

Responding to Mercury Spills: General Information

INTRODUCTION

This information is offered to help you respond to mercury spills. Most spills associated with fever thermometers or other small spills can be cleaned up by following the guidance provided here and in supplemental pages on the web at <http://dhs.wisconsin.gov/eh/HlthHaz/fs/MercSpill.htm>. While the amount of mercury involved with broken thermometers is usually very small, it can be enough to in some cases, to produce unhealthy exposure to mercury vapor. Quick response to any mercury spill is very important. If you have a large spill (more than 2 tablespoons or 1 fluid ounce), or are not sure about the hazards or your ability to respond, please contact your local health department or seek expert help from the agencies or contractors listed on the web at <http://dhs.wisconsin.gov/eh/HlthHaz/fs/hgresources.htm>.

ABOUT MERCURY

Elemental mercury is a heavy, silvery metal element that is a liquid at room temperature. Liquid mercury evaporates at room temperature and these vapors are invisible, odorless, and, at high levels, are very toxic. Mercury vapors can harm the nervous system, cardiovascular system, digestive tract, kidneys, and the development of young children. In the home, metallic mercury is often found in thermometers, barometers, electrical switches, and thermostats. Upon spilling, it will bead up and spread readily. The amount of vapor elemental mercury produces is related to the amount spilled, surface area (amount of beads produced), temperature (vapor increases with warmer air), air flow and physical disturbance of the spilled material.

CAUTIONS

You should respond immediately to all mercury spills. Even small spills can, in some cases, cause high levels of mercury vapors that are unsafe to breathe. Mercury vapors are readily absorbed through the lungs into the bloodstream and are therefore, particularly hazardous. Mercury vapors are also heavier than air and may linger in higher concentrations close to the floor. Children who crawl or play in these areas are at highest risk of breathing these vapors.

- **DO NOT use a vacuum to clean up mercury.** The filters in household and even high efficiency vacuums will not remove mercury vapors. Of even greater concern, the vacuum exhaust will put more mercury vapor in the air. The vacuum will also be contaminated. If you already have used a vacuum to clean a spill, carefully double-bag

the vacuum, seal and remove it from the building. Quickly isolate the areas as described below because there may be higher amounts of mercury vapor in air.

- **DO NOT use a broom to clean up mercury.** It will break the mercury into smaller beads, further spreading it and making more vapor.
- **DO NOT allow people whose shoes have contacted mercury to take their shoes beyond the spill area.** Further contamination of the building may result. The shoes should be removed and protective foot coverings, such as Tyvek booties should be provided.
- **DO NOT put mercury in the trash.** Mercury can be released in the environment and will further impact human health.
- **DO NOT put mercury or mercury-containing items in a burn barrel.** Vapors and smoke will be produced releasing mercury into the environment and create an exposure risk.
- **DO NOT pour or allow mercury to go down a drain.** It can lodge in the trap, and produce airborne vapor creating an inhalation risk. It will also lead to mercury contamination of the wastewater system.
- **DO NOT wash mercury-contaminated items in a washing machine.** Mercury may contaminate the machine and/or be discharged to the environment in wastewater.

Note: Everything used during the cleanup procedure should be managed as mercury-contaminated unless you are positive it has not come into contact with mercury. The Department of Health Services recommends you seek get advice from your local county health department, Wisconsin Department of Natural Resources or by contacting one of the disposal references listed on the web at <http://dhs.wisconsin.gov/eh/HlthHaz/fs/hgresources.htm>.

For more information

For health related information, contact the Wisconsin Division of Public Health, Bureau of Environmental and Occupational Health, 1 West Wilson St, Box 2659, Madison, WI 53701-2659, (608) 266-1120 or online at <http://dhs.wisconsin.gov/eh>.



Prepared by the Wisconsin Division of Public Health, Department of Health Services, with funds from the Agency for Toxic Substances and Disease Registry, Public Health Service, USDHHS.
(PPH 45060 3/11/2004)