

Trends in Mercury Use in Products:

Analysis of the IMERC Mercury-added Products Database

NEWMOA



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IMERC Coordinator

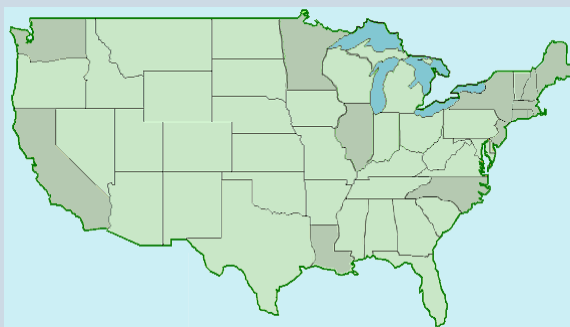
Northeast Waste
Management Officials'
Association

November 17, 2009

About IMERC

14 State Members:

CA, CT, IL, LA, MA, ME, MN, NC, NH, NJ, NY,
RI, VT, WA



About IMERC

- IMERC is a program of the Northeast Waste Management Officials' Association (NEWMOA), which provides logistical, facilitation, & technical support
- "...established to help [states] implement laws & programs aimed at getting mercury out of consumer products, the waste stream, & the environment."

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IMERC Services

IMERC provides:

- Ongoing technical & programmatic assistance to states that have enacted mercury education & reduction legislation
 - Notification
 - Labeling
 - Phase-out
 - Enforcement
- A single point of contact for industry & the public for information on mercury-added products & member states' legislation

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Product Notification Requirements

Required by 8 IMERC-member states & intended to inform consumers, recyclers, policy makers, & others about:

- Products that contain intentionally-added mercury
- The total amount of mercury in a specific product
- The total amount of mercury in the specific products sold in the U.S. in a given year

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Frequency of Reporting

- Minimum reporting required every three years during triennial notification period
- 2001 – Initial triennial year (baseline)
- Triennial Notification Forms due for 2004, 2007, 2010, etc.
- Updated Notification Forms due when products change: increase or decrease in amount of mercury, elimination of mercury-added product, introduction of new product

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IMERC Mercury-added Products Database

- Database – 500 companies & 4,500 products (2001 & 2004 data)
- Currently upgrading prior to 2007 data entry – more robust, easier product searching
- NEIEN funding – better data sharing and e-filing for 2010 Triennial cycle

IMERC Database:

www.newmoa.org/prevention/mercury/imerc/Notification/index.cfm

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Database Caveats

- Does not include products manufactured prior to 2001
- Does not represent the entire universe of mercury-added products - likely under-reporting in some product categories
- Mercury reported is in products – not associated with manufacturing, etc.
- Future reporting in certain product categories will be limited

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Mercury Use in Products Analysis

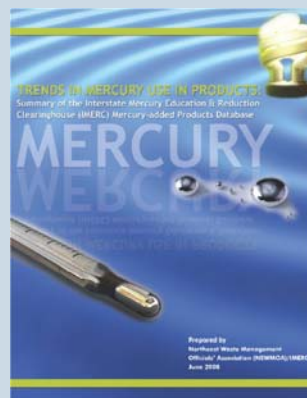
All OEM products in Database placed into following categories:

- Switches & Relays
- Dental Amalgam
- Lamps
- Thermostats
- Batteries
- Measuring Devices (i.e., thermometers, barometers, blood pressure cuffs)
- Formulated Products
- Miscellaneous

