Mercury Thermometers



Overview

Elemental mercury and its compounds are toxic to humans and the environment, making mercury exposure or release a serious concern. The use of mercury thermometers has been phased out of WCM laboratories. This Update provides guidelines on how to dispose of mercury thermometers safely, what to do if a mercury thermometer breaks, and alternative products to use in place of a mercury thermometer.

Applicability

This update applies to all WCM faculty, staff, and students that find mercury thermometers in their laboratory or work area.

Responsibilities

- Faculty, staff, and students should follow the guidelines in this update to dispose of a mercury thermometer or report a broken thermometer.
- Environmental Health and Safety (EHS) provides waste disposal for mercury-containing materials, information on mercury-free alternatives, and emergency response and clean-up of contaminated areas if a mercury thermometer breaks.

Mercury Thermometer Guidelines

DANGERS OF MERCURY EXPOSURE

Exposure to mercury can cause tremors, insomnia, memory loss, neuromuscular effects, headaches, cognitive and motor dysfunction, and reproductive effects. Mercury exposure can also cause damage to the immune system, digestive system, lungs, and kidneys. These health effects can depend on several factors, the amount of mercury you are exposed to, the duration of exposure, the route, and your age.

Some of these adverse health effects can be fatal.

DIFFERENCES BETWEEN MERCURY AND ALCOHOL THERMOMETERS

- The liquid in mercury thermometers appears silver, and mercury thermometers will have a silver bulb at the bottom.
- Alcohol thermometers offer a safe alternative to mercury. These thermometers are filled with a red or blue liquid.

WHAT TO DO IF MERCURY THERMOMETER BREAKS

- Do not panic and do not attempt to clean it up yourself.
- Avoid walking through the area as the mercury will bead and scatter. Close the doors and post notice of the spill with instructions not to enter until cleared by EHS.
- Notify EHS of the spill by calling 646-962-7233.
- Seek medical assistance for minor exposures by visiting Workforce Health or Safety or Student Health Services during regular business hours.
- Go to the NYP emergency department or contact NYP EMS (x2-2222) for major exposures/injuries.

MORE INFORMATION

- If you come across a mercury thermometer in your lab, put it in a safe location, and request a hazardous waste pick up via Salute.
- If you need to use a thermometer, purchase one with a mercury-free substance such as alcohol.
- Contact EHS for questions or assistance with mercury-free alternatives.

References

- Health Effects of Exposure to Mercury: Environmental Protection Agency
- Mercury and Health: World Health Organization





Mercury

Alcohol