



## Guidance Note

## Broken Mercury Thermometers

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HSD - HWG - 005

*This information is for your use and as a way of providing consistent information. There is no response required.*

### Broken Mercury Thermometers

The following information should be considered in the event a mercury thermometer or other mercury containing device breaks and releases mercury to the work area:

1. If the mercury thermometer breaks on the floor inside a laboratory make every attempt to keep people out of the spill site. Allowing personnel to walk on a metallic mercury spill site will scatter the mercury beads over a wide area and make the cleanup more difficult. Contact the Health & Safety Division (x 40345) to clean up mercury spills. If a mercury thermometer breaks inside a hallway or other high traffic public area it may also be necessary to call the University Police Office (911) to control access to the area.
2. Whenever a mercury thermometer breaks inside a heating block at elevated temperatures (above 100 degrees Fahrenheit) request that all personnel in the immediate area evacuate the room to prevent potential exposures to airborne mercury vapors (turn off heating block if practical). Mercury vapor has no perceptible odor. The Health & Safety Division will use a Jerome mercury sniffer to measure the airborne mercury vapor concentration.
3. A broken mercury thermometer inside a water bath at room temperatures does not present a significant inhalation health hazard because the water will trap most of the mercury vapor (heated water baths release more Hg vapors). Bail most of the water out of the water bath and collect the mercury beads into a corner of the bath. Remove the mercury beads with a disposable pipette. Collect the mercury beads in a sealed plastic container and dispose them as regular chemical waste through Health & Safety.
4. Compact high intensity mercury (HIM) tubes may release significant amounts of mercury vapors if they break while being used inside electronic equipment. If a HIM tubes breaks while in use, evacuate the laboratory and contact Health & Safety to monitor mercury vapor concentration inside the room with the Jerome mercury sniffer. The amount of metallic mercury vapors released from a standard four foot fluorescent light tube is insignificant (20 - 50 milligrams).
5. Spills of compounds of mercury (i.e., mercuric chloride, dimethyl mercury, etc.) will require the standard chemical spill response (Health & Safety will evaluate spill site for cleanup).



**University of Colorado Health Sciences Center**

**Health and Safety Division**

6. The Health and Safety Division has a limited exchange program for replacing mercury thermometers with non-mercury thermometers. Contact the UCHSC Compliance Assistant [Debbie.Witt@UCHSC.edu](mailto:Debbie.Witt@UCHSC.edu) for more information regarding the program.