

**Scientific Literature Related to  
DENTAL AMALGAM MERCURY AND THE ENVIRONMENT**  
Prepared by the [International Academy of Oral Medicine and Toxicology](#)  
(IAOMT)  
to accompany our Dental Amalgam Mercury and the Environment  
Online Learning Video

Adegbembo AO, Watson PA, Lugowski SJ. The weight of wastes generated by removal of dental amalgam restorations and the concentration of mercury in dental wastewater. *Journal-Canadian Dental Association*. 2002; 68(9):553-8. Available from: <https://pdfs.semanticscholar.org/9759/35fac90f7abd015be12da55d5762a4616860.pdf>

Alothmani O. Air quality in the endodontist's dental surgery. *New Zealand Endodontic Journal*. 2009; 39: 12. Available at: <http://www.nzse.org.nz/docs/Vol.%2039%20January%202009.pdf>

al-Shraideh M, al-Wahadni A, Khasawneh S, al-Shraideh MJ. The mercury burden in waste water released from dental clinics. *SADJ: Journal of the South African Dental Association (Tydskrif van die Suid-Afrikaanse Tandheelkundige Vereniging)*. 2002; 57(6):213-5. Abstract available from: <https://europepmc.org/abstract/med/12229075>

Arenholt-Bindslev D, Larsen AH. Mercury levels and discharge in waste water from dental clinics. *Water, Air, and Soil Pollution*. 1996; 86(1-4):93-9. Abstract available at: <http://link.springer.com/article/10.1007/BF00279147>

Arenholt-Bindslev D. Dental amalgam—environmental aspects. *Advances in Dental Research*. 1992; 6(1):125-30. Available from: [https://www.researchgate.net/publication/21864156\\_Dental\\_amalgam\\_-\\_Environmental\\_aspects](https://www.researchgate.net/publication/21864156_Dental_amalgam_-_Environmental_aspects)

Batchu H, Rakowski D, Fan PL, Meyer DM. Evaluating amalgam separators using an international standard. *The Journal of the American Dental Association*. 2006; 137(7):999-1005. Abstract available from: <https://www.ncbi.nlm.nih.gov/pubmed/16803827>

\*Björnberg KA, Vahter M, Grawé KP, Berglund M. Methyl mercury exposure in Swedish women with high fish consumption. *Science of the Total Environment*. 2005 Apr 1;341(1-3):45-52. Abstract available from: <https://www.sciencedirect.com/science/article/pii/S0048969704006576>

Christiansen P, Larson M. Mercury removal prior to cremation: a collaboration of dentistry and mortuary science to prevent environmental contamination. Available from: <http://www.thefreelibrary.com/Mercury+removal+prior+to+cremation%3A+a+collaboration+of+dentistry+and...-a0216339047>

\*Correa L, Rea LD, Bentzen R, O'Hara TM. Assessment of mercury and selenium tissular concentrations and total mercury body burden in 6 Steller sea lion pups from the Aleutian Islands. *Marine Pollution Bulletin*. 2014 May 15;82(1-2):175-82. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4123997/>

\*Crump KL, Trudeau VL. Mercury-induced reproductive impairment in fish. *Environmental Toxicology and Chemistry: An International Journal*. 2009 May;28(5):895-907. Available from: <https://setac.onlinelibrary.wiley.com/doi/pdf/10.1897/08-151.1>

Fan PL, Batchu H, Chou HN, Gasparac W, Sandrik J, Meyer DM. Laboratory evaluation of amalgam separators. *The Journal of the American Dental Association*. 2002; 133(5):577-89. Abstract available from: <https://www.ncbi.nlm.nih.gov/pubmed/12036162>

\*Frouin H, Loseto LL, Stern GA, Haulena M, Ross PS. Mercury toxicity in beluga whale lymphocytes: limited effects of selenium protection. *Aquatic Toxicology*. 2012 Mar 1;109:185-93. Available from: <https://www.academia.edu/download/46722722/j.aquatox.2011.09.02120160622-28326-4k2cq4.pdf>

\*Haley BE. Mercury toxicity: genetic susceptibility and synergistic effects. *Medical Veritas*. 2005 Nov;2(2):535-42. Available from: <http://www.medicalveritas.com/images/00070.pdf>

\*Hallinger KK, Zabransky DJ, Kazmer KA, Cristol DA. Birdsong differs between mercury-polluted and reference sites. *The Auk*. 2010 Jan 1;127(1):156-61. Available from: [https://www.researchgate.net/profile/Daniel\\_Cristol/publication/47385639\\_Mercury\\_exposure\\_and\\_survival\\_in\\_free-living\\_tree\\_swallows\\_Tachycineta\\_bicolor/links/0c96053c6b6cca72d0000000.pdf](https://www.researchgate.net/profile/Daniel_Cristol/publication/47385639_Mercury_exposure_and_survival_in_free-living_tree_swallows_Tachycineta_bicolor/links/0c96053c6b6cca72d0000000.pdf)

\*Höglund LO. Technical options for storage and disposal of mercury. Study undertaken under contract with UNEP Chemicals. Available from: [https://learn.e-worktraining.com/SCOs/r-iaomtce/impact04/downloads/unep\\_tech\\_options\\_storage\\_disposal\\_mercury.pdf](https://learn.e-worktraining.com/SCOs/r-iaomtce/impact04/downloads/unep_tech_options_storage_disposal_mercury.pdf)

\*Horowitz HM, Jacob DJ, Amos HM, Streets DG, Sunderland EM. Historical mercury releases from commercial products: Global environmental implications. *Environmental Science & Technology*. 2014 Sep 2;48(17):10242-50. Available from: [https://dash.harvard.edu/bitstream/handle/1/34306003/Horowitz\\_2014\\_EST\\_HgProducts.pdf?sequence=2](https://dash.harvard.edu/bitstream/handle/1/34306003/Horowitz_2014_EST_HgProducts.pdf?sequence=2)

