Chapter 14

It has been clearly shown in previous chapters how fluoride has been promoted for reasons far beyond oral health. In particular, for monetary gain by multi-million dollar businesses and organisations, while the USA military establishment promoted fluoride for reasons of national security. It is, therefore, not surprising, that these businesses and organisations, may hide scientific evidence that shows fluoride as having a negative effect, particularly on the health and welfare of adults, children and the unborn.

The following examples will illustrate how important information has been carefully buried, from public view, how information has been changed, and how people have been intimidated.

Buried information

- In the mid-1900s, Dr Weston Price's 25 year study, on tooth health, was shelved and buried by the American Dental Association (ADA) because his final report and subsequent books, did not contain what the ADA had expected. As dentists considered themselves to be technicians, repairing teeth, Weston Price's report was too far-reaching for them at that time. In spite of this, Price's work remains the monumental dental study of the age and is only now beginning to be understood and implemented by some dentists.
- In 1948, during an operation code-named 'Program F', with the knowledge and co- operation of the US State Health Department personnel, blood and tissue samples from Newburgh citizens (the second trial town to have fluoride added to the water supply) were secretly gathered and analysed by Harold C. Hodge. The adverse health effects from fluoride that Hodge found, were removed by the US Atomic Energy Commission (AEC) for reasons of national security, and the original 'secret' version of this 1948 study, was buried, because these scientists were, now, fully aware of fluoride's toxic potential. Fluoride, one of the most toxic chemicals known, was necessary for atomic bomb production millions of tons were required, and the toxic fluoride waste had to be disposed of, somewhere. (1)
- Charles Eliot Perkins, a chemist, was reduced to mythical proportions, after going against the ideas of the USA military in the mid 1950s. His life and work were practically erased from public view, on the grounds of 'national security'. However, one of his letters escaped censorship which was to tease the public and researchers in the years following until two of his books finally re-appeared. To read more about Charles Perkins and his letter go to Appendix 12.
- In the late 1950s, the Kettering Research Laboratory in the US buried the results of an experiment on 42 beagle dogs. The dogs would inhale fine particles of calcium fluoride dust for six hours a day, five days a week in an experimental chamber. The idea was to 'simulate occupational exposure to fluoride'. The experiment on the dogs began on 6th October, 1958. The dogs were divided into three groups: a control group received no fluoride; a second group inhaled a small dose, 3.5mgs of calcium fluoride per cubic meter of air; and the last group received 35.5mgs of calcium fluoride per cubic meter. A report stated that: "It was anticipated that there would be little or no injury to the lungs of the experimental animals... and would pave the way for similar experiments with human subjects." But the fluoride injured the dogs. Autopsies revealed wounds to the dogs' lungs and lymph nodes in both groups of animals exposed to fluoride. The lungs were thickened, with inflamed lesions on the surface. The researchers called it 'emphysema'. The final report explained that the fluoride ion had wreaked havoc with biological tissue because, inside the lung, the calcium fluoride dust had been transformed into a corrosive acid penetrating deep within the body. It also showed that fluoride travelled quickly from the lungs into the blood stream. Consequently, no human experiments were conducted, and the results were never published they were quietly forgotten, buried.

Buried perhaps because – by way of the Fluorine Lawyers Committee, headed by Frank Seamans, a lawyer for Alcoa – it was industry which, in 1957, had committed \$179,175 dollars for the research. (2)

• Dr Meta Asselberg found that fluoride kills beneficial bacteria, allowing moulds to proliferate... but she was silenced. During 1965 and 1966, Dr Asselberg was working in a laboratory in Tiel, unaware that Tiel

was being fluoridated. (The Tiel-Culemborg water fluoridation trial in the Netherlands ran from 1953 to 1971). Dr Asselberg found that there was a lot of bronchitis and in the sputum of these patients, she found an unusual mould. She alerted the authorities to her unusual findings but they were unresponsive and she was discharged from her job. After leaving, she found out, to her amazement, that Tiel was being fluoridated. In 1969, she wrote an article in the magazine 'Natura Docet', hoping to alert other doctors to the fact that fluoride, by killing beneficial bacteria, allowed moulds to proliferate. Dr Moolenberg, in his book, explains this episode as follows;

"There was a lot of bronchitis in Tiel at that time, (1965/6) but, instead of the normal organisms, Dr Asselberg found moulds in the sputum of her patients. These strange moulds repeatedly turned up. She dutifully reported these strange infections but, instead of earning thanks from her directors, she met with, first, stony silence, then with irritation and, finally, she was threatened and told to stop finding moulds. She kept on finding them and was discharged from her job."

"Sometime after having left the laboratory, Dr Asselbergs discovered that Tiel's water supply was fluoridated. She began the lonely and unrewarding job of alerting the authorities [to the fact that fluoride, by killing beneficial bacteria, allowed moulds to proliferate] but she was given the cold shoulder everywhere. She fought and fought because she knew what she had seen."

"Some years later the biologist, Grimbergen, made mixed cultures of moulds and bacteria and found that, while with normal water the bacteria destroyed the moulds, with fluoridated water the moulds got the upper hand. This vindicated the findings of Dr Asselbergs. There was no media coverage and no response from the authorities".

This information has been ignored, buried.

• Dr George Waldbott in his book, 'A Struggled with Titans', page 187-188 highlighted the problem of corrosive pipes, boilers and equipment in fluoridated areas of the USA. This information the 'Public Health Service' tried to suppress by discrediting these reports. Here is the extract from George Waldbott's book;

"In Miami, Florida, by February, 1957, a water heater company had replaced under warranty approximately 5000 water heaters due to leakage since fluoridation started in 1951 compared to about 100 replacements during the four years prior to 1951. (3)

"After establishing that the quality of the steel was unchanged, and after ruling out other possible causes, the company could not but attribute the corrosion to fluoride added to drinking water."

"A Toronto manufacturer of hot water tanks, in business for over 40 years, had routinely given a 20-year guarantee with every boiler. Towards the end of 1962 he expressed his intention to discontinue sales too Brantford (fluoridated since 1945) because 90 percent of all corrosion instances brought to his attention were connected with range boilers installed in Brantford and neighbouring areas. Previously, boiler failures due to corrosion had always been negligible from even the hardest water." (4)

"In Riverhead, N.Y., fluoridation started in 1954 according to a letter Oct. 24, 1964, by J. P. Riesdorph, the Water District Superintendent. By 1959, corrosion problems had become so severe that it was impossible to wash clothes clean. Twice, when fluoridation was discontinued, the trouble disappeared only to return when fluoride was again added to the water. Every conceivable means was tried to no avail to correct the trouble while retaining fluoridation. Fluoridation was finally terminated in March, 1963. The National Fluoridation News revealed how the Public Health Service attempted to discredit other reports of damage, to plumbing. This would have constituted a serious setback to fluoridation promotion had they been widely publicized."

- In 2001, Dr Elise Bassin, as part of her doctorate in dental medicine thesis, at the Harvard Dental School, investigated a possible relationship between osteosarcoma and exposure to fluoride. She found a 'robust finding' that young boys exposed to fluoride in their sixth to eighth years had a five-fold to seven-fold increased risk of contracting osteosarcoma by the age of 20. Professor Chester Douglass was Bassin's research sponsor and signed off on her thesis but, as this study contradicted his own smaller study of 1991 that he had co-authored with McGuire et al, he quietly dismissed it and failed to warn the public. Bassin's research was filed away, buried, in the Harvard Medical Rare Books Room where it was discovered and accessed in January 2005 by Michael Connett and finally published in May 2006 in the journal 'Cancer Causes and Control'.
- In 2007, in the Republic of Ireland (Southern Ireland), a report, produced by John Gormley, the Minister for the Environment, was 'buried' because it recommended that water fluoridation should end in the 26 counties, after 50 years of the practice. This 'buried' report was commissioned by the Joint Committee on Health and Children, known also as the Dail committee, while the Green Party was in opposition.

Presumably, the report was looked at and considered but it was not publish. Frustrated, by not seeing the report published, John Gormley, himself, published the report on 'hotpress.com' on 12th September, 2013. The report argues that, mandatory fluoridation is a breach of the human rights of Irish citizens, as it is a contravention of the Council of Europe's 'Convention on Human Rights and Bio-medicine' (1997). It concludes that, in light of all the evidence and, in particular, considering the fluoride overexposure risk to bottle-fed babies, water fluoridation in Ireland should cease immediately. In an interview for 'Hot Press' in 2013, John Gormley said,

"When you actually do a comparative study on dental health before, and then after fluoridation has ceased, you find that there is no increase in dental decay."

Supporting Gormley's report were many previous unheeded warnings;

- In 2000-2002, 92% of public submissions sent to the 'Fluoridation Forum', opposed water fluoridation. Irish Health Minister Martin, also found an,

"increased occurrence of dental fluorosis in Ireland (yet he) still recommended fluoridation".

