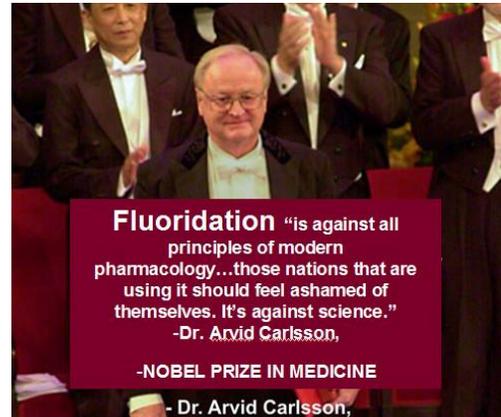


Submission to Select Committee on Health (Fluoridation of Drinking Water) Amendment Bill 208-1
Our group requests presentation time to appear before the committee.

This submission is on behalf of the group **New Zealand Health Professionals Opposing Fluoridation** <http://fluoridefree.org.nz/nz-health-professionals-opposed-to-fluoridation/>

Our NZ list now has 338 professionals, which include 94 Doctors, including 38 GPs and 74 other doctors, 20 Dentists, 10 current Dental Technicians and former School Dental Nurses, 28 Nurses and 13 Ph.D Scientists. The international professionals opposing fluoridation list is over 4000 people, including a former Belgian Minister of Health, a former Federal Health Minister of Australia, and Nobel Prize Winner Dr. Arvid Carlsson, Nobel Prize in Medicine, 2000.



Statistical Myths

Our NZ professionals oppose this Amendment for many reasons, a few of which are here:

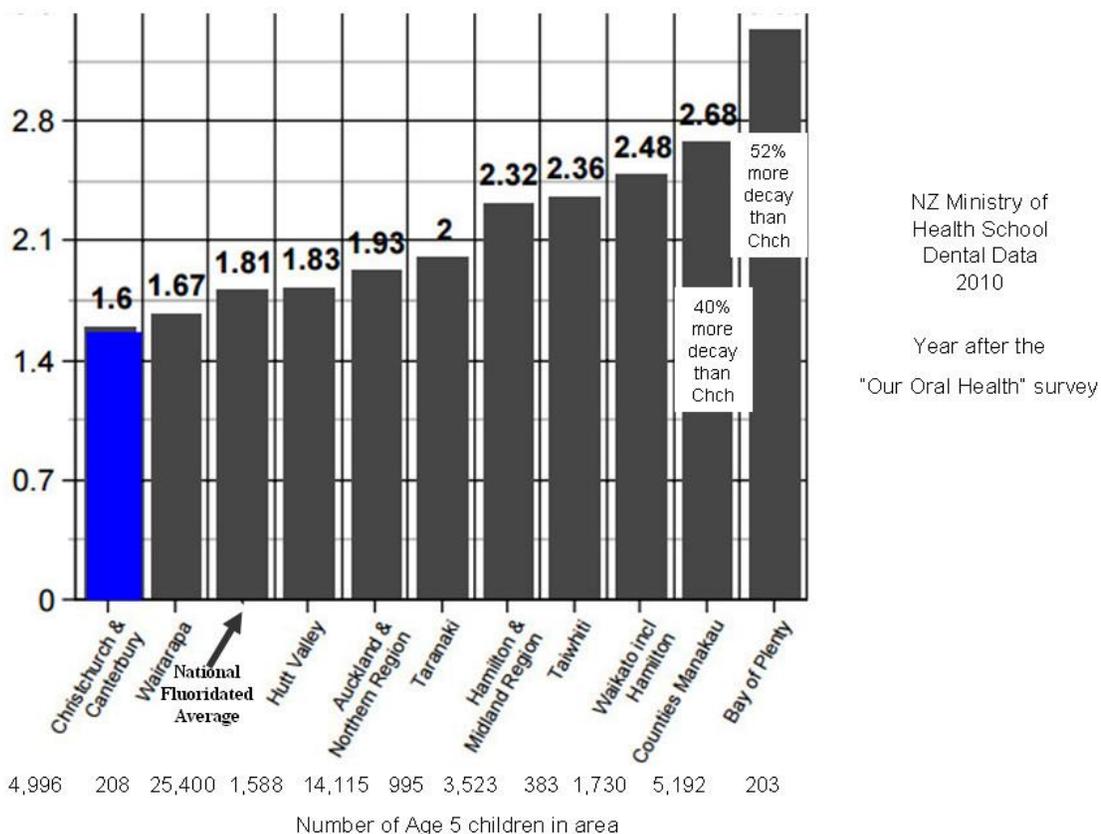
- 1) The Amendment applies to a policy based on out-dated myths, anti-scientific mis-information and an unwillingness to admit fluoridation's failure
- 2) It will extend exposure of a harmful neurotoxin to 50% more New Zealanders
- 3) It will be expensive harm. Instead, money could be saved on CHILDSMILE, which is proven successful, giving non-fluoridated Scottish children better teeth than NZ children
- 4) DHBs will not be required to consult with anyone or examine ingested fluoride toxicity
- 5) This Bill will effectively force fluoridation on everyone
- 6) There are no provisions in this Bill for fluoride testing for anyone, including tens of thousands of fluoride-sensitive New Zealanders including people with Diabetes, Thyroid Disease, Kidney Disease and Bottle-Fed Babies