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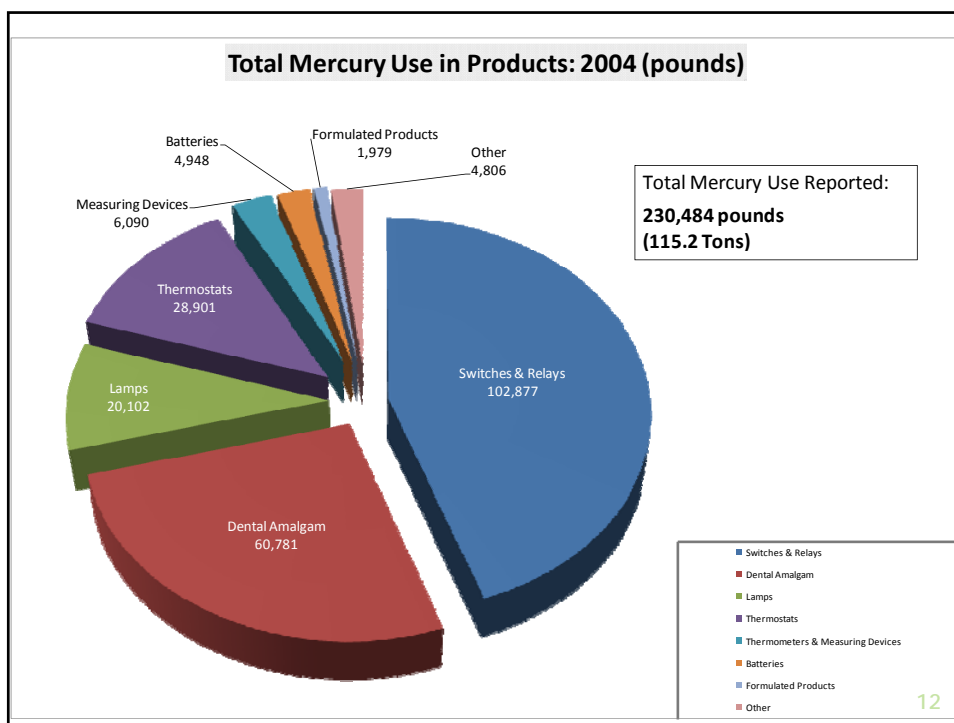
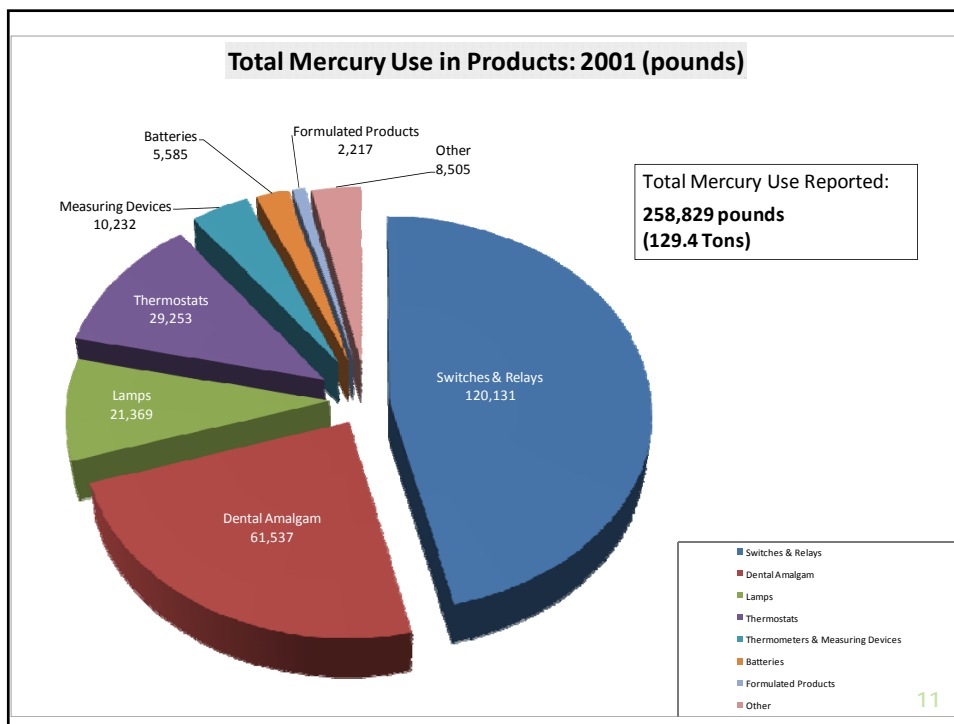
Trends in Mercury Use in Products Report

