

# Mercury (Hg)

## Definition

Mercury (Hg) is a naturally occurring chemical element found in rock in Earth's crust, including in deposits of coal, etc. It is also found in air, water, and soil. Hg exists in several chemical forms, each one with different properties and different health effects.

## Where Does Hg Come From?

From burning oil, wood, Hg-containing wastes (manufacturing of Portland cement), consumer products that contain Hg and that are thrown into garbage that is incinerated. From burning iron ore, coke and limestone in electric arc furnaces used to produce steel, from gold mining practices, from the use of certain technologies to produce chlorine and from the use of coal-fired boilers in many industries, to generate thermal heat-like steam.

## How Might I Be Exposed To Hg?

From all the above-mentioned sources. Breathing vapors from spills, incinerators and industries that burn Hg-containing fossil fuels. Besides, Hg is a problem when it is released from rock, volcanoes and forest fires as it ends up in the atmosphere and in water. However, human activities are responsible for much of the Hg that is released into the environment. For example, release of Hg from dental work, smelting operations, gold mining, etc. Exposure of organic Hg occurs when people eat food contaminated with methyl-Hg.

## Potential Health Effects

Exposure to high levels of Hg can permanently damage the brain, kidneys, and developing fetus. Methyl-Hg and metallic Hg vapors are more harmful than other forms. Hg in these forms reaches the brain, producing mood swings, irritability, nervousness, excessive shyness, muscle weakness, twitching, headaches, changes in nerve responses and/or poor performance on tests of mental function. Also, changes in vision, "pins and needles" feeling, usually in the hands, feet, and around the mouth, lack of coordination of movements, impairment of speech, hearing, walking.

## How Can I Reduce The Risk Of Exposure To Hg?

Hg has several sources of exposure, therefore, those sources should be avoided. Carefully handle and dispose of products that contain Hg. Do not vacuum up spilled Hg because it will vaporize and increase exposure. If a large amount of Hg has been spilled, contact your health department. Teach children not to play with shiny, silver liquids.



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