

Cuyahoga County Office of Emergency Management

Shelter-in-place and Evacuation Training for Educational and Institutional Facility Managers

June - 2012

Welcome to the Property Managers for Educational and Institutional Facilities 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 module includes curriculum that has been developed for Property (facility) Managers for Educational Facilities and Institutional Facilities whose populations have special needs with respect to Shelter-in-Place (SIP) and Evacuation.

They 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 module describes how facility managers can recognize and prepare for emergencies at their facilities and gives specific information about preparation for SIP and evacuation orders, what to do when such orders are received, who gives these orders, and under what authority.

Training Objectives

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

- Identify time-limited acute health crises common to Cuyahoga County and know what to do if you are the first person to discover one
- Describe the difference between evacuation and shelter-in-place (SIP), who is authorized to issue a SIP or evacuation order and where to obtain specific instructions in the event of a SIP or evacuation order (e.g., the evacuation route)

- State why some emergencies lead to evacuation and others to SIP and why during some emergencies people with special needs or large populations may not be evacuated along with everyone else
- Understand how emergency responders use the National Incident Management System (NIMS) to work together during emergencies in cities and in Cuyahoga County
- Prepare for emergencies at home and in the workplace and make a family emergency plan
- Explain all local, state and federal licensing standards for emergency planning and response for your own facility and for your occupants with special needs
- Understand the importance of maintaining an emergency plan to protect special needs occupants and employees
- Explain calmly and clearly to your employees, occupants and visitors actions they need to take to safely evacuate or SIP
- Recognize the importance of classifying occupants (regarding SIP or evacuation) according to unique limitations such as age, physical, mental or emotional capabilities and the limitations of families and caregivers
- 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. A communications campaign will also be run to inform the general public.



Managers of educational and institutional facilities have a variety of specific needs and responsibilities that will be addressed in this training module.

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->

planning.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 that do not require batteries or charging
- Flashlight and extra batteries
- First aid kit and manual
- Sanitation and hygiene items (moist towelettes and toilet paper)
- 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.

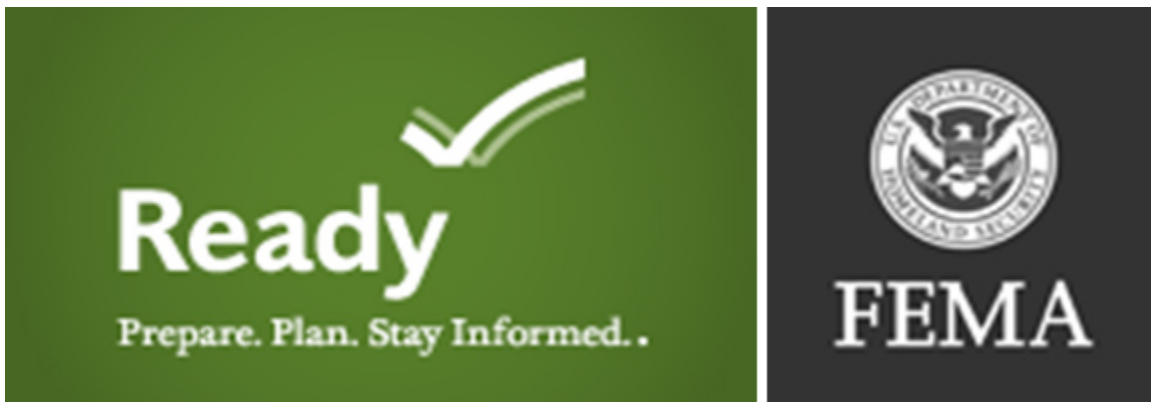
- Change stored food and water supplies every six months. Be sure to write the date you store it on all containers.
- Re-think your needs every year and update your kit as your family needs change.
- Keep items in airtight plastic bags and put your entire disaster supplies kit in one or two easy-to-carry 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.

