

Evacuation Elements

A disorganized evacuation can result in confusion, injury, and property damage. When developing your [emergency action plan](#), it is important to determine the following:

- [Conditions](#) under which an evacuation would be necessary;
- Conditions under which it may be better to [shelter-in-place](#);
- A clear [chain of command](#) and designation of the person in your business authorized to order an evacuation or shutdown;
- Specific evacuation procedures, including [routes and exits](#);
- Specific evacuation procedures for high-rise buildings;
 - [For Employers](#)
 - [For Employees](#)
- Procedures for [assisting visitors and employees to evacuate](#), particularly those with disabilities or who do not speak English;
- Designation of [what, if any, employees will remain](#) after the evacuation alarm to shut down critical operations or perform other duties before evacuating;
- A means of [accounting for employees](#) after an evacuation;
- [Special equipment](#) for employees; and
- [Appropriate respirators](#).



Conditions under which an evacuation would be necessary

A wide variety of emergencies both man-made and natural, may require a workplace to be evacuated. These emergencies include - fires, explosions, floods, earthquakes, hurricanes, tornadoes, toxic material releases, radiological and biological accidents, civil disturbances and workplace violence.

Employers will want their employees to respond differently to these different threats. For example, employers may want to have employees assemble in one area inside the workplace if threatened by a tornado or perhaps a chemical spill on an adjacent highway, but evacuate to an exterior location during a fire. Your plan must identify when and how employees are to respond to different types of emergencies. Ask yourself questions and brainstorm worst-case scenarios. What would happen if the storeroom caught fire, the river flooded, or a chemical release occurred in the shop?

- The type of building you work in may be a factor in your decision. Most buildings are vulnerable to the effects of disasters such as tornadoes, earthquakes, floods, or explosions. The extent of the damage depends on the type of emergency and the building's construction. Modern factories and office buildings, for example, are framed in steel and are structurally more sound than neighborhood business premises may be. In a disaster such as a major earthquake or explosion, however, nearly every type of structure will be affected. Some buildings will collapse and others will be left with weakened floors and walls.



Steel building

Routes and exits

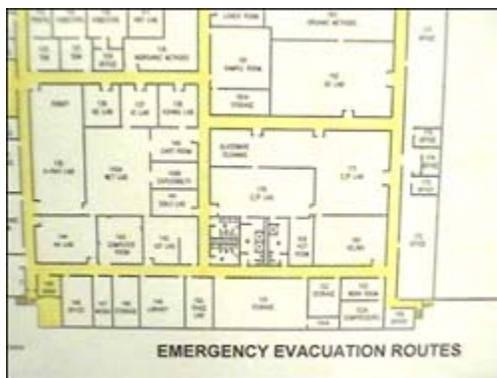
Most employers create maps from [floor diagrams](#) with arrows that designate the exit route assignments. These maps should include locations of exits, assembly points, and equipment (such as fire extinguishers, first aid kits, spill kits) that may be needed in an emergency. Exit routes should be:

- Clearly marked and well lit,
- Wide enough to accommodate the number of evacuating personnel,
- Unobstructed and clear of debris at all times, and
- Unlikely to expose evacuating personnel to additional hazards.



Obstacles in hallways may prevent passageways from providing the [required width](#) to accommodate a safe evacuation.

When preparing drawings that show evacuation routes and exits, post them prominently for all employees to see. [See OSHA's Floorplan Demonstration.](#)



Also, see [OSHA's Means of Egress requirements.](#)

Procedures for assisting visitors and employees to evacuate, particularly those with disabilities or who do not speak English

Many employers designate individuals as evacuation wardens to help move employees from danger to safe areas during an emergency. Generally, one warden for every 20 employees should be adequate, and the appropriate number of wardens should be available at all times during working hours.

Wardens may be responsible for checking offices, bathrooms, and other spaces before being the last person to exit an area. They might also be tasked with ensuring that fire doors are closed when exiting. All employees designated to assist in emergency evacuation procedures should be trained in the complete workplace layout and various alternative escape routes if the primary evacuation route becomes blocked. Employees designated to assist in emergencies should be made aware of



employees with special needs (who may require extra assistance during an evacuation), how to use the buddy system, and any hazardous areas to avoid during an emergency evacuation.

