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**DAMS Fact Sheets on Mercury Exposure**

## **DAMS Fact Sheets on Mercury Exposure from Amalgam and Adverse Health Effects**

**DAMS(Dental Amalgam Mercury Syndrome) is a patient support group providing information to mercury toxic individuals on testing, treatment options, list of specially trained dentists and doctors, etc. We have provided information to many thousands of poisoned people, most of whose health improves significantly with proper treatment after reducing mercury exposure. We have documentation on thousands of such patients.**

**The information on The Florida Dams Chapter web page, which contains over 1500 peer-reviewed medical or governmental study references documenting high exposures from amalgam and mechanisms of causality for over 30 chronic conditions, has been summarized into 9 DAMS fact sheets for documenting the high exposures and adverse effects due to mercury from amalgam(and other mercury sources). They are available to anyone for use in educating the public, Media, Legislators, Officials, Dental Staff, etc. They can be downloaded or copied from the web site.**

**PR1     [www.home.earthlink.net/~berniew1/damspr1.html](http://www.home.earthlink.net/~berniew1/damspr1.html)**

**documents that amalgam is the number one source of mercury in most people and daily exposures commonly exceed federal Gov't guidelines for mercury exposure. It also documents the reasons for the high exposure from amalgam.**

**PR2     [www.home.earthlink.net/~berniew1/damspr2s.html](http://www.home.earthlink.net/~berniew1/damspr2s.html)**

**documents that the environmental effects of amalgam are affecting everyone since those with amalgam fillings have high levels of daily excretion(as much as 100 ug/day) that are going into sewers and causing high levels of mercury in municipal sewer plants and into rivers and lakes, resulting in enough mercury in waterways to cause levels in fish to be over Gov't health standards for mercury in fish. 20 % of U.S. lakes have warnings to limit fish and wildlife consumption due to mercury, and 7% of U.S. river miles.**

**PR3     [www.home.earthlink.net/~berniew1/damspr3.html](http://www.home.earthlink.net/~berniew1/damspr3.html)**

**documents that mercury from amalgam is a cause or major factor in 30 chronic health conditions, and summarizes the mechanisms of causality as well as documenting over 50,000 clinical cases of recovery or significant improvement after amalgam replacement.**

**PR4     [www.home.earthlink.net/~berniew1/damspr4.html](http://www.home.earthlink.net/~berniew1/damspr4.html)**

**documents that mercury and other toxic metals are the most common cause of childhood neurological conditions such as autism, ADD, learning disabilities, etc. and that toxic metal exposures are also a primary cause or factor in behavioral problems, juvenile delinquency, violence, criminality,**

and serial killers.

**PR5 [www.home.earthlink.net/~berniew1/damspr5.html](http://www.home.earthlink.net/~berniew1/damspr5.html)**

Several states have recently passed legislation restricting use of amalgam or providing that dentists who use amalgam must warn the patients that amalgam contains mercury which is known to have harmful health effects.

**PR6 [www.home.earthlink.net/~berniew1/damspr6.html](http://www.home.earthlink.net/~berniew1/damspr6.html)**

Documents that dentists and dental staff in offices that use amalgam get high levels of occupational exposure to mercury, and significant adverse health effects are common. Adverse effects include neurological effects, depression and mood problems, high incidence of allergies, reproductive effects. (over 100 medical study references)

**PR7 [www.home.earthlink.net/~berniew1/damspr7.html](http://www.home.earthlink.net/~berniew1/damspr7.html)**

**Medical Studies Document Widespread Common Adverse Oral Effects of Dental Amalgam Fillings and High Levels of Accumulation of Mercury in Gums, Oral Mucosa, Jaw Bone, Brain, and Central Nervous System.**

Oral effects include gingivitis, halatosis, oral lichen planus, amalgam tattoos, oral cancers, inflammation of gums and oral mucosa, sisusitis, oral galvanism, pain, TMJ, metal mouth, etc., plus systemic effects on brain and CNS.  
(Over 100 medical study references and thousands of documented case histories)

**PR8 [www.home.earthlink.net/~berniew1/damspr8.html](http://www.home.earthlink.net/~berniew1/damspr8.html)**

**Widespread Adverse Health, Cognitive, and Fertility Effects from Mercury's Endocrine Disrupting Hormonal Effects Found to Be Affecting Millions. Some of the endocrine related conditions/symptoms found to be commonly caused by these hormonal effects in infants and children include widespread neuropsychiatric conditions and developmental disorders such as autism, ADHD, dyslexia, learning disabilities, mood disorders, mental retardation, spontaneous abortions, eczema, asthma, systemic allergies, behavioral problems, and juvenile delinquency.**

**The endocrine related conditions/symptoms found to be commonly caused by mercury in adults include hypothyroidism, chills, chronic fatigue, fibromyalgia, depression and mood disorders, anxiety, anger, memory loss, balance problems, infertility, endometriitis, menstrual disorders, low sperm counts, diabetes, etc.  
(over 1500 medical study references reviewed)**

**PR9 [www.home.earthlink.net/~berniew1/damspr9.html](http://www.home.earthlink.net/~berniew1/damspr9.html)**

**Documents the mercury connection to chronic health condions- MS, ALS, Lupus, CFS, FM, RA, Parkinson's, Alzheimers, Depression, Periodontal Conditions, ADD, Autism, Eczema, Psoriasis, etc.**

**Papers documenting the common exposures and mechanism of causality of**

**mercury to these conditions. Over 1500 peer-reviewed medical studies  
5referenced and thousands of clinical cases of recovery or significant improvement  
after mercury detox, as documented by doctors.**

**DENTAL AMALGAM MERCURY SYNDROME** ..... [www.amalgam.org](http://www.amalgam.org)  
DAMS, Inc.; P.O. Box 7249 .  
Minneapolis, MN 55407-0249 . Contact: see page 4 (PR1)

**New Studies Find High Mercury and Adverse Effects of Dental Amalgam:**

- 1. Dental Amalgam Fillings are the Number One Source of Mercury in Most People (1,8)**
- 2. Daily Mercury Exposure from Amalgam Commonly Exceeds Government Health Standards for Inorganic Mercury(vapor). (1,8)**
- 3. Adverse health effects are common in adults. (4-8)**
- 4. Mercury from amalgam is passed on to infants through mother's blood and milk at levels commonly higher than in the mother. (2,8)**
- 5. Developmental effects on infants occur at low levels of mercury exposure and many hundreds of thousands are known to be affected. (2,5)**
- 6. Mercury vapor from amalgam is the most dangerous form of mercury, most rapidly crossing blood-brain barrier and mother's placenta, and causing adverse developmental effects at lower levels than other forms. (8)**
- 7. The main reasons for the high daily exposure from dental fillings is mercury's negative vapor pressure and galvanic currents created by mixed metals in the mouth and exposure to EMF. (7,8)**