- In 2001, Dr Gerry Gavin, the Chief Dental Officer in Ireland said:

"Dental fluorosis is a biomarker for the level of fluoride in the body... if we see the danger that fluorosis will increase, we need to change the regulations." He resigned in May 2003.

- In 2002, the North South Survey of Children's Oral Health in Ireland reported:
- "The prevalence and severity of fluorosis has increased in ROI between 1984 and 2002." The authors failed to admit the increase was 700% with every third teenager affected.
- In 2005, more than 100 Irish dentists opposed fluoridation (IDOF) because fluorosis was at epidemic levels among children. (5)
- Merilyn Haines, of Fluoride Action Network Australia Inc.,unearthed evidence from the Australian Research Centre for Population Oral Health (ARCPOH) statistics showing that the permanent teeth of children in largely un-fluoridated (<5% before 2009) Queensland were erupting, on average, two years earlier than the children in the rest of Australia, which is largely fluoridated. (6)
- In the USA, in 2019, a senior official at the US Environmental Protection Agency (EPA), suppressed/removed information that a fluoride-containing ingredient of a paint, parachlorobenzotrifluoride, or PCBTF, is carcinogenic. This allowed the product, which cannot be named because of EPA business confidentiality rules, to be sold without a suitable warning.

The Intercept article published on 20th, Dec. 2022, revealing this information, was based on interviews and documents supplied by whistle-blowers at the agency. These people did not name the senior official who deleted the cancer warning from documents though the article stated the following;

"The chemical is listed as 'carcinogenic' by the State of California and as 'likely carcinogenic' by the International Agency for Cancer Research. It makes up 50% of the weight of the paint".

"A 2009 National Toxicology Program report, 'noted experiments had shown the chemical to cause tremors and hyperactivity in rats, as well as lung problems in pups which had been exposed in the womb". "David Michaels, former Commissioner of the Occupational Safety and Health Administration, said that these revelations mean that EPA violated the 2016 revision to the Toxic Substances Control Act, which were intended to notify workers of potential toxic exposures". (7)

• The Water Fluoridation Health Monitoring Report for England, released in March 2022 by UKHSA, (formerly PHE), buries the evidence that links fluoridation to 20% greater rate of hip fractures a new English study reveals.

Chris Neurath, Science Director, American Environmental Health Studies Project collaborated with Penelope Sowter, of Bedford, England, on this English study and was spurred by the findings of the most recent Water Fluoridation Health Monitoring Report for England, released in March 2022. Chris Neurath wrote the following:-

"In 2022 Public Health England (PHE) recently renamed UK Health Security Agency (UKHSA), buries evidence that fluoridation is associated with higher hip fracture rates.

Our study showed that after accounting for confounding variables that PHE failed to consider, the association between fluoridation and hip fractures increased from the PHE finding of 7% higher rate to 20% higher rate."

Chris Neurath explains below, how their study came about;

"We wished to check PHE's analyses, apply more robust methods, and account for potential con-founders that PHE failed to consider. We requested the water fluoride and hip fracture data from PHE in several Freedom of Information requests, but were denied access to the data. This brings into question the integrity of PHE's report if they are not willing to release its underlying data. PHE also would not release the names of the report's authors."

"Having received no cooperation from PHE, we turned to publicly available information on water fluoride concentration and hip fracture rates by small areas in England, to allow us to do our own independent analysis. We also considered three other factors that have been found to affect hip fracture rates, but which PHE failed to adequately control or even consider in their analyses. These factors were water hardness, poverty in the elderly, and ethnicity. Using multivariable regression analyses, we simultaneously controlled for all these factors, and found that fluoridated water at a concentration of 0.7 mg/L was associated with a 20% higher rate of hip fractures compared to those with low fluoride water. This finding was highly statistically significant."

"Hard water protects against hip fractures in England, and PHE's failure to control for it may explain why they did not find consistent trends between fluoride and hip fractures".

"An interesting additional finding was that hard water was indeed protective against hip fractures. Much of England has very hard water, but despite this protective factor the adverse effect of fluoridation still outweighs the protective effect of hard water. PHE's failure to account for the protective effect of water hardness may explain why their analyses were not able to consistently show trends of higher hip fracture rates with higher water fluoride concentration. For geological reasons, the regions in England with water fluoride in the second lowest category (0.1-0.2 mg/L) had a much higher proportion of the population with hard water than in regions with other fluoride concentrations. This likely explains why the 0.1-0.2 mg/L fluoride band hip fracture rate is lower than the 0.0-0.1 mg/L band, thus "bucking the trend" of higher hip fracture rate with higher fluoride concentration. But after we controlled for water hardness, the trend of increasing hip fracture rates with increasing water fluoride became clear. PHE's analysis didn't find a consistent trend because they didn't control for water hardness, and PHE used this false inconsistency as an excuse to say the evidence of harm was 'unconvincing'". "Furthermore, the 20% increase in hip fracture rates in fluoridated areas compared to non-fluoridated is likely an underestimate. That's because the English drink large amounts of tea, which has high levels of fluoride. The average tea consumer in England gets more fluoride from tea than from fluoridated water. Fluoride from tea will therefore reduce the contrast in total fluoride exposure between fluoridated and non-fluoridated populations and thus attenuate, or blur, the observed association between water fluoride and hip fractures.

This is an important issue, because it may explain why a recent very high quality study of fluoride and hip fracture from Sweden found a 50% higher rate of hip fractures associated with a 1 mg/L increase in urine fluoride [Helte 2021, Nicole 2021]. Urine fluoride is a biomarker that reflects total fluoride intake from all sources, so it would include fluoride from both water and tea, and any other sources like swallowed toothpaste. The Swedish study would not suffer any blurring or underestimation of effect and its finding of 50% increased rate of hip fracture is likely closer to the true effect size."

"The evidence of increased hip fractures should halt PHE's plans to mandate and expand fluoridation in England."

"PHE is currently hoping to expand artificial fluoridation schemes to the entire population of England, from its current coverage of only about 10%. The adverse public health implications of increases in hip fractures from such an expansion of fluoridation outweigh any hoped-for decrease in tooth decay. Fluoridation is harmful "From Womb to Tomb".

"With the accumulating evidence that long term exposure to fluoridated water may significantly increase risk of debilitating and deadly hip fractures in the elderly, combined with the already voluminous evidence that early life fluoride exposure harms the developing brain, it's time to consider fluoride a hazard "From Womb to Tomb" [FAN Bulletin 2021]. Nobody of any age should be drinking fluoridated water. There are far safer, and just as effective, ways to reduce tooth decay [see the ChildSmile FAN webpage]. Furthermore, a cavity in a tooth can be fixed, whereas a child's brain damaged during development or a hip fracture that leaves a grandparent wheelchair-bound or dead, is forever." (8)

Intimidation

• Dr George Waldbott, practised in the US from 1921. He was a meticulous and thorough researcher and careful medical doctor and was considered a pioneer in his treatment of allergies and respiratory diseases. He published several books and more than 200 scientific articles in his lifetime. In 1949, he

alerted the medical community, to the fact that penicillin could cause anaphylactic shock in some individuals, and he was the first to link tobacco smoking to lung cancer. Unfortunately, in the mid-1950s, he fell out of favour with 'mainstream' thinking and suffered harassment from business' and 'the establishment' after turning his attention to the adverse health effects of environmental pollutants, especially fluoride. The 'establishment', in an attempt to hide these embarrassing facts, published articles that questioned Waldbott's reputation. Derogatory statements were made about his research and character and editors of scientific magazines refused to publish his work as 'it was against the main stream narrative'. These editors were often, themselves, intimidated and pressurized into refusing to publish Waldbott's research. Waldbott said, "All my adverse scientific evidence was simply dismissed and swept away in a sea of unsubstantiated generalities". Dr Waldbott recorded his research and his unfortunate experiences, as well as those of others, in two of his books, 'A Struggle with Titans', and 'Fluoridation the Great Dilemma'. He founded the 'International Society for Fluoride Research' as a way of bringing like minded scientists and doctors together. The Society produced a quarterly magazine, publishing studies that had been refused publication by other editors. However, as this magazine was not listed in the scientific library, it was still hard for doctors and dentists to gain an insight into this subject. Waldbott worked tirelessly until his death in 1982.