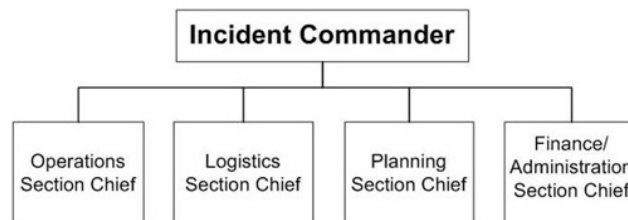
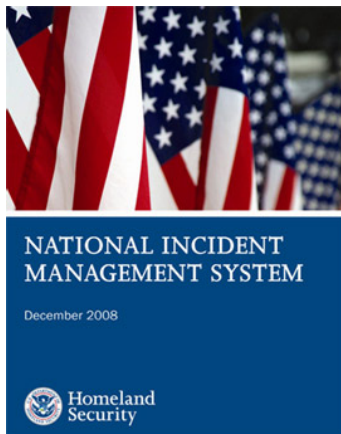
✓ **Shelter-in-Place (SIP)** is a process for taking immediate shelter in a location readily accessible to the affected individual.

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/> .



KEY POINT

Understand the differences among the four types of populations within the educational and institutional target group and the facilities they occupy: children (K- 12 and day care), adults with special needs (adult day care, assisted living and nursing homes), prisoners (jails and detention) and all ages special needs (hospitals).

In this training, **special needs** individuals are defined as “people who feel they cannot comfortably or safely access and use the standard resources offered in disaster preparedness, relief and recovery.” (People who cannot access resources are included, not just those who **feel** they cannot.) This definition would include people who are mentally and/or physically disabled,

non-English speaking, culturally isolated, medically or chemically dependent, homeless, frail or elderly, and children.

Four Special Needs Populations

There are four general types of special needs populations that must be protected at educational and institutional facilities, and all have unique needs and abilities:

- **Children.** Included in this group are children in K-12 schools and day care. The primary special need of this group is that they are minors and must be supervised by competent adults at all times. Children may also have other special needs, including being mentally and/or physically disabled, non-English speaking or medically dependent.
- **Adults with special needs.** This group includes adults in day care, assisted living, nursing homes, group homes, alcohol and drug centers and convalescent facilities.
- **Prisoners.** People in jails, prisons, detention centers and reformatories are members of this group. They have special needs due to their imprisonment but may also be mentally and/or physically disabled, non-English speaking and medically or chemically dependent.
- **All ages special needs.** This is a catchall definition for those who are hospitalized for treatment or rehabilitation. People in this group will have a variety of additional special needs.

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

- ✓ *Know what to do if you are the first person to discover a dangerous situation:*
 - Remove yourself and others from the danger to an area of safety or shelter.
 - Call 911 as soon as possible and give as much information as you can about the danger.



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:

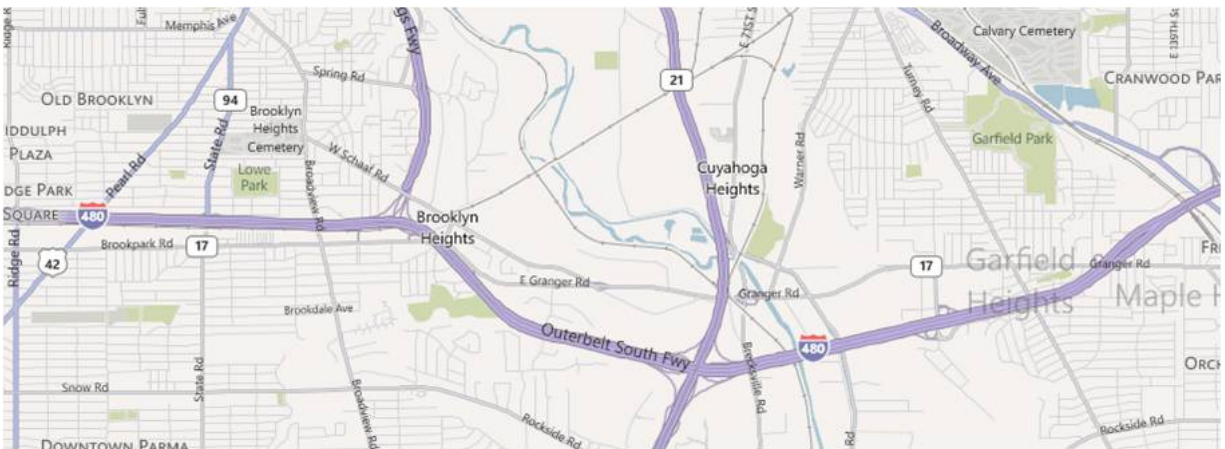
Northeastern Ohio is the second most active earthquake area in the State. At least 20 earthquakes occurred here since 1836.

