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Why community water fluoridation matters in clinical practice: Evidence from the Public Health Association of New Zealand's new policy statement

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Abstract

Background: Oral health is fundamental to wellbeing in Aotearoa New Zealand, yet dental caries remains a leading cause of childhood hospitalisation and a persistent source of inequity. Community water fluoridation (CWF) is a proven, proportionate, and equitable population measure. This article synthesises the evidence for CWF and translates the Public Health Association of New Zealand's (PHANZ) 2025 policy position for clinical practice. *Methods:* A review of national and international evidence on CWF was conducted, incorporating systematic reviews and policy analyses. Policy development drew on engagement with oral health and public health experts and the PHANZ Policy Subcommittee, followed by broader engagement with PHANZ members and final endorsement by the PHANZ Executive Council in June 2025. *Findings:* CWF can significantly reduce dental caries across the life course, particularly in communities experiencing socioeconomic deprivation. Evidence supports CWF as a safe, cost-effective, and scalable public health measure. The analysis also acknowledges community concerns regarding autonomy and consent, highlighting the importance of community partnership alongside culturally safe implementation of CWF. The PHANZ statement positions CWF as a foundational upstream intervention that should be integrated with broader strategies addressing poverty, access barriers, and wider systemic inequities. *Conclusions:* Oral health practitioners have a professional and ethical responsibility to advocate for and support CWF through evidence-based communication and culturally safe practice. Implementing and sustaining CWF aligns with clinical ethics and Aotearoa New Zealand's commitment to equitable oral health outcomes.

Background

Oral health remains a critical, yet often overlooked, determinant of overall wellbeing in Aotearoa New Zealand. Despite advances in preventive dentistry, dental caries continues to be one of the leading causes of hospital admissions for children (Ministry of Health, 2024c) and a major contributor to health inequities. According to the 2023/24 New Zealand Health Survey (Ministry of Health, 2024a), 10.6% of children aged zero to 14 years have had at least one tooth extracted due to dental caries, with higher proportions among children with disabilities (22.9%), and Māori (13.7%) and Pasifika children (12.7%). Moreover, the number of children receiving dental treatments under general anaesthesia (Hunt *et al*., 2018) and oral health inequities are steadily increasing in all communities (Boyd *et al*., 2022; Ram & Han, 2025). Almost half (45.0%) of adults aged 15 years and over have undergone an extraction in their lifetime due to "decay, an abscess, infection or gum disease", and more so for Māori (50.3%) and people living with disabilities (64.4%). Access to care shows a similar pattern (Ministry of Health, 2024a). The cumulative burden on individuals and whānau is substantial, highlighting the need for upstream, equitable prevention strategies.

While almost half (48.7%) of adults had at least one dental visit in the 12 months prior to being surveyed, the proportion was lower for Māori (42.6%) and Pasifika (32.9%), indicating inequitable oral health access and gaps in the current service model. Aotearoa New Zealand's current oral health care system does not address Te Ao Māori (Māori worldviews) and Pasifika worldviews, the consequence of which are systemic barriers to access to the oral health care Māori and Pasifika need (Palmer *et al*., 2019; Sa'u Lilo *et al*., 2020). Addressing these barriers requires upholding Te Triti o Waitangi principles and embedding equitable and culturally-responsive care across planning, commissioning, and service delivery (Lacey *et al*., 2021; Waitangi Tribunal, 2023).

Of the many global public health actions to reduce oral health burdens, community water fluoridation (CWF) remains one of the most effective and equitable (International Association for Dental Research, 2022). Recent reaffirmations from the Ministry of Health (2024b) and the Office of the Prime Minister's Chief Science Advisor and the Royal Society of New Zealand (2021; 2014), along with international evidence (Iheozor-Ejiofor *et al*., 2024; Schluter *et al*., 2020), confirm its safety, effectiveness, and cost-efficiency as a public health measure. Yet, ongoing public debate, legal challenges, and misinformation risk undermining community confidence and delaying further implementation of CWF in Aotearoa New Zealand. For oral health practitioners who see the consequences of untreated dental caries first-hand,

CWF is not a distant policy debate but a matter that calls for careful ethical judgment and professional advocacy. The New Zealand Dental Association's position statement on water fluoridation (2024) strongly supports CWF, describing the adjustment of community water supplies to recommended fluoride levels as a safe and effective public health measure that reduces dental caries and improves public oral health. Building on the recent release of the Public Health Association of New Zealand (PHANZ)'s policy position statement on CWF, there is a critical role for oral health practitioners to engage with patients, communities, policymakers, stakeholder organisations, and other health professionals to ensure evidence-based measures, including CWF, are supported and sustained. This article summarises the updated PHANZ policy position statement, reviews supporting evidence, and advocates continued support for CWF by oral health practitioners.