- In the early 1960s Dr Albert Schatz Ph.D., co-discoverer of streptomycin, studied the effects of water fluoridation in Chile and showed that there was a link between the introduction of WF, and increased death rates. In 1965, he sent a report of this study to the editor of the *Journal of the American Dental Association (JADA)*, expecting it to be published, but the editor returned it unread. He also sent his report several times to JADA's editor but, again, it was never published.
- Dr John Yiamouyiannis, PhD. in biochemistry, became aware of adverse health issues that resulted from ingesting fluoride, when he worked as the biochemical editor at Chemical Abstracts in the US, and, from then on, he worked tirelessly and fearlessly to alert people and officials. This brought him into direct confrontation with the establishment and, subsequently, he encountered ridicule and harassment. Dr Yiamouyiannis, together with Dr Dean Burk (former Chief Chemist at the National Cancer Institute), set out to determine whether cancer death rates increased after water fluoridation was introduced. Their final report, in 1975, claimed that there quickly became a 10 -15 percent increase in total cancer rates in the 10 USA fluoridated cities compared to the 10 non-fluoridated ones. This caused great concern among those promoting fluoridation and prompted Congressional hearings against them, in 1977, followed by a 21-day trial in the Supreme Court of Pennsylvania. The Presiding Judge Flaherty said he was "compellingly convinced" by the evidence presented to him by Yiamouyiannis and Burke and his final judgement called for a halt to fluoridation as it was a public health hazard.
- Yiamouyiannis was also able to prove that the Brunelle and Carlos' study published in 1990, for the Dental Health Department, was exaggerated. The author's claimed that there was less dental decay in fluoridated areas but Yiamouyiannis looked at their data and found this to be incorrect. Yiamouyiannis records his discoveries and his experiences in his book, 'Fluoride the Aging Factor', published in 1983. (9)
- Dr John Colquhoun, a former supporter of fluoridation in New Zealand, was Chief Dental Officer for Auckland. In the early 1980s, when his own careful investigations and critical examination of available data indicated that water fluoridation in New Zealand was showing essentially no dental benefit but was clearly causing harm, he did not hesitate to oppose official policy, even though it cost him his prestigious position as Auckland's Principal Dental Officer.
- William Marcus, a senior advisor at the Environmental Protection Agency (EPA), was fired after pointing out, in May 1990, that a study approved by the Office of Drinking Water was unsound. The study on rats, showed that cancer increased with fluoride exposure, though before publication, its results were downgraded. Marcus said of the study, before it was altered for publication;

"When I got hold of the contractor's report and reviewed it very carefully, not only was it reporting cancers in the animals, [it was reporting] osteosarcomas which bothered me a lot because I've been trying to produce osteosarcomas in animals for almost 20 years and the only luck I ever had was with an experiment in dogs and monkeys, and the osteosarcomas took nearly the lifetime of the animals and we were using radium which specifically produces that in bones. And here we have a compound available – fluoride – that did it in rats in two years or less."

Marcus went to court over his dismissal which was heard before an Administrative Law Judge in a bitterly contested two year trial. EPA officials shredded embarrassing notes, obstructing Dr. Marcus' attempts to fully document the collusion between the corporations and EPA. However, Dr. Marcus prevailed on every count and was ordered reinstated, with full back pay, a large compensatory damage award, and full attorney fees and costs. EPA lost its appeal and Dr. Marcus returned to his job, fully vindicated.

After reinstatement, the EPA continued to harass Dr. Marcus, and he prevailed at a second hearing on his hostile work environment case and was awarded additional damages and affirmative relief.

David Kennedy's six-min video clip on a rat study and cancer, with Bill Marcus, can be found at this link: https://www.youtube.com/watch?time_continue=42&v=TKgz0GKN7QA.

• Phyllis Mullenix, PhD, worked in the Department of Psychiatry at the Children's Hospital in Boston and the Department of Neuropathy at Harvard University Medical School. In 1982 she was invited by the Director of Forsyth's Dental Infirmary for Children in Boston, Dr John Hein, to conduct research at Forsyth and to apply it to substances used in dentistry. She was asked to look at fluoride first, which she thought was pointless, but she agreed. However, her ground-breaking work with rats, using computers, suggested that fluoride altered animal behaviour because it accumulated in rat brains and, so, had the potential of lowering IQ in children. The fluoride levels used were less than one-tenth the amount found in children one hour after receiving topical application of dental fluoride gels, and confirmed that fluoride crossed the placenta membrane. (Ref: B Groves page 64).

After her research was published in 'Neurotoxicology and Teratology' in 1995, Mullenix was fired from her post. She had been Head of the Toxicology Department for ten years. Forsyth's associate director told her;

"You are going against what dentists and everybody have been publishing for fifty years, that this is safe and effective. You must be wrong. You are jeopardizing the financial support of this entire institution. If you publish these studies, NIDR (National Institute of Dental Research) is not going to fund any more research at Forsyth"

Forsyth was getting about 90% of its money from NIDR. (10)

The official reason given for her dismissal was that her work was not 'dentally related'. Mullenix's equipment and computers, designed specifically for the studies, were mysteriously damaged and destroyed by water leakage before she could remove them from Forsyth's Lab. Mullenix sued and won substantial punitive damages from her employers, but her career as a brilliant scientist was ruined. Dr Mullenix was later given an unfunded research position at the children's hospital in Boston, but with no equipment and no money. There she unearthed papers that had been declassified by the US Government showing that scientists had evidence in 1944 that fluoride could cause confusion, drowsiness, and listlessness... brain damage. By 2010, more than 80 animal studies had confirmed what Mullenix et al reported.

• Dr Phillipe Grandjean is a Danish scientist working in environmental medicine. He is the head of the Environmental Medicine Research Unit at the University of Southern Denmark and adjunct professor of environmental health at the Harvard School of Public Health. Grandjean has an extensive history of researching mercury and fluoride.

Grandjean said, in 2020, that threats were made against him at Harvard and that the 'fluoride lobby' exerted influence over the World Health Organisation.

In February 2024, when interviewed by Derrick Broze for 'The Last American Vagabond', (TLAV) after testifying in Court, Granjean clarified his previous statement of 2020. He explained that, after he began researching fluoride and its impact on IQ, members of the Harvard University staff became concerned, he said that.

"A professor from Harvard University came to my office and asked me to sign a statement that my work on fluoride had nothing to do with fluoridation. He actually wrote this ddraft. And since I didn't sign this immediately, he instead went to my dean and had the dean sign a statement that he supported water fluoidation in accordance with the policy of the CDC."

Grandjean would later be told by the 'leadership at Harvard' that his research on fluoride was 'unwanted' and had never been approved by Harvard.

Granjean continued,

"Because we couldn't agree on my, what I would consider academic freedom, I left Harvard".

He was then invited by the World Health Organisation (WHO), to help develop an 'environmental health criteria' document on fluoride. Once he began gathering data, including animal data and epidermiological studies, changes were made to his draft. He said,

"They inserted changes in my draft indicating that fluoride could perhaps be toxic, but only at immense concentrations. I protested and said that in accordance with scientific documentation, it would be wrong to insert the word immense".

"And so WHO published a document, without my name, because I'd asked to have my name stricken, but then they inserted some other colleague's name as the author of the draft, which is, of course erroneous. But that was what WHO felt was necessary in order to protect the interests of water fluoridation".

It was in February 2024, that Granjean gave testimony in the court case where FAN, Fluoride Action Network, along with others are suing the EPA for not regulating or banning water fluoridation. FAN is attempting to prove that fluoride is a neurotoxin and should be regulated or banned under the the Toxic Substances Control Act (TSCA). The Toxic Substances Control Act is a United States law passed in 1976 and is administered by the Environmental Protection Agency (EPA), that regulates chemicals.

Collusion

• Researchers uncovered evidence showing that the sugar industry colluded with the National Institute of Health in the 1960s and 1970s to turn attention away from sugar, a proven cause of tooth decay, in favour of other unproven approaches, including fluoride. (11)

Sheiham and James reported in the Journal of Dental Research (2015) that fluoride has not stopped sugarcaused tooth decay. They write:

"Previous preventive measures have clearly failed."

• John Kelly, was a New Jersey General Assemblyman in the US for 18 years. He spent nine years trying to obtain the studies supporting the claim of the safety and effectiveness of prescription fluoride products and tried to get them removed from the market when finding them unapproved by the FDA. These products included drops for infants and tablets for older children, which had been on the market since the 1950s. Kelly sent letters to all the relevant authorities and manufacturers and was sent on 'a wild goose chase', as there were no safety studies to be found. John Kelly wrote in his report dated 29th April, 2012:

"The Food and Drug Agency (FDA) has been aware for at least the past 35 years that these unapproved products are being prescribed to millions of infants and children. They have been fully aware of the potential side-effects of these products as listed in numerous publications such as the Toxicology Fluoride Profile (NTP), the Physicians Desk References, Clinical Toxicology of Commercial Products, and the Merck Index. The FDA has allowed these children to endure health effects from such products which the FDA does not recognise as either safe or effective, as there are no studies."

