

SUBMISSION BY ROSS FORBES

Why the Health (Fluoridation of Drinking Water) Amendment Bill must be withdrawn

What is fluoride and fluoridation?

- Fluoride is a toxic substance naturally found in small concentrations in groundwater, soil and the oceans. It is a toxin, like arsenic and lead, which can interfere with the life and structure of living things.
- Fluoridation is the addition of fluoride to a community water supply ostensibly to harden teeth. It is undeniably mass medication.
- The form of fluoride added to water is usually either hydrofluorosilic acid or sodium fluoride which are impure, untested and contaminated industrial by-products - but all forms of fluoride are toxic.
- There is no clinical management or health monitoring of individuals subjected to fluoridation. This is against all the principles of using prescribed doses of medicines to treat people's health problems.

What is fluoridation supposed to do?

- Fluoride swallowed with water is supposed to improve dental health by delivering fluoride through blood to teeth to make enamel hard enough to stop decay. We now know that it doesn't work this way. It works by being applied to the tooth surface in high concentrations i.e. either by fluoride tooth paste with a tooth brush or as a fluoride varnish. The US Centers for Disease Control says that any benefit from fluoride comes from putting fluoride on to the surface of teeth and not from swallowing it.
- The Ministry of Health, district health boards and many dentists talk of large percentage improvements in dental health with fluoridation but modern research shows there is little, if any. Analysis of New Zealand Health data of 31,720 Auckland five year olds and 12-13 year olds showed no significant difference between those living in artificially fluoridated and non-fluoridated areas.

Does fluoridation help people in need who can't afford other dental health care?

- Not really. The most exhaustive survey of fluoridation literature, *The York Review*, says that there is little evidence to show that water fluoridation has reduced social inequalities in dental health. The claim that it will especially help the socially deprived is wishful thinking. The data of 31,720 Auckland school pupils referred to above confirms this.

Is fluoridation value for money?

- Fluoridation is hugely wasteful as most fluoridated water goes straight down drains. Only a fraction of 1% is swallowed by people and from a value for ratepayers viewpoint it is concerning that councils will be forced to implement it. On a simple cost/benefit basis fluoridation must be abandoned but if, this Bill is enacted in its present form and a local body is forced to fluoridate its community water supplies all capital and operating costs must reside with the Ministry of Health or District Health Boards. Ratepayers, many thousands of whom nation-wide strongly oppose fluoridation, should not be made to pay for a medical treatment they either do not want or do not need.

What else can fluoride do?

- Fluoride accumulates in bones over time to the point of brittleness with increased risk of bone fracture in old age.

- There is also firm evidence that it affects the pineal gland. This advances the onset of menstruation in girls and increases breast cancer risk. It can cause a rare bone cancer (particularly in boys), reduce intelligence levels in children, cause premature births with associated complications and higher death rates, affect the ways that kidneys and the thyroid work and other complications..
- Fluoridation is not worth these well documented health risks.

Are there any other problems with fluoridation?

- Although the amount of fluoride in drinking water can nearly always be controlled, the actual dose received by each member of the public is uncontrolled. It is therefore unsafe, because it depends on how much water or other fluoride-containing foods or drinks each person takes in.
- The outcome of fluoridation at any concentration is uncontrolled dosing with a toxin which accumulates in the bodies of humans and animals as well as in soil and plants.
- Fluoridated drinking water contains up to 200 times more fluoride than breast milk. As a result, babies drinking formula made with fluoridated tap water are exposed to much higher levels of fluoride than a breast-fed infant. Taking into account its size a baby drinking fluoridated formula receives the highest dosage of fluoride among all age groups in the population whereas a breast-fed infant receives the lowest.
- Fluoride is not essential for nourishment. No disease has ever been linked to a fluoride deficiency - not even tooth decay.
- Humans can have perfectly good teeth without fluoride so why do the health agencies and councils waste taxes and rates on the practice of adding it to a community water supply?

Is fluoridation fair to everyone?

- Definitely not. This is where the *Bill* fails to address key ethical issues around fluoridation.
- A district health board should not be able to determine that a large number of a community's citizens are forced against their will to take a health-affecting toxin in their drinking water. If a member of the Health Select Committee is sick he or she doesn't ask strangers to vote on their medication so why should fluoridation of a community water supply be determined by a majority vote of a district health board?
- Those who believe in fluoride treatment for teeth can have it clinically and carefully prescribed by a doctor so to achieve the greatest good for the greatest number fluoridation should be abandoned as a public policy.

Is fluoridation used world-wide?

- No. Most European countries don't fluoridate and neither does Japan. World Health Organization data shows that it doesn't matter whether a community is fluoridated or not there is improvement in dental health at about the same rate – if not faster in some non-fluoridated communities.

Why do the Ministry of Health, health boards and many dentists strongly promote fluoridation?