Why community water fluoridation matters for clinical practice

To protect against dental caries, the optimal range of fluoride in community drinking-water supplies is 0.7 to 1.0 mg/L (Office of the Prime Minister's Chief Science Advisor & Royal Society of New Zealand, 2014). The World Health Organization (2017) recommends a range of 0.5-1.5mg/L with the maximum acceptable value (MAV) of 1.5 mg/L. In Aotearoa New Zealand, naturally occurring fluoride levels in most water sources are low (around 0.1 to 0.2 mg/L), so fluoridation plants adjust dosing to bring treated water into the optimal range. As specified in the Water Services (Drinking Water Standards for New Zealand) Regulations 2022, MAV is set at 1.5 mg/L.

To support safe operation, Water New Zealand (the New Zealand Water & Wastes Association–Waiora Aotearoa) (2023) has set an operating target of 0.85 mg/L ± 0.15, with an upper action process limit of 1.30 mg/L that triggers immediate fluoride plant shutdown and investigation if reached. Under the Drinking Water Quality Assurance Rules, water suppliers serving populations greater than 500 must continuously monitor fluoride concentrations in water leaving treatment plants, and those serving 101-500 people must analyse fluoride levels at least twice weekly (Water New Zealand, 2023). Water suppliers must then report compliance annually to Taumata Arowai (Water Services Authority). Any exceedances of MAV of 1.5 mg/L must be notified to Taumata Arowai as soon as practicable after the result is known, to enable timely follow-up and corrective action (Ministry of Health, 2025b; Water New Zealand, 2023). These monitoring requirements and reporting obligations sit alongside, and are distinct from, the routine dose calculations and real-time adjustments made by treatment plant operators at the point of treatment to keep fluoride concentrations within the target range.

Water fluoridation directly addresses the burden of dental caries and related inequities across all age groups (Ministry of Health, 2024b). The 2009 New Zealand Oral Health Survey found a 40% reduction in dental caries prevalence among children and adolescents in communities with CWF compared to those who lived in areas without CWF (Ministry of Health, 2010). Likewise, in Australia, the National Health and Medical Research Council (2017) reported a 21% reduction in dental caries among adults aged 18 to 44 years and a 30% reduction among those aged 45 years and over in fluoridated communities compared to non-fluoridated areas.

From a clinical perspective, the benefits of CWF are tangible. It is likely to contribute to reducing the number of emergency hospital appointments for children and adults, thereby lowering demand for extractions under sedation or general anaesthesia (Hobbs *et al*., 2020; Kamel & Thomson, 2013). By lowering the incidence and slowing the progression of dental caries at a population level, CWF has the potential to reduce the volume of urgent, pain-driven visits and free clinical capacity to prioritise risk assessment and preventive interventions. International research also highlights CWF's role in reducing oral health inequities, with the greater benefits among children living in communities with higher levels of socioeconomic deprivation (Senevirathna *et al*., 2023; Shen *et al*., 2021). Moore *et al*. (2017) in their New Zealand CWF cost-benefit and cost-effectiveness study, suggested that for communities with populations over 500 receiving CWF, the net discounted savings would be NZ$ 1.4 billion. As an upstream prevention strategy, CWF has the potential to reduce the burden of disease on patients, whānau, and communities and the service burden on the health system supporting more effective and equitable practice.

