

Healing the Home

*Mercury*  
**Thermometers**  
*and Your*  
**Family's Health**



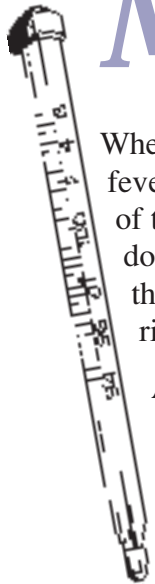
# *Mercury Thermometers* and Your Family's Health

When a family member feels sick, we check for fever. Getting out the thermometer is often one of the first steps in caring for someone who doesn't feel well. But, ironically, the type of fever thermometer you have in your home can be a risk to the health of your family and community.

As children, most parents of today grew up with mercury thermometers in their homes. Mercury thermometers are easy to recognize. Mercury thermometers are made of glass the size of a

straw, with a silvery-white liquid inside. This liquid is mercury. While mercury has proved useful in measuring devices such as thermometers, it is a toxic substance that can harm both humans and wildlife.

Mercury affects the human brain, spinal cord, kidneys and liver. It affects the ability to feel, see, taste and move. It can cause tingling



sensations in the fingers and toes, a numb sensation around the mouth and tunnel vision. Long term exposure to mercury can result in symptoms that get progressively worse and lead to personality changes, stupor and coma. Wildlife populations, especially loons, are already exhibiting effects of mercury poisoning. There is so much mercury pollution that 40 states are currently warning residents not to eat certain species of fish caught in all or some of the state's lakes, rivers and streams.

In pregnant women, mercury can pass through the placenta, where it affects fetal development

by preventing the brain and nervous system from developing normally. Affected children show lowered intelligence, impaired hearing and poor coordination. Their verbal and motor skills may be delayed. Because of these threats to the developing fetus, the federal government recommends that women who are pregnant or who may become pregnant not eat mercury-contaminated fish.



## A Broken Mercury Thermometer is a Serious

# *Health Threat*

Many families have had a mercury thermometer in their medicine chest for years, without it breaking. Yet, public health officials across the country report a steady stream of concerned calls from parents that have accidentally broken their mercury thermometers. Because your mercury thermometer has never broken, it does not mean it never will. Oftentimes, parents may not clean up spilled mercury because they may not know that their thermometer has broken, or if the mercury has spilled into a hidden crack in the floor

or soaked into a carpet. If mercury spills from a thermometer and is not cleaned-up, it will all evaporate, potentially reaching dangerous levels in indoor air. The largest risk for mercury exposure is in a small, poorly ventilated room. Even the smallest amount of mercury needs to be treated as a serious issue.

In most cases, breaking one fever thermometer is unlikely to threaten your health, but under some conditions the mercury from a fever thermometer



can seriously damage your health or the health of your family. Recent cases of mercury poisoning from a fever thermometer have involved young children exposed to mercury spilled on a carpet. Their symptoms have included apathy, irritability, hypertension, weight loss, sweating, light sensitivity and eczema. Some of these children required months of treatment before they became well.

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# Affordable *Alternatives*



A variety of mercury-free alternatives are available at your local pharmacy. Alternatives most comparable in cost and use to the mercury fever thermometer include battery and solar powered digital thermometers. These can all be used orally, rectally, or axillarily (in the armpit). Other alternatives include the less expensive flexible “liquid crystal” thermometers, or more expensive infrared ear thermometers. Flexible forehead thermometers are easy and fast to use, but not very accu-

rate. According to the American Medical Association, the most important thing is to choose a thermometer that is easy to use and read.

In the summer of 1998, the American Hospital Association (AHA) signed an agreement with the United States Environmental Protection Agency committing to the virtual elimination of mercury from hospital wastestreams. In order to accomplish this, many hospitals are phasing out the use of mercury

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thermometers and other mercury-containing equipment. By eliminating mercury use in your house you will be setting an example for the hospitals in your community. If your healthcare provider still uses mercury thermometers or other mercury-containing equipment such as blood pressure devices, give them a copy of this brochure and ask them to look for alternatives. Two out of every three pharmacy chains have made a commitment to end their sale of mercury thermometers. Many states and municipalities have banned the sale of mercury thermometers. Talk with your local pharmacist about taking the mercury-containing products off the drugstore shelf. Help distribute this brochure to child-care centers, PTAs and other organizations concerned with children's health.



