

If a mercury thermometer breaks or a small amount of mercury spills (one gram or one milliliter), you can clean it up yourself with proper supplies and appropriate precautions. Professional assistance may be required if the amount of mercury spilled is greater than the amount in a fever thermometer, is spread across a wide area, or is spilled on carpet, fabrics, wood, or other porous surfaces. Professional assistance may also be required if you do not know when the spill occurred and how widespread it is. Contact a Board of Cooperative Educational Services (BOCES) Health and Safety Office, your regional New York State Department of Environmental Conservation (NYSDEC) office, or your local health department for guidance. In some cases, your local utility provider may clean up a spill, particularly if the mercury is spilled near their meters. Block off the spill area to prevent tracking.

If you have ANY mercury-containing items, make sure you have spill cleanup materials readily available and that you have a mercury spill response plan. Response planning should include staff awareness about containing the spill, prompt notification of one's supervisors and cleanup staff, and training of appropriate personnel on cleanup procedures. Mercury spill cleanup kits are easy to use and can be purchased from many suppliers such as Fischer Scientific, Flinn Scientific, Lab & Safety Supply, Mallinckrodt/Baker or VWR Scientific. Or, you can make your own kit as described in this brochure.

While it is important to report any amount of mercury spilled, reporting is REQUIRED for a release of one pound (approximately two tablespoons) or more. Report the spill to the NYSDEC Spill Hotline at 1-800-457-7362.



Instruments containing mercury can be found virtually anywhere on school property – in the nurse's office, science rooms, gymnasiums, art rooms and boiler rooms.

For a mercury spill that has just occurred, the following steps should be taken. Your school's spill response plan should include these steps, as well as a staff training component.

- Contain the area to prevent spreading the mercury.
- Evacuate the room or affected area immediately. Open exterior windows to ventilate the room. Keep people and animals away to prevent tracking.
- Shut down any ventilation system that would spread mercury vapor to other areas. Lower the temperature if possible because this lowers the amount of mercury that can vaporize. Cover the mercury with plastic to reduce evaporation into indoor air if the mercury is not going to be cleaned up immediately and is confined to a small area.
- Keep anyone who may have been contaminated in a separate room until they can change their clothing and shoes, and remove other articles such as watches or jewelry. If possible, have people shower or at least wash thoroughly before changing into fresh clothes. This protects other people from mercury contamination and prevents the mercury from spreading further.
- Do not return contaminated items to the owner. Instead, double bag, label and secure these items as hazardous waste until proper cleaning or disposal/recycling can be arranged.
- Close the doors and ventilate to the outside by opening windows and activating any existing exhaust fan that vents to the outside. We do NOT recommend bringing auxiliary fans into the area.
- **Never use a vacuum cleaner, mop or broom to clean up a mercury spill!**
Heat from the vacuum's motor will increase the amount of mercury vapor in the air. Mops and brooms will spread the mercury, making proper cleanup more difficult and costly. The vacuum cleaner, mop or broom will become contaminated and require disposal as hazardous waste.
- Never pour mercury down a floor drain or any other drain because the mercury may get trapped in the plumbing and continue to vaporize.
- Inform your supervisor if any personnel are involved in a spill or cleanup. A school official who can determine if parental notification is necessary should also be informed.



Carefully follow the directions, including disposal/recycling instructions, which are in your spill kit if you purchased one. If you made your own kit (see back of this page), follow these 12 steps:

