and/or property.

1. **Flash Flood Watch:** A flash flood watch typically occurs 6 to 24 hours in advance of expected flooding.



1. **Flash Flood Warning:** A flash flood warning is issued when flooding is occurring or imminent.
2. **Flood Warning:** A flood warning is declared when general flooding is occurring, imminent or likely.



HAZARDOUS MATERIALS RELEASES:

Sometimes a plume of a gaseous chemical can be seen, however not all chemicals are visible. The only indicator might be a strange odor. People may have difficulty breathing or experience irritation of the eyes, skin, nose or respiratory tract. They may have headaches, blurred vision, or changes of skin color, dizziness, clumsiness or lack of coordination, or gastrointestinal effects like cramps or diarrhea.



RADIOLOGICAL DISPERSION DEVICE (DIRTY BOMB)

Only first responders will be able to distinguish a conventional explosion from an explosion that disperses radioactive materials. Notification will then be made by EAS, media announcements, and direct contact with responders.

NUCLEAR/RADIOLOGICAL:

There are four emergency classification levels at nuclear plants. People who live near nuclear power plants should be aware of these levels, but only need to take action if told to do so.



Four emergency classification levels at nuclear plants:

1. **Unusual Event** - A small problem has occurred. No radiation leak is expected. Federal, State and County officials will be told right away. You should not have to do anything.

2. **Alert** – This is also a minor problem. You should not have to do anything.
3. **Site Area Emergency** – This is a more serious problem. Small amounts of radiation could leak from the plant. If you hear sirens, listen to a radio or TV station that broadcasts EAS messages. Federal, State, and County officials will help if you need to act.
4. **General Emergency** – This is the most serious problem. Radiation could be released outside the plant. When you hear the sirens, listen to the EAS radio or TV stations for instructions.



EARTHQUAKE:

Northeastern Ohio is the second most active earthquake area in the State. At least 20 earthquakes occurred here since 1836.

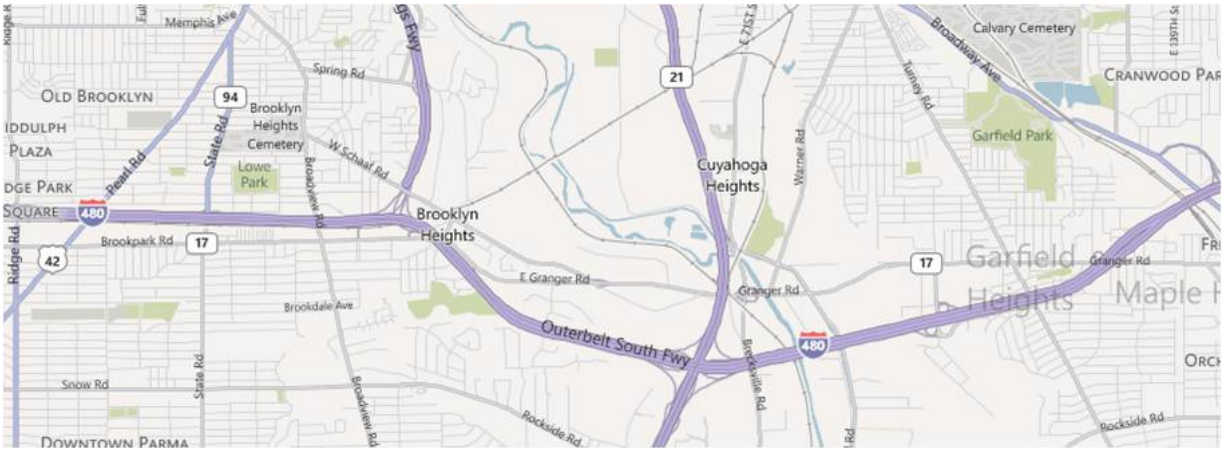
However, based on geology, Cuyahoga County has a low risk for damage due to an earthquake. Ohio has twenty-two seismographic monitoring stations (OhioSeis). Cuyahoga County has one station located at the Cleveland Museum of Natural History.