This written submission will focus on the statistics used in discussing water fluoridation. The aim is to show clearly how the "40% difference" claim advertised by the New Zealand Ministry of Health is false. It will also show how individuals at the MoH manipulated useless and inferior data to continually advertise a deceptive number that can also be **reversed**, using their own calculation methods. We've used the better quality data, to show fluoridated areas have 40% OR MORE tooth decay than non-fluoridated areas.

"40% better" is a false advertising MYTH

The below bar graphs shows how “40%” goes against the Ministry of Health claim and favours ENDING fluoridation. This shows how the Ministry of Health’s way of manipulating numbers can also be used in the reverse.

Non-fluoridated Christchurch has LESS tooth decay than all of these fluoridated areas of New Zealand



All of these areas are fluoridated, except **non-fluoridated Christchurch and Canterbury**. You can see that all of these fluoridated areas have more fillings than non-fluoridated Christchurch and Canterbury. One of them has exactly “40% more tooth decay” (its population size is the same as the Christchurch/Canterbury group and was chosen to use here for this reason). One of the areas has 52% more fillings than non-fluoridated Christchurch/Canterbury. The above table comes from the Ministry of Health’s own annual database of 45,000 Age Five Children (<http://www.health.govt.nz/nz-health-statistics>) across New Zealand, which is an appropriate and respectable sample size to use for fluoridation discussion.

**Contrast the inferior data used by
The Ministry of Health to advertise “40%” difference**

The Ministry of Health has advertised repeatedly on websites and publications the claim that fluoridated areas have “40% less” tooth decay than non-fluoridated areas. The above graph shows that this is not true. Their number was cherry-picked, inflated and is still falsely advertised. The comparison below contrasts the cherry-picked small and obscure survey data used to advertise “40%” <http://www.health.govt.nz/publication/our-oral-health-key-findings-2009-new-zealand-oral-health-survey> with the MoH’s own high quality annual School Dental statistics which are not advertised <http://www.health.govt.nz/nz-health-statistics>:

Non-fluoridated “40% better” data	Fluoridated “40% better” data
Figures calculated accurately.	The figure was rounded up to the advertised 40. Actual number is 37.5%
Group size 25,000+ children across all of NZ. Data collected annually by MoH.	Very small survey conducted in 2009: only 987 children
Age Fives and Year Eights data show baby teeth versus adult teeth in separate categories, as per international standards	Ages ranging from 2-17: Decayed, Missing & Filled baby teeth and adult teeth combined to obscure comparisons
Grouped by location. Also clearly shows fluoridated versus non-fluoridated	Small survey never states how many of the children were from fluoridated area(s?) compared to non-fluoridated, or where those areas were in New Zealand.
Additional analysis for Maori, Pacific Island, Asian and other	Doesn’t clearly illustrate socio-economic factors pertaining to use of the 40% calculation

The individuals who chose to advertise inferior data from the small survey in 2009 ignored their own other superior data which clearly show numbers against fluoridation. That false-advertising number is from a single, low-quality survey that states within its own text:

“It is important to note that it was not one of the objectives of the 2009 NZOHS to compare the oral health status of people by fluoridation status, and therefore the survey cannot be taken as a fluoridation study. The following results are a snapshot in time and constitute an ecological analysis based on current place of residence. As such they do not take into account lifetime exposure to fluoridated and non-fluoridated water supplies. Individuals who currently live in fluoridated areas may have spent time in non-fluoridated areas, and the

reverse is also true. Furthermore, there may be other confounding factors that haven't been taken into account."

