NEW ZEALAND COLLEGE OF
PUBLIC HEALTH MEDICINE

15 June 2021

Submission to the Health Select Committee: Inquiry into Supplementary Order Paper No. 38 on the Health (Fluoridation of Drinking Water) Amendment Bill

The New Zealand College of Public Health Medicine thanks the Health Select Committee for the opportunity to make a submission on the Inquiry into Supplementary Order Paper No. 38 on the Health (Fluoridation of Drinking Water) Amendment Bill.

The New Zealand College of Public Health Medicine (NZCPHM) is the professional body representing the medical specialty of public health medicine in New Zealand. We have 205 active members, including 185 fully qualified Specialists, with the majority of the remainder being advanced trainees in the medical specialty of public health medicine.

Public Health Medicine is the branch of medicine concerned with the assessment of population health and health care needs, the development of policy and strategy, health promotion, the control and prevention of disease, and the organisation of services. The NZCPHM partners to achieve health gain and equity for our population, eliminating inequities across socioeconomic and ethnic groups, and promoting environments in which everyone can be healthy.

Background

Community water fluoridation helps prevent tooth decay and reduces inequalities in oral health.[1] Tooth decay is a common condition in New Zealand causing pain, infection, loss of teeth and loss of self-esteem. Oral pain can stop a person from eating, working, and sleeping. Tooth decay poses extra risks for people with specific health problems – for example, valvular heart disease, congenital heart disease, recent cardiac surgery, renal disease, bleeding disorders, and low immunity.

The benefits of community water fluoridation are most pronounced for those at higher risk of poor oral health. In New Zealand, Māori and Pacific people and people living in more deprived areas experience poorer oral health outcomes compared to other New Zealanders.[2] Recent New Zealand studies have associated community water fluoridation with both reduced prevalence of severe caries[3] and reduced dental hospital admissions[4] in children, with the latter association most marked for children living in our most socioeconomically deprived areas.

The mineral fluoride occurs naturally in water supplies in New Zealand but mostly at levels too low to provide protection against tooth decay. Community water fluoridation allows for the adjustment of fluoride levels in a public water supply to a level where protection against tooth decay can occur. The New Zealand Ministry of Health recommends that the level of fluoride in water be adjusted to between 0.7 and 1.0 parts per million (ppm).[5]

Community water fluoridation programmes have been running in countries with low natural amounts of fluoride in drinking water supplies for over seventy years. There is consistent evidence of

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the effectiveness and safety of these programmes in assisting in the maintenance of oral health of these communities, regardless of social, economic or cultural group.[6]

After a thorough review of the evidence, the findings of a joint report by the Officer of the Prime Minister's Chief Science Advisor and The Royal Society Te Apārangi issued in 20146 (and updated in 2021) have been:

> *Given the caveat that science can never be absolute, the panel is unanimous in its conclusion that there are no adverse effects of fluoride of any significance arising from fluoridation at the levels used in New Zealand. In particular, no effects on brain development, cancer risk or cardiovascular or metabolic risk have been substantiated, and the safety margins are such that no subset of the population is at risk because of fluoridation.*

A fresh update, which has considered new research and comprehensive reviews internationally published since the 2014 joint report, has found and reiterated that the above conclusions remain appropriate.[7]

The NZCPHM holds that there is considerable evidence to support community water fluoridation as the most effective and cost-effective approach to prevent tooth decay and reduce oral health inequities in New Zealand.[6,7,8]

Position

The NZCPHM notes that the Health (Fluoridation of Drinking Water) Bill amends Part 2A of the Health Act 1956 with regard to decision-making authority on the fluoridation of community water supplies.[9] We note further that Supplementary Order Paper No. 38 on this Bill confers a power on the Director-General of Heath to direct a local authority to add, or not to add, fluoride to drinking water supplied through its local authority supply.[10]

We agree with the findings in the Regulatory Impact Statement of March 2016 that local authority decision-making on community water fluoridation (i.e., the status quo) has not been effective at extending fluoridation coverage and has not improved oral health status for the most disadvantaged groups in society.[11] Reliance on decision-taking by local authorities has led to nationally inconsistent decisions, which have not always been based on the available scientific evidence and on data about community oral health status data.

We note that it has been estimated that extending water fluoridation to those areas that do not currently have it would be associated with net savings of over $600 million over twenty years, with most of these savings directly to consumers.[8] It has also been estimated that this would result in 4,400 to 6,500 quality adjusted life years (QALYs) gained over twenty years, with a proportionally larger benefit to Māori and the most deprived communities.[8]

The NZCPHM strongly supports a shift to ensure nationally consistent decision-taking about community water fluoridation. We agree with the criteria used to evaluate the options for decision-making in 2016, and the two additional criteria added in 2021,[12] in particular that the option selected should:

- Improve oral health status and reduce disparities;
- Be informed by scientific evidence on the safety and efficacy of community water fluoridation;

- Align with government expectations of strong national public health leadership and sector stewardship; and
- Ensure a robust and nationally consistent decision-taking process.

We agree that providing the Director-General of Health with decision-making authority on community water fluoridation is the best way to achieve these expectations. The alternate suggestion of situating this decision-making authority with the district health boards is likely to lead to inconsistent decisions and regional variations in fluoridation coverage.[12]

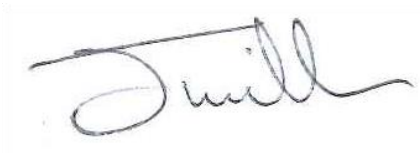
We note that the matters that the Director-General must consider before making a direction include scientific evidence on the effectiveness of adding fluoride to drinking water in reducing the prevalence and severity of dental decay, and whether the benefits of adding fluoride to the drinking water outweigh the financial costs, taking into account the oral health of the population group or community where the water supply is situated.[10] We endorse this requirement and note the intention to develop a framework to support decision-making by the Director-General.[12]

We recommend the inclusion of a requirement in the legislation that the Director General should take advice from the Director of Public Health on this public health and regulatory issue. This is consistent with the statutory functions of the Director of Public Health listed in the Health Act (section 3B(2)).[13] We would expect also that the Director-General of Health will consult with the to-be-formed Public Health Agency regarding the scientific evidence on water fluoridation and on community and population group oral health status data.

The NZCPHM views the proposed changes to the legislation as an important opportunity to improve, and reduce inequities in, the oral health of Aotearoa New Zealand's population.

Thank you for the opportunity for the NZCPHM to submit on Supplementary Order Paper No. 38 on the Health (Fluoridation of Drinking Water) Amendment Bill. We hope our feedback is helpful and are happy to provide further clarification on matter covered in this submission.

Sincerely,



Dr Jim Miller, President

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