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

✓ *People in educational and institutional facilities are vulnerable in time-limited acute health crises.*

Due to their special needs people in educational and institutional facilities (e.g., students, patients, residents, and so on) are especially vulnerable during time-limited acute health crises. Severe weather events are extremely likely in Cuyahoga County, and the presence of

hazardous materials inside our facilities and on our roadways is very common. The presence of these potential threats illustrates why emergency plans are required for these facilities.



KEY POINT

✓ *Employers are required to have an emergency action plan (EAP) that includes procedures for emergency evacuation.*



Emergency Action Plan (EAP)

One component of this EAP must include “procedures for emergency evacuation, including type of evacuation and exit route assignments.” This plan should include the following components:

- Who is empowered to dial 911
- Who else must be notified when 911 has been dialed
- The exact location of the emergency within the facility
- A designated person to meet responders
- A designated location to meet the responders

- Clearly defined roles for all personnel who are assigned duties in the event of an emergency
- Intra-facility communications, including notification to other staff in the facility so that all appropriate personnel know what is happening and what must be done to support the response.

KEY POINT

✓ *Know that emergency plans should include provisions for people with special needs.*

- The people who work in these facilities also may have special needs. Since 9/11/2001, the special needs of disabled individuals have become an area of focus, stimulated by accounts of people in wheelchairs being trapped and left to die in the World Trade Center towers. Emergency plans that do not take into account the special needs of disabled people can limit the possibilities for their employment and/or retention. Employers may be hesitant to hire people with special needs due to concerns about being able to provide for their safety. Disabled people may be hesitant to seek employment in locations where they could be trapped.
- It is intuitive that if facility managers must plan for the protection of their employees, they must also plan for the protection of their other occupants.

KEY POINT

✓ *Facility managers 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.

Fire 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

Fire Safety Plan

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

✓ *Understand and can explain all local, state and federal licensing standards for emergency planning and response for their facility and occupants with special needs.*

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

- ✓ *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

✓ *Understand the basics of crisis communication and the process for crafting appropriate messages for staff, occupants and family and friends of those occupants before a crisis occurs.*

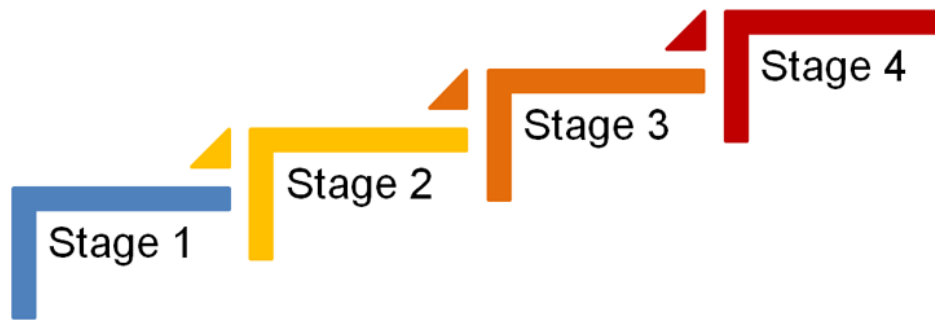
The importance of planning messages before an event requiring SIP or evacuation cannot be overstated. The facility manager must not only convey accurate information but also speak calmly and clearly.