Safety concerns

While the benefits of fluoride and CWF are well-recognised, dental fluorosis, neurodevelopmental effects, and thyroid disorders have been raised as concerning side-effects (Ministry of Health, 2024b). Dental fluorosis is a known side-effect of excess fluoride; it is typically mild and primarily cosmetic, with no effect on function. No cases of severe or disfiguring fluorosis have been linked to CWF in Aotearoa New Zealand (Ministry of Health, 2024b). Neurodevelopmental effects have been extensively studied; current evidence does not support an association between CWF and attention-deficit hyperactivity disorder (Fiore *et al*., 2023; Taher *et al*., 2024) or lower intelligence quotient (Broadbent *et al*., 2015; Gopu *et al*., 2022; Kumar *et al*., 2023), particularly at the levels used in Aotearoa New Zealand. Similarly, there is no consistent epidemiological or causal evidence confirming a relationship between CWF at recommended levels and thyroid disorder and cancer (Royal Society of New Zealand and the Office of the Prime Minister's Chief Science Advisor, 2014). Overall, a substantial body of evidence confirms that CWF remains a safe and effective population measure for reducing the burden of dental caries, including at Aotearoa New Zealand's levels of 0.7–1.0 mg/L fluoride.

Health (Fluoridation of Drinking Water) Amendment Act 2021

Autonomy is central in public health; at the same time, collective measures can be justified when they deliver large, equitable benefits with minimal risk. Yet a persistent tension exists between respecting individual autonomy, including informed choice and control over exposure, and achieving population-level benefits (Marckmann *et al*., 2015; Varkey, 2021). CWF sits at the intersection of respect for autonomy and the pursuit of population health as it restricts individuals' opportunities to make informed decisions.

The Health (Fluoridation of Drinking Water) Amendment Act 2021 amends the Health Act 1956 to enable the Director-General of Health to direct local authorities to fluoridate drinking water supplies, creating a nationally consistent, health-focused, and evidence-based decision-making process. Subsequently, in July 2022, the Director-General of Health issued directions to 14 local authorities to take practicable steps to ensure their drinking water supplies contain an optimal level of fluoride (Ministry of Health, 2025b). Consequently, 400,000 people gained access to fluoridated drinking water (Ministry of Health, 2025a). At the time of writing, a further 27 local authorities have been advised to actively consider the potential impacts of CWF on their water service delivery (Ministry of Health, 2025b). Recent local evidence assessing the health equity implications of the Act for access to and performance of CWF suggests that these directives are pro-equity and likely to facilitate greater access to fluoridated water (Chambers *et al*., 2025). Chambers *et al*. (2025) also found that scheme performance in achieving the optimal fluoride range was better for non-Māori (61.0%) than for Māori (56.6%), underscoring the need to improve plant performance so that increased access translates into equitable oral health gains.

Ethical and professional considerations

Ethical practice in dentistry requires balancing multiple principles: beneficence, non-maleficence, justice, and respect for autonomy (Varkey, 2021). From the perspective of beneficence and justice, CWF is compelling; it reduces the burden of dental disease, particularly among groups most affected by oral health inequities, including Māori, Pasifika, and people living with disabilities. At the same time, autonomy in population health differs from clinical informed consent; individual consent to a population-level intervention is not feasible, so the ethical questions become whether any constraint on choice is justified by effectiveness, safety and fairness. Te Tiriti o Waitangi affirms that the Crown and the health system are obliged to uphold tino rangatiratanga (self-determination) and achieve equitable health outcomes (Waitangi Tribunal, 2023). Importantly, decisions on CWF must be made in partnership with Māori communities and experts to ensure Māori perspectives are upheld in the decision-making process (Waitangi Tribunal, 2023). In doing so, CWF supports the ethical obligation to pursue equity and align with Te Tiriti o Waitangi, which requires active protection of Māori health and ensuring meaningful partnerships (Lacey *et al*., 2021; Waitangi Tribunal, 2023).

Because CWF constrains individual choices about fluoridation exposure, some people object on grounds of autonomy, consent, and fairness. These concerns should be acknowledged and addressed by those responsible for the design and delivery of the service, including central government, public health agencies, local authorities, and oral health practitioners. Upholding Te Tiriti o Waitangi obligations (Lacey *et al*., 2021; Waitangi Tribunal, 2023) and actively engaging with the public can strengthen the legitimacy of CWF and support culturally safe implementation. Engaging with concerns enhances the legitimacy of public health measures, ensuring they are both evidence-based and ethically transparent while reinforcing the proven benefits and safety of CWF. In some parts of Aotearoa New Zealand, such as Kapiti (Kāpiti Coast District Council, 2025) and Papamoa (Tauranga City Council, 2025), people can access non-fluoridated supplies, and some households opt for point-of-use filtration or bottled water. These alternatives are not equally practical or affordable for everyone, which highlight the need for transparent communication, equity considerations, and partnership with Māori throughout decision-making and implementation.