A large National Institute of Dental Research Study has confirmed other previous study results that found that the current type of amalgam dental fillings being used in the U.S. leak significant amounts of the extremely toxic substance mercury into the body and are the number one source of mercury in people.(see abstract below) The study measured mercury levels in the blood and urine of over 1000 military personnel and found a high significant correlation to the number of amalgam filling surfaces in the mouth. Like several other recent studies, the study found that amalgam fillings are not stable because of

mercury's low vapor pressure and galvanic action between the different metals in the mouth.(1,7) For this large military population that had a range of from 0 to 66 amalgam filling surfaces and an average of 20 surfaces, each 10 surfaces added approximately 1 microgram of mercury per liter of urine excreted, meaning total mercury excreted in urine averaged about 4.5 micrograms per day, with soldiers levels with over 49 amalgam surfaces averaging over 8.7 micrograms. The average level for those with fillings was 4.5 times that of the controls without amalgam, and those with over 49 surfaces averaged over 8 times controls. Together with the considerably larger amount of mercury excreted daily through the digestive tract and sweat, the daily mercury excretion would amount to well over 20 micrograms per day on average and much more for some individuals. Over 90 % of the mercury in the urine was inorganic mercury, the kind that comes from fillings, as opposed to organic mercury which comes from fish plus methylation of inorganic mercury to organic by mouth and intestinal bacteria and yeast,etc.(8)

For this population, it was determined that the exposure from amalgam fillings was the primary source of mercury exposure, and on average exceeded the levels that would be consistent with U.S. Government Standards(MRL) for daily mercury exposure. The study's findings were consistent with the findings of many other recent such studies, including a similar study testing 20,000 people at a University Health Clinic in Germany, as well as the findings of the World Health Organization Scientific Panel on mercury. (8)

The U.S.EPA mercury health guideline for elemental mercury exposure(vapor) is 0.3 micrograms per cubic meter of air(0.3 ug/M<sup>3</sup>). For the average adult breathing 20 M<sup>3</sup> of air per day, this amounts to an exposure of 6 micrograms(ug) per day.

The U.S. Department of Health, Agency for Toxic Substances and Disease Registry (ASTDR) standard (MRL) -for acute inhalation exposure to mercury vapor is 0.2 micrograms Hg/M<sup>3</sup>, which translates to approx. 4 ug/day for the average adult(1).

The corresponding tolerable daily exposure developed in a report for the Canadian Health Agency, Health Canada, is .014 ug/kg body weight or 1 ug/day for average adult(1). The permissible level for a child would be less. But the levels of the average daily exposures found in the study were above all of these health guidelines for mercury exposure.

Other studies that the Government Health Standards were based on have found adverse health effects at very low levels and developmental effects on infants and children at very low levels of exposure, along with finding that mercury vapor from a mother's fillings is readily transferred through the mother's blood across the placenta to a fetus and also through mother's milk. (2,5,8)

**These findings increase the urgency to advise the public of the clear danger in the use of mercury in fillings and to reconsider the policy of using mercury in dental fillings. Based on such studies, several other countries, such as Sweden, Australia, Japan, and Canada, have already adopted restrictions or warnings on the use of mercury in fillings, such as for children, pregnant women, women of child bearing age,**

**people with damaged kidneys or immune systems, and in the mouth adjacent to other metals. Amalgam manufacturers have also warned against some of the uses currently made of amalgam in dentistry in the U.S.**

Studies are also available that confirm adverse health effects from amalgam fillings and clinically document that many thousands of people have recovered or had significant improvement in many health conditions including very serious conditions after replacement of amalgam fillings.(3) Fact sheets are available from DAMS with medical study references covering the statements and issues in this press release. (see below)

**DAMS is currently working with very many people in the U.S. dealing with serious health effects caused by exposure to mercury from amalgam and urges everyone to find out more about this major problem and to get involved in resolving these health safety issues. DAMS can provide information and help to anyone who is interested or who thinks they might have health problems related to their amalgam fillings.**

Available fact sheets with medical study references include:

- 1 Common Exposure Levels from Amalgam Fillings and Government Health Standards Commonly Exceeded, [www.home.earthlink.net/~berniew1/amalno1.html](http://www.home.earthlink.net/~berniew1/amalno1.html)
- 2 Transfer of Mercury from Mother's Amalgams and Breast Milk to the Fetus and Developmental Effects of Mercury on Infants, [www.home.earthlink.net/~berniew1/fetaln.html](http://www.home.earthlink.net/~berniew1/fetaln.html)
3. Documentation of recovery from 30,000 clinical cases of serious adverse health effects after replacement of amalgam fillings in over 30 chronic health conditions, [www.home.earthlink.net/~berniew1/amalg6.html](http://www.home.earthlink.net/~berniew1/amalg6.html)
4. Adverse Oral Health Problems related to Amalgam Fillings, [www.home.earthlink.net/~berniew1/periodon.html](http://www.home.earthlink.net/~berniew1/periodon.html)
5. Effect of Mercury and Other Toxic Metal Exposure on Cognitive and Behavioral Problems of Children- including ADD, dyslexia, juvenile delinquency, and crime. [www.home.earthlink.net/~berniew1/tmfbn.html](http://www.home.earthlink.net/~berniew1/tmfbn.html)
- 6, Autoimmune conditions: CFS, FM, MS, Parkinson's, ALS, Alzheimer's, Lupus, Chron's, Schleraderma: the connection to mercury immune reactivity and amalgam fillings: [www.home.earthlink.net/~berniew1/indexa.html](http://www.home.earthlink.net/~berniew1/indexa.html)
- 7 The battery in your mouth: oral galvanic currents and metals in the mouth, and interactions with FMF , [www.home.earthlink.net/~berniew1/galv.html](http://www.home.earthlink.net/~berniew1/galv.html)
8. Health Effects of amalgam fillings and results of replacement of amalgam fillings. Over 1500 medical study references(most in Medline) documenting common high mercury exposures from amalgam, and that vapor from amalgam is the most dangerous form of mercury to the fetus, and approx. 50,000 clinical cases of amalgam replacement followed by doctors; [www.home.earthlink.net/~berniew1/amalg6.html](http://www.home.earthlink.net/~berniew1/amalg6.html)

Local contact person:

National contact person: Bernie Windham [berniew1@earthlink.net](mailto:berniew1@earthlink.net) 850-878-9024  
(over 1500 medical study references supporting this fact sheet at [www.home.earthlink.net/~berniew1](http://www.home.earthlink.net/~berniew1))

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**Abstract:**

Kingman A, Albertini T, Brown LJ  
*J Dent Res* 1998 Mar;77(3):461-71

**Mercury concentrations in urine and whole blood associated with amalgam exposure in a US**



**DENTAL AMALGAM MERCURY SYNDROME**

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FOR IMMEDIATE RELEASE

contact: see page 4

(PR2)

## **THE ENVIRONMENTAL EFFECTS OF AMALGAM FILLINGS AFFECT EVERYONE**

THE FOLLOWING FINDINGS ARE DOCUMENTED IN THIS RELEASE:

- 1. Dental amalgam fillings are a major source of mercury going into sewers, rivers, lakes, and bays, both from dental offices and human wastes in home and office sewers.**
- 2. Mercury pollution is widespread in U.S. rivers, lakes, and bays; with dangerous amounts of mercury commonly found in freshwater and saltwater fish. There are warnings to limit eating fish for thousands of U.S. lakes, rivers, bays. Warnings affect over 20% of U.S. lakes and 7% of U.S. river miles. Over half of rivers and lakes in Florida have warnings.**
- 3. Mercury is the most toxic substance commonly encountered, and is adversely affecting the health of large numbers of people in the U.S. Based on tests the U.S. CDC estimates that 10 % of women of childbearing age have mercury levels that would put a fetus at risk of developmental neurological problems. Millions of U.S. infants/children have been documented by the National Academy of Sciences to have such developmental damage, including autism, ADD, dyslexia, learning disabilities, mood and anxiety disorders, etc.**
- 4. Dental Amalgam fillings are the number one source of mercury in most people and levels of mercury exposure from amalgam commonly exceeds Government Health Guidelines, with high levels in human excretion wastes documented.**