# Disposing

## of Your Mercury Thermometer Without Polluting Your Community



Once a mercury-free replacement has been purchased, it is important to dispose of the old thermometer safely. Do not throw the old mercury thermometer in the garbage. Garbage is either incinerated or landfilled.

In either case, the mercury will make its way into the environment through air emissions or water contamination. This mercury will then affect many living things, including humans.

Bring your mercury thermometer to a household hazardous waste collection facility. Many state or local agencies operate these facilities as permanent or seasonal collections. Typically, the service is free.

*For more information on household hazardous waste collections in your area, call your State pollution control agency or your local health department located in the government listings in your phone book .*

Never throw your old mercury thermometer in the garbage.



**If you break  
your mercury  
thermometer,  
it is important  
that it be  
cleaned up.**

**Immediately after a spill** keep all people and pets away from the spill area. To minimize the mercury that vaporizes, turn off any heaters and turn up any air conditioners.

Ventilate the area by opening windows and, when possible, keep open for at least two days.

**Never use a vacuum** to clean up a mercury spill. Not only will the mercury contaminate your vacuum; the heat from the vacuum will evaporate the mercury, further distributing it throughout the house. Similarly, never use a broom to clean up mercury. It will only distribute the mercury into smaller beads, and will contaminate the broom.

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## Assemble the necessary supplies

before attempting a clean up. These include gloves, an eyedropper, and two stiff pieces of paper or cardboard, two plastic bags, a large tray or box, duct tape or packing tape, a flashlight and a wide mouth container.

Remember that any tools used for clean up should be considered contaminated and disposed of with the mercury.

Do not touch the mercury. Remove all jewelry and watches from your hands as mercury will bond with the metal.

Put on gloves, preferably rubber gloves to minimize contact with mercury. Use the flashlight to locate the mercury. The light will reflect off the mercury beads and make them easier to find.



**Clean up the spill.** Different surfaces require different clean up procedures.

**On a hard surface** or tightly woven fabric use stiff paper to push beads of mercury together. Use the eyedropper to suction the beads of mercury, or working over the tray to catch any spills, lift the beads of mercury with the stiff paper. Carefully place the mercury in a wide mouth container. Pick up any remaining beads of mercury with sticky tape and place contaminated tape in a plastic bag along with

Care must be

the eyedropper, stiff paper, and gloves. Label the bag as mercury waste. Place this bag and sealed container in the second bag. Label it as mercury waste and call your State agency for appropriate disposal.

**On a carpet or rug**, the mercury-contaminated section should be cut out. This cut-out section, along with all cleanup items, should be placed in a plastic bag. Label it as mercury waste and call your State agency for appropriate disposal.

**In a sink of water** mercury will sink to the bottom. Remove as much water as possible without disturbing

the mercury and then recover the mercury with an eyedropper. Place in a wide mouth container, close the lid and seal it with tape. Label it as mercury waste and call your State agency for appropriate disposal.

**In a drain**, mercury will get caught in your sink trap. Working over a tray, remove the trap and pour the contents into a large mouth container. Close the container lid and seal with tape. Label it as mercury waste and call your State agency for appropriate disposal.

taken not to touch the mercury.

# Health Care Without Harm

Health Care Without Harm, the Campaign for Environmentally Responsible Health Care, is producing and distributing this publication. Health Care Without Harm is an international campaign with over 370 participating organizations focused on transforming the health care industry so it is no longer a source of environmental harm by eliminating pollution in health care practices. The campaign is working with hospitals and other health care institutions to phase out the use of mercury and other toxic pollutants in health care products and practices.

## Health Care Without Harm

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