- Hexafluorosilicic acid or hydrofluorosilicic (H2SiF6), classed as a hazardous waste, cannot be dumped into the sea by international law, nor can it be dumped locally on land or in streams, or allowed into the air because it is too concentrated. In the US, however, once this toxic waste product, hexafluorosilicic acid or hydrofluorosilicic, is 'purchased' i.e. by the water companies, it becomes a 'product' and no longer attracts the Environmental Protection Agency's (EPA's) legal requirement for handling hazardous waste.
- Powerful interests have long sought to suppress evidence against fluoridation. A review of Christopher Bryson's book, 'The Fluoride Deception', was published in the Chemical & Engineering News. It stated:

"We are left with compelling evidence that powerful interests with high financial stakes have colluded to prematurely close honest discussion and investigation into fluoride toxicity."

Misinformation

- Harold C. Hodge, a dentist and Chief Toxicologist for the US Army's Manhattan Project (the atomic bomb project), became the leading scientific promoter of water fluoridation in the US in 1953. Hodge made a serious error in calculating the recommended intake of fluoride which remained in print for 40 years in articles and pamphlets prepared by the American Dental Association and other agencies. The US Environmental Agency (EPA) took these incorrect figures to determine their standard for safe levels of fluoride in 1986, in spite of the fact that Hodge had quietly revised his figures in 1979. Darlene Sherrell, who had personally suffered from fluoride exposure, was the first to notice and highlight this serious error published in the 'Fluoridation Facts' booklet distributed by the ADA. The recommendation was that the intake of fluoride should not exceed 20-80mg/day per person (depending on body weight) and implied that, if you kept below this maximum dosage, you would be insured against any and all potential chronic toxicity effects of fluoride. Fluoride consumption above that level, however, over a prolonged period of time, could lead to the development of crippling skeletal fluorosis. The 1953 National Academy of Sciences panel meeting on fluoride dosage was quoted as the source of their figures. Sherrell's enquires uncovered that these figures came from Harold Hodge who based his figures on Kaj Roholm's figures from his classic book 'Fluorine Intoxication', published in 1937. What Hodge had neglected to do was to convert body weight from pounds to kilograms and, thus, had overstated the maximum acceptable dosage by a factor of two. In 1979, Hodge quietly revised his figures to 10-20mg F per day. Later the World Health Organisation correctly calculated from Kaj Roholm's work and, basing their figures on a longer period of fluoride exposure, found that the maximum daily intake of fluoride to be in the range of 2.5-5mg/day per person. This was almost 10 times lower than those recommended originally by Hodge. Hodge offered his incorrect high F calculations in testimony at congressional hearings on fluoride in 1954 and, for many years, Hodge was cited for the claim that people would have to consume 20-80mg of fluoride per day for a prolonged period of time to develop crippling skeletal fluorosis (the terminal stage). (12)
- In 1956, Hodge claimed that it was 'impossible' for an accident with fluoridation equipment to cause acute fluoride poisoning. He reassured people by saying that even if the whole day's sodium fluoride supply was dumped into the water in one hour for 10 years, people would still not suffer 'serious toxic consequences'. He repeated that,

"It is clearly impossible to produce acute fluoride poisoning by water fluoridation." (13)

It is now known that water fluoridation accidents do happen, resulting in acute poisoning – even death. Fluoride Action Network's website has a list of such accidents and some of these accidents are listed in this book, Chapter 12 and Chapter 16.

- Other misinformation that Hodge gave was that 50 ppm fluoride in water was the amount needed to cause thyroid damage. Yet other scientists had already shown that daily doses of just 2-10mg fluoride could reduce the activity of the thyroid in individuals with hyperthyroidism (an overactive thyroid). (14)
- Hodge overlooked others' work on kidney damage and fluoride, claiming that 100 ppm F was the threshold needed to damage kidneys and stating that people with poor or severe kidney function did not retain more fluoride. He made these claims, he said, from animal experiments he conducted with Frank Smith and by reviewing other animal studies. But how, says Connett (Page 103 of his book), did he miss McCay's animal study of 1957 and Siddiqui's 1955 study on humans in India which showed much lower levels of fluoride causing harm. In the past 10 years, studies have shown that the 1-10 ppm fluoride, depending on the duration of exposure, can cause kidney damage in animals. And it is now well known that poor kidney function increases fluoride retention.
- Dr Geoffrey E. Smith's book, 'The Secret War and The Fluoride Conspiracy', published in 1997, details his discovery that:

"The multi-national toiletry companies, in particular Procter and Gamble, Colgate-Palmolive and Unilever (through Gibbs), have spent millions of dollars to buy professional endorsement of their products by national dental associations such as the American Dental Association and the Australian Dental Association. Yet not one of these products has ever been tested to establish its potential toxicity in the manner now mandatory for medicinal products. All the 'university' tests and trials which manufacturers claim establish the efficacy of their products are at best worthless and at worst... fraudulent."

• Dr Waldbott, in his book, 'Fluoridation the Great Dilemma', states that, when fluoridated toothpaste came on to the market in 1955, the obvious dangers of an overdose from simultaneous absorption of fluoride from water and from toothpaste were recognised by the US PHS.

So, a warning note was added to the toothpaste packet stating that such toothpaste should not be used in areas where the water supply was fluoridated. A later decision stipulated that each tube should carry a warning note such as:

CAUTION: children under 6 yrs should not use CREST.

However, in 1958 the two regulations were abandoned, even though no new research was available to prove beyond doubt that the overdose hazard no longer existed. Subsequent studies by W.S. Weisz even raised serious question about the efficacy as well as the safety of toothpaste which contained sodium and stannous fluoride. (15)

This was ignored. Forty years later, however, in 1997, a similar warning was re-introduced on to fluoridated toothpaste packets. Although very few people read such small print, it shields the manufacturers from liability or litigation.

- The New Zealand Water Fluoridation Report, 2014, was a literature review, by Gluckman et al. It was commissioned by the Prime Minister's Chief Science Advisor. The published report was quickly seen to be, 'inept and misleading' by many, so much so, that an international panel of scientists and medical professionals published a critical analysis of Gluckman et al.'s review, on 1st Dec 2014. This team of professionals concluded that, the NZ Report failed to address serious questions of efficacy and safety for the estimated 70% of the NZ population in fluoride toxicity risk groups including;
- Bottle fed infants.
- Children under 8 years.
- People with impaired kidney function.
- People who drink a lot of fluoridated water.
- People who have a high fluoride intake from other sources such as diet and toothpaste.

The international panel of scientists and medical professionals looking at the NZ report of 2014, stated that on the question of risk, specifically those related to dental fluorosis, lead concentrations, IQ, osteosarcoma and kidney function the NZ report was an unacceptable failure.

They were amazed that the report was;

- Prepared to a political time-frame for a political purpose.
- That a decision was made not to conduct a robust scientific review because of wanting to publish in time to allay concerns being raised by councillors
- The panel for the NZ, WF, report 2014, was hand-picked
- The report was hastily prepared
- The review of adverse health effects, risks and toxicity was perfunctory and superficial.

They concluded that professional people, writing the NZ, 2014, Report, seem to be defending and promoting a practice, a policy, such as water fluoridation, and disregarding scientific evidence. They asked, why are people more interested in protecting a policy and their professional reputations rather than protecting public health?

• Geoff Pain in his paper 'Mandatory Oral Medication', 2017, states that The National Health Medicine Research Council of Australia's (NHMRC) report 2007, was full of manipulations and massages, and their 2017 'Review' failed to address all but 41 of the 2,145 scientific fluoride papers.

Merilyn Haines, agrees, stating in her critique of the report of 3rd August 2017:

"The NHMRC produced a very poor review in 2007 which received extensive criticism from independent scientists. To produce an even more biased and restrictive review in 2016 is even more egregious in lieu of the new science published (or updated since 2007).

Merilyn Haines, on behalf of Fluoride Action Network Australia Inc., is:

"Calling for a Royal Commission to investigate the manner in which the Australian government's NHMRC conducted its review (2017) on the safety, effectiveness and ethics of water fluoridation."

Haines charges are the following:

- a) "the 2O17 review was unprofessional, unscientific, biased, highly selective, deeply flawed and prevented meaningful scientific and public input;
- b) other NHMRC activities outside this review clearly demonstrate a bias of NHMRC in favour of both promoting and defending the practice of water fluoridation a long-standing government policy."