An example of a local emergency requiring evacuation

On March 25, 1991 a truck carrying a mixed load of different types of hazardous materials on Interstate 480 in Cleveland, Ohio suddenly caught fire. The driver immediately pulled over, disconnected the trailer from the tractor, and moved the tractor a safe distance away. The

Cleveland Fire Department was notified and responded. They cordoned off the interstate, notified the hazmat team, and waited.



As a precaution, approximately 5,000 people were evacuated from an area approximately one square mile in size, including parts of Cleveland, Brookpark and Brooklyn. Evacuees were asked to go to local schools, and were not allowed to go back home until the next day.

Thousands of people's lives were disrupted that day, but no one was injured. This time-limited acute health crisis was effectively mitigated in part by the use of evacuation.



An example of a local time-limited acute health emergency

In 2009, an industrial facility had a nitric acid leak inside their facility. The facility manager notified the police and fire departments, the LEPC and Ohio SERC.

The police saw an orange plume over the facility and the fire department responded. The source of the cloud was a tank truck unloading product into a storage tank. The fire department and facility personnel secured and evacuated the area.

Hazmat was contacted, a command structure was set up and EPA was notified. The rail lines were shut down. No personnel were injured.



KEY POINT

- ✓ *Understand county, regional, state and federal protocols for emergency response.*

County protocol for emergency response:

- Ohio Revised Code (ORC) 5502.26 requires every county to have an emergency management agency.
- The Cuyahoga County Office of Emergency Management (OEM) is responsible for coordinating emergency response.
- Each municipality should have its own Emergency Operations Plan (EOP) developed according to the FEMA guidelines.

Federal Protocols for Emergency Response

Federal protocols for emergency response are located in the Robert T. Stafford Disaster Relief and Emergency Assistance Act, NIMS, and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), which was amended by Superfund Amendments and Reauthorization Act (SARA) of 1986.

- The Governor of Ohio has the authority to ask the President to declare an emergency within the State. The President would then determine whether or not the emergency requires federal assistance.
- When the President issues an emergency, there will be a minimum of three national response teams. Each team will coordinate with state and local officials. The National Response Framework is located within NIMS and provides the structure and mechanisms for incident management.
- CERCLA is a federal statute that deals with hazardous substances and any releases involving hazardous substances.

KEY POINT

- ✓ *Understand who has the authority to issue an evacuation or SIP order.*

The fire chief has the authority at the scene of a fire or other emergency involving the protection of life or property (ORC 1301:7-7-01 section 104.11) and in emergencies related to hazardous materials (ORC 3737.80).

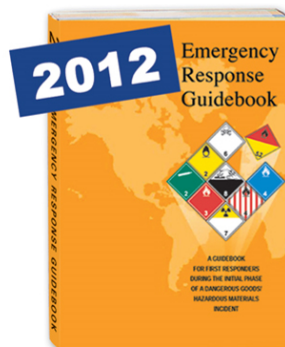


KEY POINT

- ✓ *Know how Incident Commanders use analytical tools to make decisions about SIP and evacuation in the event of a hazmat emergency.*

Public officials should be familiar with the tools that Incident Commanders use to make decisions to evacuate or SIP specific populations in hazmat emergencies and to issue all-clear orders. ICs in Cuyahoga County have a number of tools at their disposal to assist them in this decision making.

Emergency Response Guidebook (ERG): Sometimes called the “orange book,” the ERG is updated every four years; the 2012 edition is the current one. This book was intended for use by all first responders during the initial phase of a hazardous materials incident.



SARA Plan: The SARA Plan is a plan for emergency response to hazmat incidents. The County Staff provides the vulnerability zones in this document as a part of its annual update of the SARA Plan. Facilities are required to provide updated information to the County annually.

Computer-aided management of emergency operations (CAMEO): This suite of three computer programs is free and available to all responders. All hazmat teams in Cuyahoga County have it loaded on their computers in their response vehicles, and each hazmat team has specialists who are well-versed in its use.

Fire Department Pre-Plans: Facilities that use and store EHS are required to coordinate on the local level with the local jurisdiction fire department. Most fire departments in Cuyahoga County create pre-plans for these facilities. These pre-plans contain information about the hazards in each facility and what the fire department will do in the event of a release at the facility.