- Given rapidly advancing knowledge on the overall effect of fluoride in the body, not just teeth, this is very hard to understand as in spite of beliefs about the benefits of fluoride from the 1940s and 1950s

fluoride has proven to have limited, if any, benefit to teeth when swallowed. Those who have built their careers and professional status on fluoridation cannot credibly assess the evidence against it.

- Dentists are taught out-of-date practices about fluoride, they believe this, and support fluoridation wrongly believing it will help people. If they speak against it they are often condemned by their peers. DHBs are directed by the Ministry of Health to promote fluoridation whether they agree with it or not.
- Although the US Centers for Disease Control says that any benefit comes from putting fluoride on to the surface of teeth and not from swallowing it even this is not necessary with good diet and tooth brushing, especially as any fluoride is a risk to the health of several parts of the body. Proven alternatives to fluoridation, such as the Scottish Childsmile programme, are clearly superior and cheaper options.
- Lack of fluoride does not cause tooth decay - poor diet and sugary drinks do and all the fluoride in the world won't help. Fluoride cannot fix a poor diet and the sad effects of sugar on dental health but it can and does damage the surface of children's teeth.

Where can I find more information about fluoridation?

Three excellent websites with extensive and reliable information are:

www.fluoridealert.org

www.slweb.org

www.fluoridefree.org.nz

Those members of the select committee who might responsibly seek extensive reference to sound peer reviewed science on the bodily effects of fluoride should visit the bibliography of scientific literature on fluoride at www.slweb.org where is listed (with sub-headings) topics such as the effect of fluoride on the brain, cancer, thyroid, kidneys, gastrointestinal disorders, reproduction system, birth defects, immune system, caries, fluorosis and alternatives to fluoride.

THE SELECT COMMITTEE MUST ACCEPT THAT THE EFFECT OF FLUORIDATION IS NOT SOLELY RELATED TO DENTAL HEALTH AND THAT THERE ARE SUBSETS OF A COMMUNITY POPULATION AT RISK OF HEALTH CONDITIONS BEING NEGATIVELY AFFECTED.

By far the best single book reference is *The Case Against Fluoride* by Paul Connett, PhD et al. published by Chelsea Green Publishing in 2010. The findings of this book have never been credibly challenged.

What do experts say about fluoridation?

- **Dr Hardy Limeback**, then Associate Professor and Head, Preventive Dentistry, University of Toronto, and panel member for the National Research Council report on 'Fluoride in Drinking Water' (NRC, 2006)

“. . . we now know that fluoride doesn't need to be swallowed, that the public has to be informed. They should be told that it doesn't work by swallowing it.”

- **Dr Robert Isaacson**, panel member, NRC 2006.

“As far as I can see, there's no doubt that the intake of fluoridated water is going to interrupt basic functions of nerve cells in the brain, and this is certainly not going to be [for] the benefit of anybody.”

- **Dr Arvid Carlsson**, Nobel Laureate in Medicine (2000) and official advisor to the Swedish Government.

"Fluoridation is against all modern principles of pharmacology. It's obsolete. I don't think anybody, not a single dentist would bring up this question in Sweden anymore."

- **Dr John Colquhoun**, former dental health officer for Auckland and former editor of the international journal *Fluoride*, who on the basis of firm evidence became one of the most articulate critics of fluoridation.

"It is my best judgement, reached with a high degree of scientific certainty, that fluoridation is invalid in theory and ineffective in practice as a preventive of dental caries. It is dangerous to the health of consumers."

Might the current biases of Health Select Committee members be challenged?

A major challenge for Associate Minister of Health, the Hon Peter Dunne, in promoting the *Bill* and the majority of members of the Health Select Committee in hearing evidence is to set aside their current belief that fluoridation of community supplies is an appropriate treatment of dental ill health.

The ideological bias of the Hon Peter Dunne in promoting the *Bill* is well documented. For example, he slammed the Far North decision to stop fluoridation in Kaitaia and Kaikohe as "nothing short of disgraceful and a total failure of civic leadership" and repeated the mantra that water fluoridation protects the dental health of children and those most disadvantaged.

He also described those who contributed peer reviewed medical evidence to the public debate that fluoridation might negatively affect other bodily functions, not just teeth, as "misguided anti-fluoridation activists"

On the programme *Sunday* on the 7th of March 2015, in response to calls from dentists to have a tax on sugar, he made the extraordinary statement that sugar is not the main problem associated with tooth decay and that "the answer to our oral health problems could lie in more education and fluoridation." He added that "We are certainly looking at . . . (fluoridation) because we know from the evidence that it works."

His comments were completely out of line with the WHO publication, *Guideline: Sugars intake for adults and children*. Geneva: World Health Organization, 2015, which, incidentally, had been peer reviewed by Professor Murray Thomson (BSc, BDS, MComDent [Otago], MA [Leeds], PhD [Otago]) of the Otago Dental School.

