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Research Article

Assessing elemental mercury vapor exposure from cultural and religious practices.

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Abstract

Use of elemental mercury in certain cultural and religious practices can cause high exposures to mercury vapor. Uses include sprinkling mercury on the floor of a home or car, burning it in a candle, and mixing it with perfume. Some uses can produce indoor air mercury concentrations one or two orders of magnitude above occupational exposure limits. Exposures resulting from other uses, such as infrequent use of a small bead of mercury, could be well below currently recognized risk levels. Metallic mercury is available at almost all of the 15 botanicas visited in New York, New Jersey, and Pennsylvania, but botanica personnel often deny having mercury for sale when approached by outsiders to these religious and cultural traditions. Actions by public health authorities have driven the

mercury trade underground in some locations. Interviews indicate that mercury users are aware that mercury is hazardous, but are not aware of the inhalation exposure risk. We argue against a crackdown by health authorities because it could drive the practices further underground, because high-risk practices may be rare, and because uninformed government intervention could have unfortunate political and civic side effects for some Caribbean and Latin American immigrant groups. We recommend an outreach and education program involving religious and community leaders, botanica personnel, and other mercury users.

Full Text

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Selected References

These references are in PubMed. This may not be the complete list of references from this article.

- Wendroff AP. Domestic mercury pollution. *Nature*. 1990 Oct 18;347(6294):623–623. [[PubMed](#)]
- Zayas LH, Ozuah PO. Mercury use in espiritismo: a survey of botanicas. *Am J Public Health*. 1996 Jan;86(1):111–112. [[PMC free article](#)] [[PubMed](#)]
- Trotter RT., 2nd The cultural parameters of lead poisoning: a medical anthropologist's view of intervention in environmental lead exposure. *Environ Health Perspect*. 1990 Nov;89:79–84. [[PMC free article](#)] [[PubMed](#)]
- Baer RD, Garcia de Alba J, Cueto LM, Ackerman A, Davison S. Lead based remedies for empacho: patterns and consequences. *Soc Sci Med*. 1989;29(12):1373–1379. [[PubMed](#)]
- Geffner ME, Sandler A. Oral metallic mercury. A folk medicine remedy for gastroenteritis. *Clin Pediatr (Phila)* 1980 Jun;19(6):435–437. [[PubMed](#)]
- Trotter RT., 2nd Greta and Azarcon: a survey of episodic lead poisoning from a folk remedy. *Hum Organ*. 1985 Spring;44(1):64–72. [[PubMed](#)]
- Smart ER. Mercury vapour levels in a domestic environment following breakage of a clinical thermometer.

- Sci Total Environ. 1986 Dec 1;57:99–103. [[PubMed](#)]
- von Mühlendahl KE. Intoxication from mercury spilled on carpets. *Lancet*. 1990 Dec 22;336(8730):1578–1578. [[PubMed](#)]
 - Bogen KT, McKone TE. Linking indoor air and pharmacokinetic models to assess tetrachloroethylene risk. *Risk Anal*. 1988 Dec;8(4):509–520. [[PubMed](#)]
 - Riley DM, Small MJ, Fischhoff B. Modeling methylene chloride exposure-reduction options for home paint-stripper users. *J Expo Anal Environ Epidemiol*. 2000 May-Jun;10(3):240–250. [[PubMed](#)]
 - Tichenor BA, Sparks LA, White JB, Jackson MD. Evaluating sources of indoor air pollution. *J Air Waste Manage Assoc*. 1990 Apr;40(4):487–492. [[PubMed](#)]
 - Wallace L. A decade of studies of human exposure: what have we learned? *Risk Anal*. 1993 Apr;13(2):135–139. [[PubMed](#)]
 - Wilkes CR, Small MJ, Davidson CI, Andelman JB. Modeling the effects of water usage and co-behavior on inhalation exposures to contaminants volatilized from household water. *J Expo Anal Environ Epidemiol*. 1996 Oct-Dec;6(4):393–412. [[PubMed](#)]
 - Zeitlin LR. Failure to follow safety instructions: faulty communication or risky decisions. *Hum Factors*. 1994 Mar;36(1):172–181. [[PubMed](#)]
 - Kovacs DC, Small MJ, Davidson CI, Fischhoff B. Behavioral factors affecting exposure potential for household cleaning products. *J Expo Anal Environ Epidemiol*. 1997 Oct-Dec;7(4):505–520. [[PubMed](#)]
 - Pasquali EA. Santería: a religion that is a health care system for Long Island Cuban-Americans. *J N Y State Nurses Assoc*. 1986 Mar;17(1):12–15. [[PubMed](#)]
 - Pasquali EA. Santería. *J Holist Nurs*. 1994 Dec;12(4):380–390. [[PubMed](#)]

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