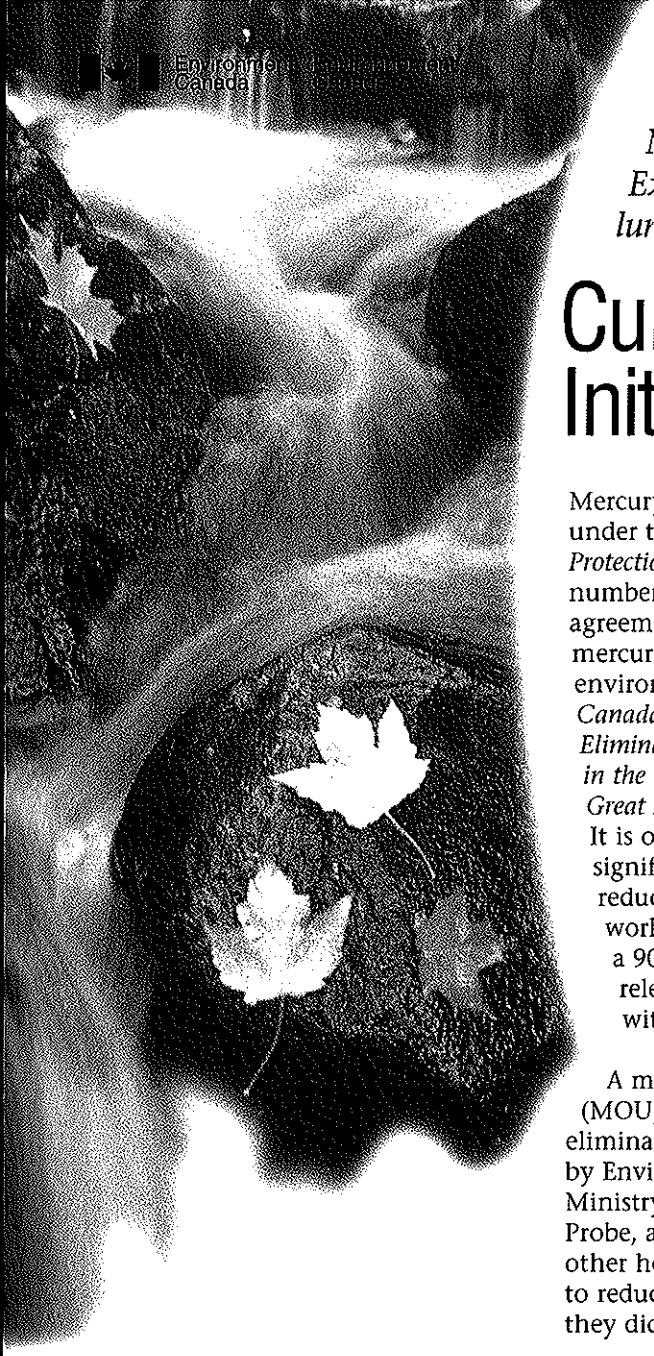


BACKGROUND

Mercury can affect the health of both humans and wildlife. Exposure to mercury can cause damage to the brain, kidneys, lungs and nervous system.

Current Mercury Reduction Initiatives in Ontario Hospitals

Mercury is a regulated toxic substance under the *Canadian Environmental Protection Act, 1999*. Canada is party to a number of domestic and international agreements and programs to reduce mercury contamination in the environment. Among these is the *Canada-United States Strategy for Virtual Elimination of Persistent Toxic Substances in the Great Lakes*, also known as the *Great Lakes Binational Toxics Strategy*. It is one of the world's most significant agreements to address the reduction of mercury, and Canada is working to meet its commitment of a 90-per-cent reduction in the release or use of mercury by 2000, with further reductions by 2006.

A memorandum of understanding (MOU) to voluntarily reduce and eliminate the use of mercury was signed by Environment Canada, the Ontario Ministry of the Environment, Pollution Probe, and six Ontario hospitals. Many other hospitals have voluntarily begun to reduce mercury use, even though they did not sign the MOU.