**5. The level of mercury in all sewer plants in the U.S. exceeds the U.S. Environmental Protection Agency(EPA's) proposed mercury limit for mercury in waterways adopted in some areas to avoid bioaccumulation in fish due to the large amount from amalgam in sewers from dental offices, homes, and businesses.**

**6. Crematoria emissions commonly violate mercury air emission standards and constitute a significant source of mercury emissions due to mercury in amalgam fillings.**

**7. Due to the major environmental effects of mercury from amalgam fillings, plus the additional known adverse health effects, Japanese Dental Schools no longer teach the use of mercury amalgam fillings and several other countries have voted to ban amalgam use or issued warnings regarding its use, as has the state of California.**

**8. High levels of mercury including the very toxic organic forms are being measured in rainfall throughout the U.S. Extremely high levels of the extremely toxic dimethyl and methylmercury forms of mercury are being found in landfill gas coming from landfills and appear to be a source of some of this. Bacteria in landfills have been found to be methylating elemental and inorganic mercury to the organic forms. Dental amalgam waste and mercury from human sewer sludge are major sources of mercury in landfills.**

#### **Documentation:**

Mercury is one of the most toxic substances commonly encountered, and according to Government agencies causes adverse health effects in large numbers of people in the U.S. [1,20] Based on widespread tests, the U.S. CDC estimates that approx. 10 % of women of childbearing age, 6 million women, have current mercury levels that would put fetuses at risk of developmental neurological problems(18), without considering other common sources of mercury in infants. The extreme toxicity of mercury can be seen from documented effects on wildlife by very low levels of mercury exposure. The amount of mercury in the marine environment is increasing 4.8% per year, doubling every 16 years(16). Some Florida panthers that eat birds and animals that eat fish containing very low levels of mercury(about 1 part per million) have died from chronic mercury poisoning(17). Since mercury is an estrogenic chemical and reproductive toxin, the majority of the rest cannot reproduce. The average male Florida panther has higher estrogen levels than females, due to the estrogenic properties of mercury(17). Similar is true of some other animals at the top of the food chain like polar bears, beluga and orca whales, and alligators, which are affected by mercury and other hormone disrupting chemicals.

The average amalgam filling has more than ½ gram of mercury, and has been documented to continuously leak mercury into the body of those with amalgam fillings due to the low mercury vapor pressure and galvanic current induced by mixed metals in the mouth. Because of the extreme toxicity of mercury, only ½ gram is required to contaminate the ecosystem and fish of a 10 acre lake to the extent that a health warning would be issued by the government to not eat the fish[2]. Over half the rivers and lakes in Florida have such health warnings[3] banning or limiting

eating of fish, and most other states and 4 Canadian provinces have similar health warnings(16). Wisconsin has fish consumption warnings for over 250 lakes and rivers(13) and Minnesota even more, as part of the total of over 50,000 such lakes with warnings(16) and 7% of all U.S. river miles. All Great Lakes as well as many coastal bays and estuaries and large numbers of salt water fish carry similar health warnings.

Unlike many European countries with more stringent regulation of mercury that require amalgam separators in dental offices, the U.S. does not and most dental offices do not have them. The discharge into sewers at a dental office per dentist without amalgam separators is approximately 270 milligrams per day(4). For the U.S. this would be approximately 5400 kg/yr (or slightly over 6 tons/year of mercury into sewers and thus into streams and lakes in most cases. A study in Michigan estimated that dental mercury is responsible for approximately 14 % of mercury discharged to streams(5). Other EPA and municipal studies(4,13) found that dental office waste was responsible for similar levels of mercury in lakes, bays, and streams in other areas throughout the U.S. Another Canadian study found similar levels of mercury contribution from dental offices into lakes and streams. Surveys of dental office disposal practices found the majority violated disposal regulations, and dangerous levels of mercury are accumulating in pipes and septic tanks from many offices(14,22).

The total discharge into sewers from dental amalgam at individual homes and businesses is even more than at dental offices, since the average person with amalgam fillings excretes in body waste approx. 100 micrograms per day of mercury(6,7,8,20). This has also been confirmed by medical labs such as Doctors Data Lab in Chicago and Biospectron in Sweden which do thousands of stool tests per year and is consistent with studies measuring levels in residential sewers by municipalities(13b). . In the U.S. this would amount to approximately 7300 kilograms per year into sewers or over 8 tons per year. Thus the amount of mercury being excreted from dental amalgam is more than enough to cause dangerous levels of mercury in fish in most U.S. streams into which sewers empty. According to an EPA study the majority of U.S. sewerage plants cannot meet the new EPA guideline for mercury discharge into waterways that was designed to prevent bioaccumulation in fish and wildlife due to household sewer mercury levels(15,13). Over 3 tons of mercury flows into the Chesapeake Bay annually from sewer plants, with numerous resulting fish consumption advisories for that area and similar for other areas(16). The EPA discharge rule is being reevaluated due to a National Academy of Sciences report of July 2000 that found that even small levels of mercury in fish result in unacceptable risks of birth defects and developmental effects in infants(18).

High levels of mercury including the very toxic organic forms are being measured in rainfall throughout the U.S. High levels of the extremely toxic dimethyl and methylmercury forms of mercury are being found in landfill gas coming from landfills and appear to be a source of some of this(21). Bacteria in landfills have been found to be methylating elemental and inorganic mercury to the organic forms. Dental amalgam waste and mercury from human sewer sludge are major sources of mercury in some landfills and sludge is also used in landspreading on farms and other areas.

Additionally cremation of those with amalgam fillings adds to air emissions and deposition onto

land and lakes. A study in Switzerland found that in that small country, cremation released over 65 kilograms of mercury per year as emissions, often exceeding site air mercury standards(9), while another Swiss study found mercury levels during cremation of a person with amalgam fillings as high as 200 micrograms per cubic meter(considerably higher than U.S. mercury standards). The amount of mercury in the mouth of a person with fillings was on average 2.5 grams, enough to contaminate 5 ten acre lakes to the extent there would be dangerous levels in fish(2,20). A Japanese study estimated mercury emissions from a small crematorium there as 26 grams per day(10). A study in Sweden found significant occupational and environmental exposures at crematoria, and since the requirement to install selenium filters mercury emission levels in crematoria have been reduced 85%(11). For the 70% of people in Britain who die and end up with their bodies being cremated, the mercury escapes into the atmosphere and contaminates waterways, soil, wildlife and food. Crematoria now contribute 11% of all the mercury released by industry and power plants in Britain. The 440,000 people cremated in Britain every year are estimated to discharge 1300kg of mercury(12) A study of assessing hair mercury in a group of staff at some of the 238 British crematoriums found that the groups hair mercury were significantly greater than that of controls(12).

