

## Appendix 14

### Timeline for fluoride and dental amalgam fillings

The main text refers to fluoride while the print in *italics* concerns amalgam fillings

- 1819: *First amalgam prototype by British dentist.*
- 1824: *Dental amalgams used extensively used in the UK and in France, but American dentists were against them and labelled their use 'mal-practice'.*
- 1837: *'Mad Hatters disease' became an expression.*
- 1859: *The American Dental Association (ADA) was formed supporting the use of amalgams and ended 'the first amalgam war'.*
- 1895: *Dr G.V. Black made a 'safer amalgam' to use in dentistry.*  
Dr Weston Price begins his monumental research programme that was to last over 25 years.
- 1899: *The first Merck Manual was published which advised mercurial use in the treatment of syphilis.*
- 1900: *Dr Alfred Stock reports his own illness stems from the mercury in his dental amalgam fillings.*
- 1901: Dr Frank McKay, dentist, begins his practice in Colorado Springs, US. (2 ppm F in the water supply). And he is concerned about the poor teeth he finds, mottled and brown stained.
- 1918: Prof Greves in Holland observed goitres in people in areas where there were 'mottled teeth'.
- 1925: A team at Johns Hopkins University in the US fed fluoride to rats and found that it made their teeth weaker.
- 1928: Frank McKay comments in an article that 'mottled' teeth had fewer cavities.  
Dr Weston Price publishes two books on teeth and becomes Director of ADA.
- 1931: H.V. Churchill confirms that fluoride causes 'mottled' teeth.  
H. Trendley Dean is appointed by the Public Health Department to find a cure for dental decay although Dr Weston Price had already identified preventative measures. Dean and his team travel around the US testing drinking water and looking at teeth.
- 1933: Floyd DeEds senior toxicologist warns of the growing risk from industrial fluoride pollution and singles out the aluminium industry.  
Frank McClure, toxicologist, publishes an article on fluoride's toxicity and joins Dean's team.
- 1935: Gerald Cox working on rats to find a cure for dental decay for the Mellon Institute (funded by Alcoa) was having no success. Francis Frary CEO of Alcoa suggests that fluoride may hold the key. Cox's further experiments found that fluoride reduced cavities in rats.
- 1937: Raj Roholm publishes his monumental work on 'Fluorine Intoxication'.
- 1938: Dr Weston Price publishes his work on nutrition, 'Nutrition and Physical Degeneration'.
- 1939: The Fluorine Lawyers Committee is well established in the US – set up by Robert Kehoe, Director of Kettering Laboratories, which is funded by Alcoa. The purpose of this committee is to fight fluoride litigation for industry. (Throughout his career Kehoe confidently proposed that leaded gasoline was safe!).
- 1940: Harold Hodge, biochemist and toxicologist at the University of Rochester investigates fluoride toxicity for the US Army's Manhattan Project. He fully supports and encourages WF at 1 ppm fluoride claiming that this will have no adverse health effects other than 10% of people drinking the water will exhibit a mild form of dental fluorosis.
- 1944: Frank McClure claimed, from a study looking at army recruits, that boys and young adult men exposed to 5.2 ppm F water showed no increase in bone fractures, no difference in height or weight and no indication of renal injury. It was a very poor study not worthy of consideration.
- 1945: Frank McClure claims that all fluoride up to 4-5mgs per day is excreted in urine and none is retained in the bones, and that only higher levels of fluoride ingested would lead to the accumulation in bones (since proved incorrect).  
Water fluoridation (WF) trials commence – January 1945 – months before the end of WW2.

Raj Roholm visits the US.

After the war, Harold Hodge becomes the leading scientific promoter of water fluoridation in the US, while chairing the National Research Council's Committee on Toxicology.

1948: Oscar Ewing, as PHS Administrator in the US allocated \$1 million for a nationwide demonstration of the efficacy of 'topical' fluoride application (he previously had been a lawyer for Alcoa).

1950: Oscar Ewing endorses WF in the US

Fluoride is added to toothpaste

The WF trials are considered to be a success and the practice is rolled out elsewhere

Four WF trials were set up in the UK.

1957: Oscar Ewing allocates \$2 million to promote WF.