Here are her 23 examples:

- 1. Stacked the fluoride review committee with fluoridation lobbyists and advocates.
- 2. Broke a promise that it would include experts opposed to fluoridation.
- 3. Secretly commissioned a new study on dental effects (previously listed as 'out of scope'), when the 2015 Cochrane Collaboration review failed to deliver a convincing pro-fluoridation position.
- 4. Initially misled, the public, about its knowledge of a new thyroid study (Peckham et al., 2015) and then dismissed its findings, reaching a biased and false position that there is no evidence that fluoride interferes with thyroid function.
- 5. Falsely claimed that a low-quality IQ study (Ref: Broadbent et al, 2014) was a high-quality study.
- 6. Downplayed, dismissed or excluded most other IQ studies and evidence of fluoride's neurotoxicity.
- 7. On flimsy grounds, excluded a significant study linking fluoridation to ADHD (Ref: Malin and Till, 2015) then failed to even acknowledge its existence.
- 8. In 2007, the NHMRC used a promised study in a 'Letter to the Editor' to negate an unrefuted osteosarcoma study (Ref: Bassin, 2006) to claim there was no link to cancer. Then, in its 2017 review, the NHMRC failed to acknowledge that the promised study failed to refute the Bassin study while still continuing to maintain no evidence of a link between fluoridation and cancer.
- 9. Selected a publication cut-off date for studies (which would be considered) that would exclude a very significant review by the US NRC (2006) and the Bassin (2006) study that were not given due consideration in its 2007 review.
- 10. The NHMRC 2017 review based its claims of safety largely on its 2007 review, however, this was largely a copy of the 2000 York University review which, according to the York Review's Professor Sheldon, did NOT show fluoridation to be safe.
- 11. Obfuscated on chronic kidney disease even though it was aware that poor kidney function increases uptake of fluoride into the bones and poses risks over a lifetime. Such cumulative risks and the special plight of those with poor kidney function have never been investigated by NHMRC.
- 12. On another but related matter, the NHMRC endorsed doubling children's upper safety limits for fluoride ingestion (using data from the 1930s) almost certainly anticipating that the pre-existing limits would be exceeded by bottle-fed infants for whom formula is made up with fluoridated tap water.
- 13. Abandoned the normal evaluation method for studies of fluoride's effectiveness, almost certainly in an effort to disguise the fact that most of the studies reviewed were of low, or very low quality.
- 14. NHMRC 2017 rated tooth decay and dental fluorosis as more important end-points than other health incomes, including cancer and lowered IQ.
- 15. Commenced review with strict restrictions for acceptable evidence, then included:
 - a) unpublished work; b) a favourable narrative and c) an abstract.
- 16. Attempted to diminish known dental fluorosis harm by manipulating fluorosis ratings and raising threshold of concern.
- 17. Misled the public and decision-makers by claiming that fluoridation reduces tooth decay by 26-44% but without indicating just how small such reductions are in absolute terms often less than one tooth surface out of over 100 tooth surfaces in a child's mouth.

- 18. Dishonestly claimed fluoridation is safe by excluding important studies on spurious grounds, ignoring many others, and even cherry-picking weak studies that served their purpose (e.g. Broadbent on IQ).
- 19. Failed to exhibit an understanding of, or to appreciate, the basic principles of toxicology concentration is not the same as dose...
- 20. Perverted the principles of medical ethics by presenting a bogus ethical claim constructed by lobbyists rather than ethicists.
- 21. Gave an incomplete project, of dubious quality, a prestigious NHMRC award.
- 22. NHMRC fluoridation public consultations have been shams.
- 23. The NHMRC's extraordinary effort to maintain the dubious claims that fluoridation is safe, effective and ethical were becoming more and more desperate by the year. NHMRC 2007 was very bad, NHMRC 2017 verges on fraud.

Haines concluded that,

"The NHMRC has ignored its duty of care and betrayed the Australian public with its poor and perverted fluoride review. The NHMRC's fluoride review should be shredded. We request that citizens and scientists from inside Australia and around the world will call for a Royal Commission inquiry to investigate the NHMRC's behaviour in this matter. Hopefully they will call for a new review to be commissioned by the Federal government but carried out by an independent organization, with the panel comprised of unbiased scientists and professionals. In terms of reviewing government policies in general, it is requested that the Royal Commission investigate the wisdom of using a government department such as NHMRC to review the science of controversial programs, when those programs have been part of long-standing government policy. Under such circumstances it is urged that the Royal Commission recommend such reviews be organized by a non-governmental agency. This agency would be required to select panels completely independent of governmental influence. Ideally such panels would consist of experts drawn from both sides of the issue in question, and those who have not taken a position on the issue: a good model would be the panel selected by the US National Research Council for its review of fluoride's toxicity in 2006."

Flawed information

• Harold Hodge, a dentist and chief toxicologist for the US Army's Manhattan Project (the atomic bomb project), helped to mastermind the introduction of fluoride into the US water supplies. Hodge made many false claims about fluoride and its safety – six of these false claims have been detailed in the book, 'The Case Against Fluoride' by co-author Paul Connett, and has been mentioned above.

Hodge appears to have had no moral conscience for 'reasons of national security' as he injected uranium and plutonium into 'unsuspecting' hospital patients to assess their toxicity level in humans. (16)

He also befriended Dr Phyllis Mullenix and took an interest in her experimental work on fluoride and rats without disclosing to her that the harm done by fluoride was already 'covertly' well known.

• Experimental water fluoridation trials, attempting to monitor fluoride's toxicity on humans, were conducted in the US, and Canada between 1945 and 1955. According to Dr Hubert Arnold, a statistician from the University of California at Davis, these trials,

"Are especially rich in fallacies, improper design, invalid use of statistical methods, omissions of contrary data, and just plain muddle-headedness and hebetude." (17)

Dr Philip Sutton, who graduated with honours in Dental Science and who became Senior Research Fellow of the University of Melbourne, Australia, was asked to examine the trials. He found that they were of low quality and full of errors, and was so very critical that he authored two monographs on the subject – 'Fluoridation and Omissions in Experiment Trials' and, 'The Greatest Fraud: Fluoridation', published in 1996. (18)

Sutton pointed out that, depending on the number of teeth in a child's mouth, fairly large percentage reductions may reflect a difference of only one or two affected teeth. And in the US Newburgh / Kingston water fluoridation trial, no adults were examined.

It was also revealed in 1952, that the water in Newburgh town, which was used as the test town, was not similar to Kingston's (the control town) as stated at the beginning of these experiments. Newburgh's water

was much higher in calcium and magnesium compared to Kingston and this would have negated much of the harm done by fluoride.

City	Calcium	Magnesium	Total Hardness
Newburgh (test)	35.0 ppm	3.6 ppm	102.0 ppm
Kingston (control)	6.6 ppm	0.9 ppm	20.0 ppm
(19)			

Dr John Colquhoun highlighted the fact that the pro-fluoride studies past and present were flawed and that, from the outset, distinguished and reputable scientists opposed the use of fluoride in spite of considerable intimidation and pressure.

In 1970, Dr Rudolph Ziegelbecker, an Austrian scientist and brilliant researcher, showed mathematically how the claims of dental decay prevention by fluoridation was impossible, for it was offset by dental fluorosis. He found two things:

- 1) less dental decay due to fluoridation could not be proven
- 2) there was more dental fluorosis in countries which fluoridated their communities.

Professor Erich Naumann, Director of the German Federal Health Office, said of Zeigelbecker,

"Your results have been accepted everywhere in Germany with the greatest interest and have increased the grave doubts against water fluoridation..... It is regrettable that the existing data on water fluoridation had not been examined earlier using mathematical-statistical methods. Otherwise the myth of drinking water fluoridation would have already dissolved into air long ago".

Others who have unmasked and debunked justification of fluoridation have been Dr Waldbott, Dr Foulkes, Dr Mark Diesendorf, Dr Exner, De Stefano 1954, and Mann 1986 – on the basis of neglecting variables, group selection, and not completing the studies etc. (20)

• The UK, in the mid-1950s, selected 4 towns for a five-year experiment to determine whether water fluoridation reduced dental caries in children and after five years claimed that it was a success but this defied the truth. The four towns, selected for fluoridation were: Andover (1955-58), a part of Anglesey (1955-92), Kilmarnock (1956-62) and Watford (1956-89). The control towns which were un-fluoridated were Sutton, Ayr, Winchester and the remaining parts of Anglesey.

The local councils of the four fluoridated towns allowed this human experiment to take place, while the citizens of the towns remained uninformed. No-one thought to explore the possibility of any short-term or long-term harm to health or to the environment.

The integrity and reliability of these trials was soon questioned and in 1957, Dr Geoffrey Dobbs wrote in the 'New Scientist', that these four trials,

"....are now officially described as demonstration of the benefit of fluoridation, not experiments, so the results are a foregone conclusion", and their purpose was quite openly 'promotional'".

After five years, the government's official report claimed, and still claims, that the 'experiment' was a success, with less dental decay in the fluoridated towns. (There was no account taken of 'the slow eruption of teeth' in fluoridated areas.) Author's comment in parentheses.