Public concerns have also required careful consideration of rights under the New Zealand Bill of Rights Act 1990 (Ministry of Health, 2025b). In February 2024, the High Court judge directed that an assessment be made on whether the Director-General of Health's direction is a justified limit on the individual's right to refuse medical treatment. Upon evaluation, in December 2024, the Director-General confirmed the direction to fluoridate as a justified action based on the latest scientific evidence on the safety and effectiveness of CWF and oral health conditions of the population (Ministry of Health, 2025b).

The PHANZ policy position statement – Supporting a strong public health approach

In June 2025, PHANZ released a policy position statement supporting CWF as an effective, ethical, safe, and cost-effective public health measure to support good oral health and reduce oral health inequities in Aotearoa New Zealand (Public Health Association of New Zealand, 2025). The PHANZ's policy position statement recognises the strong body of research and evidence supporting CWF as a safe and effective public health measure for preventing dental decay. The statement also highlights the importance of supporting local authorities to implement CWF, with particular attention to community engagement, cost barriers and the need to avoid exacerbating existing inequities.

The PHANZ also recognises that oral health is shaped by a broad range of social determinants. While the statement focuses on CWF, it emphasises that this approach needs to be understood within the wider oral health context in Aotearoa New Zealand, including the influence of childhood poverty, food insecurity, unhealthy food environments, and the unmet demand and barriers to access for oral health care across the health system. As such, CWF must sit within a broader strategy that addresses structural barriers to care, improves access to preventive services, promotes healthier food environments, and upholds Te Tiriti o Waitangi principles.

For oral health practitioners, professional responsibility requires balancing evidence, ethics, and community perspectives. Remaining silent in the face of misinformation risks weakening public trust, while dismissing concerns outright risks alienating patients. Instead, oral health practitioners should respond to the public with empathy, cultural safety and evidence, acknowledging the legitimacy of different perspectives while reinforcing the strength of scientific consensus. Positioned at the intersection of science and lived experience, oral health practitioners see daily the cumulative effects of untreated dental caries in practice, while also hearing the concerns, questions, and misconceptions about fluoride that patients bring with them. Providing clear, culturally safe, and accessible information can help reduce uncertainty, strengthen trust,

and ensure oral health care is grounded in science and care. Moving forward, decisions made by the Director-General of Health should be undertaken in close partnership with communities, ensuring people have a genuine voice at the decision-making table.

The role of oral health practitioners extends beyond treatment to prevention and equity. By advocating for CWF while also championing complementary policies, we help safeguard one of the most effective tools for reducing dental caries and contribute to building an equitable and sustainable oral health system in Aotearoa New Zealand.

Author contributions

All authors contributed to the update of the PHANZ Policy Position Statement on Community Water Fluoridation, the drafting and critical revision of the article, and the final approval of the version to be published.

Conflict of interest statement

HH is a member of PHANZ, and LG is the Senior Policy Advisor of PHANZ. The PHANZ had no role in the study design, evidence review, analysis, interpretation, or the context of this article. The authors declare no other competing interests.

References

Boyd DH, Moffat SM, Foster Page LA, Lacey JK, Fuge KN, Natarajan AK, Misa TF, Thomson WM. (2022). Oral health of children in Aotearoa New Zealand–time for change. *J R Soc NZ*, *52*(4): 335-356. https://doi.org/10.1080/03036758.2022.2069826

Broadbent JM, Thomson WM, Ramrakha S, Moffitt TE, Zeng J, Foster Page LA, Poulton R. (2015). Community water fluoridation and intelligence: Prospective study in New Zealand. *Am J Public Health*, *105*(1): 72-76. https://doi.org/10.2105/AJPH.2013.301857

Chambers T, Broadbent J, Puente-Sierra M, Carrington S, Hobbs M. (2025). The health equity implications of the Health (Fluoridation of Drinking Water) Amendment Act 2021 for access to (and performance of) community water fluoridation in New Zealand. *NZ Dent J*, *121*(2): 61-69.

