

In-Place Sheltering

Authorities have long recognized that it would be extremely difficult to evacuate Utah and Salt Lake counties in the event of a disaster such as a bio-chemical hazard/incident or chemical spill. The population is too great with too few exit routes. Evacuation is preferable when possible, but if it isn't an option, families can do what is called "in-place sheltering" with some simple preparations. This means that a family sets up a shelter in their own home until the air-borne hazard passes, which could be in several hours or a few days, weeks or months.

"In place sheltering" involves two types of sheltering.

- 1- Sealing yourself indoors
- 2- Quarantining yourself indoors

Listen for OFFICIAL information to see what kind you need to do.

To seal yourself indoors there are some special considerations to take other than just locking the doors. IN ADVANCE, select a room in your home where you would do the in-place sheltering. An upstairs and interior room is required, as some chemical hazards are heavier than air and travel along the ground and will enter basement shelters. Then make a list and keep it handy of what you will keep in that room or put there quickly if you have to shelter there. You will need to have:

required:

- 500 sq. ft. (1 roll) plastic sheeting (4 mil is better than 3 mil but you can use down to 2 mil)
- 1 or 2 rolls of duct tape -- get decent duct tape (contractor's grade or better)
- a battery powered radio or TV to check for OFFICIAL news as to when it's safe to come out
- important personal medications for you and your family
- a flashlight incase you loose power - do not use candles or lanterns (they burn valuable oxygen)

optional:

- a port-a-potty, (5 gal. bucket lined with kitchen garbage bags + some RV/holding tank toilet chemical or a pail of dirt + a lid or plastic snap-on toilet seat) do NOT use a inside toilet this displaces valuable oxygen
- books, games, or other diversions (do not count on videos because you will be covering your outlets)
- a FRS and/or ham radio to get information from local authorities - this does not displace official information sources - *REMEMBER* rumors are not official information.
- a cordless telephone
- water or something to drink
- food to munch on but not salty foods

It's much better to have this planned in advance and readily accessible than to have to think it up and find it on the spot.

Depending on the distance you are from the bio-chemical hazard/incident you could have as little a 5 minutes and as much time as an hour but not much more than that. Hazardous fumes, vapors and smoke follow NORMAL wind patterns. In Utah and Salt Lake counties this is 2 - 3 miles per hour except around the canyons then it can be anywhere from 2 to 40 miles per hour. Most people can walk 2 - 3 miles per hour. SO, if you are not in the immediate path of danger you will have time to get to a place and shelter there. *So run - don't walk.* To calculate where a good place is, figure any where you can normally, safely walk to in 5 minutes, realizing that in the event of a incident panic and chaos set in. You will need to plan on been "sealed in" your home for a minimum ONE hour in the absence of official information or longer. Mother nature does a wonderful job of cleaning up bio-chemical hazards/incidents using normal wind patterns. This means that most of the dangerous levels of toxic problems sealed against for about an hour or so.

NOTE: You may still need to stay quarantined indoors for a much longer time just not "sealed in". Our homes cannot provide us with sufficient oxygen to seal ourselves in for long periods of time. You WILL die of asphyxiation if you try this, so don't. Besides it is next to impossible to seal and entire house in a reasonable amount of time, so choose a single room large enough with oxygen for all the intended occupants. Side note: full size dogs use twice the amount of oxygen as a full grown adult so you determine if Fido is worth saving. Cats use half the oxygen.

First:

Turn on a radio or TV for official information. In Utah county this is 89.5 FM - KBYU or 1160 AM - KSL or channel 5 on TV. In Salt Lake County this is 1160 AM or channel 5 on TV.

Second:

You will need to turn off all mechanical or electrical operated air intake or air exchange to your home, business, school, or church, etc., namely your furnace (and gas main shut off) or air conditioner, chimney flue dampers and any fans. Do not take the time to get on your roof to cover vents and/or chimney openings. Time is a luxury you do not have.

Third:

Close, lock and secure your home (windows, doors, animal entries, etc.). Close curtains and drapes.

Fourth:

1. Gather your family, and any pets you want to save, and the listed supplies into your selected room, and using the plastic sheeting and duct tape, make the room as air-tight as possible. While gathering your family, you can provide a minimal amount of protection to your breathing by covering your mouth and nose with a damp (not soaking wet) cloth.
2. Wet some (soaking wet) towels and jam them in the cracks under the doors.
3. Cover over windows, heat vents, light switches, power sockets, fire places, baseboard gaps, light fixtures, and entire door frames with duct tape and/or plastic. It is best to have these pre-cut, well in advance to cover every opening. You can in advance, caulk some cracks and small air leaks into that room.
4. Where possible select a room large enough to maximized the amount of oxygen you will have until it is safe to come out.
5. To determine oxygen needs and occupancy have everyone in the room in a standing position stretch their arms out fully. If they can do this with out touching anyone else's outstretched arms/fingers there is enough oxygen for one hour. (i.e. a 8 foot by 6 foot typical bathroom holds enough oxygen for 2 adults and a child under 6 years of age.
6. Then limit activity and oxygen usage.
7. Do not use lanterns or candles. This uses valuable oxygen. Light sticks or flashlights are a better source of light.
8. Stay inside you sealed shelter until you are told, *officially*, it is safe to leave. Realize you may still need to stay indoors, quarantined, for a longer amount of time.

Quarantining yourself includes:

1. Gather your family to your home and lock all doors and window.
2. Turn on a radio or TV for official information. In Utah county this is 89.5 FM - KBYU or 1160 AM - KSL or channel 5 on TV. In Salt Lake County this is 1160 AM or channel 5 on TV.
3. Once you have locked yourself in do NOT open the door until you get OFFICIAL information that it is safe to leave.

At-home sheltering for a nuclear attack has different needs than what is described above.

EVACUATION

- Authorities may decide to evacuate an area for your protection. Again, it is important to stay calm, listen carefully and follow all instructions.
- If you are told to evacuate, listen to your radio to make sure the evacuation order applies to you and to understand if you are to evacuate immediately or if you have time to pack some essentials. Do not use your telephone.
- If you are told to evacuate immediately:
 - Close and lock your windows.
 - Shut off all vents, furnaces, air conditioning units. and air exchange units.
 - Lock the doors.
 - Move quickly and calmly.
 - You do not need to turn off your refrigerator or freezer, but you should turn off all other appliances and lights before locking your home as you leave.
- Check on neighbors to make sure they have been notified, and offer help to those with disabilities or other special needs. If you need a ride, ask a neighbor. If no neighbor is available to help you, listen to the emergency broadcast station for further instructions.
- Take only one car and carpool to the evacuation site.
- Close your car windows and air vents and turn off the heater or air conditioner.
- Do not take shortcuts because a shortcut may put you in the path of danger. For your safety, follow the exact route you are told to take.