Visitors also should be accounted for following an evacuation and may need additional assistance when exiting. Some employers have all visitors and contractors sign in when entering the workplace and use this list when accounting for all persons in the assembly area. The hosts and/or area wardens, if established, are often tasked with helping these individuals safely evacuate.

You also may find it beneficial to coordinate the action plan with other employers when several employers share the worksite, although OSHA standards do not specifically require this.

Employees who may remain to shut down critical operations before evacuating

Certain equipment and processes must be shut down in stages or over time. In other instances it is not possible or practical for equipment or certain process to be shut down under certain emergency situations. This condition, which is not unusual for certain large manufacturers operating complex processes, is not typical of small enterprises that normally can turn off equipment or utilities if necessary and evacuate. However some small enterprises may require designated employees remain behind briefly to operate [fire extinguishers](#) or shut down gas and/or electrical systems and other special equipment that could be damaged if left operating or create additional hazards to emergency responders (such as releasing hazardous materials).

Each employer must review their operation and determine whether total and immediate evacuation is possible for various types of emergencies. The preferred approach, and the one most often taken by small enterprises, is immediate evacuation of all their employees when the evacuation alarm is sounded.

If any employees will stay behind, the plan must describe in detail the procedures to be followed by these employees. All employees remaining behind must be capable of recognizing [when to abandon the operation or task and evacuate](#) themselves before their [egress](#) path is blocked. In small establishments it is common to include in your plan locations where utilities (such as electrical and gas) can be shut down for all or part of the facility either by your own employees or by emergency response personnel.

Accounting for employees after an evacuation

To ensure the fastest, most accurate accountability of your employees, you may want to consider including these steps in your [emergency action plan](#):

- Designate [assembly areas](#) where employees should gather after evacuating;
- Take a head count after the evacuation. Identify the names and last known locations of anyone not accounted for and pass them to the official in charge;
- Establish a method for accounting for non-employees such as suppliers and customers; and
- Establish procedures for further evacuation in case the incident expands. This may consist of sending employees home by normal means or providing them with transportation to an offsite location.

What are assembly areas?

Depending on the type of emergency, your plan may designate assembly areas, or areas where employees will gather following an evacuation, both inside and outside your workplace. Assembly locations within the building are often referred to as "areas of refuge." Make sure your assembly area has sufficient space to accommodate all of your employees. Exterior assembly areas, used when the building must be partially or completely evacuated, are typically located in parking lots or other open areas away from busy streets. Try and designate assembly areas so that you will be up-wind of your building from the most common or prevailing wind direction. Accounting for all employees following an evacuation is critical. Confusion in the assembly areas can lead to delays in rescuing anyone trapped in the building, or unnecessary and dangerous search-and-rescue operations. When designating an assembly area, consider (and try to minimize) the possibility of employees interfering with rescue operations.

Fire Extinguishers relation to the EAP - Fight or Flee?

[Fight or Flee?](#) | [Extinguisher Basics](#) | [Extinguisher Use](#) | [Extinguisher Placement and Spacing](#)
[Hydrostatic Testing](#) | [OSHA Requirements](#) | [Test Your Knowledge](#)

A fire is the most common type of emergency for which small businesses must plan. A critical decision when planning is whether or not employees should fight a small fire with a portable fire extinguisher or simply evacuate. Small fires can often be put out quickly by a well-trained employee with a portable fire extinguisher. However, to do this safely, the employee must understand the use and limitation of a portable fire extinguisher and the hazards associated with fighting fires. Evacuation plans that designate or require some or all of the employees to fight fires with portable fire extinguishers increase the level of complexity of the plan and the level of training that must be provided employees.