Fiore G, Veneri F, Di Lorenzo R, Generali L, Vinceti M, Filippini T. (2023). Fluoride exposure and ADHD: a systematic review of epidemiological studies. *Medicina*, *59*(4): 797. https://doi.org/10.3390/medicina59040797

Gopu BP, Azevedo LB, Duckworth RM, Subramanian MK, John S, Zohoori FV. (2022). The relationship between fluoride exposure and cognitive outcomes from gestation to adulthood—a systematic review. *Int J Environ Res Public Health*, *20*(1): 22. https://doi.org/10.3390/ijerph20010022

Hobbs M, Wade A, Jones P, Marek L, Tomintz M, Sharma K, McCarthy J, Mattingley B, Campbell M, Kingham S. (2020). Area-level deprivation, childhood dental ambulatory sensitive hospitalizations and community water fluoridation: evidence from New Zealand. *Int J Epidemiol*, *49*(3): 908-916. https://doi.org/10.1093/ije/dyaa043

Hunt G, Foster Page L, Thomson W. (2018). Dental treatment of children under general anaesthesia in District Health Boards in New Zealand. *NZ Dent J*, *114*: 156-163.

Iheozor-Ejiofor Z, Walsh T, Lewis SR, Riley P, Boyers D, Clarkson JE, Worthington HV, Glenny A-M, O'Malley L. (2024). Water fluoridation for the prevention of dental caries. *Cochrane Database Syst Rev*(10): CD010856. https://doi.org/10.1002/14651858.CD010856.pub3

International Association for Dental Research. (2022). Position statement on community water fluoridation. Retrieved 29 Aug 2025 from https://www.iadr.org/science-policy/position-statement-community-water-fluoridation

Kamel MS, Thomson WM. (2013). Fluoridation and dental caries severity in young children treated under general anaesthesia: An analysis of treatment. *Community Dent Health*, *30*: 15-18. https://doi.org/10.1922/CDH_2894Thomson04

Kāpiti Coast District Council. (2025). Non-fluoridated water supply points. Retrieved 27 Nov 2025 from https://www.kapiticoast.govt.nz/services/waters/water-supply/treatment/#:~:text=Non%2Dfluoridated%20water%20supply%20points,Related%20links

Kumar JV, Moss ME, Liu H, Fisher-Owens S. (2023). Association between low fluoride exposure and children's intelligence: a meta-analysis relevant to community water fluoridation. *Public Health*, *219*: 73-84. https://doi.org/10.1016/j.puhe.2023.03.011

Lacey J, Thomson W, Crampton P, Willing E. (2021). Working towards Māori oral health equity: Why te Tiriti o Waitangi needs to underpin the oral health system, using evidence from the New Zealand Oral Health Survey. *NZ Dent J*, *117*(3): 105-110.

Marckmann G, Schmidt H, Sofaer N, Strech D. (2015). Putting public health ethics into practice: a systematic framework. *Front Public Health*, *3*: Article 23. https://doi.org/10.3389/fpubh.2015.00023

Ministry of Health. (2010). Our oral health: Key findings of the 2009 New Zealand Oral Health Survey. https://www.health.govt.nz/system/files/2011-10/our-oral-health-2010.pdf

Ministry of Health. (2024a). Annual data explorer 2023/24: New Zealand health survey [Dataset]. https://www.health.govt.nz/publications/annual-update-of-key-results-202324-new-zealand-health-survey

Ministry of Health. (2024b). Community water fluoridation: An evidence review. https://www.health.govt.nz/publications/community-water-fluoridation-an-evidence-review

Ministry of Health. (2024c). Publicly funded hospital discharges — 1 July 2021 to 30 June 2022 [Dataset]. https://tewhatuora.shinyapps.io/hospitals-web-tool/

Ministry of Health. (2025a). Better oral health outcomes as 400,000 New Zealanders gain access to fluoridated drinking water. Retrieved 29 Aug 2025 from https://www.health.govt.nz/news/better-oral-health-outcomes-as-400000-new-zealanders-gain-access-to-fluoridated-drinking-water

Ministry of Health. (2025b). Implementation of community water fluoridation. Retrieved 29 Aug 2025 from https://www.health.govt.nz/strategies-initiatives/programmes-and-initiatives/oral-health/implementation-of-community-water-fluoridation

Moore D, Poynton M, Broadbent JM, Thomson,WM. (2017). The costs and benefits of water fluoridation in NZ. *BMC Oral Health*, *17*: 134. https://doi.org/10.1186/s12903-017-0433-y

National Health and Medical Research Council. (2017). Information Paper–Water fluoridation: Dental and other human health outcomes. https://www.nhmrc.gov.au/sites/default/files/documents/reports/fluoridation-info-paper.pdf

