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A Public Health Fact Sheet Regarding Elemental Mercury Contamination at the Grafton Street School

What is Mercury?

Mercury is a naturally occurring metal which has several forms. Elemental mercury (also known as metallic mercury) is a shiny, silver-white, odorless liquid at room temperature. If heated, it is a colorless, odorless gas. It is used to make different kinds of products including electrical switches, batteries, and medical devices such as thermometers.

How might I be exposed to metallic elemental mercury?

When elemental mercury is spilled or a device containing mercury breaks, the spilled mercury can vaporize and become an invisible, odorless, toxic vapor. Exposure to elemental mercury primarily occurs by inhalation of mercury vapors that are released into air. Although elemental mercury is not readily absorbed by the skin or stomach, people can also be exposed to elemental mercury vapors when mercury is handled.

How can mercury affect my health?

Short-term exposure to high levels of elemental mercury vapors may cause effects including, but not limited to: nausea, vomiting, diarrhea, increases in blood pressure or heart rate, skin rashes, eye irritation, metallic taste in the mouth, and irritant effects to the respiratory system and lung (e.g. coughing and sore throat).

Is there a medical test to show whether I've been exposed to mercury?

Tests are available to measure elemental mercury levels in the body. Urine or blood samples are used to test for exposure to elemental mercury. Urine is most useful for testing for potential inhalation exposure to elemental mercury. In order to get the most accurate measure of mercury, the sample should be collected soon after exposure.

What are health officials doing to address exposure concerns at the Grafton Street School?

The Massachusetts Department of Public Health (MDPH) is assisting local health officials with the collection of urine specimens, particularly from children who were in areas of the school where elemental mercury levels were the highest to determine the extent of exposure and potential health effects. While levels measured in the indoor environment are elevated above clean-up levels, those levels alone cannot predict health risks. Once medical consent forms are signed and the samples are collected, they will be transported to the MDPH State Laboratory Institute in Jamaica Plain for analysis. Analyses are expected to take 24-72 hours.

Are there long term health effects associated with elemental mercury exposure?

Yes, however the type of health effect depends on the amount and length of time of exposure to elemental mercury. Higher exposures to mercury can result in a range of health effects including effects to the central nervous system and liver and kidney damage. Once urinary mercury analyses are completed, health officials will be better able to address concerns about long term effects.

Who should I contact with questions about mercury exposure and my health?

The MDPH, Bureau of Environmental Health is available to assist parents, guardians of children and staff with further questions or concerns about potential exposure to mercury. Contact: 617-624-5757.