- [Should employees evacuate or be prepared to fight a small fire?](#)
- [Risk assessment](#)

Should employees evacuate or be prepared to fight a small fire?		
<p>Choosing to evacuate the workplace rather than providing fire extinguishers for employee use in fighting fires will most effectively minimize the potential for fire-related injuries to employees. In addition, training employees to use fire extinguishers and maintaining them requires considerable resources. However, other factors, such as the availability of a public fire department or the vulnerability of egress routes, will enter into this decision.</p>		
Option 1	Option 2	Option 3
Total evacuation of employees from the workplace immediately when alarm sounds. No one is authorized to use available portable fire extinguishers.	Designated employees are authorized to use portable fire extinguishers to fight fires. All other employees must evacuate workplace immediately when alarm sounds.	All employees are authorized to use portable fire extinguishers to fight fires.
Requirement	Requirement	Requirement
Establish an emergency action and fire prevention plan and train employees accordingly. If fire extinguishers are left in the workplace, they must be inspected, tested, and maintained.	Establish an emergency action and fire prevention plan and train employees accordingly. Meet all general fire extinguisher requirements plus annually train designated employees to use fire extinguishers. Fire extinguishers in the workplace must be inspected, tested, and maintained.	If any employees will be evacuating, establish an emergency action and fire prevention plan and train employees accordingly. Meet all general fire extinguisher requirements plus annually train all employees to use fire extinguishers. Fire extinguishers in the workplace must be inspected, tested, and maintained.

Risk assessment

Portable fire extinguishers have two functions: to control or extinguish small or incipient stage fires and to protect evacuation routes that a fire may block directly or indirectly with smoke or burning/smoldering materials.

To extinguish a fire with a portable extinguisher, a person must have immediate access to the extinguisher, know how to actuate the unit, and know how to apply the agent effectively. Attempting to extinguish even a small fire carries some risk. Fires can increase in size and intensity in seconds, blocking the exit path of the fire fighter and creating a hazardous atmosphere. In addition, portable fire extinguishers contain a limited amount of extinguishing agent and can be discharged in a matter of seconds. Therefore, individuals should attempt to fight only very small or incipient stage fires.

Prior to fighting any fire with a portable fire extinguisher you must perform a risk assessment that evaluates the fire size, the fire fighters evacuation path, and the atmosphere in the vicinity of the fire.

Risk Assessment Question	Characteristics of incipient stage fires or fires that can be extinguished with portable fire extinguishers	Characteristics of fires that SHOULD NOT be fought with a portable fire extinguisher (beyond incipient stage) - evacuate immediately
Is the fire too big?	The fire is limited to the original material ignited, it is contained (such as in a waste basket) and has not spread to other materials. The flames are no higher than the firefighter's head.	The fire involves flammable solvents, has spread over more than 60 square feet, is partially hidden behind a wall or ceiling, or can not be reached from a standing position.
Is the air safe to breathe?	The fire has not depleted the oxygen in the room and is producing only small quantities of toxic gases. No respiratory protection equipment is required.	Due to smoke and products of combustion, the fire can not be fought without respiratory protection.
Is the environment too hot or smoky?	Heat is being generated, but the room temperature is only slightly increased. Smoke may be accumulating on the ceiling, but visibility is good. No special personal protective equipment is required.	The radiated heat is easily felt on exposed skin making it difficult to approach within 10-15 feet of the fire (or the effective range of the extinguisher). One must crawl on the floor due to heat or smoke. Smoke is quickly filling the room, decreasing visibility.
Is there a safe evacuation path?	There is a clear evacuation path that is behind you as you fight the fire.	The fire is not contained, and fire, heat, or smoke may block the evacuation path.

Shelter-in-place

Chemical, biological, or radiological contaminants may be released into the environment in such quantity and/or proximity to a place of business that it is safer to remain indoors rather than to evacuate employees. Such releases may be either accidental or intentional. Examples of situations that might result in a decision by an employer to institute "shelter-in-place" include an explosion in an ammonia refrigeration facility across the street, or a derailed and leaking tank car of chlorine on the rail line behind your place of business.

"Shelter-in-place" means selecting an interior room or rooms within your facility, or ones with no or few windows, and taking refuge there. In many cases, local authorities will issue advice to shelter-in-place via TV or radio.