<http://www.health.govt.nz/publication/our-oral-health-key-findings-2009-new-zealand-oral-health-survey>.

Crunching Tooth Decay Numbers: How is 40% Calculated?

The following table contains details on how these numbers can be completely misleading, for those who want to examine some fine print.

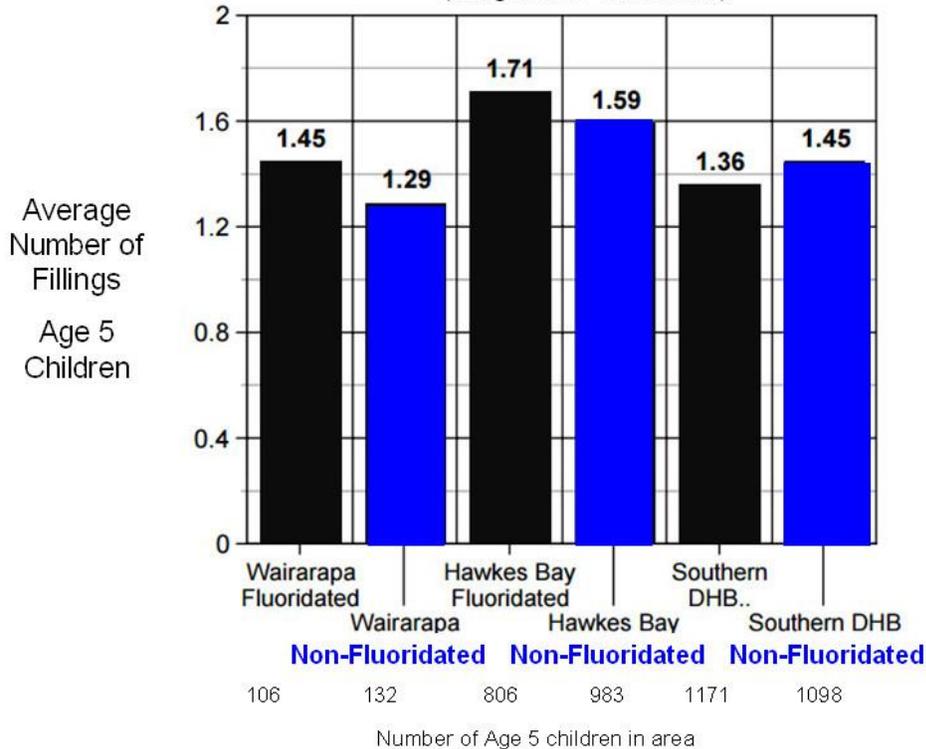
Data Sources	Age group	Number of children Fluoridated / Non- Fluoridated	Decayed, Missing & Filled teeth or surfaces Fluoridated / Non-Fluoridated	Subtracted Difference	Divide by higher number	Multiply by 100 to get % difference
Our Oral Health Survey 2009 Advertising 40% BUT ONLY 37.5%	Ages 2-17	987 total combined Flrdated/NonFd unknown	1.5 / 2.4 baby teeth & adult teeth combined Tooth SURFACES	0.90	= 0.375	Fluoridated 37.5% NOT 40%
NZ Ministry of Health Annual School Dental Data 2010 Fluoridated Area /Non-Fluoridated	Age 5	~25,000 / 19,000	See bar graph above	See bar graph above	See bar graph above	Non-fluoridated Up to 40% and 52% better
MoH School Dental Stats 2009 Below			dmft below			
Waikato / Canterbury	Age 5	1,559 / 4,096	2.54 / 1.53	1.01	= .397	~40%
Midland Region / Canterbury	Age 5	3,262 / 4,096	2.31 / 1.53	0.78	= .337	~34%
Hutt Valley / Canterbury	Age 5	1,763 / 4,096	1.73 / 1.53	0.20	= .115	~16%
Cent Region INCL Wlgn/ Cantbry	Age 5	~6000 / 4,096	1.55 / 1.53	0.02	= .0129	1%
MoH School Dental Stats 2010 Below	Age 5		dmft below			
National Fd Avrg / Canterbury	Age 5	25,400 / 4,996	1.81 / 1.60	0.21	= .116	12%
Counties Manakau / Canterbury	Age 5	5,192 / 4,996	2.68 / 1.60	1.08	= .402	40%
Northern Region incl Auck / Canterbury	Age 5	14,115 / 4,996	1.93 / 1.60	0.33	= .170	17%
Waikato / Canterbury	Age 5	1,730 / 4,996	2.48 / 1.60	0.88	= .354	35%
Bay of Plenty / Canterbury	Age 5	203 / 4,996	3.33 / 1.60	1.73	= .519	52%
Taiwhiti / Canterbury	Age 5	383 / 4,996	2.36 / 1.60	0.76	= .332	33%
Taranaki / Canterbury	Age 5	995 / 4,996	2.00 / 1.60	0.40	= .20	20%
Midland Region incl Ham/ Cantbry	Age 5	3,523 / 4,996	2.32 / 1.60	0.72	= .310	31%
Hutt Valley / Canterbury	Age 5	1,588 / 4,996	1.83 / 1.60	0.23	= .125	13%
Wairarapa / Canterbury	Age 5	208 / 4,996	1.67 / 1.60	0.07	= 0 .041	4%
MoH School Dental Stats 2014 Below	Year 8					
Auckland/ Canterbury	Year 8	4,016 / 4,229	0.88 / 0.86	0.02	= .022	2%
Counties Manakau/ Canterbury	Year 8	5,621 / 4,229	1.12 / 0.86	0.26	= .232	23%
Fluoridated Waikato/ Canterbury	Year 8	1,081 / 4,229	1.26 / 0.86	0.40	= .317	32%
Midland Providers / Canterbury	Year 8	6,981 / 4,229	1.16 / 0.86	0.30	= .258	~26%
Midcentral incl Palmy/ Canterbury	Year 8	1,060 / 4,229	1.23 / 0.86	0.37	= .300	30%
Central Region Incl Wlgn/ Cantbry	Year 8	6,083 / 4,229	0.80 / 0.86	0.06	= .069	7%