KEY POINT

✓ *Public officials should know how they and the residents in their jurisdiction will be notified of an evacuation or shelter-in-place (SIP) order.*

- Radio stations with Emergency Alert Systems (EAS) are WTAM 1100 AM and WCPN 90.3 FM.
- TV stations WKYC TV 3, WEWS TV 5, WJW TV 8, WOIO TV 19, WVIZ TV 25 and WUAB TV 43 have EAS.
- Some communities have mass notification or local emergency radio systems.



Cuyahoga Emergency Communications System (CECOMS)

In addition to being notified directly by the fire or police Incident Commander, elected and appointed officials will be notified through the Cuyahoga County Emergency Communication System (CECOMS).

This central coordination point for emergency communications is staffed 24-hours per day and provides monitoring, warning and notification to emergency response agencies and municipalities throughout the county.

It maintains dial-in phone lines to the two radio stations noted above. During an emergency, the Incident Commander will contact CECOMS and request activation of the EAS.



KEY POINT

✓ *Public officials must understand the basics of crisis communication and the process for crafting appropriate messages **before** a crisis occurs.*

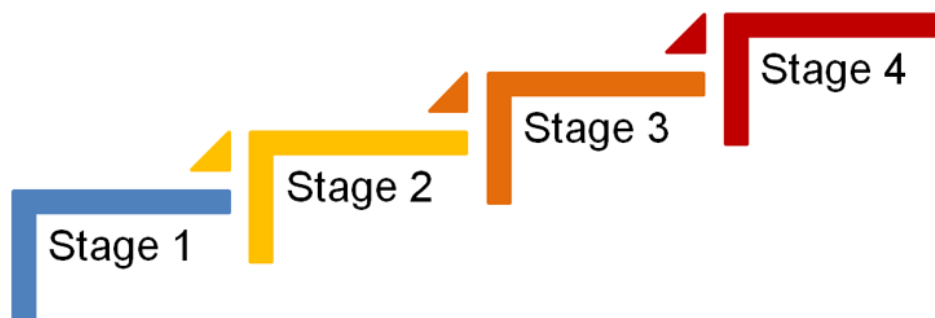
Elected and appointed officials must be able to communicate effectively during a time-limited acute health crisis. They must communicate with their staff, a task to which they are accustomed. However, they will be required to address the media, and may also need to communicate with representatives of Federal and State bureaus.

The importance of planning messages and knowing the ways in which information can be communicated **before** an event requiring SIP or evacuation cannot be overstated.

KEY POINT

✓ *Public officials should know how they and the residents in their jurisdiction will be notified of an evacuation or shelter-in-place (SIP) order.*

- Stage 1, officials think about the groups of people they may need to communicate with, the strategies they will use to deliver the messages and what the goal of the messages will be.
- Stage 2 is a pre-test of the messages with target audiences. This stage enables officials to eliminate all but the most effective messages based on real feedback.
- Stage 3, the official conveys the information to their actual target audiences to expose them to the information and obtain reactions from them.
- Stage 4 occurs after the communication takes place during an actual event.



KEY POINT

✓ *Understand the "8 Cs" of crisis communication.*

The Cuyahoga County Crisis Communications Plan states that good crisis communication must have the following general characteristics, commonly called the "8 Cs."

- Concise
- Confirmable
- Credible
- Consistent
- Current
- Clear
- Compassionate
- Candid



KEY POINT

✓ *Understand how managers of facilities with extremely hazardous substances (EHS managers) must report a release.*

EHS managers are required to make all notifications described by law. They must:

- Know how to report a release – both immediate and follow up actions.
- Notify the local jurisdiction fire department by dialing 911. The manager should do this within 30 minutes of becoming aware of the release.
- Notify the Local Emergency Planning Committee/SARA Information Coordinator. This can be done by calling the Cuyahoga Emergency Communications System Center (CECOMS). The 24-hour number for this is 216-771-1365.