- [Preparing to stay or go](#)
- [Shelter-in-place procedures](#)
- [Links to additional information](#)

Related information:

- [Evacuating - Evacuation elements](#)
- [Fire - Do I fight or flee?](#)



Preparing to stay or go

Depending on your circumstances and the type of emergency, the first important decision is whether you stay put or get away. You should understand and plan for both possibilities. Use common sense and available information, including what you are learning here, to determine if there is immediate danger. In any emergency, local authorities may or may not immediately be able to provide information on what is happening and what you should do. Use available information to assess the situation. If you see large amounts of debris in the air, or if local authorities say the air is badly contaminated, you may want to "shelter-in-place." However, you should watch TV, listen to the radio, or check the Internet often for information or official instructions as it becomes available. If you're specifically told to evacuate or seek medical treatment, do so immediately.



Use telephones, televisions, and radios for receiving instructions or emergency information.



The Internet may be a valuable source of information during an emergency.

If you intend to include a shelter-in-place option in your emergency plan, be sure to keep the following in mind:



Alarm methods may vary depending on the type of emergency.

- Implement a means of [alerting your employees](#) to shelter-in-place that is easily distinguishable from that used to signal an evacuation.
- Train employees in the [shelter-in-place procedures](#) and their roles in implementing them.



Train employees for shelter-in-place procedures just the same as you would for evacuation procedures.

Shelter-in-place procedures

Specific procedures for shelter-in-place at a worksite may include the following:

- Close the business.



- If there are customers, clients, or visitors in the building, provide for their safety by asking them to stay – not leave. When authorities provide directions to shelter-in-place, they want everyone to take those steps immediately. Do not drive or walk outdoors.
- Unless there is an imminent threat, ask employees, customers, clients, and visitors to call their emergency contact to let them know where they are and that they are safe.
- Turn on call-forwarding or alternative telephone answering systems or services. If the business has voice mail or an automated attendant, change the recording to indicate that the business is closed, and that staff and visitors are remaining in the building until authorities advise it is safe to leave.



Have employees and anyone else in the building call their emergency contacts, then turn on answering systems.

- Quickly lock exterior doors and close windows, air vents, and fireplace dampers. Have employees familiar with your building's mechanical systems turn off all fans, heating and air conditioning systems, and clothes dryers. Some systems automatically provide for exchange of inside air with outside air. These systems, in particular, need to be turned off, sealed, or disabled.
- If you are told there is danger of explosion, close the window shades, blinds, or curtains.



Gather essential supplies such as a first-aid kit.

- Gather essential disaster supplies, such as nonperishable food, bottled water, battery-powered radios, first-aid supplies, flashlights, batteries, duct tape, plastic sheeting, and plastic garbage bags.
- Select interior room(s) above the ground floor, with the fewest windows or vents. The room(s) should have adequate space for everyone to be able to sit. Avoid overcrowding by selecting several rooms if necessary. Large storage closets, utility rooms, pantries, copy and conference rooms without exterior windows will work well. Avoid selecting a room with mechanical equipment like ventilation blowers or pipes, because this equipment may not be able to be sealed from the outdoors.

- It is ideal to have a hard-wired telephone in the room(s) you select. Call emergency contacts and have the phone available if you need to report a life-threatening condition. Cellular telephone equipment may be overwhelmed or damaged during an emergency.
- Take your emergency supplies and go into the room you have designated. Seal all windows, doors, and vents with plastic sheeting and duct tape or anything else you have on hand.
- Consider precutting plastic sheeting (heavier than food wrap) to seal windows, doors, and air vents. Each piece should be several inches larger than the space you want to cover so that it lies flat against the wall. Label each piece with the location of where it fits. [See Fig. 1]
- Write down the names of everyone in the room, and call your business' designated emergency contact to report who is in the room with you, and their affiliation with your business (employee, visitor, client, customer).

- Listen to the radio, watch television, or use the Internet for further instructions until you are told all is safe or to evacuate. Local officials may call for evacuation in specific areas at greatest risk in your community.

