

**Scientific Literature Related to
THE SCIENCE OF DENTAL AMALGAM MERCURY**
Prepared by the International Academy of Oral Medicine and Toxicology
(IAOMT)
to accompany our Mercury 102 Online Learning Video

*Abraham JE, Svare CW, Frank CW. The effect of dental amalgam restorations on blood mercury levels. *J Dent Res.* 1984; 63(1):71-3. Abstract available from:
<http://jdr.sagepub.com/content/63/1/71.short>

*Bellinger DC, Trachtenberg F, Barregard L, Tavares M, Cernichiari E, Daniel D, McKinlay S. Neuropsychological and renal effects of dental amalgam in children: a randomized clinical trial. *JAMA.* 2006 Apr 19;295(15):1775-83. Available from:
<https://jamanetwork.com/journals/jama/articlepdf/202706/joc60041.pdf>

*DeRouen TA, Martin MD, Leroux BG, Townes BD, Woods JS, Leitão J, Castro-Caldas A, Luis H, Bernardo M, Rosenbaum G, Martins IP. Neurobehavioral effects of dental amalgam in children: a randomized clinical trial. *JAMA.* 2006 Apr 19;295(15):1784-92. Available from: <https://jamanetwork.com/journals/jama/articlepdf/202707/joc60045.pdf>

Echeverria D, Aposhian HV, Woods JS, Heyer NJ, Aposhian MM, Bittner AC, Mahurin RK, Cianciola M. Neurobehavioral effects from exposure to dental amalgam Hgo: new distinctions between recent exposure and body burden. *FASEBJ.* 1998; 12(11):971-980. Available from: <http://www.fasebj.org/content/12/11/971.long>

Echeverria D, Heyer N, Martin MD, Naleway CA, Woods JS, Bittner AC. Behavioral effects of low-level exposure to Hg0 among dentists. *Neurotoxicol Teratol.* 1995; 17(2):161-8. Abstract available from:
<http://www.sciencedirect.com/science/article/pii/089203629400049J>

Echeverria D, Woods JS, Heyer NJ, Rohlman D, Farin F, Li T, Garabedian CE. The association between a genetic polymorphism of coproporphyrinogen oxidase, dental mercury exposure and neurobehavioral response in humans. *Neurotoxicol Teratol.* 2006; 28(1):39-48. Abstract available from:
<http://www.sciencedirect.com/science/article/pii/S0892036205001492>

Echeverria D, Woods JS, Heyer NJ, Rohlman DS, Farin FM, Bittner AC, Li T, Garabedian C. Chronic low-level mercury exposure, BDNF polymorphism, and associations with cognitive and motor function. *Neurotoxicology and Teratology.* 2005; 27(6):781-796. Abstract available from:
<http://www.sciencedirect.com/science/article/pii/S0892036205001285>

*Gay DD, Cox RD, Reinhardt JW. Chewing releases mercury from fillings. *Lancet.* 1979; 1(8123):985-6. Abstract available from <https://library.iaomt.org/chewing-releases-mercury-from-fillings/>

*Geier DA, Carmody T, Kern JK, King PG, Geier MR. A dose-dependent relationship between mercury exposure from dental amalgams and urinary mercury levels: a further assessment of the Casa Pia Children's Dental Amalgam Trial. *Human & Experimental Toxicology*. 2012 Jan;31(1):11-7. Available from:

https://www.researchgate.net/profile/David_Geier/publication/51535059_A_dose-dependent_relationship_between_mercury_exposure_from_dental_amalgams_and_urinary_mercury_levels_A_further_assessment_of_the_Casa_Pia_Children%27s_Dental_Amalgam_Trial/links/09e4150ece21957bd6000000.pdf

*Geier DA, Carmody T, Kern JK, King PG, Geier MR. A significant dose-dependent relationship between mercury exposure from dental amalgams and kidney integrity biomarkers: a further assessment of the Casa Pia children's dental amalgam trial. *Human & Experimental Toxicology*. 2013 Apr;32(4):434-40. Available from:
<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.1012.4292&rep=rep1&type=pdf>

*Geier DA, Carmody T, Kern JK, King PG, Geier MR. A significant relationship between mercury exposure from dental amalgams and urinary porphyrins: a further assessment of the Casa Pia children's dental amalgam trial. *Biometals*. 2011 Apr 1;24(2):215-24. Available from:

https://www.researchgate.net/profile/Mark_Geier/publication/47680588_A_significant_relationship_between_mercury_exposure_from_dental_amalgams_and_urinary_porphyrins_A_further_assessment_of_the_Casa_Pia_children%27s_dental_amalgam_trial/links/0912f50b918a2e101e000000.pdf

*Hahn LJ, Kloiber R, Leininger RW, Vimy MJ, Lorscheider FL. Whole-body imaging of the distribution of mercury released from dental fillings into monkey tissues. *The FASEB Journal*. 1990 Nov;4(14):3256-60. Abstract available from:

<https://www.fasebj.org/doi/abs/10.1096/fasebj.4.14.2227216>

*Hahn LJ, Kloiber R, Vimy MJ, Takahashi Y, Lorscheider FL. Dental" silver" tooth fillings: a source of mercury exposure revealed by whole-body image scan and tissue analysis. *The FASEB Journal*. 1989 Dec;3(14):2641-6. Available from:
<http://www.toxcenter.org/artikel/Tooth-fillings-source-of-mercury-hgl.pdf>

Hanson M, Pleva J. The dental amalgam issue. A review. *Experientia*. 1991; 47(1):9-22. Available from:

https://www.researchgate.net/profile/Jaro_Pleva/publication/21157262_The_dental_amalgam_issue_A_review/links/00b7d513fabdda29fa000000.pdf

Homme KG, Kern JK, Haley BE, Geier DA, King PG, Sykes LK, Geier MR. New science challenges old notion that mercury dental amalgam is safe. *BioMetals*. 2014; 27(1); 19-24. Abstract available at <http://www.ncbi.nlm.nih.gov/pubmed/24420334>

Kall J, Just A, Aschner M. What is the risk? Dental amalgam, mercury exposure, and human health risks throughout the lifespan. *Epigenetics, the Environment, and Children's Health across Lifespans*. David J. Hollar, ed. Springer. 2016. pp. 159-206 (Chapter 7). Abstract available from: http://link.springer.com/chapter/10.1007/978-3-319-25325-1_7

Mutter J. Is dental amalgam safe for humans? The opinion of the scientific committee of the European Commission. *Journal of Occupational Medicine and Toxicology*. 2011; 6:2. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3025977/>

Patterson JE, Weissberg BG, Dennison PJ. Mercury in human breath from dental amalgams. *B Environ Contam Toxicol*. 1985; 34(1):459–68. Abstract available from: <https://link.springer.com/article/10.1007%2F01609761?LI=true>

Richardson GM, Brecher RW, Scobie H, Hamblen J, Samuelian J, Smith C. Mercury vapour (Hg(0)): Continuing toxicological uncertainties, and establishing a Canadian reference exposure level. *Regul Toxicol Pharmacol*. 2009; 53(1):32-38. Abstract available from: <http://www.sciencedirect.com/science/article/pii/S0273230008002304>

*Richardson GM, Wilson R, Allard D, Purtill C, Douma S, Graviere J. Mercury exposure and risks from dental amalgam in the US population, post-2000. *Science of the Total Environment*. 2011 Sep 15;409(20):4257-68. Available from: https://www.researchgate.net/profile/Colleen_Purtill2/publication/51514541_Mercury_exposure_and_risks_from_dental_amalgam_in_the_US_population_post-2000/links/5ae0ed0d458515c60f65f2bd/Mercury-exposure-and-risks-from-dental-amalgam-in-the-US-population-post-2000.pdf

Vimy MJ, Lorscheider FL. Intra-oral air mercury released from dental amalgam. *J Dent Res*. 1985; 64(8):1069-71. Available from: <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.550.7668&rep=rep1&type=pdf>

Vimy MJ, Lorscheider FL: Serial measurements of intra-oral air mercury; Estimation of daily dose from dental amalgam. *J Dent Res*. 1985; 64(8):1072-5. Abstract available from: <http://jdr.sagepub.com/content/64/8/1072.short>

Vimy MJ, Luft AJ, Lorscheider FL. Estimation of mercury body burden from dental amalgam computer simulation of a metabolic compartment model. *J. Dent. Res.* 1986; 65(12):1415-1419. Abstract available from: <http://jdr.sagepub.com/content/65/12/1415.short>

*Vimy MJ, Takahashi Y, Lorscheider FL. Maternal-fetal distribution of mercury (203Hg) released from dental amalgam fillings. *American Journal of Physiology-Regulatory, Integrative and Comparative Physiology*. 1990 Apr 1;258(4):R939-45. Abstract available from: <https://journals.physiology.org/doi/abs/10.1152/ajpregu.1990.258.4.R939>

*Woods JS, Heyer NJ, Echeverria D, Russo JE, Martin MD, Bernardo MF, Luis HS, Vaz L, Farin FM. Modification of neurobehavioral effects of mercury by a genetic polymorphism of coproporphyrinogen oxidase in children. *Neurotoxicology and Teratology*. 2012 Sep 1;34(5):513-21. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3462250/>

*Woods JS, Heyer NJ, Russo JE, Martin MD, Pillai PB, Farin FM. Modification of neurobehavioral effects of mercury by genetic polymorphisms of metallothionein in children. *Neurotoxicology and Teratology*. 2013 Sep 1;39:36-44. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3795926/>

*Also noted in References and Resources for Mercury 102 Online Learning Video.