A review of these trials, after 11 years of fluoridation, by the UK's own Department of Health, showed that children in fluoridated towns had approximately one fewer DMFT Decayed, Missing and Filled teeth), that is, essentially one fewer cavity, than children of the same age group in fluoridated towns. And the rate of increase in caries with age was the same in both populations. (21)

Dr Yiamouyiannis, in the 1980s, reviewed the available data on these four trials and discovered that this experiment carried out by the British Ministry of Health did indeed fail to show a significant reduction in dental decay in the fluoridated towns when children's teeth were assessed in 1967/9. Graphs are provided in his book. (22)

The story of Andover's experience during the 1950s trial has been documented in a book called, 'Something in the Water', written by David J. Borrett, and published in 2002. The book documents the battle that erupted within the council over this secretive human experiment.

It was, and has been, difficult for the Health Authority to persuade other towns to accept fluoridation because of public awareness and opposition. There is still only 10% of England fluoridated, with no towns in Scotland or Wales.

• New Zealand's first water fluoridation trial, 1954 -1970, comparing fluoridated Hastings with non-fluoridated Napier, was hailed a spectacular success and initiated the roll-out of fluoridation across New Zealand. However, the reliability of the trial has been seriously questioned.

After an erratic beginning in 1949 and 1950, Hastings, finally began fluoridating the communities water supply in1954 with the control town being Napier. These two towns were chosen as they used the same ground water (un-fluoridated at 0.15ppm F). Within two years it was reported that Napier had 58% less tooth decay compared to fluoridated Hastings. This was unusual. Was it because Napier's ground water surfaced through rock formations causing their water to be, high in the minerals required for good strong teeth development, while the fluoride in Hastings water hindered the activity of these minerals even if they were present?

The authorities certainly had not expected or wanted to find this result and so, in 1957, Napier was abandoned as a control town but the trial still went forward with just the town of Hastings. It was to be a 'before and after experiment', although the 'before' examination results of the children's teeth were soon to be destroyed. After 10 years, in 1964, the trial was proclaimed a great success because of a large reduction in tooth decay (over 60%), even though, two years earlier the director of NZ Government dentistry complained, that they could not find the evidence to convincingly demonstrate a relationship between fluoridation and lower tooth decay. In the two years what had changed?

Dr John Colquhoun, former Chief Dental Officer for Auckland, was allowed access to the official files of the trial, as part of his doctoral thesis, 'The History of Fluoridation', that he pursued after his retirement. (23) These official files were found to be incomplete, especially regarding Napier, while the pre-fluoridation dental examinations of Hastings children were not only not published but they had been destroyed in one of the department's 'periodical purges of records'. In spite of this set-back, there were enough records for Colquhoun to discover that the massive reduction in tooth decay claimed for Hastings was a complete artefact, a deception, because;

- 1) After about two years the control city of Napier was dropped for bogus reasons.
- 2)The claimed reduction in tooth decay was based on comparing tooth decay in Hastings at the beginning and the end of the trial (and not a comparison between tooth decay in Hastings and Napier).
- 3) The method of diagnosing tooth decay was changed during the trial in the following way.
- Before the experiment they had filled (and classified as 'decayed') teeth with any small catch on the surface, before it has penetrated the outer enamel layer.
- After the experiment began, they filled (and classified as 'decayed') only teeth with cavities, which penetrated the outer enamel layer.

This change in the method of diagnosing tooth decay caused a sudden drop in the numbers of 'decayed and filled' teeth that were recorded and 'this change in method of diagnosis' was not reported in any of the published accounts of the experiment.

It is this activity, changing the method of diagnosing tooth decay, that can be called, 'scientific fraud', says Professor Paul Connett. (24)

• As mentioned in Chapter 1, the UK's, Medicine and Health Regulatory body (MHRA) avoids the sensitive issue of toxicity because by adding fluoride to toothpaste it becomes a medicine. Likewise, adding fluoride to a water supply is a medical practice as it is there to change our bodies.

Article 1 of Directive 2001/83/EC, as amended, defines a 'medical product' as:

"Any substance or combination of substances presented as having properties for treating or preventing disease in human beings; [the first/presentation]. Any substance or combination of substances which may be used in, or administered to, human beings, either with a view to restoring, correcting or modifying physiological function by exerting a pharmacological, immunological or metabolic action, or making a medical diagnosis [the second/functional limb]."

And confirmed in UK Regulation 1631/2007, the only compounds of fluoride permitted in food (and water is regarded as a food) are sodium fluoride (milk fluoridation) and potassium fluoride (salt fluoridation). Hydrofluorosilicic acid (H2SiF6 and Na2SiF6) or Hydrofluoric acid (HF) is not permitted.

In 2014, Doug Cross said the following,

"The practice (WF) is actually in violation of European law, since fluoridated water is a 'medicinal water' under the terms of the EC Drinking Water Directive. As such, its administration to the public in the absence of a medicinal product licence is an offence! As Dr David Shaw, of the University of Basel in his paper, 'Weeping and Wailing and Gnashing of Teeth: The Legal Fiction of Water Fluoridation', published in Medical Law International 2012, concluded that: 'The status quo rests on the illegal fiction that fluoridated water does not constitute a medication'." (25)

Sophistry

Sophistry is the use of clever but false arguments, for the intention of deceiving.

• Water fluoridation is currently permitted by the Water Act 2003, but this appears to contradict legislation and regulations governing food and healthcare, both in the UK and in the EU, as Dr Shaw fully explains in his article of 2012, "The Weeping and Wailing and Gnashing of Teeth", where he maintains that water fluoridation seeks to improve health by the addition of a chemical. It is, therefore, a medicine and any accurate and honest interpretation of the law would result in this conclusion.

In the UK, it is the Medicines and Healthcare products Regulatory Agency (MHRA), that regulates medicines and ensures medicines meet applicable standards of safety, quality and efficacy (effectiveness). The MHRA refuses to acknowledge that water fluoridation is a medicine even though fluoridation aims to prevent dental disease by adding a supplement to the water supply. The MHRA claims that as water is a normal part of the diet, it is not its concern, as foods, beverages and dietary supplements such as vitamins and minerals are subject to food regulations rather than medicine regulations. The Food Standards Agency (FSA) says that water fluoridation (WF) is not its concern because water is only part of the normal diet once it comes out of our taps and the fluoride is added to the water at the Water Treatment Work. In this confusing way, WF escapes any regulation.

- The official figures promoted by the pro-fluoride 'establishment', can be deceiving. John MacArthur explains in his book, 'Fluoride and Pregnancy Do Not Mix', that a half tooth difference in decay rates between fluoridated areas, with one tooth decayed, and non-fluoridated areas, with one and a half teeth decayed, has been promoted as being a 50.6% difference. In real terms, out of 24 teeth, that half tooth difference in decay rate is an insignificant 2% difference. If included in the calculations, are the 5 surfaces for each tooth the difference is even less. (26)
- Doug Cross has taught statistics to college students and in a press release sent to the BBC on the 25th March 2014, claimed that,

"the Public Health England's, 'Health Monitoring Report on Water Fluoridation, 2014', was unsound and deliberately misleading."

He is critical of the 2014 report because he said,

"There are no authors named and 91% of all the data used comes from samples that are too small, having been taken mostly from the National Survey of Oral Health 2012, which I have recently been engaged in examining. The data in this 2012 Oral Survey are, in fact, of extremely variable quality, not least because of the small sample sizes used to calculate decay rates in many smaller local authority areas. The survey warns that samples of fewer than 230 children are too small for comparison, and larger ones may still not provide sufficiently reliable data on which to found public health interventions. Nonetheless, statistical analyses are then carried out to calculate means and Confidence Intervals (measures of reliability) which are derived from samples that were always too small!"

"In many such cases, the range of the reliable limit of the means, as indicated by the disclosed 95% Confidence Interval, actually overlap. Users of the Survey are specifically warned not to attribute differences between any location for which these limits overlap. Yet this is regularly done by the Public Health sector in order to 'justify' new fluoridation initiatives, both for drinking water and for children's school milk, and it is precisely this statistical impropriety that runs all the way through this (2014 Health Monitoring on WF) Report..."

Doug Cross also said of the report that,

"The overall 'benefit' of fluoridation, only appears to be one tenth of one tooth per child, out of one child in ten. The report makes much of PHE's finding that very young children in fluoridated areas are less likely to be admitted for extraction under general anaesthetic. By using percentages it gives the impression that there are many children each year having to have teeth extracted in hospital. However, the smaller Local Authorities may only have 1000 children in the young age group 1- 4 year olds so they may only have 3 or 4 such admissions each year and out of 4 children a 50% increase represents just 2 children." (27)

Reporting facts in percentages can give an incorrect impression. A very simple example is when a bus has two people on board and when one of them gets off it is reported by the driver that he has lost 50% of his passengers.