Shelter-in-Place in an Emergency

What Shelter-in-Place Means:

One of the instructions you may be given in an emergency where hazardous materials may have been released into the atmosphere is to shelter-in-place. This is a precaution aimed to keep you safe while remaining indoors. (This is not the same thing as going to a shelter in case of a storm.) Shelter-in-place means selecting a small, interior room, with no or few windows, and taking refuge there. It does not mean sealing off your entire home or office building. If you are told to shelter-in-place, follow the instructions provided in this Fact Sheet.

Why You Might Need to Shelter-in-Place:

Chemical, biological, or radiological contaminants may be released accidentally or intentionally into the environment. Should this occur, information will be provided by local authorities on television and radio stations on how to protect you and your family. Because information will most likely be provided on television and radio, it is important to keep a TV or radio on, even during the workday. The important thing is for you to follow instructions of local authorities and know what to do if they advise you to shelter-in-place.

How to Shelter-in-Place

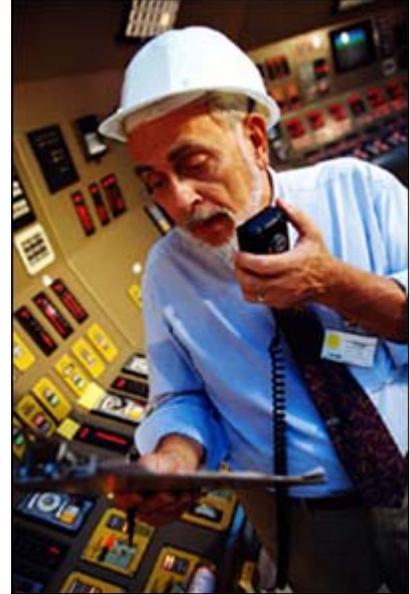
At Work:

- Close the business.
- If there are customers, clients, or visitors in the building, provide for their safety by asking them to stay – not leave. When authorities provide directions to shelter-in-place, they want everyone to take those steps now, where they are, and not drive or walk outdoors.
- Unless there is an imminent threat, ask employees, customers, clients, and visitors to call their emergency contact to let them know where they are and that they are safe.
- Turn on call-forwarding or alternative telephone answering systems or services. If the business has voice mail or an automated attendant, change the recording to indicate that the business is closed, and that staff and visitors are remaining in the building until authorities advise it is safe to leave.
- Close and lock all windows, exterior doors, and any other openings to the outside.
- If you are told there is danger of explosion, close the window shades, blinds, or curtains.
- Have employees familiar with your building's mechanical systems turn off all fans, heating and air conditioning systems. Some systems automatically provide for exchange of inside air with outside air – these systems, in particular, need to be turned off, sealed, or disabled.
- Gather essential disaster supplies, such as nonperishable food, bottled water, battery-powered radios, first aid supplies, flashlights, batteries, duct tape, plastic sheeting, and plastic garbage bags.
- Select interior room(s) above the ground floor, with the fewest windows or vents. The room(s) should have adequate space for everyone to be able to sit in. Avoid overcrowding by selecting several rooms if necessary. Large storage closets, utility rooms, pantries, copy and conference rooms without exterior windows will work well. Avoid selecting a room with mechanical equipment like ventilation blowers or pipes, because this equipment may not be able to be sealed from the outdoors.
- It is ideal to have a hard-wired telephone in the room(s) you select. Call emergency contacts and have the phone available if you need to report a life-threatening condition. Cellular telephone equipment may be overwhelmed or damaged during an emergency.
- Use duct tape and plastic sheeting (heavier than food wrap) to seal all cracks around the door(s) and any vents into the room.
- Bring everyone into the room(s). Shut and lock the door(s).
- Write down the names of everyone in the room, and call your business' designated emergency contact to report who is in the room with you, and their affiliation with your business (employee, visitor, client, customer.)
- Keep listening to the radio or television until you are told all is safe or you are told to evacuate. Local officials may call for evacuation in specific areas at greatest risk in your community.