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(including studies by Dental School Professors and Dental Researchers) .../~berniew1/galv.html  
**8. Common Exposure Levels from Amalgam Fillings and the Mechanism by which mercury causes over 30 chronic health conditions including autoimmune conditions.**

(Over 1500 medical study references, most from National Library of Medicine Medline)  
[www.home.earthlink.net/~berniew1/amalg6.html](http://www.home.earthlink.net/~berniew1/amalg6.html)

[ Most of this documentation is available at the web site: [www.home.earthlink.net/~berniew1/](http://www.home.earthlink.net/~berniew1/) ]  
papers can be viewed or saved to your computer as html or txt file(file, save as. ...)

[ abstracts or full copies of most references can be found at the National Library of Medicine  
Medline at [www.nlm.nih.gov/](http://www.nlm.nih.gov/) ]

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FOR IMMEDIATE RELEASE

**Mechanisms Documented by Which Mercury from Amalgam Dental Fillings and Vaccinations Are a Cause or Major Factor in Over 30 Chronic Health Conditions**

1. Research including over 1500 peer-reviewed or government studies has been accumulated from the medical literature documenting the mechanism by which mercury causes or is a major factor in over 30 chronic health conditions. (1-9)
2. Also accumulated are the clinical results of over 30,000 cases of amalgam replacement as followed and documented by doctors with evidence of cure or significant improvement in these chronic conditions. (1, Section VI)

The conditions for which mechanisms of causality are documented and evidence of significant improvement after amalgam replacement include:

(a) autoimmune problems such as arthritis, MS, Lou Gehrig's Disease(ALS), Parkinson's/ muscle tremor, Alzheimer's, muscular & joint pain /fibromyalgia, chron's disease, lupus, scleroderma, Chronic Fatigue Syndrome(CFS), endometriosis , diabetes (6,9,1)

(b) neurological and mood disorders including memory disorders, depression , schizophrenia , insomnia, anger, anxiety & mental confusion, neuropathy/paresthesia, tinnitus, dizziness/vertigo, headaches/ migraines, epilepsy, ADD, dyslexia, learning disabilities, hearing loss, etc. (2,1)

© periodontal diseases such as gingivitis, oral lichen planus, amalgam tattoos, metal mouth, halitosis, oral keratosis(pre cancer); (8,4,1)

(d) immune system conditions such as allergies asthma, multiple chemical sensitivities, eczema, psoriasis, other skin conditions; cancer(breast, leukemia,etc. ), susceptibility to infections, antibiotic resistant infection, sinus problems (9,2,1)

(e) cardiovascular conditions including tachycardia, angina, arteriosclerosis, other heart conditions, hypertension, and other blood conditions (7,1)

(f) hormonal problems such as hypothyroidism, adrenal problems, chronic chills, Hashimoto's Disease, alopecia/hair loss, urinary/ prostate problems, depression, suicidal thoughts (7,1)

(g) reproductive problems such as infertility, reduced sperm counts, PMS, spontaneous abortions, birth defects, developmental disabilities, children with learning disabilities and low IQ, etc. (7,3,1)

(h) chronic eye conditions: inflammation/iritis/ astigmatism/myopia /cataracts/ macula degeneration, color blindness, vision disturbances, etc. (1)

(I) stomach/digestive problems including leaky gut, chron's disease, malabsorption of essential minerals and essential fatty acids, blocked cellular enzymatic processes related to the ATPASE energy function and sulfur oxidation, (2,1)

There are extensive documented cases (many thousands) where removal of amalgam fillings led to cure or significant improvement of these serious health problems. Over 50,000 such clinical cases are compiled in the documentation as followed and compiled by doctors. The over 50,000 cases of cure or significant improvements were not isolated cases of cures; the clinical studies indicated a large majority of most such type cases treated showed significant improvement. (1,Section VI)

Mercury's extreme cytotoxicity and neurotoxicity is a major factor in the neurological conditions, along with its inhibition of basic enzymatic cellular processes and effects on essential minerals and nutrients in cells. Mercury is also documented to cause imbalances in neurotransmitters related to mood disorders. A direct mechanism involving mercury's inhibition of cellular enzymatic processes by binding with the hydroxyl radical(SH) in amino acids appears to be a major part of the connection to allergic/immune reactive conditions such as autism, schizophrenia, lupus, eczema and psoriasis, scleroderma, and allergies. Immune reactivity to

mercury has been documented by immune reactivity tests to be a major factor in many of the autoimmune conditions([www.melisa.org](http://www.melisa.org)). (1,2)

The over 1500 peer reviewed studies mostly either Government studies or abstracted in the National Library of Medicine([www.nlm.nih.gov/](http://www.nlm.nih.gov/)) document that most people with several amalgam dental fillings get significant daily exposure to mercury that is the largest source of mercury exposure for most people and often above the Government health guideline for mercury. The reason for the high exposure levels from amalgam are mercury's negative vapor pressure that means it is constantly vaporizing, along with galvanic electric currents caused by mixed metals in the mouth that drive mercury and other metals into the body. These are easily measured which has been widely documented. (1,4)

The studies also document that mercury from amalgam or other sources such as fish crosses a woman's placenta readily and accumulates to levels in the fetus at levels usually higher than in the mother. And that mercury in the mother is transferred at significant levels to a breast-fed infant. The fact that children have been exposed to levels of highly toxic mercury thimerosal in vaccinations well beyond Government health guidelines for mercury is also well documented. Studies document that such mercury exposures can cause developmental conditions and disorders such as autism, ADD, learning disabilities, etc. (1,2,3)

The studies also document that due to the high daily exposure from amalgam, people excrete high amounts of mercury into home and office sewers which cause levels in sewer plants to be high enough to contaminate with mercury most of the water bodies they empty into to the extent that fish and wildlife are contaminated with dangerous levels of mercury. Over 20% of the lakes, all Great lakes, 7% of U.S. river miles, and many bays are contaminated to the extent warnings have been issued to not eat the fish. Amalgam is documented to be a major source of mercury in many water bodies. (5,1)

#### References

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- (3) Developmental Effects of Mercury on Infants. [www.home.earthlink.net/~berniew1/fetaln.html](http://www.home.earthlink.net/~berniew1/fetaln.html)
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- (6) Lou Gehrig's Disease(ALS), MS, Chronic Fatigue Syndrome(CFS), Fibromyalgia, Lupus, Parkinson's, Alzheimers Disease, Rheumatoid Arthritis, etc.: the Mercury Connection, [www.home.earthlink.net/~berniew1/indexa.html](http://www.home.earthlink.net/~berniew1/indexa.html) (several hundred P.R. references)
- (7) Hormonal Problems and Cardiovascular Problems [www.home.earthlink.net/~berniew1/endohg.html](http://www.home.earthlink.net/~berniew1/endohg.html)



**ADD, dyslexia, autism, schizophrenia, or other learning disabilities;** mood disorders, other developmental disorders; or chronically unhealthy children according to a recent report of the **National Academy of Sciences(1)** .

**2. Peer-reviewed medical studies have documented that the majority of such conditions are caused by exposure to toxic substances, with the most common being the toxic metals: mercury, lead, arsenic, nickel, cadmium, copper, antimony, and aluminum (2,4,10).** Pesticide and organochlorine or organophosphate exposures can also cause such effects(3).