Professor Stephen Peckham also noted that the PHE data of 2014 relied only on hospital episode data (HES) that is very unreliable as an accurate picture of dental extraction for decay. It does not include data for all extractions under General Anaesthesia (GA).

Richard Gillard (a physics graduate) commented,

"I find it hard to believe that there can be ANY significant incidents of children of this age (1- 4 years) needing emergency dental work. That is, unless they have had sugar soaked dummies in their mouths for the best part of every day. If this IS the case, then surely the best way to deal with the problem is to educate mothers not to indulge in such practices".

Doug Cross also pointed out the following,

"Section 5.2.4 of the (2014) report, Table 4, compares the effects of fluoridation on the teeth of children in fluoridated Newcastle-on-Tyne, with those of un-fluoridated Manchester. The levels in fluorosis are expressed in percentages and appear to be low, but they clearly reveal that, while only 3% of Manchester children had 'fluorosis of aesthetic concern', 16% of those in Newcastle on Tyne were so affected. In simple layman's terms, then, the introduction of water fluoridation led to a rise of 433% in objectionable dental disfigurement..."

"Even in numerical terms, that's many thousands of children with embarrassingly discoloured teeth who would have otherwise have had perfectly normal teeth had the water not been fluoridated. Against this, the reduction in one tenth of a tooth affected by dental decay cannot be claimed to be of greater benefit than a 433% increase chance of having disfigured teeth through the proposed remedial intervention! When presenting numerical data, and using percentages, one always needs to ask why this form of presentation is more appropriate than simple numerical data – all too often it allows a disproportionately large impression of what turns out to be surprisingly small numerical differences!"

"The same deliberate exaggeration is evident in the way in which the apparent reduction of the proportion of children with any tooth decay is presented; once again the data are summarised as misleading percentages. There appear to be about 3% fewer children with decayed teeth in fluoridated areas – but the upper 95% Confidence Limit for children in non-fluoridated areas is actually identical to those in fluoridated areas. If there is a real significant difference, then it is so marginal as to be negligible in practical terms, especially given the extreme caution that must be used in interpreting these data under such uncertain and statistically 'noisy' conditions, as expressed in Section 6.3 – Limitations..."

- In August 2015, Verner Wheelock wrote a critique on PHE's, Oral Health Toolkit of 2014. He stated, "It is very clear that much highly relevant but inconvenient information has been totally ignored... the PHE
- statement that there is no evidence of harm is complacent in the extreme."
- 'Oral Health Toolkits' advising local authorities have been circulated since 2007. The (3rd Edition) was sent out in 2017 from the dental department of the PHE. It was stated in the document that its aim was, to "increase fluoride availability… by a range of methods… higher concentrations provided better caries prevention."

Indeed, it promoted fluoride in every form - fluoridated milk, high-strength fluoridated toothpaste, fluoridated varnish, fluoride rinses, water fluoridation and even fluoride tablets and drops for those more vulnerable to tooth decay. Their only concern was for children under three years of age who may swallow the toothpaste and get an overdose that may lead to mild dental fluorosis (but it was thought that this was not really a concern for their 'health team'). There was no mention of the fact that dental fluorosis in permanent teeth can be caused if children up to the age of eight years ingest fluoride. There was no understanding in this document that children in fluoridated areas were slower to develop teeth into the mouth, meaning that there were fewer teeth to survey for dental cavities at age five years.

Public Health England's dental department also mention in their reports that fluoride is 'good for 'general health' without clarifying the reason for that statement so that fluoride suddenly becomes equated to a mineral or vitamin in the minds of their readers. This could be called 'spin' as well as sophistry.

• The next document sent out by the same dental team was the next four yearly, 'Water Fluoridation – Health Monitoring Report', 2018. This new document only updated the previous 2014 report but this time added that it was.

"limited in its ability to find meaningful data and could find no time or resources to assess the 'total daily fluoride' intake of individuals"

It is surprising that the dental department of the PHE, with all its resources and manpower, could not test for 'the total fluoride intake of individuals', when Dr Peter Mansfield managed to do this in 1991, in Lincolnshire. Dr Mansfield managed the UK's first and maybe only, laboratory to test individual fluoride levels and according to the results of the first 100 individuals tested, one in four people in the UK is in danger of overconsuming fluoride. Mansfield concluded,

"Far from being deficient in fluoride, the British public is in danger of consuming too much."

The 2018, WF Health Monitoring Report, did however, note that hip fractures were fewer in areas with very low natural fluoride levels but this was dismissed and the report found no adverse health effects for people living in fluoridated areas compared to un-fluoridated areas.

- In 2018, a Freedom of Information request was sent, asked PHE to provide evidence that fluoride was safe to consume, as they claimed, but Public Health England was unable to produce such evidence. Likewise, in 2014, when asked, Health Canada was unable to provide such evidence, although both Health organisations fully support the practice of water fluoridation and fluoridated products. (See Appendix 9 for the replies from FOI).
- The UK Government's Green Paper on Health Care called, 'Advancing our Health: Prevention in the 2020s', published in July 2019,_continued to refer to water fluoridation (WF) as 'safe and effective', referencing only the PHE reports of 2014 and 2018 to prove their case. This Green Paper subsequently formed the basis of the White Paper on Health and Social Care, published in February 2021, and became a 'Bill,' which proceeded through the Parliamentary process in an attempt to change law. In this Bill, originally Clause 128 and 129, called for central government to take the responsibility for WF schemes, not local government. In 2022, this became law and so paved the way for mandatory fluoridation to be introduced throughout England and Wales. For Prof Paul Connett's comments on the Bill, see Appendix 8.
- Tony Watson wrote the following letter, printed in The Northern Echo on the 6th April, 2020. The letter alerts us to PHE's underlying problem regarding the fluoride issue. He wrote,

"Public Health England's belief that water fluoridation reduces tooth decay is built on quicksand'

Doctors Lowry and Robson (HAS, March 20, 2020) assert that oral health in fluoridated Newcastle is: "Much better than in the neighbouring non-fluoridated areas."

What statistics are they reading? The Dental Health Surveys (DHS) are plagued by varying participation. If you believed them, you would have recommended more fluoride for Newcastle's water after the 2007-08 survey, since it showed that 53% of five-year-olds had decayed teeth. But the participation in the survey was only 6%

In 2014 -15, participation in the survey across the North-East was again low at an average of 12%, causing an apparent 'spike' in tooth decay in Sunderland and Darlington. This 'decay' then fell off by 29% and 25% respectively over the next two years, probably due to better participation (an average of 52%).

A study of extraction rates due to caries in our hospitals may be more accurate, since consent is not sought as in a Dental Health Survey (DHS). People come to hospital because they need to.

Using Government data, comparing some fairly deprived locations of Sunderland, South Tyneside and Middlesborough with similarly-deprived fluoridated Newcastle, we see that in age group 0-10 years, average hospital tooth extractions for caries in Newcastle, over a five-year period from 2014 onwards, was (respectively) quadruple, triple and double that of the three un-fluoridated towns. This pattern repeats in

fluoridated North Tyneside where the extractions are triple, double and 1.4 times that of the un-fluoridated towns.

The only possible explanation is that artificial fluoride weakens teeth in Newcastle and North Tyneside.

Public Health England's belief that water fluoridation reduces tooth decay is built on quicksand. The contradiction between its expectations and the reality of extra-hospital extractions in North-East fluoridated towns threatens to undermine and destroy the fluoridation programme, and not before time."

 Barbara Tritz, RDH, BS, MSB, Hygienist at Green City Dentals, Edmunds, Washington in the USA, wrote on 24th February 2023, in her blog, 'Queen of Dental Hygiene', about her experiences and observations regarding the fluoride issue,

"I wanted to believe in the incredibleness of fluoride. I trusted the industry leaders when they said how awesome fluoride was for preventing tooth decay. "They" never ever mentioned its very sinister and dark side effects.

From the beginning of dental hygiene school, I learned all about how "wonderful" fluoride was for dental health. How it was the magic bullet to combat decay. That it was the be—all—end—all, and my best, most incredible tooth-saving tool.

For years and years, I relied on it exclusively. It was the only tool in my unfortunately very empty dental hygiene toolbox for addressing dental decay. I never did my own research. I trusted when I should have verified.

Instead, I did lazy hygiene for years (and years). Trusting that fluoride was "going to save the day". See, I believed that what I learned in school was correct and that what I was reading in my hygiene journals was the complete story. The fluoride articles all said the same thing over and over: fluoride was THE tool I needed to combat tooth decay. Fluoride toothpaste and water for everyone, but if there was new decay then prescription strength fluoride toothpaste, as well as fluoride varnish in the office, then sealants and fillings with fluoride within the restorative materials as well as fluoride trays to soak teeth in fluoride gel. The answer was always, 'more fluoride'.