Implementation of the EAP

Drafting an [emergency action plan](#) (EAP) is not enough to ensure the safety of your employees. When an evacuation is necessary, you will need responsible, trained individuals who can supervise and coordinate activities to ensure a safe and successful evacuation. An EAP will be useful only if its content is up to date and employees are sufficiently educated and trained before an actual evacuation. The following sections will help you successfully implement your plan:

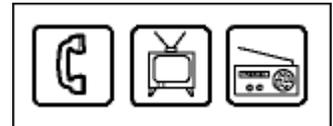
- [Authority](#)
- [Training](#)
- [Plan Review, Coordination, and Update](#)



Authority

It is common practice to select a responsible individual to lead and coordinate your emergency plan and evacuation. It is critical that employees know who the coordinator is and understand that this person has the authority to make decisions during emergencies. The coordinator should be responsible for assessing the situation to determine whether an emergency exists requiring activation of the emergency procedures, overseeing emergency procedures, notifying and coordinating with outside emergency services, and directing shutdown of utilities or plant operations if necessary.

In other instances, local emergency officials, such as the local fire department, may order you to evacuate your premises. If you have access to radio or television, listen to newscasts to keep informed and follow whatever official orders you receive.



When emergency officials, such as the local fire department, respond to an emergency at your workplace, they will assume responsibility for the safety of building occupants and have the authority to make decisions regarding evacuation and whatever other actions are necessary to protect life and property. The highest-ranking responder will assume the incident command role and will work with the onsite emergency coordinator, but will be responsible for directing all response activities.

Employee training

Before implementing the [emergency action plan](#), the employer must designate and train enough people to assist in the safe and orderly emergency evacuation of employees. [1910.38\(a\)\(5\)\(i\)](#) Training should be offered to employees when you develop your initial plan [1910.38\(a\)\(5\)\(ii\)\(A\)](#) and to all newly hired employees. Employees should be retrained when their actions or responsibilities under the plan change [1910.38\(a\)\(5\)\(ii\)\(B\)](#), or when the plan changes due to a change in the layout or design of the facility, new equipment, hazardous materials, or processes are introduced that affect evacuation routes, or new types of hazards are introduced that require special actions. [1910.38\(a\)\(5\)\(ii\)\(C\)](#)

Educate your employees about the types of emergencies that may occur and train them in the proper course of action. The size of your workplace and workforce, processes used, materials handled, and the availability of onsite or outside resources will determine your training requirements. Be sure all employees understand the function and elements of your [emergency action plan](#), including types of potential emergencies, reporting procedures, alarm systems, evacuation plans, and shutdown procedures. Discuss any special hazards you may have onsite such as flammable materials, toxic chemicals, radioactive sources, or water-reactive substances. An employer must inform employees of the fire hazards present in the workplace. [1910.38\(b\)\(4\)\(i\)](#) Clearly communicate to your employees who will be in charge during an emergency to minimize confusion.

General training for your employees should also address the following:

- Individual roles and responsibilities;
- Threats, hazards, and protective actions;
- Notification, warning, and communications procedures;
- Means for locating family members in an emergency;
- Emergency response procedures;
- Evacuation, shelter, and accountability procedures;
- Location and use of common emergency equipment; and
- Emergency shutdown procedures.

And remember, if training is not reinforced it will be forgotten. Consider retraining employees annually.

Also may want to train your employees in first-aid procedures, including protection against [bloodborne pathogens](#); [laboratory protection](#), including use of an [escape-only respirator](#); and methods for preventing unauthorized access to the

you have reviewed your [emergency action plan](#) with your employees and everyone has had the proper training, it is a good idea to hold practice drills as often as necessary to keep employees prepared. Include outside resources such as fire and police departments when possible. After each drill, gather management and employees to evaluate the effectiveness of the drill. Identify the strengths and weaknesses of your plan and work to improve it.

Plan review, coordination, and update

Once you have completed your emergency action plan, review it carefully with your employees and post it in an area where all employees will have access to it.

