**MASSACHUSETTS MEDICAL SOCIETY HOUSE OF DELEGATES**

**Resolution 410, I-00 (D)**

**Title: Massachusetts Medical Society Supports a Zero Mercury Emission Strategy, Including Improved Waste Prevention, Continuation of the Moratorium on New Waste Incinerators, and Improved Emission Controls for Power Plants**

Adopted November, 2000

Sponsors: Jill E. Stein, M.D., Theodore Schettler, M.D.

Whereas, Mercury is a recognized hazardous pollutant that is extremely persistent in the environment once introduced, becoming more concentrated at higher levels of the food chain; and

Whereas, Studies have shown that very low doses of mercury result in impaired childhood neurobehavioral function, including problems with attention, verbal learning, vocabulary, and neuromotor function (1); and

Whereas, According to the National Academy of Sciences, mercury exposure may cause neurological problems in 60,000 children born in the United States each year (2); and

Whereas, The Commonwealth of Massachusetts has already determined that mercury contamination in fish is sufficiently widespread that a statewide fish consumption advisory has been issued (3); and

Whereas, Coal-burning power plants, trash incinerators, and other industrial sources in Massachusetts emit more than 10,000 pounds of mercury into the air each year (4); and

Whereas, A mere 1 gram (1/28th ounce) of mercury emitted into a 20-acre lake can cause the fish to be unsafe for human consumption; and

Whereas, Incineration of municipal waste and coal combustion are the first- and second-largest sources of mercury released in Massachusetts (5); and

Whereas, Because future mercury emissions are likely to increase environmental levels of this persistent pollutant, and mercury contamination is already high enough that the Environmental Protection Agency (EPA) estimates that 52,000 to 166,000 pregnant women consume at or above safe levels (6), there is concern that eliminating the Massachusetts moratorium on new municipal waste incinerators or allowing coal-burning power plants to continue to emit mercury may increase the proportion of children with neurological damage, and increase the severity of damage in those affected; and

Whereas, The Massachusetts Executive Office of Environmental Affairs has called for a "Zero Mercury Emissions" strategy (7); and

Whereas, Proliferation of solid waste is a public health issue that threatens not only the state of our natural resources, but also threatens the quality of water, air, and food; and

Whereas, According to the National Academy of Sciences, as much as 80 percent of the waste stream is preventable or recyclable (8); and

Whereas, The American Public Health Association has issued a policy statement (No. 8911 raising concerns about the hazardous nature of incinerator ash due to its high levels of heavy metals and dioxins (9); and

Whereas, The Agency of Toxic Substances and Disease Registry and the World Health Organization have set safe exposure limits for chronic (> 1 year) dioxin exposure at levels equaled or exceeded by large portions of the population, particularly infants and children (10); and

Whereas, The American Public Health Association has recommended in the same policy statement that solid waste policy should be rooted in resource conservation and pollution prevention through use of least-toxic materials and product life cycle design; and

Whereas, The American Hospital Association and the EPA are working together to develop a Mercury Waste Virtual Elimination Plan that will set forth a strategy for achieving the goal of virtually eliminating mercury-containing waste from the health care industry waste stream by the year 2005; therefore, be it

RESOLVED, That the Massachusetts Medical Society (MMS) encourage physicians to inform patients about mercury advisories for fish; and be it further

RESOLVED, That the MMS encourage physicians and hospitals to continue the process of phasing mercury-containing medical instruments out of medical care facilities; and be it further

RESOLVED, That the MMS advocate maintenance of the Massachusetts moratorium on new waste facilities, particularly incinerators, and for aggressive state policies for waste prevention at many stages of the product life cycle in order to achieve the dramatic reductions in volume and toxicity of the waste stream that have been proven to be feasible; and, be it further

RESOLVED, That the MMS advocate stricter mercury emission standards for power plants.

References:

1. National Academy of Sciences. Toxicological Effects of Methylmercury, 2000. p. 273.

2. National Academy of Sciences. Ibid. p. 276.

3. Massachusetts Executive Office of Environmental Affairs, 2000. Massachusetts Zero Mercury Strategy. p. 12.

4. Massachusetts DEP. Mercury Releases in Massachusetts, 1996.

5. Massachusetts DEP. Mercury Releases in Massachusetts, 1996.

6. Mercury Study Report to Congress, EPA-452/R-97-003, December 1997.

7. Massachusetts Executive Office of Environmental Affairs, Ibid.

8. National Academy of Sciences. Waste Incineration and Public Health. National Academy Press, 2000. pp. 11-14.

9. Dennison R.A., Silbergeld E., Comprehensive Management of Municipal Solid Waste Incineration: Understanding the Risks. In "Municipal Waste Incineration Risk Management." Oak Ridge National Laboratory Office of Risk Analysis, 1992.

10. Schecter A., Ryan J.J., Masuda Y., et al. Chlorinated and Brominated Dioxins and Dibenzofurans in Human Tissue Following Exposure. Environmental Health Perspectives 102, Suppl. 1.135-47; Pitandin S., Dagnelie P., Mulder P., et al. Dietary Exposure to PCBs and Dioxins from Infancy Until Adulthood: A Comparison Between Breast-Feeding, Toddler and Long-Term Exposure. Environmental Health Perspectives, 107 (1):pp 45-51, January 1999. p. 50.