So much fluoride. Problem was, there was so much fluoride out there, yet dental decay was and still is a major health problem. It is at epidemic levels. Everyone had new cavities, every visit. And shame on me, I even did "fluoride shaming" to my patients because I believed in fluoride's magic. I was the authority on fluoride (yet I had never even read the research).

I finally had to question my methods – What was I missing? What could I do better? Because what I was doing was not working. Decay was still occurring, and more fluoride was not the answer. It was a short conversation with myself because fluoride was all I knew to use to address this problem. I did know that the best predictor of future decay is current decay. So, I read more journal articles, scouring for new information and better answers. Thankfully and very luckily, I found my way to biological dental hygiene and my dental decay world turned upside down. Biological dental hygiene looks for the root causes of dental decay. There are better tools and techniques. We can conquer cavities if we look for "why tooth decay is occurring". We need to get to the real root causes of why the hardest substance in the body is literally melting away.

I now have better answers to fight cavities. We must dive deeper to defeat decay- it is a multifactorial disease. It is not a lack of fluoride. Relying on fluoride as the only tool in the dental toolbox ignores the many other components of solving tooth decay problems. And, finally, I know so much more about fluoride and its actions. Fluoride does not live up to all its promises.

It has many sinister side effects to which the dental industrial complex turns a blind eye. They still think fluoride is "good" and necessary. Fluoride is their monotherapy. In fairness to them, knowledge changes."

Cost of WF Schemes in the UK

In the push to fluoridate the whole of the UK, it is regularly stated, by those supporting water fluoridation and government officials, that WF is a 'cheap' way of reducing dental decay in children, especially for those who live in deprived areas. This is false information because health officials have not taken into account the following costs that arise from water fluoridation schemes:-

a) adding veneers to teeth, to hide the effect of dental fluorosis that occurs because of consuming fluoridated water. These veneers may need replacing every 15 years at considerable cost.

In 2021/2, R.I. Bland and G.M. Bland of Wrea Green, UK, asked that the Government to fund training programmes for dentists so that they may recognise the expected increase in dental fluorosis, and to pay for the cosmetic repair work to restore fluorotic teeth, if WF becomes Mandatory. (Ref: Bland's article 'Fee for fluorosis' in British Dental Journal, 12th Nov. 2021).

Dianne Standen's daughter, from fluoridated Cumbria, was afflicted with dental fluorosis as a child. She said,

"The damage was so significant in her teens that, she accepted NHS treatment to fit veneers. This now means she will have to have veneers replaced periodically."

- b) the extra NHS costs due to ill health caused by artificial fluoride.
- c) the extra expense due to fluoride's corrosive effect on pipes, equipment and boilers.
- **d**) the full cost of installation and running costs of water fluoridation schemes. Lord Reay's speech in the House of Lords debate, 2022, explains,

"Last year, we heard the Secretary of State for Health and Social Care announce that £10 million will be charged to water bill-payers for the rollout of water fluoridation. However, I suggest that it will cost taxpayers considerably more. Greater Manchester has around 22 treatment plants, which would need to be refitted for £1 million to £2 million each. Using a back-of-the-envelope calculation, to cover parts of the UK not already fluoridated will conservatively cost in excess of £300 million, excluding chemicals or running expenses. The policy paper fails to reveal how much the proposals will actually cost"

"Will these unknown extra costs be met by cuts to NHS dental departments or other parts of the health budget?"

And Professor Stephen Peckham wrote the following in 2012;

"Total costs for fluoridation in England (5.6 million people) are £2.1 million annually plus capital costs. In Scotland a universal Childsmile scheme (teaching children in schools how to care for and clean their teeth) for a population of 5.5 million is £1.8 million per annum with no capital cost. The evidence in Scotland has shown a £6 million saving in hospital costs."

Even if fluoridating the water supply had proved successful, and made dentists redundant, it would not be a sensible option to pursue as only a very tiny fraction of the water supplied to us by Water Companies, is used to clean teeth, to drink or to use in cooking. Most of the water supplied to households is used for cleaning ourselves, our clothes, our houses, our gardens and our cars. The greatest amount of water, however, goes to industry, usually for manufacturing purposes. It would seem, therefore, an unnecessary financial burden on tax payers and a burden to water companies to fluoridate every drop of water. The added fluoride ends up in the environment where it has been shown to cause damage.

The polls taken so far show, that there are far more people who want un-fluoridated water compared to those who want fluoridated water. It could be expected, therefore, that if an area becomes fluoridated there will be a big increase in the use of Reverse Osmosis filters. This is a challenge for two reasons;

- **1**)These R/O filters use up a lot of water as 50% of the water that passes through them is discarded. This could be of concern with dwindling water supplies and the cost of water.
- 2) Many people on low incomes would not be able to have the choice of filters that were able to remove fluoride.

It is of interest to note, as mentioned before, that in 1951, in the USA, the waste product, hydrofluorosilicic acid, produced from the manufacturing of aluminium, sold at the rate of 50 cents per ton. When they began to sell it to the water companies to use for water fluoridation, they made a profit of ten million dollars during the first year alone. By 1987 fluoride was being sold for \$256 per ton in the USA, and there was a net profit of \$1,000,000,000 (a billion dollars). (28)

Chapter 14 References

- (1) (Ref: 'Fluoride, Teeth and the Atomic Bomb' by Chris Bryson & Joel Griffith 1998 Project Series).and (6 mins/ for reasons of national security at https://www.youtube.com/watch?time_continue=42&v=TKgz0GKN7QA).
- (2) (Ref: Chapter 15, Christopher Bryson's book, 'the Fluoride Deception').
- (3) (Miami Water Heater Co. to Dr Marvin Smith, Miami, 2/22/57).
- (4) (Ref: Letter by H. A. Morton, Coulter Copper and Brass Co., Ltd to Mrs. Ann Burton, Toronto, 114/62. The damage was attributed to fluoridated water, not to excessive water pressure as subsequently claimed by the company).

- (5) (Ref: www.irishhealth.com/article?id=7322).
- (6) (Ref: Published and unpublished data from 2003-2004 Australian Child Dental Health Surveys (unpublished data obtained by Fol application).
- (7) (Ref: https://theintercept.com/2021/12/22/epa-whistleblowers-carcinogen-paint-solvent/. 'The Fluoridation Record' Dec 27th 2021 newsletter).
- (8) (Source: fluoridealert.org; Analysis of 2013-2020 data).
- (9) (Ref: Tohru Murakami, DDS, PhD Editor, 'Japanese Journal of Fluoride Research' 1–5–16 Kamikoide-machi Maebashi-shi Gunmaken, 371 0037, Japan) and www.fluoridealert.org).
- (10) (Source: Chris Bryson, The Fluoride Deception and John MacArthur, Fluoride and Pregnancy Do Not Mix, page 18).
- (11) (Ref: www.fluoridealert.org).
- (12) (Ref: 'The Fluoride Wars' by Freeze and Lehr pages 74-5; and 'The Case Against Fluoride' by Paul Connett et al Page 104-5).
- (13) (Source: Hodge HC. (1956). Fluoride metabolism: Its significance in water fluoridation. *Journal of the American Dental Association* 52:307-314.) and (FAN's website: www.fluoridealert.org).
- (14) (Ref: Paul Connett's book, 'The Case Against Fluoride', Page 103).
- (15) (Ref: Weisz W.S: 'A comparison of the Relative Effects of Sodium and Stannous Fluoride When Applied Topically'). J. Dent. Child. 29:22-35, 1962).
- (16) (Ref: 'The Plutonium Files' by Eileen Welsome).
- (17) (Ref: Letter from Hubert A. Arnold. PhD, to Dr Ernest Newbrun, Medical Sciences Bldg. 653, San Francisco, California, May 28, 1980, http://www.fluoridealert.org/uc-davis.htm).
- (18) (Ref: 'The Case Against Fluoride', by Paul Connett, Page 52).
- (19) (Source: 1952 U.S. Geological Survey and Page 220, of 'Fluoridation and Truth Decay' by Caldwell and Zanfagua, M.D.)
- (20) (Ref: 'Why I Changed My Mind About Water Fluoridation' Pub. in: 'Perspectives in Biology and Medicine' Vol. 41, Page 29044. 1997).
- (21) (Ref: UK Dept of Health, Report No. 122, HMSO, London (1969).
- (22) (Ref: 'Fluoride the Aging Factor' by John Yiamouyiannis, Pages 123/4).
- (23) (Colquhoun 1987).
- (24) (Source; FAN www.fluoridealert.org).
- (25) (Ref: Doug Cross press release sent to the BBC on the 25th March 2014).
- (26) (Source: FAN's website and Paul Connett's sound explanation).
- (27) (Ref: Doug Cross, 2014).
- (28) (Source, page 157 of Moolenburg's book, Fluoride the Freedom Fight).