The employer must review with each employee upon initial assignment those parts of the EAP and fire prevention plan (FPP) that the employee must know to protect him or herself in the event of an emergency. The written plans must be available to the employees and kept at the workplace. For employers with 10 or fewer employees, the plans may be communicated orally, and the employer does not need to maintain written plans. [1910.38\(b\)\(4\)\(ii\)](#), [1910.38\(a\)\(5\)\(iii\)](#)



The plans also should be reviewed with other companies or employee groups in your building to ensure that your efforts will be coordinated with theirs, enhancing the effectiveness of your plan. In addition, if you rely on assistance from local emergency responders such as the fire department, local HAZMAT teams, or other outside responders, you may find it useful to review and coordinate your emergency plans with these organizations. This ensures that you are aware of the capabilities of these outside responders and that they know what you expect of them.

It is a good idea to hold practice evacuation drills. Evacuation drills permit employees to become familiar with the emergency procedures, their egress routes, and assembly locations, so that if an actual emergency should occur, they will respond properly. Drills should be conducted as often as necessary to keep employees prepared. Include outside resources, such as fire and police departments, when possible. After each drill, gather management and employees to evaluate the effectiveness of the drill. Identify the strengths and weaknesses of your plan and work to improve it.

Operations and personnel change frequently, and an outdated plan will be of little use in an emergency. You should review the contents of your plan regularly and update it whenever an employee's emergency actions or responsibilities change, or when there is a change in the layout or design of the facility, new equipment, hazardous materials, or processes are introduced that affect evacuation routes, or new types of hazards are introduced that require special actions. The most common outdated item in plans is the facility and agency contact information.

Consider placing this important information on a separate page in the front of the plan so that it can be readily updated.

An emergency action plan (EAP) is a written document required by particular OSHA standards. The purpose of an EAP is to facilitate and organize employer and employee actions during workplace emergencies. The elements of the plan must include, but are not limited to:

- Evacuation procedures and emergency escape route assignments.
- Procedures to be followed by employees who remain to operate critical plant operations before they evacuate.
- Procedures to account for all employees after an emergency evacuation has been completed.
- Rescue and medical duties for those employees who are to perform them.
- Means of reporting fires and other emergencies.
- Names or job titles of persons who can be contacted for further information or explanation of duties under the plan.

Evacuation in or through High Hazard Environments

Though this eTool focuses on evacuations for low-hazard businesses, some small businesses may deal with chemicals or substances that could be hazardous during an emergency. In this situation, a prudent employer may provide additional equipment for employees to safely evacuate.

- [Special equipment for employees](#)
- [Appropriate respirators](#)



Special equipment for employees

Your employees may need personal protective equipment to evacuate during an emergency. Personal protective equipment must be based on the potential hazards in the workplace. Assess your workplace to determine potential hazards and the appropriate controls and protective equipment for those hazards. Personal protective equipment may include items such as the following:

- Safety glasses, goggles, or face shields for eye protection;
- Hard hats and safety shoes for head and foot protection;



Eye and face protection equipment

- [Proper respirators](#);
- Chemical suits, gloves, hoods, and boots for body protection from chemicals;
- Special body protection for abnormal environmental conditions, such as extreme temperatures; and
- Any other special equipment or warning devices necessary for hazards associated with your worksite.



Chemical Suits

Appropriate respirators

Consult with health and safety professionals before making any purchases. Respirators selected should be appropriate to the hazards in your workplace, meet OSHA standards' criteria, and be certified by the National Institute for Occupational Safety and Health (NIOSH).

Respiratory protection may be necessary if your employees must pass through toxic atmospheres (such as dust, mists, gases, or vapors) or through oxygen-deficient areas while evacuating. There are four basic categories of respirators for use in different conditions. All respirators must be NIOSH-certified under the current [29 CFR 1910.134](#). See also OSHA's [Small Entity Compliance Guide for Respiratory Protection](#).



Tight-fitting facepiece



Full-facepiece SCBA



Particulate APR, N95

- [Additional respirator images](#)

Additional Respirators



Atmosphere supplying respirator



Half-facepiece SAR



Full-facepiece PAPR





Loose-fitting hood



Emergency escape breathing apparatus (above and top right corner)



Half-facepiece APR



Full-facepiece SCBA



Air-purifying respirator