

## Nau mai haere mai,

Kia Ora and welcome to the fifth issue of On Tap e-newsletter of the National Fluoridation Information Services.

Over the last few months we have focused on helping District Health Boards (DHBs) to work with councils following the 2012-2022 Long Term Plans (LTPs). This has ranged from facts and figures for council submissions and letters to Editors, summaries of the latest information on community water fluoridation for presentations to councils, to fact checking on information developed for local communities. Busy areas have included the Southern DHB (Invercargill) Taranaki DHB (South Taranaki), Hawkes Bay DHB (Central Hawkes Bay) Bay of Plenty DHB and Auckland DHB.

On a different note, we were a 'case study' organisation for the PHA for the work they have been doing on public health ethics. This document may be of use to Councils and DHBs in their discussions with each other and with their communities. You can download it from the PHA website [here](#) along with a PowerPoint tool for introducing discussions on public health ethics.

Kia kaha,  
Emmeline

## PROMOTING GOOD ORAL HEALTH FOR LIFE IN TAIRAWHITI



On Wednesday 12 September, Gisborne Mayor, Meng Foon took part in a "mass tooth-brushing" at Cobham School as part of local celebrations for World Oral Health Day. Dr Robyn Haisman-Welsh, Chief Dental Officer, Ministry of Health and Tairawhiti District Health (TDHB) CEO, Jim Green were also there to enjoy the activities.

Three schools and two kindergartens joined forces with TDHB to celebrate World Oral Health Day, an opportunity to raise awareness of oral health and the impact of tooth decay on general health and wellbeing of children. TDHB Oral Health Service places strong emphasis on patients/whānau in their approach to oral health.

The schools taking part in the week of activities were Cobham, Te Kura Kaupapa Māori Mangatuna and Waikirikiri. Other events took place at Knox St and Riverdale Preschool. TDHB Oral Health Promoter and Educator, Leanne Bodle, said the schools and kindergartens enjoyed a "tooth friendly" meal and education on oral health, before beginning a mass tooth-brushing exercise. Parents/Whānau of the children also attended.

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These events were made possible through funding from the New Zealand Dental Association (NZDA). In particular, the Cobham School event was funded by Wrigley Company Foundation NZDA community service grant and the other four centres were funded through NZDA's umbrella organisation Dental Health Foundation. Other sponsors included Walter Findlay Bakery.

The Dental Association's Oral Health Educator Deepa Krishnan said

*"the trio Arish Naresh, Team Leader, Oral Health Service, Dr. David Edgar, and Leanne Bodle from TDH made the funding applications back in July, their applications were successful due to their merits and the benefits they bring to the local community. World Oral Health Day provides a great opportunity to raise awareness about oral health."*

## Chief Dental Officer, Dr Robyn Haisman-Welsh lends support for World Oral Health Day in Gisborne

I recently had the pleasure of spending World Oral Health Day in Gisborne with the children, parents, whānau and staff of Cobham School

We were celebrating the launch of an oral health tooth brushing programme that Tairāwhiti District Health Board Community Oral Health Services had successfully won funding for through the Wrigley Company Foundation NZDA community service grant for World Oral Health Day.

I had the opportunity to sit in on Oral Health Promoter, Leanne Bodle's informative and fun classroom sessions on tooth friendly foods, the whys and hows of toothbrushing ("Brush, Swish, Spit, don't rinse") and the benefits of drinking tap water (Gisborne has community water fluoridation).

We then had the opportunity to share a lunch of healthy and tooth-friendly foods with the children. Speeches followed and then it was on to the mass tooth brushing exercise, led by Mayor Foon. In addition to tooth brushes and toothpaste being provided for each child.

It was a fun day for all with a serious mission - to raise awareness of oral health, the impact tooth decay has on general health and wellbeing of children and to launch a programme that will enable the children of Cobham School to have regular structured tooth brushing at school.

I congratulate the DHB Community Oral Health Service for going the extra mile to bring the focus of World Oral Health Day to Gisborne. And the effort that Arish, David and Leanne went to when they applied for the funding that has enabled this tooth brushing programme to be implemented in Cobham School. I also thank the Mayor of Gisborne District Council and his Councillors for continuing the city's community water programme. In doing this the Council are providing health benefits to the people of Gisborne and are taking a leadership role in improving, promoting and protecting the public health of their community.

Dr Robyn Haisman-Welsh | Chief Dental Officer | Ministry of Health



## Waimarama

by Emmeline Haymes

Kia ora e hoa ma,

The Government's Green Paper on Vulnerable Children, (and now the White Paper for vulnerable children) has been discussed both in the media and the health sector over the past six months. Most DHBs put together submissions on the Green Paper, and the White Paper's proposals have implications for how all of us in health sector work.

