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110TH CONGRESS
1ST SESSION

H. R. 2101

To prohibit after 2008 the introduction into interstate commerce of mercury intended for use in a dental filling, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

MAY 1, 2007

Ms. WATSON (for herself and Mr. BURTON of Indiana) introduced the following bill; which was referred to the Committee on Energy and Commerce

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A BILL

To prohibit after 2008 the introduction into interstate commerce of mercury intended for use in a dental filling, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the ''Mercury in Dental Fillings Disclosure and Prohibition Act''.

SEC. 2. FINDINGS.

(a) GENERAL FINDINGS.—The Congress finds as follows:

(1) Elemental mercury and mercury compounds are known to be toxic and hazardous to human health and to the environment.

(2) Mercury is number three on the 2003 CERCLA Priority List of Hazardous Substances, behind arsenic and lead.

(3) A dental amalgam, commonly referred to as a ''silver filling'', consists of 42 to 58 percent mercury.

(4) Consumers may be deceived by the use of the term ''silver'' to describe a dental amalgam, which contains substantially more mercury than silver.

(5) Dentists purchase 34 tons of mercury per year, the Nation's third largest purchaser of mercury. Dentists place millions of amalgam fillings in children each year, even though interchangeable substitutes of non-toxic materials could also fill those cavities. Each amalgam filling contains ½ to ¾ of a gram of mercury.

(6) The mercury contained in dental amalgam is continually emitted in the form of mercury vapor, and the total amount of mercury released depends upon the total number of fillings; their age, composition, and surface area; the intra-oral presence of

other metals; dietary and lifestyle habits; and other chemical and metabolic conditions affecting the mouth.

(7) When mercury vapors are inhaled, most of the mercury (about 80 percent) enters the bloodstream directly through the lungs and then rapidly deposits preferentially in the brain and kidneys as well as other parts of the body.

(8) Mercury toxicity is a retention toxicity (total body burden) that builds up over years of exposure, and is therefore dependent on all sources of mercury to which an individual may be exposed.

(9) The National Institutes of Health has concluded that when inorganic mercury is located in brain tissue, researchers are unable to demonstrate an appreciable half-life, or decrease, of mercury over time (more than 120 days). The implications of this conclusion are that dental amalgam exposure will permanently increase mercury body burden.

(10) According to the World Health Organization, the estimated average daily intake and retention of mercury from dental amalgam ranges from 3 to 27 micrograms per day, and is greater than all other sources combined.

(11) The California Dental Association, by court order, requires postings of warnings about mercury fillings in California Dental Offices as of March 9, 2003. The warnings read ''NOTICE TO PATIENTS: PROPOSITION 65 WARNING: Dental Amalgam, used in many dental fillings, causes exposure to mercury, a chemical known to the state of California to cause birth defects or other reproductive harm''.

(12) United States consumers and parents have a right to know, in advance, the risks of placing a product containing a substantial amount of mercury in their mouths or the mouths of their children.

(13) According to the Agency for Toxic Substances and Disease Registry, the mercury from amalgam passes through the placenta of pregnant women and through the breast milk of lactating women, increasing health risks to both unborn children and newborn babies.

(14) The National Academy of Sciences estimated that ''over 600,000 children are born each year at risk for adverse neurodevelopmental effects due to in utero exposure to methyl mercury''. This report urged the need to understand the relative

amount of mercury attributable to dental amalgam and to thimerosal in vaccines.

(15) Studies show that a variety of commonly found human intestinal and oral bacteria can methylate mercury. In this way, the mercury vapor from fillings biotransforms into the highly neurotoxic and teratogenic methylmercury.

(16) The use of mercury in any product being put into the body is opposed by many health groups, such as the American Public Health Association, the California Medical Association, and Health Care Without Harm.

(17) Highly effective and durable alternatives to mercury-based dental fillings exist, but many publicly and privately financed health plans do not allow consumers to choose alternatives to dental amalgam.

(b) ENVIRONMENTAL FINDINGS.—In addition to the findings of subsection (a), the Congress finds as follows:

(1) Mercury wastewater released from dental clinics has been shown to fail the Environmental Protection Agency's toxicity characteristic leaching procedure and, therefore, is regulated as hazardous waste.

(2) Research from the Naval Dental Research Institute indicates that, when discharged to the envi-

ronment, conditions may be right for waste dental mercury to methylate, become bioavailable, and subsequently biomagnify in fish as methyl mercury, the most toxic form of mercury.

(3) Forty-eight States, the District of Columbia, and the United States Territory of American Samoa have issued 2,362 fish consumption advisories to their residents due to mercury contamination.

(4) The Food and Drug Administration has issued fish consumption advisories due to levels of mercury in commercially-caught fish and, in January 2001, warned pregnant woman and young children not to eat certain marine fish.

(5) According to the Environmental Protection Agency, United States dentists use approximately 34 tons of mercury per year.

(6) A report issued on June 5, 2002, by the Mercury Policy Project, the Sierra Club, Health Care Without Harm, Clean Water Action, and the Toxics Action Center stated that, because of mercury fillings, dental offices are now the leading source of mercury in the Nation's wastewater.

(7) Mercury from dental amalgam can enter the environment during any point of the product's life-

cycle. This includes placement or removal of fillings; through bodily excretions; when sewage sludge is incinerated, spread on crops, or dumped in land fills; when vapor is released or land filled; when vapor is released directly from the filling (which increases with brushing, chewing, and consuming hot foods or salt); and during cremation. Currently there are no requirements for mercury capture before or during cremation.

(8) The Association of Metropolitan Sewerage Agencies reported human wastes from individuals with dental amalgam fillings to be the most significant source of domestic mercury entering publicly owned treatment works, greater than 80 percent of the total contributing factors.

(9) According to the Association of Metropolitan Sewerage Agencies, removal of mercury from publicly owned treatment works has been shown to cost $10,000,000 to $100,000,000 for every pound removed.

(10) Mercury use by the dental industry increased from 2 percent in 1980 to 22 percent of the total use of mercury in the United States in 2001, because of drastic declines in mercury use by other industries over that period.

(11) Amalgam restorations were estimated to be 55 percent of the total mercury product reservoir in 2004 by the Environmental Protection Agency, and will therefore be a source of environmental contamination into the future.

(12) According to a joint study by the Environmental Protection Agency and the Cremation Association of North America, approximately 238 pounds of mercury, mostly from dental amalgam fillings, were released from crematoria nationally in 1999.

(13) Cremation is chosen in approximately 30 percent of all deaths, and this percentage is expected to increase every year.

(14) According to industrial hygiene surveys, 6 to 16 percent of dental offices exceed the exposure levels for air mercury permitted by Occupational Safety and Health Administration standards.

SEC. 3. PROHIBITION ON INTRODUCTION OF DENTAL AMALGAM INTO INTERSTATE COMMERCE.

(a) PROHIBITION.—Section 501 of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 351) is amended by adding at the end the following:

''(j) Effective January 1, 2009, if it contains mercury intended for use in a dental filling.''.

(b) TRANSITIONAL PROVISION.—For purposes of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 301 et seq.), effective December 31, 2007, and subject to the amendment made by subsection (a), a device that contains mercury intended for use in a dental filling shall be considered to be misbranded, unless it bears a label that provides as follows: ''Dental amalgam contains approximately 50 percent mercury, a highly toxic element. Such product should not be administered to children less than 18 years of age, pregnant women, or lactating women. Such product should not be administered to any consumer without a warning that the product contains mercury, which is a highly toxic element, and therefore poses health risks.''.

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