Using the social marketing public health campaign model developed by the U.S. Department of Health and Human Services (HHS), National Institutes of Health (NIH) and the National Cancer Institute to develop messages that can be used during emergencies.

Message Development

There are four stages that facility managers can follow to develop their messages about SIP and evacuation. They include:

- 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

✓ *Notification systems must be in place to communicate with the occupants and staff of the various types of educational and institutional facilities.*



Use Various Notification Methods

Once it becomes clear that a SIP or evacuation action must be taken, the facility manager must be able to communicate the information to people with a variety of special needs, which includes but is not limited to disabilities. Each facility manager must determine the types of communication that will reach all the people in their facility.

Facilities that use emergency warning systems such as sirens or other audible alerts should provide people who are deaf or hard of hearing prompt notice of impending disaster. Combine visual and audible alerts to reach a greater audience than either method would by itself. Consider using telephone calls, auto-dialed TTY messages, text messages, emails and even direct room-to-room contact.

KEY POINT

✓ *Evacuation and SIP plans must be communicated to family and friends of occupants of educational and institutional facilities well in advance of any emergency.*

It is particularly important that plans for SIP and evacuation be communicated to family members and friends of occupants of educational and institutional facilities.



Communicating SIP in Schools

The manual “**Practical Information on Crisis Planning: a Guide for Schools and Communities**” (U.S. Department of Education, 2007) describes how to craft messages for students and staff and how to preplan with parents so that they know what will happen and what they should and should not do in order to keep their children safe.

Parents should be told the difference between a lockdown and SIP. A school is locked down when a crisis occurs outside of the school and an evacuation would be dangerous, or when there is a crisis inside (such as an active shooter) and movement within the school would put students in jeopardy.

Communicating Student Release (Evacuation) in Schools

If students are to be released as part of an evacuation, traditional release procedures may not be safe. Parents need to know the alternative plan. The Guide suggests that a comprehensive plan should include:

- Up-to-date student rosters for teachers, the principal and other stakeholders
- Student emergency cards that contains contact information on parents and guardians and others who could be contacted in an emergency. The card should state who the student is allowed to leave the campus with, pertinent medical information and doctor contact information. The cards should be stored in the front office in hard copy and electronically.
- Student release forms should be created and stored with other crisis supplies.
- Student release areas should be designated along with back up options.
- Staff roles should be assigned such as dealing with families and signing out students.
- Create student release procedures that anticipate high emotions as parents attempt to access their children; students should not be released to people who are not on their emergency cards or who are not able to prove their identity.
- Arrange for transportation for students who are not taken home by a parent or guardian, arranging for shelter and provisions as necessary.
- Use all communication outlets to keep families, the media, and community informed during and after the crisis. Signal its end as well.

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



Communicating SIP and Evacuation Information

Messages aren't just things you say – they are things you say with a purpose in mind. They are meant to persuade. In a crisis, these messages should have the following components:

- Expressions of empathy/shared emotions.
- Clarification of facts.
- Acknowledgement of the unknown.
- A call for action or directions to resources/more information.
- Expressions of commitment.
- Explanation of the process to get more answers.
- Explanation of when more information will be forthcoming.
- Acknowledgement of risks and recommendations on how to minimize them.