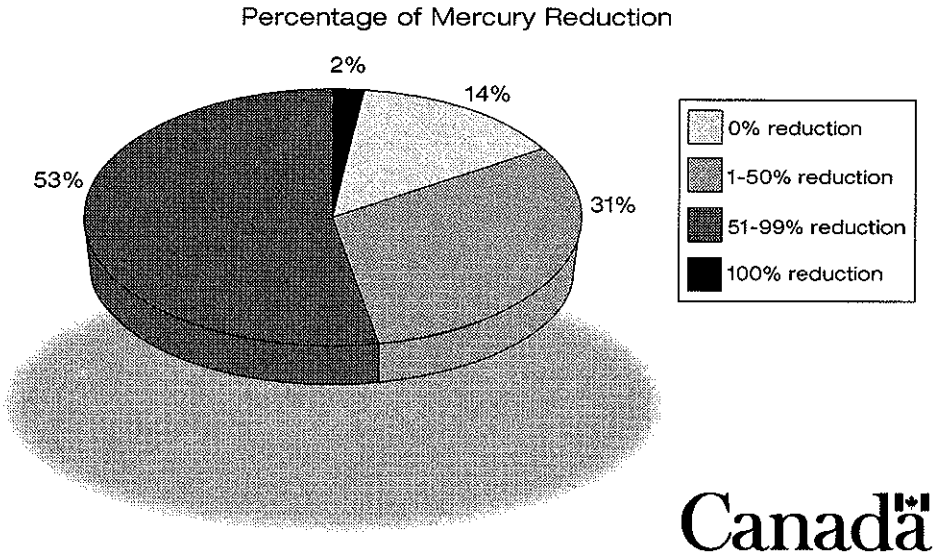
Mercury Reduction in Ontario Hospitals

As a follow-up to the MOU, Environment Canada conducted a survey of mercury reduction initiatives at Ontario hospitals. The survey results have been compiled from 93 of the 188 hospitals contacted in Ontario.

Developing a formal program is one way to set a schedule for mercury reduction. The survey results showed that approximately 70 per cent of hospitals had put a formal reduction program in place, and that the average program length was 6.4 years. Another 9 per cent had no formal program, but had nonetheless reduced the amount of mercury in use.

Survey results also showed that 31 per cent of the hospitals had reduced the amount of mercury in products and devices by 1 to 50 per cent, and over half had greater than 51 per-cent reduction.

Percentage of Ontario Hospitals with Mercury Reduction Initiatives



Canada

Most Common Mercury Products Targeted for Reduction in Ontario Hospitals

According to the survey results, the five devices most commonly targeted for mercury reduction are:

- thermometers
- sphygmomanometers
- pressure gauges
- batteries
- incubator thermostats

Other Products Containing Mercury in the Health Care Sector:

- esophageal dilators
- Cantor tubes
- Miller-Abbot tubes
- feeding tubes
- switches and relays
- fluorescent lamps
- dental amalgams
- Zenker's solution (mercury(II) chloride)
- Thimerosal (mercury chloride)
- colourimetric chloride analysis
- other analytical instruments

Mercury Management

Proper handling and disposal of mercury is essential in controlling mercury releases to the environment.

One way to properly manage mercury is by establishing mercury a take-back program and/or recycle mercury. Survey results show that approximately 30 per cent of the respondents are recycling at least some mercury waste.

Health care facilities are encouraged to continue recycling mercury products and become mercury-free.

Mercury Inventories

For effective elimination of mercury and mercury products, an inventory of mercury devices and substances is necessary.

From the survey results, it was noted that approximately 46 per cent of the hospitals have never conducted such an inventory.

Mercury Collection and Clean-up

Over 80 per cent of the hospitals responding to the survey indicated that they use mercury spill kits for clean-up, while 35 per cent also stated that they use protective equipment such as eye protection, body suits, and closed shoes. Approximately 30 per cent also indicated they use mercury disposal containers to prevent contamination of other waste. A small number of facilities have invested in mercury vacuums to handle spills.

Environmental Management Systems and ISO 14000

Environmental Management Systems (EMS) can be used at health care facilities to manage handling, use and disposal of mercury and products that contain mercury. Over half of the hospitals responding to the survey have established and implemented an EMS, while 45 per cent of that number have also put in place an evaluation system to monitor EMS effectiveness.

Pollution Prevention and EMS Training

Survey results indicated that less than 10 per cent of the hospitals had completed pollution prevention and/or EMS training. Pollution prevention training has since been provided to the health care sector by the Canadian Centre for Pollution Prevention. For more information on pollution prevention in the health care sector, review Environment Canada's fact sheet *Pollution Prevention in the Health Care Sector*, or contact the Canadian Centre for Pollution Prevention at 1-800-667-9790 and ask for a copy of *A Resource Guide to Pollution Prevention in the Health Care Sector*.

Further Information

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