**3. Exposure to toxic metals causes ADD, dyslexia, autism, and other neurological and immune conditions as a result of their neurotoxicity,** as well as by causing deficiencies and imbalances in essential minerals and essential fatty acids; blocking essential enzymatic processes such as those necessary for digestion and processing of milk casein, wheat gluten, amino acids, vitamin B-6 and B-12; and causing “leaky gut” and poor nutrient absorption(2,4,5,9). These enzymatic blockages and metabolic disorders prevent processing of necessary minerals and nutrients and result in neurotoxic metabolites in the blood.

**4. Metals toxicity and metabolic imbalances are major factors in cognitive and behavioral disorders and problems of children- including violence, sociopathic behavior, juvenile delinquency, and criminality(2,5,6)..**

**5. A hair element analysis of 28 recent mass murderers or serial killers found that all had patterns of metals toxicity and mineral imbalances typical of violent prone/sociopathic behavior(5,6).**

**6. Metals detoxification and nutritional treatment that deals with the essential mineral and essential fatty acid imbalances result in significant improvements in most of these conditions, including violent and sociopathic behavior(2,4-10).** .

**7. Common exposures in children have been documented for mercury(vaccines, mother’s amalgam fillings, dental work, fish), lead(paint,soil,water fixtures,etc.), arsenic(treated wood, pesticides, shellfish, other foods), aluminum(pans, processed food, medicines), cadmium(shellfish, paint, piping), antimony(Scotch guard), manganese(welding, metal works) (2,4,10) Toxic levels of such have been found in the majority of Pervasive Developmental Disorder(PDD) children tested. (2,4,5,9,10)**

**8. The majority of the quoted medical studies can be found in Medline at the National Institute of Health National Library of Medicine, [www.nlm.nih.gov](http://www.nlm.nih.gov)**

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- (5) W.J. Walsh, Pfeiffer Treatment Clinic and Health Research Institute, [www.hriptc.org](http://www.hriptc.org)
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- (7) Great Smokies Diagnostic Lab, Depression, ADD & ADHD research web pages - click on: (by condition), research studies on causes and treatments, <http://www.gsdl.com>; & ADD case study, <http://www.gsdl.com/news/kidsdigest/index5.html>
- (8) Vitamin Research News(weekly journal), see issues on autism, ADD, etc.  
[www.vrcentral.net](http://www.vrcentral.net)
- (9) A. Holmes, Baton Rouge Autism/PDD Clinic, [www.healing-arts.org/children/holmes.htm](http://www.healing-arts.org/children/holmes.htm)
- (10) B. Windham, Common exposure levels to mercury from amalgam fillings and mechanisms by which mercury from amalgam is a major factor in over 30 chronic health conditions. 2001. (over 1500 peer-reviewed medical studies and government agency studies, and documentation by doctors of 50,000 clinical cases of recovery after amalgam replacement). [www.home.earthlink.net/~berniew1/amalg6.html](http://www.home.earthlink.net/~berniew1/amalg6.html)

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(PR5)

**State Legislatures Pass Bills Placing Restrictions or Warnings on Use of Amalgam Dental Fillings-  
More States Plan to Consider Bills in the Next Legislative Session**

The California Legislature passed a bill, SB134, to implement Proposition 65 which was passed earlier and requires all dentists who use amalgam dental fillings to issue the following warning:

"This office uses amalgam filling materials which contain and expose you to a chemical known to the State of California to cause birth defects and other reproductive harm". (mercury)

Governor Davis signed S.B. 26 & S.B. 134 yesterday (Oct. 5). Thus, on Dec. 31, 2001, the California Dental Board ceases to exist. The existing Dental Board was abolished due to its refusal over several years to carry out the provisions of Prop 65 regarding the issuance of a warning by dentists of the dangers of mercury. A brand new Board will be appointed. The law also requires that the Fact Sheet must be given to the patient; the dentist has a duty to ensure patients read it before placing any toxins into their mouths. Finally, the Board executive director must be approved by Director Hamilton of the Dept of Consumers Affairs, a step to ensure more consumer accountability.

The Maine Legislature passed a bill this year, LD1409, placing restrictions on amalgam use by requiring a warning regarding possible mercury related adverse health effects be given to all patients if amalgam use is considered.

The Florida Legislature passed a bill, SB1324, removing restrictions on the replacement of amalgam fillings by alternatives and encouraging discussion of pros and cons of alternative treatments. Bills are being prepared for consideration in the next session in the majority of states.

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Details:

**California**

SB-26 & SB-134 AUTHORED BY SEN. LIZ FIGUEROA, to DE-FUND THE CALIFORNIA DENTAL BOARD. This bill will de-fund the state dental board and transfer responsibilities for dental regulation to Dept of Consumer Affairs for 6 months, and then re-create the Dental Board effective January 1, 2002, with an enforcement monitor to assure the Board Is acting in the consumer interest.

**BACKGROUND:**

For the last nine years, the California Dental Board has refused to implement the 1992 law passed by the California Legislature implementing Proposition 65, which requires a "fact sheet" on the risks of dental

amalgam fillings (which are half mercury ) . The law requires that dentists warn that:

"This office uses amalgam filling materials which contain and expose you to a chemical known to the State of California to cause birth defects and other reproductive harm". (mercury)

The effort to have the law implemented has been lead by Consumers for Dental Choice and DAMS. The Dental Board has again broken its promise to the legislature's Sunset Committee to complete the Fact Sheet by the end of this fiscal year (June 30, 2001). As the last straw, the Dental Board abruptly canceled its June 14th meeting in L.A., where it had promised hundreds of concerned consumers that it would finally, after 9 years of stalling, provide the required fact sheet. This is what led to SB134.

Amalgam, which many dentists call "silver fillings" contains 50% mercury which is known to be the most toxic non-radioactive element. Mercury is documented to be toxic to the nervous system, the immune system, the reproductive system, and the hormonal system. Some amalgam manufacturers and regulatory agencies in Canada and Europe advise all pregnant women, children, people with kidney problems, or with braces or other metalwork in the mouth to avoid Mercury- Amalgam dental fillings. Most dentists have not heeded these warnings or passed them on to patients, even though there is evidence that amalgam fillings are the biggest source of mercury in most with amalgam fillings, cause significant adverse health effects to many, are classified as being hazardous waste when removed from the mouth, and are a significant source of mercury in home and city sewers as well as in fish and wildlife throughout the U.S. Over 7% of all U.S. river miles as well as many lakes that sewers empty into have warnings to limit fish consumption due to mercury levels. (for documentation on exposure, health effects, and environmental effects from amalgam fillings see: [www.home.earthlink.net/~berniew1/indexa.html](http://www.home.earthlink.net/~berniew1/indexa.html))

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Maine

Maine Governor Angus King had the distinction of signing the first bill in the U. S. passed by a Legislature that requires dentists to notify their patients regarding the use of amalgam fillings. California has a similar provision which was passed by voters as Proposition 65. After July 1, 2002, dentists in Maine will be required to display a poster in the public waiting area of the dental office and must provide each patient a copy of a brochure that explains the potential advantages and disadvantages to oral health, overall human health and the environment of using mercury or mercury amalgam in dental procedures. The Director of the Bureau of Health, together with the Department of the Environmental Protection will develop the poster and brochure. The Mercury Pollution Prevention Committee has the job of developing a strategy to reduce mercury in the environment from industrial sources, including dental offices and home sewers.