1. Place clean clothes, shoes and a trash bag outside the room where the mercury was spilled.
2. Remove your watch and all other jewelry to prevent mercury from bonding to the metal. Prior to cleaning the spill, put on old clothes or coveralls, old shoes or booties, and rubber gloves.
3. Pick up any large pieces of glass and place on a paper towel. Fold the towel and place in a plastic zipper-type bag. As you clean the spill site, sort potentially contaminated items into those that cannot be cleaned and those that may be salvageable by cleaning or airing. Discard as hazardous waste any fabric-covered or porous items such as backpacks, pillows, erasers or stuffed animals. Secure salvageable items as hazardous waste until proper cleaning or disposal/recycling can be determined and arranged.
4. Make a pile of remaining glass and mercury by using index cards or stiff cardboard to push the pieces together. Use a flashlight to locate additional beads of mercury. Check a wide area beyond the spill. The beads will reflect light from the flashlight. Look for mercury in any surface cracks or in hard-to-reach areas of the floor. Push them together with the cardboard or index cards to make a larger bead.
5. Join the smaller beads together, then use the eyedropper to collect the large mercury bead and place it in the plastic bag. Tilt the dropper down near the floor to collect the mercury bead. Check again with your flashlight to be sure that no beads of mercury remain. After all the mercury is collected, put the eyedropper in the zipper-type bag.
6. Wrap tape around your fingers (sticky side out) and carefully use it to pick up any remaining glass or tiny beads. Place the contaminated tape in the zipper-type bag.
7. Sprinkle sulfur or zinc powder over the area. Either powder will quickly bind any remaining mercury. If you use zinc, moisten the powder with water after it is sprinkled and use a paper towel to rub it into cracks in the flooring. Use the cardboard and then dampened paper towels to pick up the powder and bound mercury. Place all towels and cardboard in a zipper-type bag. Seal all of the bags that were used and place them in a trash bag.
8. Carefully remove rubber gloves by grabbing them at the wrist and pulling them inside out as they come off. Place the gloves in the trash bag for disposal.
9. Any clothing or shoes that came in direct contact with mercury must be discarded and cannot be laundered or cleaned. Items that did not come into direct contact with mercury should be set outdoors to air thoroughly and can then be laundered if they are washable.
10. When the cleanup is done, tightly seal the trash bag. Wash thoroughly or shower.
11. Dispose of contaminated items properly! Refer to the brochure "Disposal and Recycling Options for Mercury and Mercury-Containing Devices." Contact your BOCES office or Regional NYSDEC office for more information.
12. If possible, keep a window open for 24-48 hours to ventilate after the cleanup. Once all the mercury has been removed, resume normal vacuuming.

**If you don't purchase a mercury spill cleanup kit,
the following items should be included in a kit:**

- Rubber gloves, eye protection if available, a flashlight, several zipper-type plastic bags, two plastic trash bags, two inch wide tape (masking, duct or clear), paper towels, an eyedropper and two index cards or pieces of stiff, non-corrugated cardboard.
- Powdered sulfur or zinc, which can be obtained from safety equipment suppliers, many agriculture supply stores, garden centers and pharmacies.
- A container to hold a small amount of tap water to moisten the paper towels. If you are using zinc powder instead of sulfur, you will need to moisten the zinc powder as well.
- Coveralls or a change of clothing, and old shoes or booties to cover your shoes. You will need to throw out or air out items worn during the cleanup.

An important note about mercury legislation and schools

The State Health Department recommends that containers of elemental mercury identified by staff or found during an inventory be given the highest priority for removal. Should a spill occur, many individuals could be exposed resulting in health effects, significant cleanup costs and widespread environmental contamination.

Legislation banning the purchase or use of elemental mercury in primary and secondary schools in New York State became effective September 4, 2004. Check with the Office of Facilities Planning in the State Education Department (518-474-3906) or, in NYC, the Office of Environmental Health and Safety in the Department of Education (718-361-3808) for the latest information about this and other initiatives for removing mercury from schools.

Brochures in this series

- Mercury and Schools: A Risky Combination
- Reducing Mercury in Schools: Superintendents, Principals, and School Boards
- Reducing Mercury in Schools: Science Teachers
- Reducing Mercury in Schools: Buildings and Grounds Superintendents
- Reducing Mercury in Schools: Health and Safety Committees
- Reducing Mercury in Schools: School Nurses
- Facility-Wide Inventory of Mercury and Mercury-Containing Devices
- Guidelines for Cleanup of Mercury Spills
- Disposal and Recycling Options for Mercury and Mercury-Containing Devices

Contact names and numbers

For health questions or to get more brochures:

New York State Department of Health (NYSDOH)
(800) 458-1158 or e-mail at ceheduc@health.state.ny.us
<http://www.health.state.ny.us/nysdoh/environ/hsees/mercury/index.htm>

For questions about recycling and disposal:

New York State Department of Environmental Conservation (NYSDEC)
Division of Solid and Hazardous Materials
(518) 402-8633
NYSDEC Small Quantity Generator Helpline
1-800-462-6553
www.dec.ny.gov

To report a spill:

NYSDEC Spill Cleanup and Reporting Hotline
(800) 457-7362

For additional information:

NYSDEC Division of Environmental Permits, Pollution Prevention Unit
(518) 402-9469
www.dec.ny.gov

In New York City:

To report a mercury spill in a NYC Public School or to get more information about mercury, call the Department of Education Office of Environmental Health and Safety at (718) 361-3808.