The public discussion included the Issues and Options Paper Solutions to Child Poverty in New Zealand (found [here](#)) put out by the Children's Commissioner. In this paper the Expert Advisory Group noted that poor oral health can be a consequence of child poverty (page 2) and that health research confirms relationships between poverty and poor health including worse oral health at the age of 26 (page 31).

In his letter to the Central Hawke's Bay District Council regarding their decision to cease community water fluoridation for Waipukurau the Children's Commissioner outlines the ethical considerations and complexities behind population health interventions and the financial interaction between lower cost preventions and higher cost treatments. This issue of On Tap includes an abridged version of the letter and a full copy can be found on our website [WWW.NFIS.org.nz](http://WWW.NFIS.org.nz) under the 'CWF Activities Hub' tab. It makes for thought provoking reading.

Ngā mihi,

Emmeline

# Recent addition to the CWF Activity Hub

[www.NFIS.org.nz](http://www.NFIS.org.nz)

## Children’s Commissioner Letter to Central Hawkes Bay District Council (Abridged)



### *The Children’s Commissioner discusses the ethics of of community water fluoridation*

As the nation’s advocate for children, I am deeply saddened that the Council are considering removal of Fluoride from the water supply because I believe the decision will harm the children of Central Hawke’s Bay. As a paediatrician in Hawke’s Bay I am also concerned for the wider implications of this decision (...)

I wish to address the ethical arguments in more detail.

Firstly, that fluoridation is unethical, compulsory or mass medication, and done without consent.

This argument is at best a misunderstanding and at worst a fundamental misrepresentation of public health. Public health measures (reticulated sewerage, cycle helmets, mandatory seatbelt laws, fencing of swimming pools, food hygiene rules, clean air standards, chlorination of water) all involve some restriction of personal rights or freedoms for a greater good.

Restricting personal freedoms for the greater good can be justified under the following conditions:

1. They reduce health inequalities
2. They substantially reduce ill health
3. They improve outcomes for vulnerable groups (e.g., children).

Fluoridation meets all these criteria. To argue against fluoridation on the grounds that it imposes on our rights is to argue against all public health measures, which is clearly ridiculous.

Secondly, that it is parents’ job to ensure their children brush their teeth. The rest of us should not have to suffer because of the neglect of the few.

This is a different and, to my mind, more pernicious argument. What it really argues is that we should accept children’s suffering when their parents are unable to meet their needs. The same argument is used to argue against feeding hungry children in school and it has the same rebuttal: it does not matter why children have bad teeth or are hungry. What matters is that we care about children. A society that values its children does not tolerate a poor outcome for which there is a simple and cost-effective solution (...)

The final reason I am concerned that the Council is considering removal of fluoride from the water supply is the impact it must have on all of us. If fluoride is removed dental decay will increase. That is clear and predictable. There must therefore be an increase in demand for acute and elective dental surgery to remove and treat decayed teeth. A DHB is required to address acute demand – it is deeply unethical to know about unmet acute health need and to do nothing about it. We would therefore have to increase our dentistry workforce and take theatre time to meet the increased demand. This resource is fixed, so this must mean a reduction in the number of elective procedures our surgeons can perform. Removal of fluoride from the water supply therefore must lead to a reduction in the number of hip replacements, cataract operations and other surgery performed. This is an argument you will never hear from anti-fluoridationists but it worries health professionals deeply.

In summary, fluoridation reduces dental decay, particularly for our poorest and most vulnerable children (...) The so-called ethical arguments against fluoridation are in fact deeply unethical and disturbing (...)

I would therefore ask Council to please leave fluoridation of the Central Hawke’s Bay water supply in place. If Council is interested in improving health outcomes for children the Hawke’s Bay District Health Board team present today will be delighted to discuss ways we can work together.

Yours sincerely

Dr Russell Wills | Community and General Paediatrician, HBDHB | Children’s Commissioner

The full letter can be viewed at [www.NFIS.org.nz](http://www.NFIS.org.nz) CWF Activity Hub

## FAST FLUORIDE FACTS

Raw water, or water in its natural state, contains a variety of chemicals which it absorbs from the land it flows over and through. Some of these can be harmful to humans if consumed at high levels.

The levels of a variety of naturally occurring chemicals in water is monitored by drinking water suppliers to ensure that your water will be safe to drink. Any potential new water source is screened for a number of possible naturally occurring chemicals (MOH 2008).