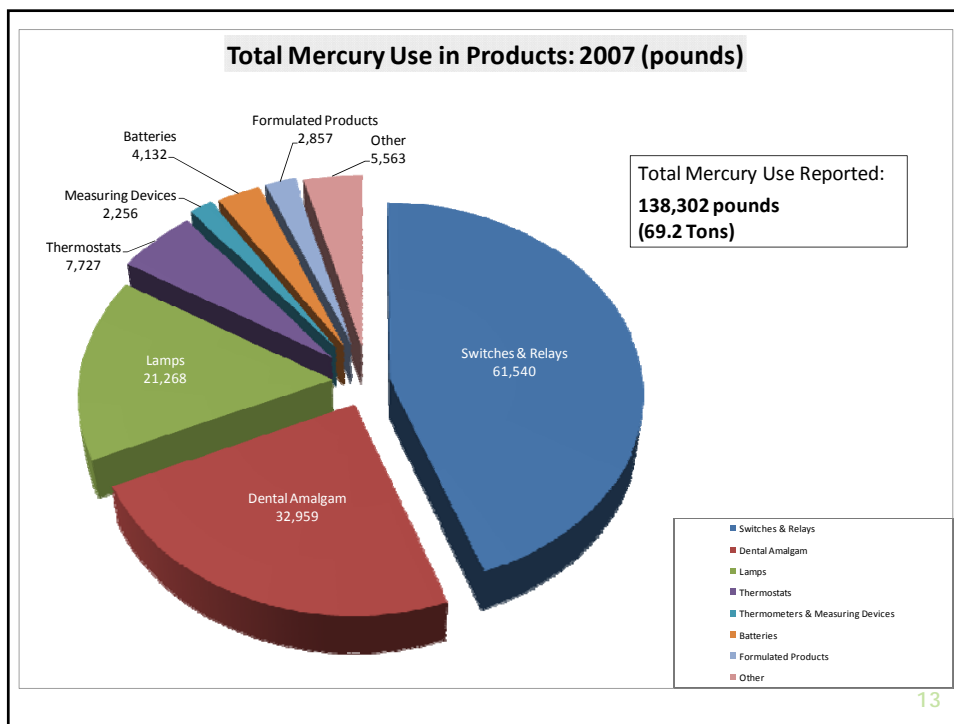
- Published in June 2008
- Funded by U.S. EPA OSW
- Analysis of 2001 & 2004 Products Data
- Switches & Relays & Dental Amalgam Use ~70% of Total Mercury Reported



www.newmoa.org/prevention/mercury/imerc/pubs/index.cfm

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Total Amount of Mercury Sold in Fabricated & Formulated Products in the U.S. 2001 – 2007

Products/Components	Total Mercury Sold in U.S. (tons)		
	2001	2004	2007
Switches & Relays	57.81	51.78	30.77
Dental Amalgam	30.77	30.39	16.48
Thermostats	14.63	14.16	3.86
Lamps	10.16	9.56	10.63
Miscellaneous	5.11	2.40	2.78
Batteries	2.95	2.53	2.07
Chemicals and Solutions	1.03	0.91	1.43
Sphygmomanometers**	2.15	1.11	0.83
Thermometers**	1.70	1.40	0.30
Manometers**	0.97	1.27	0
Barometer**	0.18	0.12	0
Total	~ 129.4 tons	~ 115.2 tons	~ 69.2 tons

** Referred to collectively as "Measuring Devices"

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	2001	2004	2007
Switches & Relays	57.81	51.78	30.77
Dental Amalgam	30.77	30.39	16.48
Thermostats	14.60	14.60	3.86
Lamps	10.63	10.63	10.63
Miscellaneous	5.14	5.14	2.78
Batteries	2.07	2.07	2.07
Chemicals and Solutions	1.43	1.43	1.43
Sphygmomanometers**	2.15	1.11	0.83
Thermometers**	1.70	1.40	0.30
Manometers**	0.97	1.27	0
Barometer**	0.18	0.12	0
Total	~ 129.4 tons	~ 115.2 tons	~ 69.2 tons

2001 - 2007: 46% Reduction

** Referred to collectively as "Measuring Devices"

Switches & Relays

2001 – 2007 Reduction: **48%**

Product Sales Bans: 11 IMERC-Member States*

IMERC Fact Sheet: www.newmoa.org/prevention/mercury/imerc/factsheets/switches.pdf

* Includes CT, RI, & LA mercury content restrictions

Year	Tons
2001	60.07
2004	51.44
2007	30.77

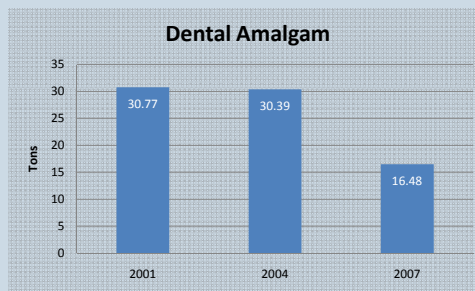
Dental Amalgam

2001 – 2007 Reduction:
46%

Product Sales Bans:
None

IMERC Fact Sheet:

www.newmoa.org/prevention/mercury/imerc/factsheets/dental_amalgam.pdf



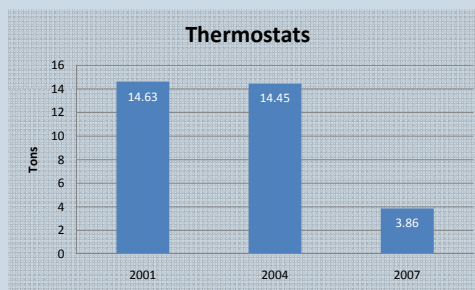
Thermostats

2001 – 2007 Reduction:
73%

Product Sales Bans:
10 IMERC-Member States*; 5 Additional States

IMERC Fact Sheet:

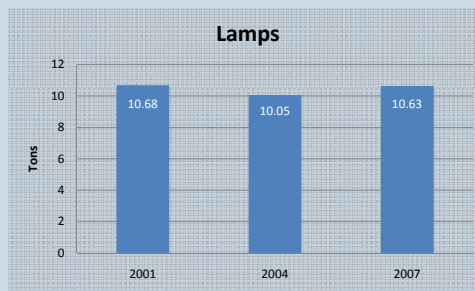
www.newmoa.org/prevention/mercury/imerc/factsheets/thermostats.pdf



* Includes CT, RI, & LA mercury content restrictions

Lamps

2001 – 2007:
Unchanged



Product Sales Restrictions:

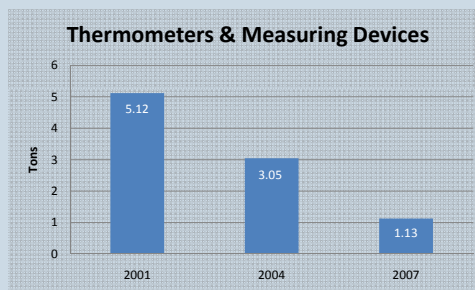
CT, LA, & RI – high content lamps; VT - neon

IMERC Fact Sheet:

www.newmoa.org/prevention/mercury/imerc/factsheets/lighting.pdf

Thermometers & Measuring Devices

2001 – 2007 Reduction:
77%



Product Sales Bans:

- Thermometers – 10 IMERC-Member States*; 2 Additional States
- Measuring Devices – 12 IMERC-Member States*; 1 Additional State

IMERC Fact Sheet:

www.newmoa.org/prevention/mercury/imerc/factsheets/measuring_devices.pdf

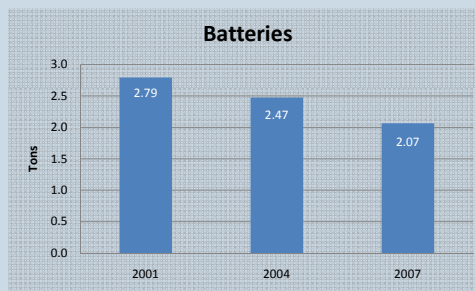
* Includes CT, RI, & LA mercury content restrictions

Batteries

2001 – 2007 Reduction:
25%

Product Sales Bans:
ME & CT – effective 2011 (& 2015)

IMERC Fact Sheet:
www.newmoa.org/prevention/mercury/imerc/factsheets/batteries.pdf

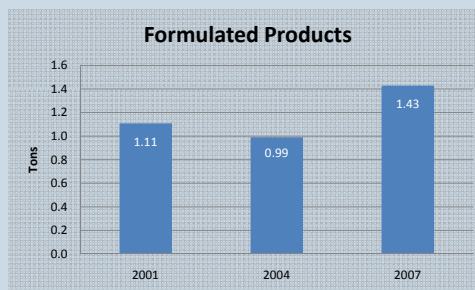


Formulated Products

2001 – 2007 Increase:
28%

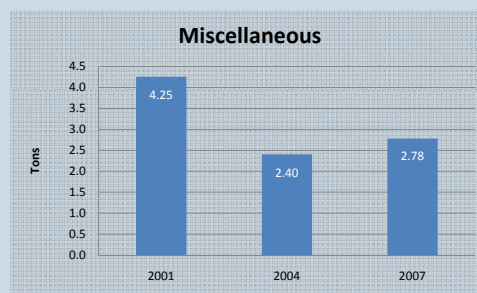
Product Sales Restrictions:
CT, LA, & RI because of content restrictions

IMERC Fact Sheet:
www.newmoa.org/prevention/mercury/imerc/factsheets/FormulatedProducts.pdf



Miscellaneous – Sensors, Electrodes, Recoil Systems, etc.

2001 – 2007 Reduction:
34%



Product Sales Restrictions:
CT, LA & RI because of content restrictions

Observations and Conclusions

- Switches & Relays still a significant use – wide range of uses though some uses are phasing out
- Fluorescent lamps and Neon continue to be of interest to the states
- Mercury Success Stories – NESCAUM, NEIWPC, and NEWMOA:

www.newmoa.org/prevention/mercury/imerc/pubs/successes.cfm

More information

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IMERC homepage -
www.newmoa.org/prevention/mercury/imerc.cfm

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