

US EPA ARCHIVE DOCUMENT

# 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