Documentation of the significant levels of mercury contributed to waterways by dental

offices, homes, and businesses related to amalgam fillings can be found in:  
[www.home.earthlink.net/~berniew1/damspr2s.html](http://www.home.earthlink.net/~berniew1/damspr2s.html)

Proponents fought long and hard for the passage of Bill LD 1409, and while the bill as passed is not as strong as desired they still considered this a major triumph for the citizens of Maine. They indicate that stronger measures including limits on amalgam use will be pursued again in future sessions.

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#### Florida

The Florida Legislature passed SB1324 this year dealing with consumer and consumer right to know issues related to dental and medical treatment. In the past, dentists have been strongly discouraged from replacing amalgam fillings with alternatives by the ADA and the State Dental Board as well as from openly discussing possible adverse health effects from amalgam or pros and cons of amalgam versus alternatives.

SB 1324 allows dentists to replace amalgam fillings due to concerns over mercury toxicity and health concerns, and encourages discussion of the pros and cons of alternative treatments.

#### New York

Assemblyman Richard Brodsky (D-Westchester) introduced a broad-sweeping bill which, if enacted, would alter the practice of dentistry in New York State. The legislation (A.4209), known as the Comprehensive Management of Waste Mercury Act of 2001, would also ban thermometers, fluorescent lights and other products that contain mercury, in what the sponsor says is an effort to cut the amount of mercury entering sewers, landfills and incinerators. Amalgam dental fillings have been found to be a major source of mercury in sewers from human waste in household and office sewer systems, and thermometers, thermostats, and fluorescent lights are sources entering landfills. A Senate version of the bill is expected to be introduced by Senator Michael Balboni (R/C-Nassau).

This legislation on the issue of waste mercury would require filtration systems on dental offices in order to prevent mercury from dental amalgam from entering wastewater systems. EPA and municipal sewer authorities say they have found high levels of mercury in all sewer systems with the biggest source being dental office and home sewer wastes from amalgam. DAMS, an organization representing mercury poisoned patients, says that there is a huge amount of medical evidence showing amalgam leaks significant levels of mercury, cause widespread adverse health effects, and are a significant source of mercury in the environment and fish. If passed, the bill would: \* Require the use of mercury containment traps for plumbing systems \* Require dental offices to submit an annual amalgam mercury report;

\* Prohibit use of mercury amalgam fillings in children under 15 and pregnant women;

- \* Require informed consent by a person to receive mercury amalgam fillings;
- \* Prohibit any health insurer to discriminate against coverage of persons choosing to have dental fillings that do not contain mercury.

Assemblyman Brodsky has gone on record to say that mercury "is the most insidious, dangerous and pervasive poison that still remains largely unregulated. It has begun to pervade our air, water, fish, animals, and even our bodies. This bill is a major first step toward protecting ourselves, our families, our oceans, our lakes, and our futures."

Measures similar to A.4209 are being considered in Connecticut, Maine, Florida, Maryland, Massachusetts, Maine, Nebraska, New Hampshire, New Jersey, Oregon and Rhode Island, and indeed, the bill is modeled on a law Vermont passed in 1998. Federal agencies and the National Academy of Sciences have a priority to reduce mercury in people and the environment due to high levels of mercury being found in fish throughout the U.S. and in tests on women of child bearing age by the U.S. Centers for Disease Control. Since many consumer and environmental groups are also concerned and actively support the bills, this likely means that the issue of regulating mercury will be on the front burner of dentistry's legislative agenda as for other sources of mercury in people and the environment.

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Documentation with over 1500 medical study references on exposure levels and adverse health effects of mercury from amalgam fillings, as well as 30,000 clinical cases documented by doctors of recovery from over 30 chronic conditions after amalgam replacement can be found at [www.home.earthlink.net/~berniew1/indexa.html](http://www.home.earthlink.net/~berniew1/indexa.html)

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### **Health Effects to Dentists, Dental Assistants, and Dental Hygienists from Occupational Exposure to Mercury Vapor from Amalgam Fillings**

DAMS is a nationwide support organization for dental patients suffering from mercury toxicity due to amalgam dental fillings. DAMS has coordinators in most states, who have themselves recovered from mercury toxicity and who have provided information to thousands of mercury toxic patients. Previous fact sheets available on our website document that many thousands have been seriously affected by mercury from amalgam, and that most who have amalgam replaced see significant improvement after treatment. DAMS website has over 1500 medical study references documenting widespread chronic health effects from mercury exposure/amalgam, and over 30,000 clinical cases of recovery or significant improvement after amalgam replacement.

DAMS has also compiled over 75 medical studies documenting the adverse health effects of dental office mercury exposure to dentists, dental assistants, and dental hygienists . **The studies reviewed found that:**

- 1. Dental office staff mercury exposure is comparable to exposure from more than 12 amalgam fillings and commonly more than the federal ATSDR/EPA health guideline(MRL) for mercury(1,2,3).**
- 2. Dental staff exposure is proportionate to the number of amalgam fillings placed, removed, or polished- as well as the number of their own amalgam fillings(1,2,3).**
- 3. Dental staff have significantly higher levels of mercury excretion than non-occupationally exposed controls(1,2).**
- 4. Sensitization or development of allergic conditions such as dermatitis and systemic allergies is common among dental staff(1,2,8).**
- 5. Dentist and dental staff commonly accumulate mercury body burden and develop neurological conditions such as irritability, depression or mood disorders, memory**



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All backup technical papers with references available at [www.home.earthlink.net/~berniew1](http://www.home.earthlink.net/~berniew1) papers can be viewed or saved to your computer as html or txt file(file. save as. ...) [ abstracts or full copies of most references can be found at the National Library of Medicine Medline at [www.nlm.nih.gov/](http://www.nlm.nih.gov/) ]

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**Medical Studies Document Widespread Common Adverse Oral Effects of Dental Amalgam Fillings and High Levels of Accumulation of Mercury in Gums, Oral Mucosa, Jaw Bone, Brain, and Central Nervous System.**

1. Mercury is one of the most toxic substances in existence, and is known to bioaccumulate in the body and brain of people and animals that have chronic exposure. (1,3)
2. The number one source of mercury in most people is amalgam dental fillings, which leak dangerous levels of mercury- due to mercury's negative vapor pressure and oral galvanism with other metals in the mouth. The level of daily exposure commonly exceeds the U.S. EPA health guideline for daily mercury exposure. (2,3,4)
3. Mercury vapor given off by amalgam fillings accumulates in tooth roots, gums, jawbone, and oral tissue at high levels. The number of amalgam surfaces has a statistically significant correlation to the level of mercury in saliva, oral mucosa, and brain. (1,3)
4. Metal Crowns over amalgam cause even higher levels of accumulation of mercury in the oral cavity than amalgam fillings due to oral galvanism and EMF. (1,4)
5. Those with amalgam fillings average at least 5 times higher levels of mercury in

saliva than those without amalgam. Eating, brushing, polishing, or drinking hot liquids can cause 10-fold higher levels of mercury release by amalgam fillings. Replacement of amalgam fillings reduces levels of mercury in saliva approximately 90%. (1,3).

