



**Connecticut
Public Health
Association**

Promoting Public Health in Connecticut Since 1916

Written Testimony of Noele Kidney, Project Coordinator of the
Connecticut Public Health Association

**AN ACT CONCERNING A MERCURY THERMOSTAT COLLECTION AND FINANCIAL
INCENTIVE PROGRAM**

Senate Bill 93

Environment Committee

March 16, 2012

Dear Senator Meyer and Representative Roy, and distinguished members of the Environment Committee:

For over 90 years, the Connecticut Public Health Association (CPHA) has been committed to fulfilling its mission to “represent and unite the diverse expertise of Connecticut’s public health professionals, to improve the most pressing public health issues in the state, and to promote healthy and safe living for the people of Connecticut.” CPHA has more than 300 members representing a wide variety of disciplines, all united in the goal of protecting and promoting the public’s health. Because of this, I along with CPHA would like to urge the members of the Environment Committee to support **Senate Bill 93 – AN ACT CONCERNING A MERCURY THERMOSTAT COLLECTION AND FINANCIAL INCENTIVE PROGRAM**. As you know, Mercury is a highly toxic chemical and a major contaminant of the marine food supply – and therefore a danger to public health.

Once mercury enters the environment through any number of ways – thermostats, batteries, thermometers, and light bulbs -- it can change to methyl mercury, a serious neurotoxin.^{1 2} Mercury builds up over time in living tissues of humans and wildlife, and this bio-accumulative process can have serious health effects including irreversible neurological and reproductive harm. Mercury does not break down in the environment and so over time it continues to pose a serious health risk to everyone. Scientific studies have shown that mercury exposure can permanently damage the brain, central nervous system, red blood cells, and kidneys. Behavioral and physical changes – including vision, hearing and memory loss have

¹ Interstate Mercury Education and Reductions Clearinghouse (2010, January) Mercury Use in Thermostats. Available from <http://www.newmoa.org/prevention/mercury/imerc/factsheets/thermostats.pdf>

² State of Connecticut Department of Environmental Protection (2001). Environmental Compliance Annual Report 2001, Special Feature: Focus on Mercury. Available from <http://www.ct.gov/dep/lib/dep/enforcement/reports/2001/annualreport.pdf>

also been linked to mercury poisoning.^{3 4 5 6} Methyl mercury exposure can cause impaired neurological development in fetuses, infants, and children – and studies have shown that prenatal methyl mercury exposure negatively impacts children’s cognitive thinking, memory, language, and fine motor and visual spatial skills.^{2 3}

Nearly a decade ago, the dangers associated with exposure to mercury spurred lawmakers to begin phasing out the sale of mercury-containing products. Products containing more than one gram of mercury (including thermostats) were banned from being sold within Connecticut.⁷ Unfortunately, many thermostats still pose a risk to public health since they were sold prior to the ban and contain enough mercury that, if disposed of improperly, would prove to be a threat to public health and the environment.

It is estimated that more than 50 million mercury-containing thermostats have been sold since 1950 for use in homes and offices. While the use of thermostats containing mercury has decreased substantially in recent years, there are still many in use.⁸ As homeowners and businesses begin to replace their older thermostats with newer ones, it is vital that the older models are disposed of properly – and responsibly. **Many states offer financial incentives for recycling mercury thermostats, and preliminary collection results show that these incentives have played a key role in increasing recycling rates.⁹ In the first**

³ United States Department of Environmental Protection Agency (2011). Health Effects and Methyl mercury Effects. Available from <http://www.epa.gov/mercury/effects.htm>

⁴ Grandjean, P., H Satoh, K Murata, and K Eto. Adverse effects of methyl mercury: Environmental health research implications. *Environ Health Perspectives*, August 2010, 118(8); p. 1137-45.

⁵ Selin, NE, EM Sunderland, CD Knightes, and RP Mason (2010, January). Sources of mercury exposure for U.S. seafood consumers: Implications for policy. *Environ Health Perspectives*, January 2010, 118(1): p. 137-43.

⁶ Mergler, D., HA Anderson, LH Man Chan, KR Mahaffey, M Murray, M Sakamoto, and AH Stern (2007, February). Methyl mercury Exposure and health Effects in Humans: A Worldwide Concern. *AMBIO: A Journal of the Human Environment*, February 2007, 36(1), p. 3-11.

⁷ Public Act 02-90.

⁸ Northeast Waste Management Officials’ Association. Trends in mercury use in products: Summary of the Interstate Mercury Education & Reduction Clearinghouse (IMERC) Mercury-added Products Database (2008, June) Available from <http://www.newmoa.org/prevention/mercury/imerc/factsheets/mercuryinproducts.pdf>

⁹ Annual Report on Mercury Thermostat Collection Program 2012, The Vermont Agency of Natural Resources

year of implementation of a financial incentive program in the state of Maine, one that included a \$5 bounty per thermostat, returns more than doubled over the previous year.¹⁰

Therefore the Connecticut Public Health Association believes it makes good public health sense to support **AN ACT CONCERNING A MERCURY THERMOSTAT COLLECTION AND FINANCIAL INCENTIVE PROGRAM**. I urge you to support Senate Bill 93, which we believe will move the state closer toward the goal of eliminating the risk that mercury poses to public health and the environment. I thank you for your consideration of this important issue.

¹⁰ Maine 2008 Report on the Collection and Recycling of Mercury-Added Thermostats, Maine Department of Environmental Protection