

Staying in Your Home During Emergencies



For People Unable to Self Evacuate (UTSE) or Others with Access or Functional Needs

During emergencies and disasters, some people will choose the option of staying in their home, and should know how to do it quickly and effectively.

Being prepared is the best defense. The formal term for staying in your home is “sheltering in place.” Please read and understand shelter in place guidelines. In the event of an emergency, what you learn now could save your life later.

Wyoming is vulnerable to a range of disasters and emergencies including health and safety impacts of a hazardous materials emergency. Such emergencies can result from accidents or sabotage at a wide variety of locations and from terrorist use of chemical or biological materials. There are numerous hazardous materials throughout the state. Some materials pass by our residences each day via rail and on various US and State Highways.

When hazardous material (HAZMAT) events occur, emergency response officials have two basic tools to protect people. One is to evacuate people out of the area affected by a toxic cloud. The other is to direct “sheltering in place”, that is, go indoors, close up the building, and wait for the danger to pass. Either way, you must follow directions exactly, use common sense, and act quickly to ensure safety. Evacuation has long been used to move the public away from danger during emergency situations. However, evacuations can take a very long time to complete and can actually expose some people to more danger than if they just sheltered in place.

In some cases, evacuation is the better thing to do. However, evacuation could increase your chances of being exposed to an airborne chemical hazard. Evacuation is also more time consuming. For chemical releases of limited duration it is faster and usually safer to shelter in place than to evacuate. **In all the real-world HAZMAT emergency cases studied by the National Institute for Chemical Studies, there were no fatalities associated with sheltering in place.**

Sheltering in place is used if a migrating toxic vapor cloud could quickly overtake unprotected or evacuating citizens, or evacuation would create greater problems. The amount of protection from sheltering in place depends mainly on the air tightness of the building and the length of time the building is exposed to a hazardous plume. One of the instructions you may be given is to shelter in place. This is a precaution aimed at keeping you safe while remaining indoors. This is not the same thing as going to a shelter in case of a storm. Sheltering 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.

Modern, energy efficient and weatherized homes and workplaces provide the most effective air movement barrier. However, even the most weather-tight structure will slowly allow contaminated air to enter. Sealing windows,

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doors, and vents with plastic sheeting and duct tape can further reduce infiltration of contaminated air into a building. Other factors affecting the level of protection provided by sheltering in place are weather conditions and behavior of the threatened population.

It is extremely important to ventilate and/or leave a structure after a contaminated cloud has passed. With tight buildings, any vapors entering structures during exposure to hazardous vapors will leave those structures very slowly. Chemicals sorbed onto building surfaces will also gradually desorb. If an occupant remains inside a building without radically increasing the air exchange rate, exposure to hazardous chemicals will continue and dosage of chemicals will increase. By opening windows and turning on air moving equipment, the air exchange rate of the building will be substantially increased and hazardous vapors will be removed at a greater rate.

Remember that instructions to shelter in place are usually provided for the duration of a few hours, not days or weeks. For this amount of time there is little danger that you will run out of air or suffocate.

If you hear instructions on the television or radio, or if you hear the outdoor warning siren, go inside and turn on your radio to get instructions on what to do. Or, if you smell a strong or unusual odor and you don't know where it's coming from, go inside and begin sheltering in place procedures.

Listen to the radio or television for further information. Do NOT call 911 to inquire about the emergency.

Keep listening to the radio or television until you are told all is safe or you are told to evacuate. Officials may call for evacuation in specific areas at greater risk in your community.

Local officials on the scene are the best source of information for any particular situation. Following their instructions during and after emergencies regarding sheltering, food, water, and clean up methods is your safest choice.

Sheltering in place is a concept developed for situations where you need to protect yourself, your family, or coworkers without leaving your home or office.

Sheltering in place may be the only practical action to take in certain types of emergencies. It may be one of the most effective tools your family, coworkers, or neighbors have in averting disaster. Public knowledge and quick action can stand as a force against needless loss of life and property during disasters. You can become part of the solution by becoming more informed.

In a chemical release or hazardous materials incident, you may be told to seal windows, doors, and other openings. Have a Sheltering in Place kit available for this purpose.

It is important that you have both a Family Disaster kit and a Sheltering in Place kit available at all times.

Staying in Your Home During Emergencies Plan

When a shelter in place advisory is issued:

- ▶ Best suitable room for shelter in place is your bathroom.
- ▶ Communities use several different means to warn the public of impending danger, such as outdoor warning sirens, the Emergency Alert System (EAS), or NOAA Weather Radio. Once you have been notified of an emergency you should tune to a local radio or television station for further details.
- ▶ Upon hearing the shelter in place announcement, make sure all room windows are closed and locked. Close all room doors throughout the building. Immediately go to your shelter area and ensure any visitors accompany you.

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- ▶ On the way to your bathroom, remember to take a pre-positioned flashlight located near the bathroom. Also, take a desk chair into the bathroom, along with a clock radio. Radios will have battery backup, so make sure to plug it in once inside the bathroom.
- ▶ Make sure towels are in the bathroom.
- ▶ Pre-position a Sheltering in Place kit under the sink in the cabinet. You will find in this kit duct tape and two sheets of plastic.
- ▶ Shut your bathroom door completely closed with you in the bathroom.
- ▶ Turn off the air vent to the bathroom if there is a switch. This vent, when running, is pulling contaminated air into the shelter.
- ▶ Place a small piece of plastic over the vent by using your chair and seal with long strips of duct tape. Be sure tape securely overlaps all edges of the plastic.
- ▶ Remove the large piece of plastic and slice a strip of duct tape across one narrow end. This is the top of the plastic and should be placed over the top of the door jam/molding.
- ▶ Wet a large bath towel in the sink and place the dampened towel at the bottom of the door. This is to help seal any gap between the bottom of the door and the floor.
- ▶ Pull the plastic down tight and seal the bottom of the plastic to the floor with long strips of duct tape.
- ▶ Tape both sides of the plastic to the wall with long strips of duct tape. The idea here is to create an airtight seal as best as possible.
- ▶ Remain in the shelter area until “All Clear” is announced.
- ▶ Ensure your building is thoroughly ventilated and has been cleared for re-entry by emergency response officials.

If you would like more information about how to best assist persons with disabilities or how to prepare to assist persons with disabilities, please contact the Wyoming Institute for Disabilities at the University of Wyoming, Dave Schaad, (307) 766-2095 or dschaad@uwyo.edu.