



MACOMB COUNTY HEALTH DEPARTMENT

SHELTER-IN-PLACE DURING A RADIATION EMERGENCY

FREQUENTLY ASKED QUESTIONS (FAQ)

People who live near but not in the immediate area of a terrorist attack involving radioactive materials may be asked to stay home and take shelter rather than try to evacuate. This action is called “sheltering in place.” Because many radioactive materials rapidly decay and dissipate, staying in your home may protect you from exposure to radiation. This fact sheet contains a few simple precautions that can help you reduce your exposure to radiation.

Preparing a Shelter in Your Home

- The safest place in your home during an emergency involving radioactive material is a centrally located room or basement. This area should have as few windows as possible. The further your shelter is from windows, the safer you will be.
- Preparation is key. An emergency could happen at any time, so it is best to store emergency supplies in the shelter in advance.
- Every six months, check the supplies in your shelter. Replace any expired medications, food, or batteries. Also replace the water in your shelter every six months.
- Make sure that all family members know where the shelter is and what it is for. Caution them not to take any items from that area. If someone borrows things from your shelter, you may find that important items are missing when they are most needed.
- If you have pets, prepare a place for them to relieve themselves in the shelter. Pets should not go outside during a radiation emergency because they may track radioactive materials from fallout into the shelter.



Preparing Emergency Supplies

Stock up on supplies, just as you would for severe weather or other emergencies. Consider the following things when preparing your emergency kit.

- **Food with a long shelf life** such as canned, dried, and packaged food products. Store enough food for each household member and pet for at least 3 days.
- **Water** – Store bottled or tap water. Each person will need about 1 gallon per day; plan on storing enough water for at least 3 days.



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Preparing Emergency Supplies Continued

- **A change of clothes and shoes** – Check clothing every 6 months and remove clothes that no longer fit or are unsuitable for seasonal weather. Remember to include underwear, socks, sturdy shoes or work boots, and winter or summer clothes as needed.
- **Paper plates, paper towels, and plastic utensils** – Store disposable dishware and utensils because you will not have enough water to wash dishes and because community water sources may be contaminated.
- **Plastic bags** – Because you may not be able to leave your shelter for several days, you will need to collect your waste in plastic bags until it can be removed.
- **Bedding** – Store sheets, blankets, towels, and cots for use during the time that you cannot leave your shelter.
- **Battery-operated radio and batteries** – Electrical power may not be on for several days. A battery-operated radio will allow you to listen to emergency messages.
- **Medicines** – Have 2-3 days' dose of your current prescription medicines in a childproof bottle for your shelter medical kit; label it with the name and expiration date of the medicine. (Discuss with your doctor the best way to obtain this small amount of extra medicine.) Be sure to check medicines in your kit every 6 months to make sure they are not past the expiration date.
- **Toiletries** – Keep a supply of soap, hand sanitizer, toilet paper, deodorant, disinfectants, etc.
- **Flashlight and batteries** – Electrical power may be out for several days. A flashlight will help you see in your shelter.
- **A telephone or cell phone** – Although cell phone or ground phone service may be interrupted, there is still a chance that you will be able to use a phone to call outside for information and advice from emergency services.
- **Extra eyeglasses or contact lenses and cleaning supplies.**
- **Duct tape and heavy plastic sheeting** – You can use these items to seal the door to your shelter and to seal any vents that open into your shelter for a short period of time if a radiation plume is passing over. Suffocation could occur if you keep the shelter tightly sealed for more than a few hours.
- **Pet food, baby formula, diapers, etc.** – If you have an infant, store extra formula and diapers. If you have pets keep a 3-day supply of pet food and water.
- **Games, books and other entertainment** – Because you may be in your shelter for several days, keep items on hand to occupy your family during that time. Children are likely to get bored if they have to stay in one place for long periods. Think of activities that they will enjoy doing while in the shelter – finger painting, coloring, playing games, cards, etc.