Hylander LD, Lindvall A, Uhrberg R, Gahnberg L, Lindh U. Mercury recovery in situ of four different dental amalgam separators. *Science of the Total Environment*. 2006; 366(1):320-36. Abstract available from: <https://www.ncbi.nlm.nih.gov/pubmed/16182343>

Khwaja MA, Nawaz S, Ali SW. Mercury exposure in the work place and human health: dental amalgam use in dentistry at dental teaching institutions and private dental clinics in selected cities of Pakistan. *Reviews on Environmental Health*. 2016. Available from: [https://www.researchgate.net/publication/291390990\\_Mercury\\_exposure\\_in\\_the\\_work\\_place\\_and\\_human\\_health\\_Dental\\_amalgam\\_use\\_in\\_dentistry\\_at\\_dental\\_teaching\\_institutions\\_and\\_private\\_dental\\_clinics\\_in\\_selected\\_cities\\_of\\_Pakistan](https://www.researchgate.net/publication/291390990_Mercury_exposure_in_the_work_place_and_human_health_Dental_amalgam_use_in_dentistry_at_dental_teaching_institutions_and_private_dental_clinics_in_selected_cities_of_Pakistan)

\*Lamborg CH, Hammerschmidt CR, Bowman KL, Swarr GJ, Munson KM, Ohnemus DC, Lam PJ, Heimbürger LE, Rijkenberg MJ, Saito MA. A global ocean inventory of anthropogenic mercury based on water column measurements. *Nature*. 2014 Aug;512(7512):65-8. Available from: [http://www.academia.edu/download/45179480/A\\_global\\_ocean\\_inventory\\_of\\_anthropogeni20160428-24524-z5nnk7.pdf](http://www.academia.edu/download/45179480/A_global_ocean_inventory_of_anthropogeni20160428-24524-z5nnk7.pdf)

Mackey TK, Contreras JT, Liang BA. The Minamata Convention on Mercury: Attempting to address the global controversy of dental amalgam use and mercury waste disposal. *Science of the Total Environment*. 2014 Feb 15;472:125-9. Abstract available from: <https://www.sciencedirect.com/science/article/pii/S004896971301259X>

Mari M, Domingo JL. Toxic emissions from crematories: a review. *Environment International*. 2010; 36(1):137. Available from: [https://www.researchgate.net/profile/Montse\\_Mari/publication/26888045\\_Toxic\\_emissions\\_from\\_crematories\\_a\\_review/links/54353dc70cf2dc341dafb6d6.pdf](https://www.researchgate.net/profile/Montse_Mari/publication/26888045_Toxic_emissions_from_crematories_a_review/links/54353dc70cf2dc341dafb6d6.pdf)

\*Peterson SH, Ackerman JT, Costa DP. Marine foraging ecology influences mercury bioaccumulation in deep-diving northern elephant seals. *Proceedings of the Royal Society B: Biological Sciences*. 2015 Jul 7;282(1810):20150710. Available from: <https://royalsocietypublishing.org/doi/pdf/10.1098/rspb.2015.0710>

\*Pirrone N, Mason R. *Mercury Fate and Transport in the Global Atmosphere: Emissions, Measurements, and Models*. New York, New York: Springer. 2009: 166. Summary and preview available from: [https://link.springer.com/chapter/10.1007/978-0-387-93958-2\\_1](https://link.springer.com/chapter/10.1007/978-0-387-93958-2_1)

Rubin PG, Yu MH. Mercury vapor in amalgam waste discharged from dental office vacuum units. *Archives of Environmental Health: An International Journal*. 1996; 51(4):335-7. Abstract available from: <http://www.tandfonline.com/doi/abs/10.1080/00039896.1996.9936036>

Scarmoutzos L, Boyd M. OE: Environmental and Toxicological Concerns of Dental Amalgam and Mercury. Northboro, MA: MVS Solutions. Inc. and SolmeteX, Inc.; 2003: See Table 2 on pages 36-37. Available from MVS Solutions Web site: <http://www.mvssolutions.com/mercury.pdf>

Silbernagel SM, Carpenter DO, Gilbert SG, Gochfeld M, Groth E, Hightower JM, Schiavone FM. Recognizing and preventing overexposure to methylmercury from fish and seafood consumption: information for physicians. *Journal of Toxicology*. 2011. Available from <http://www.hindawi.com/journals/jt/2011/983072/>

Stone ME, Cohen ME, Debban BA. Mercury vapor levels in exhaust air from dental vacuum systems. *Dental Materials*. 2007; 23(5):527-32. Abstract available from: <http://www.sciencedirect.com/science/article/pii/S0109564106000881>

\*Sunderland EM, Mason RP. Human impacts on open ocean mercury concentrations. *Global Biogeochemical Cycles*. 2007 Dec;21(4). Available from: <https://agupubs.onlinelibrary.wiley.com/doi/pdf/10.1029/2006GB002876>

Tibau AV, Grube BD. Mercury contamination from dental amalgam. *Journal of Health and Pollution*. 2019 Jun;9(22):190612. Available from: <https://www.journalhealthpollution.org/doi/pdf/10.5696/2156-9614-9.22.190612>

Wilburn DR. Changing patterns in the use, recycling, and material substitution of mercury in the United States: U.S. Geological Survey Scientific Investigations Report 2013–5137. 2013. 32 p. Available from: <http://pubs.usgs.gov/sir/2013/5137/>

*\*Also noted in References and Resources for Dental Amalgam Mercury and the Environment Online Learning Video.*