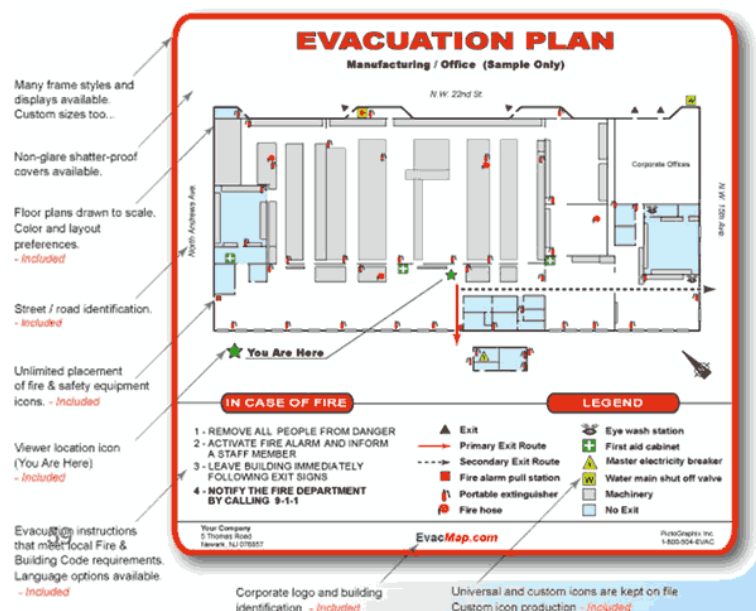
Delivering Messages During a Crisis

When delivering messages during a crisis, facility managers should keep the following things in mind:

- Admit what you don't know. Emphasize that there is a process to find out more and describe in simple terms what that process is.
- Be willing to address valid "what if" questions, but don't over-speculate.
- Say what you wish – for example, "I wish I had more information to share..."
- Give people things to do. Ask more of people to encourage them to rise to the occasion.
- Let people know what to expect and give them guidance on how to prepare.
- Be a role model. Show people how they should react.
- Understand that people tend to believe assumptions, rumors, and incorrect or conflicting information, particularly in times of crisis.
- Show empathy and compassion.

KEY POINT

- ✓ *Evacuation plans must be taught to employees and then practiced with them so that they respond appropriately when evacuation becomes necessary.*
- ✓ *Understand the roles that employees must play to safely assist special needs populations during an evacuation.*
- ✓ *Understand the roles that employees must play to safely evacuate facility occupants and people who are visiting (e.g., parents at schools or family members visiting hospital patients).*



Evacuation Plan Objectives

Facility managers at educational and institutional facilities must develop an evacuation plan that:

- Describes the conditions under which an evacuation would be necessary
- Determines who will be authorized to initiate the evacuation plan
- Describes how the evacuation will be communicated
- Describes how employees will communicate with each other
- Describes in detail the roles and responsibilities for all employees
- Establishes procedures to assist those with special needs
- Designates meeting areas for all personnel
- Outlines a procedure for accounting for all personnel, and a procedure for reporting missing individuals
- Is as building-specific as possible

Planning for Evacuation of Hospitals

The Joint Commission's Guidebook (2010) has a useful checklist that hospitals can use to plan for evacuation.

Elements of an Evacuation Plan

Answering the following questions regarding a hospital's evacuation policy will help determine if it has all the necessary elements for an effective evacuation plan:

- Does the plan identify the conditions under which an evacuation would be necessary?
- Does the plan identify a clear chain of command and designate a person authorized to order an evacuation or shutdown of operations?
- Does the plan address the types of actions expected of different employees for the various types of potential emergencies?
- Does the plan designate who, if anyone, will stay to shut down critical operations during an evacuation?
- Does the plan outline specific evacuation routes and exits and are they posted in the workplace where they are easily accessible to all employees?
- Does the plan address procedures for assisting people during evacuations?
- Does the plan ensure that sufficient medical resources are en route and available on the receiving end of the evacuation?
- Does the plan identify one or more assembly areas (as necessary for different types of emergencies) where employees will gather and a method for accounting for all employees?
- Does the plan address how visitors will be assisted in evacuation and accounted for?
- Is an organized discharge routine in place to handle large numbers of patients upon short notice?
- Has someone been designated with the responsibility for removing and controlling patient records and documents?