1959: *With the destruction of Prof Alfred Stock's laboratory along with 30 articles regarding mercury's toxicity, in WW2, and Dr Karl Frykholm now claiming that mercury in dental amalgam fillings when covered with saliva did not release mercury the 'second amalgam war' came to an end.*

1970: Frank McClure writes his book, 'Fluoridation' as a celebration of WF.

1980: *Hal Huggins begins publishing his books of dental Toxicity and lectures extensively so begins the 'third amalgam war'.*

1983: Dr John Yiamouyiannis published his book, 'Fluoride the Aging Factor' and lectures extensively.

1984: The IAOMT was founded by Murray Vimy and Michael Ziff and they maintain that topical fluoride is ineffective.

1985: Water Bill in the UK is passed (with 399 MPs refusing to vote on the bill). By 2020, only 10% of England is fluoridated while the US is 73% fluoridated.

1989: *Hal Huggins gains an MS (with special emphasis on toxicology and immunology) from the University of Colorado.*

1990: Fluoride was named as being an ambiguous health hazard by the National Cancer Cells Institute Toxicology Programme (National Cancer Cells Institute 82, 1118-26,1990)

William Marcus was a senior advisor at the Environmental Protection Agency (EPA) and was fired after pointing out in May that a study approved by the Office of Drinking Water was unsound. The study, on rats, showed initially that cancer increased with fluoride exposure but subsequently, before publication, it was downgraded.

1994: *Dr Jack Levenson founded the British Society for Mercury Free Dentistry.*

1995: *Many countries begin to warn about mercury exposure in amalgam fillings; Germany, Austria, Norway and Sweden.*

Phyllis Mullenix published her ground breaking work on rats using a new computer model. Fluoride had the potential to lower I.Q. and was fired from her job.

1997: Prof Paul Connett and his wife establish their website; [www.FluorideAlert.org](http://www.FluorideAlert.org) and link up with other such organisations around the world proving that WF is inappropriate. Prof Connett begins to lecture and travel extensively around the world.

2004: Christopher Bryson publishes the ground breaking book, "The Fluoride Deception", that took him 10 years.

2005: UK Water Companies received civil and 'in part' criminal indemnity re: fluoridation.

2006: The American Dental Association (ADA) released on Nov 9<sup>th</sup> a statement advising mums and dads not to use fluoridated water when reconstituting infant formula for 'Newborns less than one year'.

2009: "Water Fluoride Wars" is published in a response to Christopher Bryson's book in order to discredit his findings.

2013: *The Minamata Convention is set-up and it was agreed, by many countries, to reduce mercury pollution by banning the import and export of mercury with a complete ban by 2020.*

In the UK the decision on water fluoridation became the responsibility of local authorities again.

2015: The US recommends that 1 ppm F in water be reduced to 0.7 ppm to reduce the dental fluorosis in children that had reached epidemic proportions. Finally conceding that 1 ppm of fluoride added to a water supply was not safe.

2018: *EU regulations and UK law states that dental amalgams should not be used in the treatment of children under 15 years old, and in pregnant women.*

UK 'oral toolkits' introduced the idea that only a pea-sized amount of toothpaste should be used for children under three years of age, as advised by doctors.

Dr Nigel Carter, Chief Executive of the Oral Health Foundation, responding to Dr Valerie Skafida et al, 2018 study on decay in preschool children which concluded snacking habits were to blame for decay, said:

"It is clear that toothbrushing with fluoride toothpaste alone is not the magic wand that many people still believe it to be and preventing tooth decay must also involve changing diet and lifestyle."

2020: *The FDA and the ADA in the US recommended that certain high-risk groups avoid dental amalgam whenever possible and appropriate.*

*In the US, 1 in 36 children is diagnosed with autism.*

*In the UK, 1 in 100 children is diagnosed with autism.*

In the UK the draft White Paper on Health recommends that the responsibility for WF is taken from Local Authorities and becomes the responsibility of Central Government, the Secretary of State for Health. In this way 1 ppm F could be forced into all areas of the UK.

2021: Glass ionomer cement (with fluoride) to replace mercury amalgam, says WHO in report 1<sup>st</sup> October.

2022: In April the UK Government passed the Bill to make fluoridation the responsibility of Central Government.