<http://www.health.govt.nz/publication/our-oral-health-key-findings-2009-new-zealand-oral-health-survey>

<http://www.health.govt.nz/nz-health-statistics>

Non-fluoridated groups are BETTER in two of New Zealand's same-size areas

Comparing NZ's only regions where the fluoridated & non-fluoridated groups are the same size
(living next to each other)

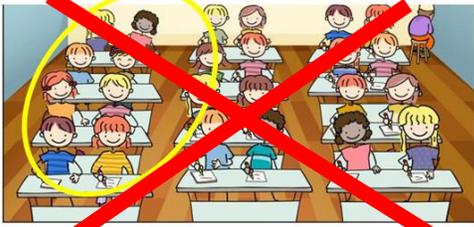


NZ Ministry of Health School Dental Data 2014

2014 Age Fives	Percentage difference
Wairarapa	11%
Hawkes Bay	7%
Southern DHB	12%

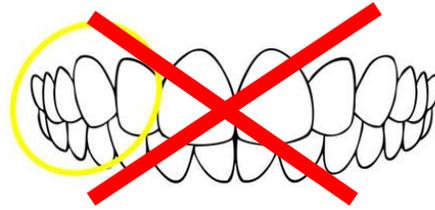
What does 40% less tooth decay mean? What does it look like?

Dental professionals know that the figures used above to calculate a “40% difference” in DMFT are statistically meaningless. But this figure is used to deceive lay people. Most people think that 40% refers to the number of children or the number of teeth, but this is not the case.



40% of kids in a room

DO NOT have tooth decay



40% of teeth in a mouth
DO NOT have decay

“40 % difference” actually looks like this



Child A



Child B



Child A and Child B have the same amount of decay, but Child B’s decay is counted as two decayed teeth (dmft).

