

Safety Information for Handlers of Pesticide Soil Fumigants

The U.S. Environmental Protection Agency requires that certified applicators provide safety information to handlers of soil fumigants. Providing this information to handlers in a manner they can understand meets this obligation.

How do I know if I am a handler?

You are a handler if you are in an application block and/or buffer zone and your work involves:

- Assisting with applications
- Cleaning up spills
- Handling or disposing of containers
- Using, cleaning, adjusting, or repairing equipment that may have residue
- Installing, operating, repairing, or removing irrigation equipment
- Shoveling soil
- Installing, perforating, removing, repairing, or monitoring tarps
- Monitoring air concentrations
- Doing any crop advisor and/or other Worker Protection Standard (WPS) handler activities

What are soil fumigants?

Soil fumigants are pesticides that...

- are applied as a gas, or form a gas shortly after application,
- move through the soil to kill pests, and
- give off gas into the air around treated areas.

What are the common active ingredients in soil fumigants?

- Methyl bromide
- Chloropicrin
- Metam sodium (Vapam)
- Metam potassium (K-Pam)
- Dazomet (Basamid)
- 1,3-Dichloropropene (Telone)
- Iodomethane (Midas)
- Dimethyl disulfide (DMDS) (Paladin)

What are the signs and symptoms of exposure?

You may have been exposed to a soil fumigant if you experience signs and symptoms such as:

- Watering, burning, or irritation of the eyes, nose, or mucus membranes
- Headache, nausea, or dizziness
- Tremors, slurred speech, or loss of muscle coordination; and/or
- A skin rash, burning and/or blistering

Only trained handlers can assist with and apply soil fumigants.

What should I do if I have signs or symptoms of exposure?

If you experience signs or symptoms of exposure:

- **STOP** working immediately;
- **INFORM** your supervisor or employer and let them know if you need medical attention,
- **LEAVE** the area, and
- **MOVE** upwind.

Return to work only when your employer or supervisor tells you it is safe. Your supervisor may have you wear a respirator and go back to work. If you still experience symptoms while wearing the respirator, **STOP WORKING**.

- You may go back to work **only when** the:
 - Symptoms go away,
 - Cartridge in the respirator has been changed, and
 - Measured air concentrations are below the trigger level.

How can I prevent exposure?

Before a pesticide application:

- Read the entire label, especially the first aid and emergency procedures.
- Ask where to find the Fumigant Management Plan. It will have information about safety precautions and what to do if there is an emergency at your site.
- Be familiar with first aid procedures.
- Know where to find a telephone and phone number for medical help.

During a pesticide application:

- Always wear the proper Personal Protective Equipment (PPE) as listed on the label.

Requirements and responsibilities for handlers

Before working with soil fumigants, handlers must:

1. Be trained on the use of fumigation equipment.
2. Know first aid and emergency procedures, escape routes, and emergency contact information.
3. **Read and follow** the directions on the label. **THE LABEL IS THE LAW**. It has information for physicians and requirements for:
 - safe handling
 - symptoms of exposure
 - first aid
4. Use the PPE listed on the label. If you use a respirator, be fit-tested, trained on proper use, and healthy enough to wear it.
5. Be trained as a handler according to the requirements of the WPS. **The information in this brochure alone does not satisfy handler training required by the WPS.**

Contact your state pesticide regulatory agency to see if your state has additional requirements.

If you think that you or someone else may have gotten ill from exposure during or after the application of a fumigant, provide *the following information* to the applicator in charge of the fumigation and/or to the doctor:

- The name of the person who is ill
- The applicator's name (if it isn't the applicator in charge)
- Where and when the exposure occurred
- What happened
- Symptoms of illness
- Name of the fumigant product, active ingredient, or EPA registration number