Methods to improve the taste and odour of drinking water were recorded as early as 4000 B.C. using treatment methods such as filtering through charcoal, straining and boiling. The Egyptians reportedly used the chemical alum as early as 1500 B.C. to remove particles from water. Filtration was commonly used in the 1700-1800s to make water appear less cloudy.

Today the type of treatment process used, and the type and quality of source water determines what may be added to the water. Poor quality raw water requires a greater degree of treatment than good quality raw water.

Some treatment plants may use ultra violet light, others add a small addition of one or two chemicals such as lime or chlorine, or there may be several additions to the water depending on the amount of organic matter, and its look, taste, and smell.

Another factor in the treatment process is consideration of the metalwork used for plumbing. If the water source has a low pH, sometimes called ‘soft water’, it can increase the likelihood of corrosion of metals in the water pipes. A substance can be added that reduces the pH of water lessening the likelihood of metals in the drinking-water (MOH 2008).

MOH (2008) Drinking-water Standards for New Zealand 2005 (Revised 2008).

# NZ Oral Health Survey Results – Community Water Fluoridation

## Extra Analysis from the Ministry of Health. By Julia Tinga

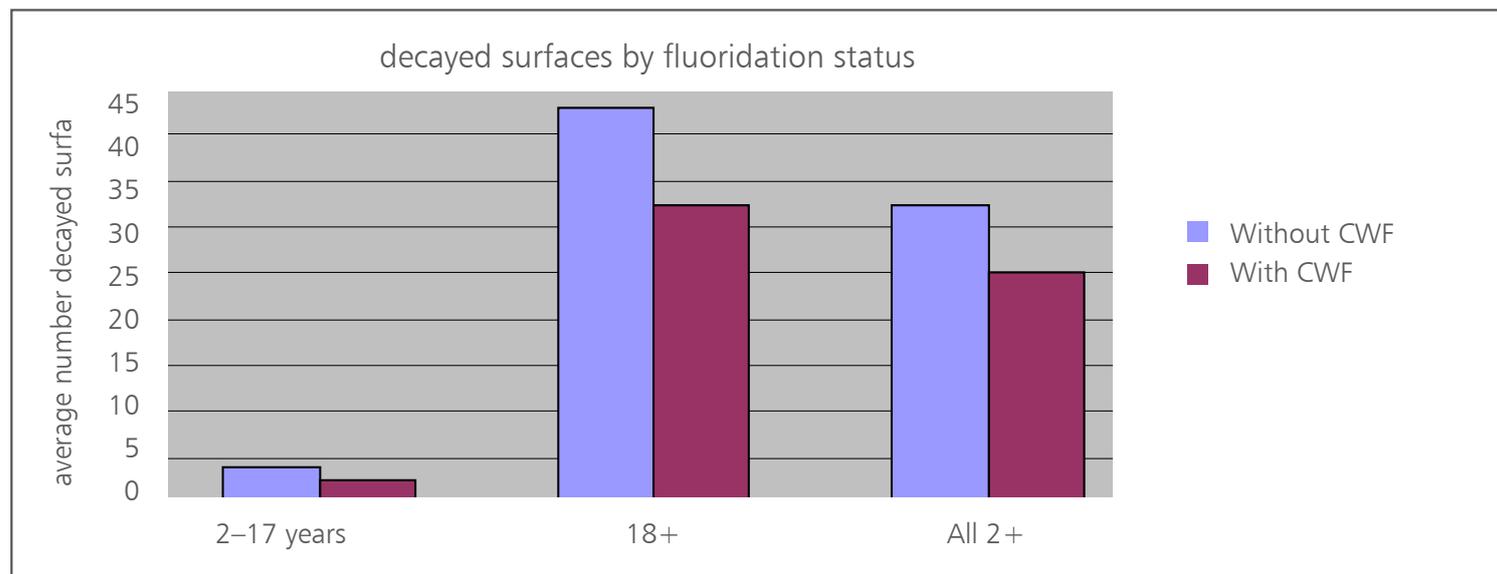
The 2009 NZ Oral Health survey shows that community water fluoridation (CWF) continues to protect teeth and reduce decay in New Zealanders of all ages. The survey results showed people living in areas with CWF had less dental decay than those living in non-fluoridated communities, the most dramatic results were seen for children.

### How much of a difference does community water fluoridation make?

Children aged 2-17 in non-fluoridated communities had 1.7 times more decay than those in communities with CWF.

In the wider population, adults 18 years and older in non-fluoridated communities had 1.1 times more decay than those in communities with CWF. Though not large, this effect was consistent across the population. Together these survey results show that CWF provides benefits across the lifespan even where other form of fluoride, including fluoridated toothpaste, are used.