This raises the recorded average level of decay in Child B’s town, even though it is sometimes the same amount of decay

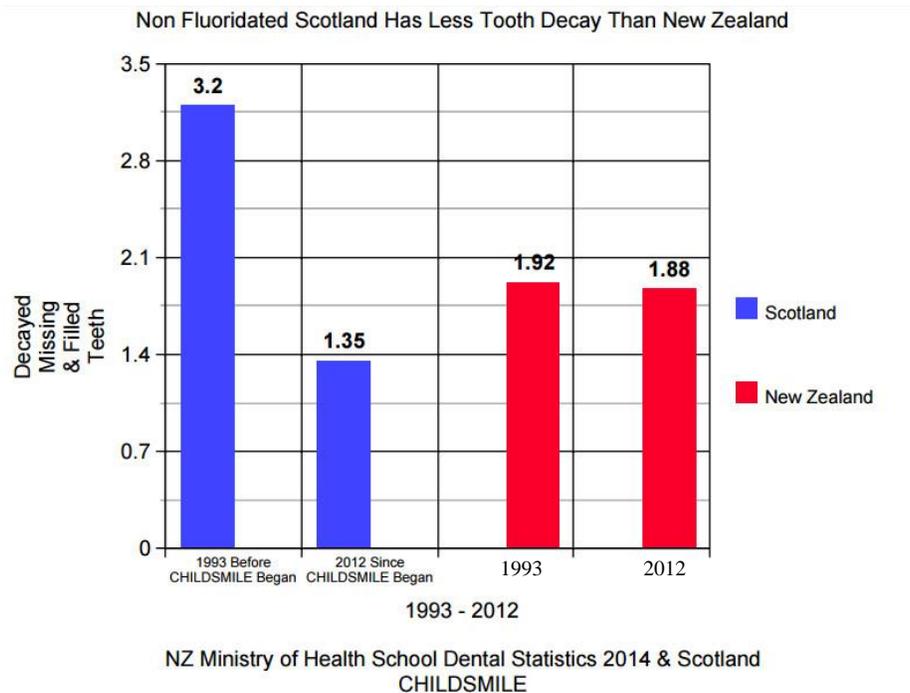
1.4 is 40% greater than 1, but it is only 0.4 surfaces out of 100, or 0.4% more decay, taken over the whole mouth. Non-fluoridated areas often have lower decay rates in New Zealand and around the world. If fluoridation worked, this would not be the case.

This is how a few individuals at the NZ Ministry of Health have cleverly and knowingly used false advertising to avoid admitting that fluoridation doesn’t work. Lowered IQ, thyroid disease and children that need real dental programmes like CHILDSMILE that work are more important than preserving the reputation of a few people who are willing to deceive the public in this way.

The Health Select Committee can easily fix this by not passing Peter Dunne’s fundamentally flawed Bill. One has to wonder what the professionals from the international list Former Belgian Health Minister Dr. Aelvoet, Former Federal Health Minister Everingham and Dr. Arvid Carlsson, Nobel Prize Winner in Medicine would think about Dunne’s unconscionable bullying and ignorant comments about people who oppose fluoridation.

The Health Select Committee can instead help everyone win by passing new legislation providing Central Government funding to begin the CHILDSMILE programme across NZ. Fluoridation doesn't work and it's causing harm. The CHILDSMILE programme is **saving Scotland more than 5 million pounds per year** and they have never had fluoridation. Scottish children used to have high levels of tooth decay, but now that they have CHILDSMILE, Scottish kids have better teeth than Kiwi kids. There are other successful programmes around the world now modeled after the CHILDSMILE programme.

CHILDSMILE improves health overall with life-long education about brushing and sugar consumption. The Health Select Committee needs to take the broader view when considering this bill and take this opportunity to abandon the costly out-of-date fluoridation programme in NZ and make the switch to funding for the NZ Childsmile programme: Saving teeth, Saving Pain and Saving Money. This is a win for everyone



Information and statistics on CHILDSMILE: <http://www.child-smile.org.uk/>

Scottish National Dental Inspection Programme statistics: <http://www.scottishdental.org/?s=NDIP>

New Zealand MoH school dental statistics: <http://www.health.govt.nz/nz-health-statistics>