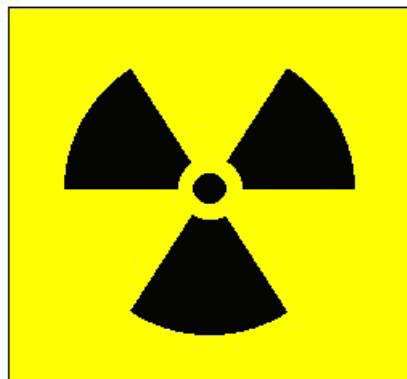
- Notify the Northeast Ohio Regional Sewer District if applicable. They may be reached by calling 216-641-6000 (216-641-3200 off hours) so that remedial action can be taken.”
- Notify the Ohio EPA, State Emergency Response Commission at 1-800-282-9378.
- If release is a CERCLA substance, notify the National Response Center at 1-800-424-8802.

These notifications should be made in the order given and within 30 minutes of discovering the release if possible.



KEY POINT

- ✓ *Know how EHS facility managers must report a release of radiological material.*



Radiation Safety

How an EHS facility manager reports a release of radiological material:

The United States Nuclear Regulatory Commission (NRC) establishes how they respond to an emergency. In response to an event at a NRC-licensed facility or an event involving NRC-licensed material the NRC will activate its incident response program at its Headquarters Operations Center and at the Regional Incident Response Centers for Region I in King of Prussia, PA.



According to the NRC, the State's emergency response should be coordinated at two levels: (a) an emergency response organization that is responsible for conducting technical assessments of the accident, and (b) decision makers. (NRC: State and local Response Actions, <http://www.nrc.gov/>).

Factors that determine radioactive material release emergency plan

The State requirements and contact information for reporting a release of radioactive material are located in the Ohio Department of Health regulations (OAC 3701:1-40-14). There are several factors that will require an emergency plan for responding to a release of radioactive material. The main factors to take into consideration when determining whether an emergency plan is necessary are:

1. If the radioactive material is physically separated
2. If the radioactive material is not subject to release because of how it is stored
3. The solubility of the radioactive material
4. If the facility itself is designed or engineered to promote a lower release probability



Radioactive Material Release Reporting

In the event of the release of any radioactive material, facility managers must call the Ohio Department of Health Bureau of Radiation protection 24 hour line at 614-644-2727 or at their emergency line at 614-722-7221.

Staff at the Bureau of Radiation Protection will report the information to the Nuclear Regulatory Commission if appropriate.

The Cuyahoga County Board of Health does not have the capability to respond to a radiological release but they would like to be notified of any releases.

KEY POINT

✓ *Know how EHS facility managers must report the release of a biological agent.*



How a facility manager must report a release of a biological agent

Release of a biological agent would have the potential for a negative impact on the public health. As such, the Cuyahoga County Board of Health (CCBH) should be one of the first notifications made in the event of a release of a biological agent.

The CCBH can be contacted on their 24 hour disease reporting line at 216-857-1433.

Facility managers should give as much information as possible about the release, specifically what material was released, the amount, the location, and if there were any confirmed or potential exposures.



CCBH

Since the CCBH is the lead agency in the Cuyahoga County Emergency Operations Plan Emergency Support Function #8 (Public Health and Medical Services), they are prepared to respond to the scene of a release of a biological agent to coordinate response activities.

CCBH staff receives NIMS training and are prepared to operate within a Unified Command structure. They are prepared to work with the Cleveland Fire Department hazardous materials specialists to identify and isolate the biological agent. They will also provide secondary support services such as coordination of mass dispensing of prophylaxis if appropriate, epidemiological surveillance and contact tracing. In addition, the CCBH can provide information for broadcast to the public.

Three classes of disease defined by law

ORC 3701.201 requires the reporting of events that may be caused by terrorism, epidemic or pandemic disease, or established or novel infections agents or biological or chemical toxins posing a risk of human fatality or disability. There are three classes of disease as defined by law, Class A, Class B, and Class C.