Preparing Emergency Supplies Continued

- **First aid kit** – You can purchase a first-aid kit or prepare one yourself. Be sure to include:
 - Sterile adhesive bandages
 - Sterile gauze pads in 2 and 4 inch sizes
 - Adhesive tape
 - Sterile rolled bandages
 - Scissors
 - Tweezers
 - Needle
 - Thermometer
 - Moistened towelettes
 - Antiseptic ointment
 - Tube of petroleum jelly or other lubricant
 - Soap or hand sanitizer
 - Latex or vinyl gloves
 - Safety pins
 - Aspirin or aspirin free pain reliever
 - Antidiarrheal medication
 - Laxatives
 - Antacids for stomach upset
 - Syrup of ipecac to cause vomiting if advised by the Poison Control Center
 - Activated charcoal to stop vomiting if advised by the Poison Control Center

Tips Before Entering a Shelter

- If you are outside when the alert is given, try to remove clothing and shoes and place them in a plastic bag before entering the house. During severe weather, such as extreme cold, remove at least the outer layer of clothes before entering the home. Leave clothing and shoes outside. Removing clothing will eliminate 90% of radioactive contamination. By taking this simple step, you will reduce the time that you are exposed and also your risk of injury from the radiation.
- Shower and wash your body with soap and water.
- Before entering the shelter, turn off fans, air conditioners, and forced-air heating units that bring air in from the outside. Close and lock all windows and doors, and close fireplace dampers.
- When you move to your shelter, use duct tape and plastic sheeting to seal any doors, windows, or vents for a short period of time in case a radiation plume is passing over (listen to your radio for instructions). Within a few hours, you should remove the plastic and duct tape and ventilate the room. Suffocation could occur if you keep the shelter tightly sealed for more than a few hours.
- Keep your radio tuned to an Emergency Alert System station at all times. Listen for official directions and information, which will be repeated often. Officials will provide information about when you may leave your shelter and whether you need to take other emergency measures.

Should I Take Potassium Iodide During a Radiation Emergency?

- Potassium iodide (KI) should only be taken in a radiation emergency that involves the release of radioactive iodine, such as an accident at a nuclear power plant or the explosion of a nuclear bomb. A “dirty bomb” most likely will not contain radioactive iodine.
- A person who is internally exposed to radioactive iodine may experience thyroid disease later in life. The thyroid gland will absorb radioactive iodine and may develop cancer or abnormal growths later on. KI will saturate the thyroid gland with iodine, decreasing the amount of harmful radioactive iodine that can be absorbed.
- KI only protects the thyroid gland and does not provide protection from any other radiation exposure.
- Some people are allergic to iodine and should not take KI. Check with your doctor about any concerns you have about potassium iodide.
- If KI is recommended after exposure Local Health Officials will notify residents on how to obtain it.
- For more information about KI, visit the following websites:
 - <http://www.bt.cdc.gov/radiation/ki.asp>
 - http://www.fda.gov/cder/drugprepare/KI_Q&A.htm
 - <http://www.fda.gov/cder/guidance/4825fni.htm>

Where can I get health advisories or alerts?

- If KI is recommended after radiation exposure the Macomb County Health Department will make frequent public announcements about how to obtain it.
- Listen to local radio and TV for more information. You may also visit <http://macombcountymi.gov/publichealth> or call 586-466-7923 for instructions.

MORE RADIATION INFORMATION

Radiological Emergencies in Michigan:

Michigan Prepares (MDCH/OPHP)
<http://michigan.gov/michiganprepares/0,1607,7-232-42879--00.html>

Nuclear Facilities: Michigan Department of Environmental Quality (DEQ)

http://www.michigan.gov/deq/0,1607,7-135-3312_4120_4243--00.html

Radiation Emergencies (CDC)

<http://www.bt.cdc.gov/radiation/>

Radiation Threat (ready.gov)

<http://www.ready.gov/america/beinformed/radiation.html>

Nuclear Threat (ready.gov)

<http://www.ready.gov/america/beinformed/nuclear.html>

Call the CDC at **1-800-CDC-INFO** or **1-888-232-6348 (TTY)**.

CONTACT INFORMATION

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<http://macombcountymi.gov/publichealth>