



The Use of Mercury for Cultural and Religious Purposes

Mercury, otherwise known as azogue or vidajan, can be purchased in cities across the United States from botanicas and bodegas, stores selling spiritual and traditional items. Negative health impacts from mercury are numerous.

Understanding the Issue

Contamination from mercury via accidental spills, industrial emissions, and materials such as thermometers and batteries can negatively impact the health of those who come into contact with the substance or its vapors. A lesser-known fact is that mercury is used in some cultures and religions as part of traditional practices. Although cultural uses of mercury are also associated with Hindu and Asian traditional healing, we have chosen to focus on use within Afro-, Latin-, Caribbean-, and Brazilian-based traditions—such as Santería, Palo, Voodoo, and Espiritismo—for the purpose of this factsheet.ⁱ

Mercury is used in some cultures and religions as part of traditional practices. It may be used for spiritual cleansing, to protect from evil, and to bring luck, love, and fortune.

Mercury, otherwise known as *azogue* or *vidajan*, can be purchased in cities across the United States from botanicas and bodegas, stores selling spiritual and traditional items. It is prescribed in various forms for a wide variety of uses, though most often by people on the fringes of religions such as Santería, Palo, Espiritismo, or Voodoo. Priests and Priestesses of these religions have expressed concern that time-honored traditions dating back hundreds of years are being associated with dangerous practices not necessarily condoned by the religious leaders.

Bodegas and botanicas sell mercury in vials, capsules, necklaces, or plastic bags. While it is legal to sell mercury, there are warning label requirements. These, however, are not always adhered to or enforced.ⁱⁱ

Mercury is often ingested as a treatment for gastrointestinal problems. It may also be used for spiritual cleansing, to protect from evil, and to bring luck, love, and fortune. As such, mercury is sprinkled throughout homes, worn on necklaces, and burned in candles.^{i, iii} Thus, mercury can enter the body through ingestion, direct contact to skin, or through inhalation of the scent-free vapors. Exposure to this toxin can come from indirect sources as well. People who do not use mercury in their homes may be at risk of mercury poisoning if the prior tenants have used mercury there. The vapors or physical material, both of which have a long half-life, may still be found in cracks in the floor, sink drains, or other parts of the home.

Health Effects of Mercury

Negative health impacts from mercury are numerous and vary in severity. Mercury poisoning is often associated with neurological disorders. Additional health effects include pneumonitis and other respiratory problems, pulmonary edema (buildup of excess fluid in the tissues), tremors, neuromuscular changes, ataxia (impaired coordination of body movements), deteriorating cognitive function, and death. Symptoms may also include anxiety, irritability, forgetfulness, insomnia, and hallucinations.

Of the various ways by which mercury poisoning occurs, inhalation is the most harmful. Children are especially vulnerable to mercury poisoning by inhalation, as its density causes vapors to sink down near the floor, where small children breathe. Children also breathe faster than adults, having a higher per minute ventilation, which further augments the danger of poisoning by inhalation.^{iv}

Prompt removal from the contaminated environment and proper remediation of the area are necessary, as well as treatment such as chelation therapy, which uses chemicals to draw toxins from the body. These measures can help mitigate the consequences of toxic exposure.

Response to Use of Mercury in Cultural Practices

How to best address the use of mercury in cultural practices is a much-debated concern. Some believe this issue should be addressed in a manner similar to home exposure to lead, which was reduced by enforcing mandatory urine and air testing, and prosecuting individuals engaged in unlawful behavior. However, evidence indicates that forced testing and scare-tactics only push the practice underground, thus furthering the danger that mercury poses to users and handlers.

Researchers have found few people willing to talk about their use or sale of mercury. Many people who use mercury in cultural practices feel that government officials in the United States consider the practice unacceptable, and fear that action will be taken against them if they have knowledge of this material's use.ⁱⁱⁱ Those who are willing to speak on the subject may have knowledge of the dangers associated with the use of

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mercury, although often, these people know only of the risk from physical contact, not inhalation.ⁱⁱⁱ Respecting the culture and beliefs of those who use mercury is necessary in order to educate them and provide alternatives to the use of this toxic material. It is possible that, through dialogue with affected community members, cultural practices can be modified towards more healthful solutions.

