

Hazard Alert to Healthcare Providers: Cultural Uses of Mercury



Mercury has been used for hundreds of years for cultural and religious reasons. A number of practices exist today that use mercury, including: Santería (an Afro-Hispanic belief system), Palo Mayombé (Caribbean), Candomblé (Afro-Brazilian), Voodoo (Afro-Haitian), Espiritismo (Puerto Rican) and Yoruba Orisha (Afro-Hispanic). Mercury is also used in Hindu practice as a major constituent of Parad, from which religious relics are made. People using mercury for cultural uses are often unaware of mercury's toxicity and associated risks.

How are People Exposed?

Exposures resulting from cultural uses depend to a large extent on the nature of the practice:

- swallowing elemental mercury capsules
- inhalation of mercury vapor
- skin absorption from mercury containing products is the most common exposure route

Health Effects

- Exposure to mercury can damage the central nervous system, kidneys, and liver
- Breathing mercury vapor has been shown to result in tremors, incoordination, impaired vision, impaired learning and memory, and mood changes
- Studies have shown that ingesting mercury compounds can cause hypertension and alterations in an individual's immune system
- Pregnant women and women of child-bearing age are particularly vulnerable and should avoid exposure to mercury. Unborn babies, infants, and children are very sensitive to mercury. Even when pregnant women do not show symptoms of mercury exposure, it can affect their unborn children.

Signs and Symptoms of Mercury Exposure

- Cough, sore throat, shortness of breath
- Metallic taste in mouth, nausea, vomiting, diarrhea, abdominal pain
- Headache, weakness, and visual disturbances
- Ptyalism (heavy salivation), enteritis, renal damage
- Chronic CNS effects, which develop as a result of the ability of absorbed elemental mercury to cross the blood-brain barrier
- Hypertension, edema, uremia (due to tubular and glomerular renal injury), nephrotic syndrome
- Paresthesia, anxiety, irritability, tremors, memory loss, depression, weight loss, fatigue

Resources

 ATSDR's <u>Medical Management Guidelines for Mercury</u> provides resources for physicians on basic chemical and exposure information, in addition to providing a summary of potential health effects to aid in medical evaluation and treatment to exposed persons.