6. Bacteria in the mouth and bacteria and Candida in intestines methylate inorganic mercury to highly toxic organic methyl mercury and mercaptans involved in bad breath (1,3)

7. There is consensus among dental researchers that amalgam fillings are responsible for common systemic oral effects such as amalgam tattoos, oral galvanism, oral lichen planus, etc. and that replacement of amalgam fillings usually resolves conditions like OLP (1,3,4)

8. Some of the oral conditions documented to be caused by amalgam fillings include: gingivitis, bleeding gums, bone loss, mouth sores, oral lesions, pain and discomfort, burning mouth, "metal mouth", chronic sore throat, chronic inflammatory response, lichen planus, amalgam tattoos, autoimmune response, oral cancer, etc. (1,3)

**References** (over 2000 peer-reviewed medical studies, most from National Library of Medicine Medline([www.nlm.nih.gov](http://www.nlm.nih.gov)) or Government Agencies)

(1) Oral Effects of Amalgam Dental Fillings Documented to be Widespread and Common by Peer-Reviewed Medical and Dental Studies.; B.Windham(Ed.), Mar 2001, [www.home.earthlink.net/~berniew1/periodon.html](http://www.home.earthlink.net/~berniew1/periodon.html) (over 100 peer-reviewed studies)

(2) Amalgam Dental Fillings Found to Be Number One Source of Mercury in Most People, with Common Daily Exposures Exceeding Gov't Health Guidelines for Mercury; B.Windham(Ed.) (medical studies including large Air Force personnel study by Inst. Of Dental Research) [www.home.earthlink.net/~berniew1/amalno1.html](http://www.home.earthlink.net/~berniew1/amalno1.html)

(3) Documentation on Exposure Levels, Adverse Health Effects Due to Amalgam Dental Fillings and Results of Replacement of Amalgam Fillings; B.Windham(Ed.), (Over 1500 Peer-Reviewed Medical or Government Studies Documenting Mechanisms by which Mercury from Amalgam causes over 30 chronic health conditions, and 30,000 clinical cases of recovery or significant improvement in these conditions after amalgam replacement)

(4) The Causes of High Levels of Exposure to Mercury from Amalgam Dental Fillings:

Oral Galvanic Currents of Mixed Metals(the battery in your mouth), Mercury's Negative Vapor Pressure, and Electromagnetic Fields(EMF) Effects on Metal Fillings; B.Windham(Ed.) [www.home.earthlink.net/~berniew1/galv.html](http://www.home.earthlink.net/~berniew1/galv.html)

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**Widespread Adverse Health, Cognitive, and Fertility Effects from Mercury's Endocrine Disrupting Hormonal Effects Found to Be Affecting Millions.**

A review by DAMS researchers of over 1500 peer-reviewed medical studies from the National Library of Medicine([www.nlm.nih.gov](http://www.nlm.nih.gov)) found that:

- 1. Mercury has been documented to be an endocrine disrupting chemical that selectively accumulates in the hormone glands and has significant adverse effects at very low levels of exposure. (1,2,8)**
- 2. Studies find that millions have chronic mercury exposure more than the U.S. Gov't Health Guideline for mercury. The largest exposures to most adults were found to be from amalgam dental fillings; and the largest exposures to most children were found to be from mercury thimerosal in vaccines. (2-5)**
- 3. Studies found that many infants are receiving high levels of fetal and neonatal exposure to mercury sufficient to cause developmental effects that damage the metals detoxification system to the extent that continued exposure to toxic metals such as mercury thimerosal, lead, and arsenic results in accumulation of toxic levels of these metals. This is commonly leading to neurological conditions like autism, Aspergers Syndrome, Attention Deficient Hyperactive Disorder(ADHD) if not properly treated. (4,5,2,9)**

**4. Recent National Academy of Sciences reports and other studies have found that approximately 50 percent of U.S. births now result in birth defects, neurological conditions, or chronic developmental disorders.** Studies document that the majority of these are due to toxic exposures and most children are receiving dangerous levels of toxic exposures. (7,2-6)

**5. Chronic mercury exposure has been documented to be commonly causing widespread endocrine system effects including hypothyroidism, autoimmune thyroiditis, impaired conversion of thyroid hormones and other hormones, pituitary hormone deficiencies, and adrenal hormone imbalances.** (1,2,6)

**6. Some of the endocrine related conditions/symptoms found to be commonly caused by these hormonal effects in infants and children include widespread neuropsychiatric conditions and developmental disorders such as autism, ADHD, dyslexia, learning disabilities, mood disorders, mental retardation, spontaneous abortions, eczema, asthma, systemic allergies, behavioral problems, and juvenile delinquency.** (1-10)

**7. Some of the endocrine related conditions/symptoms found to be commonly caused by mercury in adults include hypothyroidism, chills, chronic fatigue, fibromyalgia, depression and mood disorders, anxiety, anger, memory loss, balance problems, infertility, endometriitis, menstrual disorders, low sperm counts, diabetes, etc.** (1,2,8).

**8. Mercury is extremely neurotoxic and immunotoxic, so that some of the conditions described are the collective result of neurotoxic, immunotoxic, and hormonal effects. These interactions are also documented in the references provided . Other toxic metals and chemicals including Dioxins, PCBs, OrganoChlorine and OrganoPhosphate Pesticides have neurotoxic, immunotoxic, and hormonal effects that act synergistically to cause this conditions. According to the studies and thousands of clinical findings, mercury appears to be the most common significant toxic exposure, with the most clearly documented adverse effects.** (2,4,5,8)

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(2) Documentation on Exposure Levels, Adverse Health Effects Due to Amalgam Dental Fillings and Results of Replacement of Amalgam Fillings; B.Windham(Ed.), (Over 1500 Peer-Reviewed Medical or Government Studies Documenting Mechanisms by which Mercury from Amalgam causes over 40 chronic health conditions, and 30,000 clinical

cases of recovery or significant improvement in these conditions after amalgam replacement)  
(3) Amalgam Dental Fillings Found to Be Number One Source of Mercury in Most People, with Common Daily Exposures Exceeding Gov't Health Guidelines for Mercury; B.Windham(Ed.), 2001 (medical studies including large Air Force personnel study by Inst. Of Dental Research) [www.home.earthlink.net/~berniew1/amalno1.html](http://www.home.earthlink.net/~berniew1/amalno1.html)

(4) Cognitive and Behavioral Effects of Exposure to Toxic Metals, B.Windham(Ed.) 2001, (over 150 peer-reviewed studies), [www.home.earthlink.net/~berniew1/tmlbn.html](http://www.home.earthlink.net/~berniew1/tmlbn.html)

(5) Developmental Neurological and Immune Conditions: the Mercury Connection, B.Windham(Ed.), (over 100 medical study references) [www.home.earthlink.net/~berniew1/kidshg.html](http://www.home.earthlink.net/~berniew1/kidshg.html)

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## The Mercury Connection to Common Chronic Health Conditions

MS, ALS, Lupus, CFS, FM, PD, RA, Alzheimer's, Depression, ADD, Periodontal Disease  
(common exposures, mechanisms of causality, treatment, clinical results of treatment)

Mercury is documented by thousands of peer-reviewed medical studies and clinical experience to be a common cause of many chronic systemic health conditions such as MS, ALS, Lupus, CFS, Fibromyalgia, Parkinson's Disease, Rheumatoid Arthritis, Eczema, Psoriasis, Alzheimer's, Autism, ADD, Depression and Mood Disorders, Periodontal Disease, etc.(1) Clinics treating many thousands of such patients have documented that the majority recover or significantly improve after proper, timely, treatment of these conditions, as documented below.