It is my belief that the Ministry of Health and its various agencies are not well positioned to advise on fluoridation science.

For example, the former National Fluoridation Information Service was established under contract between the Ministry of Health and the Hutt Valley District Health Board at a cost of approximately \$1.25 million.

The contract had a laudable aim of maintaining an objective and credible viewpoint when reviewing literature and framing communications on water fluoridation (Service Specification, clause 2.3) yet in that same clause there was a requirement that the contractor would "not act in any way that may contradict or be inconsistent with Ministry policy on water fluoridation or with the MoH publication 'Good Oral Health for All, For Life'," both of which unequivocally advocate fluoridation.

The following table shows that the majority of Health Select Committee members favour fluoridation.

Simon O'Connor

“And, actually, it is a no-brainer, to use a rather colloquial term, that fluoride is a sensible health intervention to try to reduce the incidence of tooth decay”

Barbara Kuriger

“At the moment only 54 percent of our total population receive fluoridated drinking water and that figure has not increased over the last 15 years. So I think there is a real case to be made in that the decisions that are currently being made are not increasing the dental health of our population. It is time to look at a change in the way we do this”.

Jacqui Dean

“In fact, some councils have gone backwards and have voted fluoridation out—to the cost of their community, in my view.”

Julie Anne Genter

“Finally, although there is considerable evidence of the health benefits of community water fluoridation, and there is no question that the low levels of fluoridation that we are talking about do not have negative health impacts, fluoride naturally occurs in the environment, including in water. It is lower in New Zealand than in other parts of the world. It is known to have a protective effect on teeth when used at the correct levels.”

Annette King

“... I am interested in hearing submissions from the public on this measure. I hope those who are backed by evidence and science will come forward to make submissions on why we should be fluoridating water.”

Shane Reti

Position not clear

He worked in general practice in Whangarei for 17 years, and was a member of the Northland District Health Board for seven years, before being awarded a Harkness Fellowship to Harvard, in 2007.

He has examined community health issues such as how to improve appointment rates at public hospitals, and once offered to fund a \$70,000 survey on fluoride, out of his own pocket. The Northern Advocate, Saturday Nov 23, 2013

Scott Simpson

Position not clear

Barbara Stewart (As represented by Ria Bond)

“... New Zealand First is absolutely opposed to this bill, because it takes away the decision-making process from locals to decide what is best for locals, in terms of who holds the provision of power to actually be the overarching decision makers on whether to fluoridate or not.”

Poto Williams

“The over-consumption of sugary drinks surely is a major factor in this (poor dental health) which is why the fluoridation of water is important.”

(All statements in parenthesis from the *Health (Fluoridation of Drinking Water) Amendment Bill - First reading debate*)

In her First Reading contribution Poto Williams gave a sound and broad overview of the socioeconomic context of poor dental health clearly believing that an equally broad approach to improvement was required. It was surprising then that she ascribed importance to fluoridation.

However, more surprising was the statement by Annette King that she hoped submissions would be backed by evidence and that science would come forward on why we should be fluoridating water.

There is little doubt that many submissions backed by scientific and/or medical evidence will be presented to the select committee on why we should not be fluoridating water and it is to be hoped that Annette King will not close her mind to these, especially those recording the increasing concern that fluoride doses, even those derived from concentrations in community water supplies, have neurotoxic effects especially in the young.

(See ADDENDUM A to this submission – *Developmental Neurotoxicity of fluoride: A quantitative risk analysis towards establishing a safe daily dose of fluoride for children*, Hirzy J. W. et al., Fluoride Journal, October-December 2016)

If ever there was a case of applying the precautionary principle it is here.

Is there a need for a wide-ranging public inquiry into the population effects of fluoride?

Evidence from the first reading of the *Health (Fluoridation of Drinking Water) Amendment Bill* indicates that the Health Select Committee itself is not totally independent and that there is danger that its recommendations to the House of Representatives will be influenced by pre-conceived bias towards fluoridation.

There is also the impression given that there is support for the naïve belief that, in spite of the fact that the majority of district health board membership is elected from the same electoral bases as members of local and regional governments, DHBs have greater wisdom in determining fluoridation policy than councils.

My recommendations to the Health Select Committee

That the Health Select Committee recommend to the House of Representatives:

- **That the *Health (Fluoridation of Drinking Water) Amendment Bill* be withdrawn; and**
- **That the National led Government commission an independent public enquiry, with evidence taken on oath, on the impacts of fluoridation of drinking water on public health with future Ministry of Health policy development on fluoridation of drinking water based on the outcomes of the enquiry and its recommendations.**

The *Health (Fluoridation of Drinking Water) Amendment Bill* must be withdrawn

SUBMISSION BY ROSS FORBES