Class A **must** be reported by telephone to the local health department. Class A includes Anthrax, Botulism, Cholera, Diphtheria, Influenza A, Measles, Meningococcal, Plague, Rabies, Rubella, SARS, Smallpox, Tularemia, Viral hemorrhagic fever, and Yellow Fever. Class B and Class C requires a reporting by the end of the next business day. Class B requires the existence of a case, a suspected case, or a positive laboratory result. Class C is a less serious outbreak in the community, an institution, or related to healthcare.

KEY POINT

✓ ***Public officials must know what the public and facility managers have been told about evacuating their homes, workplaces and public facilities so they can communicate and take appropriate leadership during evacuation events.***

Training focuses on teaching people how to independently take appropriate measures to protect themselves without direction from supervisors or managers.

- People learn how to identify and report hazards. They learn how to activate building emergency notification systems such as fire alarm systems. When appropriate, people are taught to recognize different alarm sounds or tones in their municipalities so that they respond appropriately.
- People learn to identify every evacuation route out of their residence and that when appropriate, such as in apartment buildings, signs should be posted in conspicuous places.
- People living in apartments learn techniques for safe evacuation, such as counting doors to the exits. They are also reminded to avoid the use of elevators for fire evacuation.

- Some apartment building managers provide a means for disabled and elderly individuals to evacuate. This could include the use of stair chairs or other evacuation devices. People are told to learn to use any evacuation device that is provided.
- People living in single family homes are encouraged to leave their residence during an evacuation. Apartment residents are told to find out where they may be asked to go. For example, an adjoining parking garage could provide safe haven for residents evacuating a high-rise apartment building



What the public and facility managers should know about safely evacuating their workplace.

Facility managers should teach and practice evacuation procedures with their employees so that they respond appropriately when evacuation becomes necessary.

Many of the businesses in the Cleveland Central Business District (CBD) are well prepared because the evacuation of downtown Cleveland on 9/11/2001 spurred the development of building evacuation plans and a downtown Cleveland evacuation plan, and because of the subsequent training and drilling on these plans.

Newer businesses in the CBD and businesses outside of the CBD are probably not as well-prepared for evacuation.

What the public should know about evacuating public places and facilities.

The public should be aware of emergency exits and how they might get information during an emergency when they are in unfamiliar surroundings.

Public facilities should:

- Have clearly marked exits compliant with the Ohio Building Code.
- Have a system of communicating the need for evacuation to all visitors.

- Have properly uniformed and credentialed employees so that visitors recognize them as employees and will follow their directions (eg, vests, tags).

Public facility managers should:

- Train their employees to give accurate directions to visitors – develop an Emergency Response Team (ERT).
- Insure that their employees have practiced the plan so that they will give directions to visitors in a calm, clear voice without sounds of panic.



What managers of facilities with the potential for over 100 occupants learn in training about evacuation of their facilities.

The training distinguishes between three general types of populations that must be protected at 100+ facilities, all of which have unique needs and abilities. The three types of populations are:

- Transient populations
- Captive populations
- Residential populations



“Transient” populations. Included in this group are visitors to facilities such as arenas, stadiums and shopping malls. Building owners and managers have no way to train these

individuals, and their transient nature at these venues means that there is also no way to account for them in the event of an emergency.

“Captive” populations. Included in this group are employees of large businesses. They are considered captive because the building owner or manager has control over many of their actions, can train them in emergency procedures, and can compel them to practice these procedures.

“Residential” populations. People that live in 100+ residential occupancies such as apartment buildings share some of the characteristics of the other two groups, but also have some major differences.

KEY POINT

✓ *Public officials must know what other target groups are taught about shelter-in-place at home, in the workplace and in public so that they understand and can communicate appropriate procedures and take a leadership role in protecting the public.*

Whether one is at home, work, or elsewhere, there may be situations when it is simply best to stay put and avoid any uncertainty outside. There are a number of circumstances when staying put and creating a barrier between oneself and potential contaminated air outside, a process known as “sealing the room,” is a matter of survival and requires some preplanning.

Shelter-in-Place (SIP) at home

A public communications campaign will alert the public about sheltering in place and provide detailed information via a brochure and website.