A more sensitive measure of levels of decay is a count of decayed surfaces rather than whole teeth. This analysis of the average number of decayed surfaces also shows a consistent pattern of more decay in non-fluoridated communities.



### Who is most affected?

People who live in poorer neighbourhoods, Māori and Pacific children, have the highest rates of decay.

### Dental fluorosis

CWF can contribute to dental fluorosis, or flecking of teeth. In New Zealand in the majority of cases, it is barely noticeable, and dental fluorosis occurs roughly equally in areas with and without CWF. There is very little serious fluorosis in New Zealand. (Dental fluorosis is not the only cause of flecking or spots on tooth enamel)

### Limits of the information

Although not designed specifically to study CWF, the data from 2009 oral health survey included whether participants lived in an area with or without CWF. The Survey did not account for people moving into and out of areas with CWF, rather providing a snapshot in time – not tracking people over their lifetime.

The results are however, statistically significant and are consistent with international surveys and research and other New Zealand statistics and research showing that community water fluoridation continues to have a protective effect on the oral health of New Zealanders.

Source: Our Oral Health. Key findings of the 2009 New Zealand Oral Health Survey available on <http://www.health.govt.nz/nz-health-statistics/national-collections-and-surveys/surveys/current-recent-surveys/oral-health-survey> See especially chapter 6, pp167-171 NZ Oral Health Survey 2009

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Fluoridation see pp 168-171 NZ Oral Health Survey 2009

### Number of decayed surfaces with age group and CWF status

| Age group  | Non Fluoridated | % more | F'd  | % less |
|------------|-----------------|--------|------|--------|
| 2-17 years | 3.9             | 56     | 2.5  | 35     |
| 18+        | 42.8            | 32     | 32.3 | 25     |
| All 2+     | 32.3            | 29     | 25.0 | 22     |

These differences exist in spite of increased use of fluoridated toothpastes, dental varnishes etc.

Note: Each tooth for example has five surfaces mesial (front closest to the middle front of your teeth), distal (back further from the middle front of you teeth) occlusal (the chewing surface), lingual (the side you touch with your tongue), buccal or facial (the side that rubs against your cheek)

[www.NFIS.org.nz](http://www.NFIS.org.nz)

What's new...

### Frequently Asked Questions

We are currently testing our 'Frequently Asked Questions', to see if we are hitting the mark with useful information, and if changes can be made. We are asking for feedback from a variety of people, in DHBs and Councils as well as the general public. You may notice changes over the next few months as we update the FAQs and website to include this feedback. If you would like to give us feedback please email us at [nfis@huttvalleydhb.org.nz](mailto:nfis@huttvalleydhb.org.nz)

### Shared Learning changes to 'CWF Activities hub'

Our shared learning page is getting a new name 'CWF Activities hub'. The page will still provide a hub for powerpoints and other resources that Medical Officers of Health, Dentists, Iwi and others have used in discussions with councils, but will also include a wider range of interesting resources such as relevant letters and media releases that come across our desk. Please let us know if you have anything you would like to share with others.

Recent additions include the Children's Commissioner letter to CHBDC and the Royal Society statement on CWF.

Issue 4 Correction: NFIS has been informed that there is no formal link between NZFIS and FANNZ for further information please contact Mark Atkin at:

<http://www.fluoridegatenz.org.nz/index.htm>



NFIS CONSORTIUM PARTNERS:



### CONSORTIUM PARTNER

Introducing...

**ASSOCIATE PROFESSOR  
BARRY BORMAN**



Associate Professor Barry Borman, is the Associate Director at the Centre for Public Health Research (CPHR), Massey University. Barry has more than 20 years experience in applied epidemiology, as well as the establishment and operation of health surveillance systems, the uses of national health data sets and providing epidemiological evidence for policy development and decision making in the health sector.

Barry's role in the NFIS is to provide expertise in epidemiology relating to CWF. This includes conducting and coordinating ongoing critical reviews of new research, reports and new literature on water fluoridation from both national and international sources.

He is principal investigator for the 'National Environmental Health Indicators' project and 'Hazardous Substance and Occupational Disease Surveillance Systems', and undertakes teaching and supervising postgraduate students in public health, epidemiology, and environmental health.

Barry is also the Director of the New Zealand Birth Defects Registry which monitors the occurrence of birth defects in New Zealand and conducts research into their causes.

From 2000-08, Barry was the Manager of Public Health Intelligence, the epidemiology and surveillance group of the Ministry of Health.