

Community water fluoridation

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Rotorua Lakes DC

Overview

1. Community water fluoridation is a well-established public health measure
2. Community water fluoridation is safe, effective, affordable and equitable
3. Lakes oral health data
4. Useful websites

Community water fluoridation is a well-established public health measure

- It is the process of adjusting the natural level of fluoride in the water supply to between 0.7-1.0 mg per litre.
- New Zealand has high rates of preventable tooth decay, particularly among Tamariki Māori, Pacific children and those living in deprived communities.
- Currently, approximately 50% of the population of New Zealand has access to fluoridated drinking water.
- Community water fluoridation is part of a suite of measures that supports oral health in New Zealand, including free dental services for under 18-year-olds, providing free toothbrushes and toothpaste to vulnerable communities, healthy eating support.

Community water fluoridation is SAFE

- 2014 & 2021 Prime Minister's Chief Science Advisor review of evidence-base – concluded that water fluoridation at the levels used in New Zealand poses no significant health risk.
- 2024 Ministry of Health Review of the Evidence base
 - The current review supports that conclusion on the basis that;
 - the evidence that has been published since 2021 indicates ongoing clear benefits from CWF even during the period when alternative forms of fluoride (such as fluoride toothpaste) are available and
 - CWF promotes equity by decreasing the incidence and severity of dental caries in individuals in areas of high socioeconomic deprivation as much as, or more than individuals in areas of less deprivation and
 - there has been no high-quality evidence published since those 2014 and 2021 reports to suggest a causal link between fluoride exposure at the levels used in Aotearoa New Zealand for CWF and significant harm to health
- The only known side-effect of fluoridation at levels used in NZ is mild dental fluorosis and this is only really visible by dental health professionals under close examination.
- The level of fluoride in water is monitored to ensure it does not exceed the maximum acceptable value

Community water fluoridation is **EFFECTIVE**

- Community water fluoridation is endorsed by the World Health Organization and other international health authorities as one of the most effective public health measures for the prevention of dental decay
- Fluoride in drinking water acts like a constant repair kit for teeth and requires no behavioural change.
- In 2015, a Review of the Benefits and Costs of community water fluoridation in New Zealand (the Sapere Report) estimated significant benefits of water fluoridation:
 - **40%** lower lifetime incidence of tooth decay among children and adolescents
 - **48%** reduction in hospital admissions for tooth decay treatment among children aged 0-4 years
 - **21%** reduction in tooth decay among adults aged 18-44 years
 - **30%** reduction in tooth decay among adults aged 45 years and over

Community water fluoridation is **AFFORDABLE**

- The Sapere Report estimated that introducing CWF to cover those populations who do not currently have access to fluoridated water, this has the potential to result in estimated net savings of more than \$600 million over 20 years.
- Average ongoing cost of CWF is just **\$2.60 per person per year** for water supplies that serve populations of over 500 people. Every dollar spent on water fluoridation will save around \$9 in dental care costs.
- Savings will mostly benefit individual New Zealanders and whānau needing to pay for fewer fillings and tooth extractions (which can cost ~\$250). There will be some savings also to the health care system.



Community water fluoridation is **EQUITABLE**

- Community water fluoridation benefits everyone but will have the greatest impact on Māori, Pacific people, and those living in vulnerable communities.
- The Pasifika Dental Association, Te Ao Mārama (the Māori Dental Association), and Te Rōpu Niho Ora (representing Māori oral health providers) all support community water fluoridation.
- 2019 Māori Oral Health Equity Symposium key recommendation was that the Government pass the Act to change community water fluoridation decision-making.

Tooth decay remains the single most common chronic disease among New Zealanders of all ages!

*In year ending June 2024, preventable **dental conditions were the third most common reason for ambulatory sensitive hospital admissions** for children aged 0–4 years in Lakes (Nationwide Service Framework Library 2024).*

*In the year to December 2023, **268 0-14-year-olds** received in-patient hospital level care for preventable dental conditions in Lakes HNZ district, usually under General anaesthetic.*

179 (67%) of those children were Māori.

(Te Whatu Ora data)



In Te Whatu Ora Lakes District, tooth decay is common and inequitably distributed (as well as being largely preventable)

		Experienced tooth decay (versus national)	Decayed, missing or filled teeth in children with decay
Aged 5 years	Non_Māori-Non-Pacific children	34% (31%)	4.16
	Māori Children	69% (60)	5.51
	Pacific children	75% (67)	5.28
At School Year 8	Non_Māori-Non-Pacific children	36% (28)	2.20
	Māori Children	53% (40)	2.94
	Pacific children	66% (36)	2.94

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Te Whatu Ora Lakes district adults:

- 48.3% had one or more teeth removed in their lifetime due to decay, an abscess, infection or gum disease
- 9.4% had one or more teeth removed in the last 12 months due to decay, an abscess, infection or gum disease

Source: NZ Health Survey 2021/22

Legislative basis

Health (Fluoridation of Drinking Water) Amendment Act 2021

- Amended the Health Act 1956 in November 2021
- Gives the Director-General of Health (DG) the power to direct local authorities to fluoridate drinking water supplies

Before a direction is issued, the DG needs to consider:

- scientific evidence on the effectiveness of adding fluoride to drinking-water in reducing the prevalence and severity of dental decay
- whether the benefits of adding fluoride to drinking-water outweigh the costs, taking into account the oral health status and size of the community as well as the financial costs of fluoridating including ongoing management and monitoring.
- Local authorities can still choose to fluoridate drinking water in the absence of a direction from the DG

Recent Bill of Rights Analysis (BORA)

- A High Court judgment directed the Director-General of Health to assess whether each of the directions for local authorities is a demonstrably justified limit on the right of persons in those districts to refuse medical treatment.
- That right is provided for in section 11 of the New Zealand Bill of Rights Act.
- As per the Ministry of Health's website, the Director-General assessed each direction as directed by the Judge. The Director-General considers that each of the 14 directions is a justified limitation on the right to refuse medical treatment, and has reconfirmed each of the directions.

Useful websites

- Manatū Hauora: <https://www.health.govt.nz/strategies-initiatives/programmes-and-initiatives/oral-health/community-water-fluoridation-policy>
- Prime Minister's Chief Science Advisor website: www.pmcsa.ac.nz/topics/fluoridation-an-update-on-evidence/
- Recent publication on Ministry website re the Bill of Rights analysis <https://www.health.govt.nz/information-releases/director-general-of-health-consideration-of-community-water-fluoridation-under-the-new-zealand-bill>

Pātai?