Preparation for a shelter-in-place order includes the following:

- Designate an appropriate room. It should be an interior room with few (or preferably no) windows, an adjoining bathroom, and storage for SIP supplies. It should be large enough to accommodate all residents in your home or apartment. TV/CNN should be available.
- Measure all doors, windows, vents and skylights, then pre-cut plastic sheeting to fit with an overlap of 6 inches all the way around.
- Gather supplies, tools, equipment, and emergency numbers: refer to the emergency preparedness plan and checklist.

When ordered to shelter-in-place:

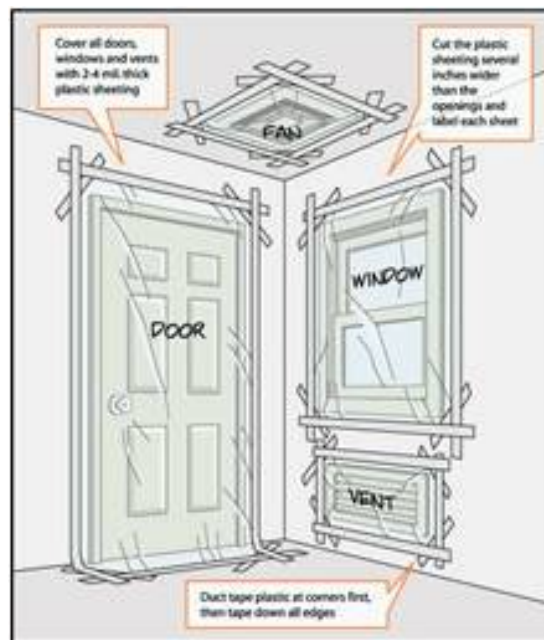
- Bring family/friends and pets into the pre-selected room.
- Access the emergency supply kit.
- Close and lock all windows and doors. Seal the opening at the bottom of the door with towels if possible.
- Turn off heating, ventilating and air conditioning systems (HVAC).

- Turn off vent fans and any other device that moves air. An exception to this might be an air purifier incorporating high-efficiency particulate air (HEPA) filters.
- Seal windows, doors, and vents with pre-cut plastic and duct tape. Tape all edges down all the way around.
- Account for everyone.
- Notify family or friends of your location. After this, do not use the telephone so that resources will be available for use by emergency responders.
- Monitor radio, TV and internet (if possible) for updates.
- Remain sheltered in place until told that it is safe to go outside or until told to evacuate.

Shelter-in-place (SIP) at work:

Preparation to SIP at work is similar to preparation in the home. It should include the following:

- Write an SIP component into the Emergency Action Plan.
- Designate an appropriate room. It should be an interior room with few (or preferably no) windows, an adjoining bathroom, and storage for SIP supplies.
- Measure all doors, windows, vents and skylights, then pre-cut plastic sheeting to fit with an overlap of 6 inches all the way around.
- Gather supplies, tools, and equipment, similar to home preparation
- Train all employees in their roles in the event of a SIP order. Give floor wardens extra training in leading SIP operations.



When ordered to shelter-in-place in the workplace and public facilities:

- Communicate the dangers of leaving to everyone in the facility.
- Close and lock all windows and doors.
- Turn off heating, ventilating and air conditioning systems (HVAC).
- Utilize call forwarding or an answering service to notify customers that your business is closed.
- Notify all employees to report to the pre-selected room.
- Close the door(s) and seal the crack at the bottom with towels.
- Seal windows, doors, and vents with pre-cut plastic and duct tape.
- Account for everyone and document who is present and those who may be absent.
- Allow employees and customers to call family/friends to check in.
- Monitor radio, TV and internet (if possible) for updates.
- Communicate with safety forces to let them know where you are located and how many are with you.
- Remain sheltered in place until you are told that it is safe or you are ordered to evacuate.

SIP at facilities with 100+ occupancies

Managers of 100+ **facilities with captive populations** have the advantage of knowing approximately how many people they will be required to shelter. In addition, they have the ability to train these people in the specific techniques for sheltering-in-place at their facility.

Managers of 100+ **facilities with transient populations** must plan to shelter a number of people equal to the capacity of their facility. Training for employees and staff at these facilities must focus on directing visitors to areas of shelter.

