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Elemental Mercury Fact Sheet

This factsheet contains information about: how mercury from household items can affect your health, where to dispose of items that have mercury in them and what to do if you spill mercury.

What is elemental mercury?

Elemental mercury is a silvery coloured heavy metal. It is liquid at room temperature, and releases vapour that is harmful to your health.

Where is elemental mercury found?

Elemental mercury can be found in the natural environment in some volcanoes, rocks and soils. Man-made sources of elemental mercury include some industrial processes, mining, cremation, waste incineration, electronic manufacturing and burning fossil fuels. Elemental mercury is also part of some common household items including: fluorescent light bulbs, fever thermometers, cooking thermometers, weather pressure monitors (barometers) and electrical switches or thermostats. Blood pressure monitors also contain elemental mercury.

How could I be exposed to elemental mercury?

When the glass of a fever thermometer, fluorescent light bulb or other item that has elemental mercury in it breaks, the mercury will release toxic vapour. Sometimes children take elemental mercury home from school or find it in abandoned industrial sites.

Is elemental mercury harmful to my health?

Yes, if any items with elemental mercury in them are broken, the mercury will give off toxic vapour that is harmful to your health. When the vapour is breathed in it is easily absorbed by the lungs, and quickly enters the blood. Once it is in the blood mercury can cause harm to the lungs, nerves, kidneys and heart. Mercury vapour is most harmful to children (aged 0-18 years), pregnant women, the elderly, and people of all ages with some major illnesses (especially illnesses of the lungs, nerves and kidneys).

Why are some people more at risk of harm from mercury vapour?

There are important stages in the development of the growing foetus and infant that put them at a higher risk of harm from toxic substances, including mercury vapour.

Infants and children breathe more often than adults, and absorb more mercury vapour for the size of their bodies. Also, mercury vapour is heavy and hangs low in the air where infants and children are likely to crawl or play. Children might want to play with spilt mercury because it

looks very attractive. Playing with mercury makes it give off more vapour that a child could breathe in.

People with illnesses of the lungs, nerves and kidneys might have more difficulty dealing with mercury vapour because mercury vapour is very harmful to these organs.

Elderly people might have difficulty dealing with mercury vapour because they might have been exposed to mercury vapour many times during their lifetime, and their health might not be able to bounce back as easily as when they were younger.

What symptoms could I have after being exposed to mercury?

Because mercury can harm lots of different parts of the body, there are lots of different symptoms that can happen. Common early symptoms are: nausea, vomiting, abdominal pain, diarrhoea, a lot more saliva than usual, coughing, burning in the chest, racing heart, eye irritation, skin rashes, irritability, forgetfulness, co-ordination problems, shaking of the hands or feet and difficulty sleeping.

If you think you have been exposed to mercury you should see a General Practitioner.

Your General Practitioner can do a test to look for mercury in your blood. If you are pregnant you should see your General Practitioner or your Obstetrician

If you have heated the room (i.e. with a fire, heater or air conditioning) where you have spilt mercury, or you have heated mercury on a stove top, you need to go to an emergency department immediately to have a medical check. Heating mercury increases toxic mercury vapour, and so is very harmful to your health and can even cause death.

I have broken an item containing elemental mercury, what should I do?

You need to call the Nelson Marlborough Public Health Service for specific advice on cleaning up the elemental mercury spill or consult the **Elemental Mercury Spill Clean-Up procedure** on the Ministry of Health website <http://www.health.govt.nz/your-health/healthy-living/environmental-health/hazardous-substances/cleaning-mercury-spills-your-house>

Warning: If mercury is not cleaned up using special steps it can release toxic vapour for months or even years.