Amalgam dental fillings are the most significant mercury exposure for most people, and daily exposure often exceeds government health guidelines(1). The above conditions have been found to be caused by synergistic exposure to mercury and other toxics, along with related effects of opportunistic pathogens that those with weakened immune systems are susceptible to such as viruses, mycoplasma, parasites, bacterial infections, Candida, etc.(1,4).

Amalgam fillings of mothers are a common significant prenatal source of mercury exposure in the fetus and infants(1). The largest source of mercury exposure in infants, which commonly exceeds government health guidelines is from mercury thimerosal in vaccines(3). The National Academy of Sciences reports that approximately 50% of U.S. children are affected by significant developmental conditions, with a large portion of these due to exposure to prenatal and neonatal exposure to mercury and other toxics(3,4).

According to the EPA, CDC, and FDA a significant number of mothers also have enough mercury exposure from mercury in fish to cause developmental effects(2). The main sources of mercury in fish are coal power plants, incinerators, and amalgam dental fillings. Municipal sewer agencies have found all sewer systems in the U.S. to have high levels of mercury, with the largest source being mercury flushed down toilets daily from human excretion at home or business sewers of those with amalgam dental fillings(2). Over 20% of U.S. lakes have warnings to limit fish consumption due to mercury, along with large numbers of rivers and bays(2).

Review papers with hundreds of peer-reviewed medical study references are available that document the common mercury exposure levels, mechanisms of causality, treatment, and treatment results of thousands of clinical cases for the following:

Multiple Sclerosis(MS), Lupus, etc. [www.home.earthlink.net/~berniew1/ms.html](http://www.home.earthlink.net/~berniew1/ms.html)

Amyotrophic Lateral Sclerosis(ALS) [www.home.earthlink.net/~berniew1/als.html](http://www.home.earthlink.net/~berniew1/als.html)

CFS, FM, RA, Lupus [www.home.earthlink.net/~berniew1/cfsfm.html](http://www.home.earthlink.net/~berniew1/cfsfm.html)

Parkinson's [www.home.earthlink.net/~berniew1/parknew.html](http://www.home.earthlink.net/~berniew1/parknew.html)

Alzheimer's [www.home.earthlink.net/~berniew1/alzhg.html](http://www.home.earthlink.net/~berniew1/alzhg.html)

Periodontal Conditions [www.home.earthlink.net/~berniew1/periodon.html](http://www.home.earthlink.net/~berniew1/periodon.html)

Austism, PDD [www.home.earthlink.net/~berniew1/kidshg.html](http://www.home.earthlink.net/~berniew1/kidshg.html)

ADD, dyslexia, LD [www.home.earthlink.net/~berniew1/tmlbn.html](http://www.home.earthlink.net/~berniew1/tmlbn.html)

Oral galvanism,EMF [www.home.earthlink.net/~berniew1/galv.html](http://www.home.earthlink.net/~berniew1/galv.html)

Other chronic conditions [www.home.earthlink.net/~berniew1/amalg6.html](http://www.home.earthlink.net/~berniew1/amalg6.html)

### References

1. B. Windham, Common exposure levels and mechanisms of causality of 30 chronic health conditions due to mercury exposure from amalgam fillings. 2001, Over 1500 peer-reviewed medical studies or Government documents and 50,000 clinical cases of recovery or significant improvement from these conditions after amalgam replacement and treatment, as documented by doctors.

[www.home.earthlink.net/~berniew1/amalg6.html](http://www.home.earthlink.net/~berniew1/amalg6.html)

2. DAMS Fact Sheet, The Environmental Effects of Mercury Exposure from Amalgam Affect Everyone. 2001, [www.home.earthlink.net/~berniew1/damspr2s.html](http://www.home.earthlink.net/~berniew1/damspr2s.html)
3. B.Windham(Ed.), Cognitive and Behavioral Effects of Prenatal and Neonatal Exposure to Toxic Metals, 2001, [www.home.earthlink.net/~berniew1/tmlbn.html](http://www.home.earthlink.net/~berniew1/tmlbn.html)
4. B. Windham(Ed.), Health Effects of Exposure to Endocrine Disrupting Chemicals (Dioxins, PCBs, Pesticides, Organochlorine chemicals, etc.) (Over 200 peer-reviewed medical studies) [www.home.earthlink.net/~berniew1/indexe.html](http://www.home.earthlink.net/~berniew1/indexe.html)

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DAMS Coordinator- Florida, 850-878-9024

(Note: the majority of medical studies summarized here can be found in the National Institute of Health Library of Medicine Medline: [www.nlm.nih.gov/](http://www.nlm.nih.gov/) )

**FedEx** USA Airbill  
Express

FedEx Tracking Number **836581429868**

Form 1.B. No.

**0200**

**1 From**

Date **9-13-02**

Sender's Name **B.J. West** Phone **407 645-4502**

Company **Citizens for Health Freedom**

Address **1565 Orange Ave**

City **Winter Park** State **FL** ZIP **32789**

**2 Your Internal Billing Reference**

**3 To**

Recipient's Name **Food + Drug Administration** Phone

Company **Dockets Management Branch**

Address **5630 Fishers Lane**

Address **Room 1061-HFA-305**

City **Rockville** State **MD** ZIP **20852**



**4a Express Package Service**

- FedEx Priority Overnight** Next business morning  
 **FedEx Standard Overnight** Next business afternoon  
 **FedEx First Overnight** Earliest next business morning delivery to select locations  
 **FedEx 2Day** Second business day  
 **FedEx Express Saver** Third business day

**4b Express Freight Service**

- FedEx 1Day Freight\*** Next business day  
 **FedEx 2Day Freight** Second business day  
 **FedEx 3Day Freight** Third business day

**5 Packaging**

- FedEx Envelope\***  
 **FedEx Pak\*** Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak  
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**6 Special Handling**

- SATURDAY Delivery** Available only for FedEx Priority Overnight and FedEx 2Day to select ZIP codes  
 **HOLD Weekday at FedEx Location** Not available for FedEx First Overnight  
 **HOLD Saturday at FedEx Location** Available only for FedEx Priority Overnight and FedEx 2Day to select locations

- Does this shipment contain dangerous goods?  
 **No**  
 **Yes** As per attached Shipper's Declaration  
 **Yes** Shipper's Declaration not required  
 **Dry Ice** Dry Ice, 3 UN 1845 x \_\_\_\_\_ kg  
 **Cargo Aircraft Only**

**7 Payment Bill to**

- Sender** Acct. No. in Section 1 will be billed  
 **Recipient**  
 **Third Party**  
 **Credit Card**  
 **Cash/Check**

Total Packages	Total Weight	Total Declared Value†	Total Charges
<b>1</b>	<b>4</b>	\$ <b>00</b>	<b>00</b>

**8 Release Signature** Sign to authorize delivery without obtaining signature

By signing you authorize us to deliver this shipment without obtaining a signature and agree to indemnify and hold us harmless from any resulting claims  
**Questions? Visit our Web site at fedex.com**  
or call 1 800 Go FedEx 800 463 3339

**446**