Employees must be trained in the following areas to effectively direct the shelter-in-place of transient populations:

- The location and capacity of all areas of refuge inside the facility, which must be identified before any incident happens.
- Proper operation of escalators and elevators to insure that guests with special needs are cared for.
- Roles and responsibilities for all staff members.
- Communications to other staff--how to use radios, etc., with whom they are to communicate, and what information they must convey.
- Communications to visitors--what message they need to communicate to visitors and how that message should be delivered

Managers of **facilities with residential populations** must train their residents how to properly SIP within their own apartment.

KEY POINT

✓ ***Public officials must understand that people with special needs and large populations may be treated differently than the general population during an evacuation or SIP action due to their circumstances so that they may communicate with these populations appropriately and insure that they are protected.***

Some facilities house large populations or people with special needs. The term “special needs” is fairly general. To help understand the needs of this population, “special needs” could be defined as “people who cannot comfortably or safely access and use the standard resources offered in disaster preparedness, relief and recovery.”



The special needs of these populations require specific accommodations. Although they should know exactly how to provide for the special needs of their clients, and are in some cases required by law to do so, facilities that house these populations are sometimes not well-prepared to deliver the specific care that their clients would need.

In a large-scale evacuation, all resources available will be needed to evacuate the general public. This large volume of people requiring transportation will overwhelm buses and other means of transportation.

Facilities that house minors have a specific need because they are required to retain custody of the minors in their care until released in to the custody of their parents or legal guardians.

Office buildings and high-rise residential buildings generally have lower air exchange rates than single-story residential construction. This means that these large-population structures are better suited for sheltering in place.

KEY POINT

✓ ***Public officials must understand the Ohio Administrative Code requirements for educational and institutional facilities that have special needs populations with respect to SIP and evacuation. This knowledge will enable them to work with Incident Command to insure that these populations are protected.***

Per the Ohio Administrative Code (OAC) 4101:1-3-01, educational and institutional facilities include K-12 schools, child and adult day care centers, assisted living facilities, convalescent facilities, nursing homes, prisons, jails and detention centers and hospitals.

The occupants of these facilities have a variety of special needs. The Ohio Fire Code (OAC 1301:7-7-04), Emergency Planning and Preparedness, mandates that educational and institutional facilities have a fire safety and evacuation plan.

The fire evacuation plan should contain the following components:

- Emergency egress or escape routes and whether evacuation of the building must be complete or by selected floors only
- Procedures for employees who must remain to operate critical equipment
- Procedures for accounting for employees and occupants
- Identification and assignment of personnel responsible for rescue or emergency medical aid
- The preferred and any alternative means of notifying occupants
- The preferred and any alternative means of reporting emergencies
- Identification and assignment of personnel who can be contacted for further information or explanation of duties under the plan
- A description of the emergency voice/alarm communication system alert tone and preprogrammed voice messages, where provided

The fire safety plan shall include the following:

- The procedure for reporting a fire or other emergency
- The life safety strategy and procedures for notifying, relocating, or evacuating occupants
- Site plans
- Floor plans
- A list of major fire hazards associated with the normal use and occupancy of the premises, including maintenance and housekeeping procedures
- Identification and assignment of personnel responsible for maintenance of systems and equipment installed to prevent or control fires
- Identification and assignment of personnel responsible for maintenance, housekeeping and controlling fuel hazard sources

Specific licensing requirements for emergency planning and response

Schools - Per Ohio Revised Code 3313.536 schools must develop a safety plan that includes a protocol for addressing serious threats and responding to any emergency events. The plan must be developed with input from local law enforcement, parents, teachers and staff.

Child day care – Child care centers in Cuyahoga County are licensed by the Ohio Department of Jobs and Family Services (JFS) under ORC 3301.52-3301.59 and OAC 3301-37-02. Child care centers must complete a medical, dental and general emergency plan that shall be posted, readily in view, by each telephone and in each classroom, and other spaces used by the children.

Adult day care – Per Ohio Administrative Code Ann. 173-3-06.1 these facilities must have an emergency plan and review it annually.