- Has provision been made for moving patients and staff to an immediate area of safe refuge within the hospital in the event the area must be evacuated or staff and patients relocated?
- Have agreements been made with other health care facilities for relocating patients should the facility be unable to support patient care?
- Have alternate sites been predetermined and confirmed for housing patients and staff in the event of an evacuation?
- Have transportation requirements been pre-established for transporting patients and staff?
- Have transportation sources been identified for patients who must be moved in hospital beds, on ventilators, and/or connected to specialized equipment?
- Does the receiving facility have sufficient resources to care for critically ill patients?
- Has provision been made for moving patient records and documents?
- Is a time sequence built into the plan designating appropriate moving times, assigned personnel to transport patients, and a priority of patients when moving them to a specific location?
- Is a sequence in place for patient transfers along pre-established routes?
- Are procedures established for the orderly disposition of patients to their homes, if applicable?
- Has provision been made for immediate refuge, care and comfort for patients and staff on the hospital grounds during inclement and winter weather?



Critical Issues with Hospital Evacuation

During the 20th century, hurricanes and floods were the primary threats which caused hospitals to evacuate, but in more recent years serious consideration has also been given to hazardous material spills and terrorist incidents. Noted are several critical issues when considering whether to evacuate a hospital:

- **The nature of the threat may define the threat's severity.** The risk to staff and patients depends on the nature of the threat. Nevertheless the risk will increase prior to and during the evacuation.



- **The time restrictions due to the threat.** While tornadoes, earthquakes, building fires and hazardous material releases (spills) can be highly damaging, the lack of warning makes them much more difficult to incorporate into the plan than floods and hurricanes, which allow more time for evacuation.
- **The ability to function during an evacuation.** Depending on the nature of the threat, requirements for acute and continuing care can increase. As the threat to the hospital grows along with the added victims requiring treatment, the evacuation decision and process become much more complex.

Evacuation requires resources of types and levels which the hospital is not likely to possess for routine operations. Another subtlety of this problem is that medical professionals, of necessity, become involved in the logistics of evacuation. This reduces their availability for patient care. Thus not only do the demands of evacuation conflict with providing care, but those providing the care are called upon to perform functions with which they are not familiar.

KEY POINT

- ✓ ***Have plans in place for returning to normal operations after an evacuation order is lifted.***

The importance of having a continuity of operations plan cannot be overstated. Pre-planning must consider activities such as returning clientele (i.e., patients, students, residents, etc.) to the facility in an orderly manner, or making longer-term arrangements, if a return is not possible. Communications with family members and others is a critical component.

Plans for crisis counseling and critical incident stress management should also be included. Note that FEMA provides a good online reference for returning to normal at <http://www.fema.gov/rebuild/recover/after.shtm>



KEY POINT

✓ ***Know how to train employees to SIP:***

Preparation for a shelter-in-place order should include the following:

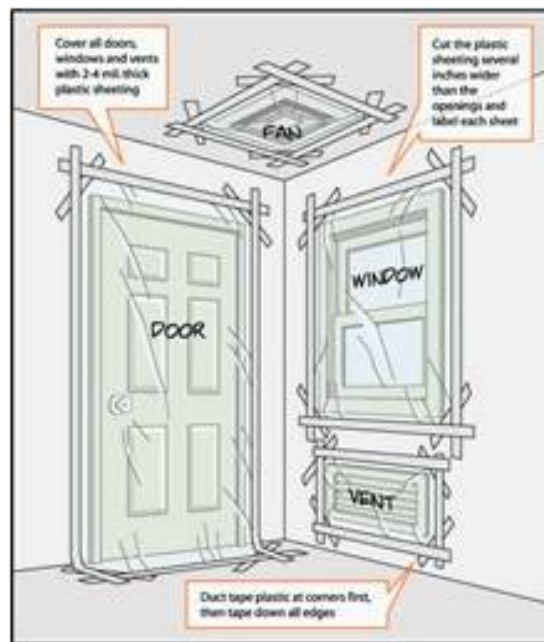
- Designate an appropriate room. It should be an interior room with few (or preferably no) windows, an adjoining bathroom, and storage for SIP supplies. It should be large enough to accommodate the required number of people.
- Measure all doors, windows, vents and skylights, then pre-cut plastic sheeting to fit with an overlap of 6 inches all the way around.
- Write an SIP component into the Emergency Action Plan.
- Gather supplies, tools, and communications equipment, similar to home but adequate for institutional needs.
- Train all employees in their roles in the event of a SIP order.

