

Guidelines for Clean-up of Broken Thermometers from Hard Surfaces

Introduction

This clean-up method is for hard surfaces like tile, linoleum or wood floors. **Do not use this method on carpet.** If carpet, upholstery or other porous surfaces are contaminated with mercury, they should be discarded if possible or cleaned with a more rigorous method, which is beyond the scope of this document.

Before Cleaning Up

- 1. Keep infants, small children, pregnant women, and pets out of the room and away from the area of the spill.** This will prevent them from potentially inhaling mercury vapor and from tracking mercury to other parts of the house on shoes or paws. This group is the most susceptible to mercury vapor, so special care should be taken to keep them out of the room.
- 2. If you are pregnant, do not do the clean-up yourself.** Find someone to do the clean-up for you.
3. Minimize air movement in the area. Close air vents near the spill, and **turn off forced hot air heat, central air conditioners, and fans** until clean-up is completed.
4. **Open windows** to allow fresh air in.
5. **Keep it cool – below 72°F if possible.** This makes it easier to clean by reducing the evaporation/condensation cycle.



Before You Go Back To The Area

Read through these instructions and gather the supplies you will need for the clean-up.



- ◆ **Disposable rubber gloves** (ie, dishwashing gloves, vinyl, nitrile or latex gloves used for hobbies, crafts, painting, etc.)
- ◆ **Flashlight**
- ◆ **Duct tape or other sticky tape**
- ◆ **2 index cards, business cards, or stiff pieces of paper**
- ◆ **Eye dropper or medicine dropper**
- ◆ **Zip-lock bags (1-3) or old glass jar with cap that seals tight.**
- ◆ **Damp paper towels or rags**
- ◆ **Portable window fan (optional)**

For Further Information Contact:

CT Dept. Public Health, Environmental & Occupational Health Assessment Program	860-509-7742
CT Poison Control Center	1-800-343-2722
CT Dept. Environmental Protection (Emergency spills, 24 hrs/day)	860-424-3338
UCONN Health Center Occupational & Environmental Medicine Clinic	860-679-2893
Yale Occupational & Environmental Medicine Clinic	203-785-4197

Clean-Up Steps For Hard Surfaces

Do Not Vacuum



Do Not Sweep



Do Not Use Metal Dust Pans



If a thermometer breaks on a hard surface

like tile, hardwood or linoleum floor, **do not vacuum with a regular vacuum cleaner. Avoid sweeping and using metal dust pans.** Put on old clothes that could be discarded if they become contaminated during clean-up. Carefully follow the steps below.

1. Close the door to the room being cleaned if possible.
2. Put on disposable gloves. Be careful not to touch your face once you begin the clean-up procedure. Also, be careful not to step on any debris so that mercury is not tracked through the house on your shoes.
3. Try one or more of the following methods to pick up the mercury beads for disposal:
 - ◆ Use stiff paper cards to push little beads of mercury together. Next, try to use one card to push the large bead onto the other card. Carefully lift the bead into a zip-lock bag or glass jar.
 - ◆ Use the eyedropper to suck up the mercury beads. Hold the eyedropper almost parallel with the floor. (Holding it upright like a pencil doesn't work very well). You may collect tiny beads by touching the edge of the eyedropper to the bead and gently nudging the bead inside the eyedropper. Clear the eyedropper by *carefully* and *gently* squeezing the contents onto a damp paper towel. Dispose of the paper towel and eyedropper, when finished, by putting them in a plastic zip lock bag or glass jar.
 - ◆ Use very sticky tape to pick up any remaining glass and mercury beads. Pay special attention to cracks and crevices in tile or wood floors. When finished, place the tape into a zip lock bag or glass jar. Repeat this with a new piece of tape until all visible glass and mercury are picked up.
4. When all visible pieces of glass and mercury have been picked up and the clean-up is completed, place stiff cardboard or squeegee into a zip lock bag or glass jar with lid for disposal. Carefully remove rubber gloves and place them in a zip lock bag for disposal. Do not touch the glove fingertips or parts that may have come in contact with mercury.
5. **When you are finished with the clean-up, put the zip-lock bags in an outdoor trashcan immediately.** Getting the waste out of the house right away is an important safety step.
6. If possible, open a window in the room where the thermometer was broken for 24-48 hrs. for ventilation purposes after the clean-up has been completed. In addition to opening windows, a portable fan may be placed in a window with the air blowing to the outside to help exhaust the "dirty air" out of the building.
7. **Do not vacuum with a regular vacuum cleaner until 2-3 days after the cleanup. Vacuuming up beads of mercury with a regular vacuum cleaner is dangerous. Be sure there are no beads of mercury left before vacuuming.** You may want to check again with a flashlight in 2-3 days to be sure no beads of mercury were missed. After this is done, you may vacuum the area as needed.
8. Wash your hands and face after the waste has been removed from the house.

Note that it is very difficult to completely remove mercury beads that have made their way in between cracked surfaces, such as linoleum, ceramic or parquet floor tiles. Sulfur powder can be sprinkled over the area to control continued vaporization, and zinc powder can be rubbed between the cracks to bind any remaining mercury. Both products are sold by safety equipment distributors (ask for mercury spill kits).

For information about mercury health effects, cleaning up broken compact fluorescent bulbs (CFLs), mercury action levels for indoor spills, and spill response in schools, please visit the CT DPH website:

<http://www.ct.gov/dph/mercury>