Nursing homes - Per the Ohio Administrative Code 3701-17-03, nursing homes are licensed by the Director of the Ohio Department of Health. The Ohio Department of Health, Bureau of Regulatory Compliance (BRC) sets standards to protect the health and safety of more than 100,000 Ohioans living in nursing homes, and similar facilities

Assisted living – The Ohio Department of Health licenses residential care facilities and many assisted living facilities hold residential care facility licenses.

Prisons – Jails are regulated by the Ohio Department of Rehabilitation and Correction, Bureau of Adult Detention under ORC 5120.10 and OAC 5120:1-7-01. The Bureau creates minimum standards for jails and inspects them to insure compliance.

Hospitals – The Joint Commission provided standards for all hospitals nation-wide.

KEY POINT

✓ ***Public officials must know the risks to all populations during an evacuation or SIP action or an incident requiring both so that they can understand decisions made by Incident Command and communicate the rationale to the public.***

Risks resulting from evacuation include:

- If not completed quickly enough, evacuation could cause the evacuees to be exposed to the hazard.
- Risks arise as a result of the mode of transportation chosen by the evacuees.
- In areas of high population density, a large-scale evacuation could cause congestion and gridlock on the roads, rendering the evacuation ineffective.
- Weather conditions could change, causing an evacuation to become ineffective or endangering evacuees.
- Evacuations involving the elderly or people with special needs could cause these populations to become emotionally agitated, might result in their injury if they fall while evacuating, or could expose them to conditions that they are ill-prepared to handle.

Risks resulting from shelter-in-place (SIP) include:

- SIP reduces exposure but does not eliminate it. Over time, small amounts of an airborne contaminant can enter a structure, resulting in the exposure of occupants to the hazard.
- If buildings are old and/or poorly-maintained, SIP can be less effective due to leakage of air and contaminants into the building at windows, doors and other breaches.

Risks associated with both evacuation and shelter-in-place (SIP) include:

- If the public is not educated and prepared to evacuate or SIP, either protective action can cause problems. The public might not know where to evacuate to, causing them to move into the hazard instead of out of it.
- If the media is not properly informed by emergency responders and/or public officials, they could give incomplete, inaccurate, or false information, resulting in an inappropriate response from the public.
- Finally, if a facility (e.g., a hospital) is asked to shelter in place, but the surrounding residential community is ordered to evacuate, family members and others may be confused and upset.

Conclusion

Public officials should:

- Help your community prepare for an emergency. Make information available online and through public speaking opportunities, news releases, community newsletters, CERTs and so on.
- Work with your fire and police chief to designate authority for evacuation or SIP decisions.
- Know NIMS and how the unified command structure will work in your community and beyond.
- Work with the ICs in your jurisdiction who have preplanned for evacuation and SIP events with facility managers and who have working knowledge of their operations.
- Plan and test your community's emergency notification system(s)
- Identify and work closely with your Public Information Officer
- Have a decision making process in place for evacuation/SIP decisions
- Work with your municipality's safety forces to test plans
- Discuss and prepare emergency plans with other public officials (mutual aid)
- Make plans for continuity of operations.

Congratulations!

You've finished the evacuation and shelter-in-place training. You have just a few more steps in order to obtain your certificate of successful completion.

1. Please take the evaluation for the online training course at <http://emergency-planning.elearningclevelandstate.com/feedback2/use/onlineCourseSurvey4/form1.html>. You will need to close the new window when you are done and/or click back to this browser window to follow the next steps.
2. You'll need to register for the quiz (or log in if you have already).
3. Next, you'll take a ten-question quiz. You can take it more than one time, if needed. Once you receive a 70% or higher score, a printable certificate will appear. You can either save it as a .pdf or print it for your records.

The link below leads to a login screen. If you've never registered before, you'll do that first by clicking on the "register" link. You will create a user name and password and provide basic information such as your name and email address. If you have registered before, simply log in with your user name and password.

Thank you for taking the online course!

Take the final test online at
<http://pro.elearningclevelandstate.com/RCC/login.php?ModuleID=PO>