New Zealand Dental Association. (2024). NZDA position statement: Community Water fluoridation. https://assets.nzda.org.nz/files/Public/Resources/Position-Statement-Community-Water-Fluoridation-2024.pdf

Office of the Prime Minister's Chief Science Advisor. (2021). Fluoridation: an update on evidence. https://www.pmcsa.ac.nz/topics/fluoridation-an-update-on-evidence/

Office of the Prime Minister's Chief Science Advisor, Royal Society of New Zealand. (2014). Health effects of water fluoridation: A review of the scientific evidence. https://www.royalsociety.org.nz/what-we-do/our-expert-advice/all-expert-advice-papers/health-effects-of-water-fluoridation/

Palmer SC, Gray H, Huria T, Lacey C, Beckert L, Pitama SG. (2019). Reported Māori consumer experiences of health systems and programs in qualitative research: a systematic review with meta-synthesis. *Int J Equity Health*, *18*: 163. https://doi.org/10.1186/s12939-019-1057-4

Public Health Association of New Zealand. (2025). PHANZ Policy Position Statement on Community Water Fluoridation. https://static1.squarespace.com/static/64f50f96be6edd18bcd91177/t/6853295671aa21208a5ec600/1750280535728/PHANZ+Policy+Position+Statement+-+Community+Water+Fluoridation_FINAL.pdf

Ram AM, Han H. (2025). Assessing dental caries experiences and dental service delivery for children with disabilities in Auckland, New Zealand: a mixed-method study. *J Prim Health Care*, *17*(2): 176-182. https://doi.org/10.1071/HC25054

Royal Society of New Zealand and the Office of the Prime Minister's Chief Science Advisor. (2014). Health effects of water fluoridation: A review of the scientific evidence. Office of the Prime Minister's Chief Science Advisor.

Sa'u Lilo L, Tautolo E-S, Smith M. (2020). Health literacy, culture and Pacific peoples in Aotearoa, New Zealand: A review. *Pac Health*, *3*: 1-10. https://doi.org/10.24135/pacifichealth.v3i0.4

Schluter PJ, Hobbs M, Atkins H, Mattingley B, Lee M. (2020). Association between community water fluoridation and severe dental caries experience in 4-year-old New Zealand children. *JAMA Pediatr*, *174*(10): 969-976.

Senevirathna L, Ratnayake HE, Jayasinghe N, Gao J, Zhou X, Nanayakkara S. (2023). Water fluoridation in Australia: A systematic review. *Environ Res*, *237*(1): 116915. https://doi.org/10.1016/j.envres.2023.116915

Shen A, Bernabé E, Sabbah W. (2021). Systematic review of intervention studies aiming at reducing inequality in dental caries among children. *Int J Environ Res Public Health*, *18*(3): 1300. https://doi.org/10.3390/ijerph18031300

Taher MK, Momoli F, Go J, Hagiwara S, Ramoju S, Hu X, Jensen N, Terrell R, Hemmerich A, Krewski D. (2024). Systematic review of epidemiological and toxicological evidence on health effects of fluoride in drinking water. *Crit Rev Toxicol*, *54*(1): 2-34. https://doi.org/10.1080/10408444.2023.2295338

Tauranga City Council. (2025). New non-fluoridated community water source in Pāpāmoa. Retrieved 27 Nov 2025 from https://newsbeat.tauranga.govt.nz/news-article/artmid/24836/articleid/13851/new-non-fluoridated-community-water-source-in-p/p/moa/default

Varkey B. (2021). Principles of clinical ethics and their application to practice. *Med Princ Pract*, *30*(1): 17-28. https://doi.org/10.1159/000509119

Waitangi Tribunal. (2023). Hauora report on Stage One of the Health Services and Outcomes Kaupapa Inquiry (Wai2575). Waitangi Tribunal. https://forms.justice.govt.nz/search/Documents/WT/wt_DOC_195476216/Hauora%202023%20W.pdf

Water New Zealand. (2023). Good practice guide: Fluoridation of drinking-water supplies in New Zealand. https://media.ixom.com/images/pitcsgzxwwxqvwbrfuyv/Fluoride%20Good%20Practice%20Guide%20Volume%201.pdf

World Health Organization. (2017). Guidelines for drinking-water quality, 4th edition, incorporating the 1st addendum. https://www.who.int/publications/i/item/9789241549950

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