KEY POINT

✓ ***Know what to do when ordered to shelter-in-place.***

1. Notify employees and visitors that a SIP order has been received and that they should place the SIP component of the emergency plan into action. Give them as much information as is available about the hazard: what it is, its location, and when it is expected to arrive.
2. Many adults with children will want to leave and find them in the event of an emergency. This is human nature, and facility managers should realize that they cannot control it. Facility managers should take whatever appropriate measures to maintain accountability and responsibility for those within or on their properties.
3. Close and lock all windows and doors.
4. Turn off heating, ventilating and air conditioning systems (HVAC).
5. Turn off vent fans, fume hoods, and any other device that moves air.
6. Utilize call forwarding or an answering service to notify customers that your business is closed.
7. Notify all employees to report to the preselected safe room.
8. Close the door(s) and seal the opening(s) at the bottom with towels.

9. Seal windows, doors, and vents with pre-cut plastic and duct tape. Tape down the edges all the way around. Use multiple rolls of duct tape so that several people can work on this at the same time.
10. Account for everyone and document who is present and those unaccounted for.
11. Allow employees and customers to make short calls to family/friends to check in. Encourage those who are present to use their cell phones for this purpose, and keep the landline available for emergency use.
12. Monitor radio, TV and internet (if possible) for updates.
13. Remain sheltered-in-place until you receive notification that it is safe or that the Incident Commander has ordered an evacuation.



KEY POINT

- ✓ *Know how to train employees to shelter visitors in place.*

Managers of educational and institutional facilities must plan to shelter a number of people equal to the capacity of their facility and take into account that family members or friends of the occupants will also need to be sheltered.



KEY POINT

✓ *Understand why an Incident Commander might choose to shelter populations with special needs or large populations rather than evacuate them.*

Many educational and institutional facilities house large populations and/or people with special needs.

As noted earlier, the term “special needs” is fairly general. It would include people who are mentally and/or physically disabled, non-English speaking, culturally isolated, medically or chemically dependent, homeless, frail or elderly, and children.



In a time-limited acute health crisis, an Incident Commander might choose to shelter special needs populations in place in their facilities for a number of reasons:

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

✓ *Have plans in place for returning to normal operations after an SIP order is lifted.*

As stated in the section on “Evacuation,” pre-planning for a return to normal operations is critical. This planning should cover the possibility of an incident requiring SIP (or a lockdown) as well as an evacuation order.

An example of a time-limited health crisis requiring shelter-in-place.

In Miamisburg, OH on July 8, 1986, a CSX rail tank car derailed, releasing liquid phosphorous. About 30,000 people were evacuated from the surrounding area. However, a local hospital near the accident site was unable to evacuate. The hospital staff and patients sheltered in place and were not injured.



KEY POINT

✓ *Understand the risks during an evacuation or SIP or an incident requiring both.*

All protective actions involve some degree of risk. In order to be considered appropriate, the protective action must carry less risk than the risk from the hazard.

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 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 resulting from both Evacuation and Shelter-in-place 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

Managers of educational and institutional facilities should:

- Be familiar with and follow the facility's pertinent licensing and/or accreditation regulations as they relate to emergency planning and response.
- Be aware of potential hazards in the facility's immediate vicinity.
- Establish a working relationship with local fire and law enforcement agencies and elected officials.

- Utilize local fire and law enforcement agencies as resources in making, reviewing, and testing emergency operations plans.
- Have a communications plan for occupants of the facility, family members and others, and the media.
- Become familiar with the resources that the municipality (include possible Community Emergency Response Team or CERT) can provide.
- Provide regular in-service training for employees that covers various emergency scenarios.
- Conduct tabletops and other tests of evacuation and shelter-in-place plans.
- Have a continuity of operations plan that includes plans for recovering from an incident that requires evacuation or shelter-in-place.

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=EIM>