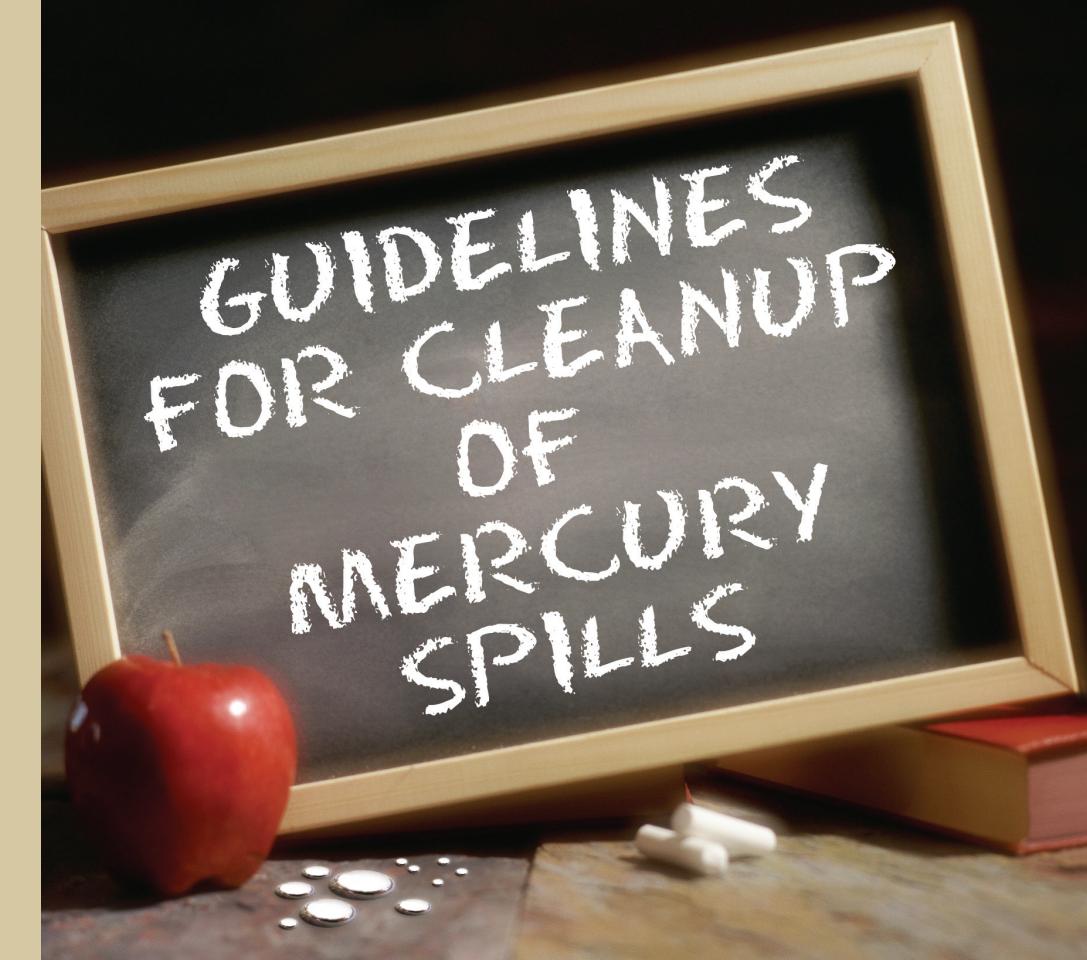
To report a mercury spill in a private NYC school call 3-1-1 and ask to be connected to the Department of Environmental Protection (DEP) HazMat.

Acknowledgements:

Materials development supported by grants from the US Environmental Protection Agency (EPA) and the Agency for Toxic Substances and Disease Registry (ATSDR), specifically the Hazardous Substances Emergency Events Surveillance program. Developed in cooperation with the Partnership to Reduce Mercury in Schools – a collaboration of representatives from state and federal agencies, local school districts, statewide associations, school and environmental organizations. Reviewers included Partnership members as well as project partners on the NYSDEC grant “Reducing Mercury in New York State Schools.”

NOTE:

These brochures are intended to provide information and lessons learned. They are not intended to replace school district requirements for training and personal protective equipment.



Get step-by-step instructions for cleaning up small mercury spills. These steps, and proper disposal and recycling of the waste, are essential components of any school's spill response plan.