Alternatives that can be used in place of mercury, which represent little to no health risks, do exist. To expedite spells, or to give strength to spiritual work, stronger tools such as *Precipitado Rojo* or *Sangre de Dragon* may be used.ⁱⁱ For personal and home cleansing, *rompe zaraguey* and *Bomba Santera* can be used. These products and many others can be found at botanicas where mercury is sold.

Many organizations work to educate the public about the dangers of using mercury. The National Association of County and City Health Officials (NACCHO), with funding from the Environmental Protection Agency and the Agency for Toxic Substances and Disease Registry, has established a Cultural Uses of Mercury program in order to assist local public health agencies (LPHAs) in educating citizens about the many risks of using mercury. The Cultural Uses of Mercury program provides LPHAs with information and technical resources to assist in preventing mercury poisoning, with an emphasis on culturally specific uses of mercury. The goal of this project is to enable LPHAs to work with their community partners to identify effective collaboration and education approaches that will assist in addressing culturally sensitive public health issues, specifically regarding the prevention of mercury poisoning.

Through an April 2001 grant from the National Institute of Environmental Health Sciences (NIEHS), the South Bronx Environmental Justice Partnership (SBEJP) hopes to assess the level of knowledge that community members have regarding the health impacts and sources of mercury. SBEJP will involve spiritual leaders, clergy, bioethicists, and scientific experts in a community-driven educational intervention in an effort to reduce childhood exposure to mercury. SBEJP's findings will be turned into a case study or model for other organizations to use.

LPHAs are also involved in mercury studies and outreach. In

1996, a Chicago Department of Public Health study found that botanicas admitted to selling mercury, but people would not admit to its use. More recently, the Chicago Department of Public Health began working with the Centers for Disease Control and Prevention (CDC) on a clinic-based study that will primarily involve children at three clinics around the city. Children (accompanied by a parent) who come to one of the clinics will be asked to participate in the study, which involves filling out a questionnaire and biological sampling for mercury. Results will be used to determine risk factors and the frequency of occurrence. This study will provide information for educational and outreach materials.

Conclusion

Mercury use for religious and traditional purposes is a culturally sensitive matter. Preventing mercury poisoning and educating users about the negative health impacts associated with exposure are the key objectives of a number of agencies and organizations striving to protect the lives of individuals who use mercury in their homes. In an effort to prevent mercury poisoning, health officials should seek to work with botanica owners, religious leaders, and those who use mercury in cultural practices, rather than prosecute and force testing, which can have the unintended, negative effect of driving the practice underground and endangering more lives. If health professionals seek to lessen the harmful effects of mercury, literature on the subject generally acknowledges that it is necessary to respect cultural practices, and to work with community members to design culturally appropriate educational packages that provide information on the dangers of the practice and suggest alternatives.

For More Information

For more information about NACCHO's Cultural Uses of Mercury program, contact Heidi Urquhart at (202) 783-5550, Ext. 252, hurquhart@naccho.org, or visit www.naccho.org/project87.cfm.

ⁱ United States Environmental Protection Agency, Office of Emergency and Remedial Response. Task Force on Ritualistic Uses of Mercury Report. December 2002. Washington, DC. OSWER 9285.4-07. EPA/540-R-01-005.

ⁱⁱ Riley, D.M., Newby, C.A., Leal-Alvarez, T.O., & Thomas, V.M. (2001). "Assessing Elemental Mercury Vapor Exposure from Cultural and Religious Practices." *Environmental Health Perspectives*. Vol. 109, Num 8.

ⁱⁱⁱ Hispanic Health Council EH Unit Info Booklet No 1. "An Educational Guide for Health Care Providers and Azogue Distributors." Hartford, CT.

^{iv} Cherry, D., Lowry, L., Velez, L., Cotrell, C., Keyes, D.C. (2002). "Elemental Mercury Poisoning in a Family of Seven." *Family and Community Health*. 24(4): 1-8.