

Water fluoridation

According to the Queensland government, community water fluoridation is ‘the adjustment of fluoride in drinking water to reach a level that can help to reduce tooth decay.’¹

The Australian Institute of Health and Welfare (AIHW) states that ‘community water fluoridation is a safe strategy to improve oral health by reducing the risk of dental caries’ (i.e., cavities).²

Queensland Health similarly states that water fluoridation is an oral health measure that helps protect against teeth decay in 3 ways:³

- *helps make teeth more decay resistant*
- *helps get rid of early decay before it becomes permanent, and*
- *helps stop bacteria in the mouth producing acids, which leads to tooth decay.*

The Australian Dental Association (ADA) Queensland states that community water fluoridation is:⁴

one of the simplest, safest and most inexpensive preventative health measures known to unquestionably work at every life stage.

Effects of fluoridation

The following section includes a sample of information from the most recent reports and research regarding the human health effects of water fluoridation.

Brain development

In 2024, Vox published an article titled [‘Should we think twice about fluoride?’](#) The article discusses the debate of whether an excess of fluoride intake may lower the IQ of children.⁵

According to the article, the United States National Toxicology Program (NTP), run under the U.S. Department of Health and Human Services, published a report declaring ‘with “moderate confidence,” that drinking water with elevated fluoride levels is linked to lower IQ in children.’⁶

¹ Queensland. [‘Facts about fluoride’](#), *Practicing good oral health*, 17 August 2023.

² Australia. Australian Institute of Health and Welfare, [‘Oral health and dental care in Australia’](#), *Dental & oral health*, 4 October 2024.

³ Queensland Health, [‘Water fluoridation’](#), *Water*, 14 November 2024; Queensland. [‘Facts about fluoride’](#), *Practicing good oral health*, 17 August 2023.

⁴ Australian Dental Association Queensland, [Position Statement – Water Fluoridation](#), May 2023, p 1.

⁵ C Ford, [‘Should we think twice about fluoride?’](#), *Vox News*, 3 September 2024.

⁶ C Ford, [‘Should we think twice about fluoride?’](#), *Vox News*, 3 September 2024.

The cited report from the US NTP is titled '[Fluoride Exposure: Neurodevelopment and Cognition](#)'.⁷

The report is a response to concerns that pregnant women and children may be ingesting fluoride from many sources, thereby exceeding safe amounts of total fluoride intake:⁸

Since 1945, the use of fluoride has been a successful public health initiative for reducing dental cavities and improving general oral health of adults and children. There is a concern, however, that some pregnant women and children may be getting more fluoride than they need because they now get fluoride from many sources including treated public water, water-added foods and beverages, teas, toothpaste, floss, and mouthwash, and the combined total intake of fluoride may exceed safe amounts.

According to the report, its findings are based on a systematic review of published scientific literature that was additionally processed through peer review:⁹

Therefore, the National Toxicology Program (NTP) conducted a systematic review of the published scientific literature on the association between fluoride exposure and neurodevelopment and cognition. The NTP released their findings in a State of the Science Monograph (available below under Documents). A corresponding meta-analysis on children's IQ was published in [JAMA Pediatrics](#) on January 6, 2025 (see [sidebar](#)).

The NTP started this work in 2016. As with all research documents intended for publication, the NTP fluoride monograph and meta-analysis underwent rigorous scientific evaluation. The evaluation process has involved many steps. The draft fluoride monograph received critical feedback during peer-review by the National Academies of Science, Engineering and Medicine (NASEM), from other external experts, and from experts in several federal health agencies. After modifications were made, additional evaluation following a rigorous scientific framework was conducted by subject matter experts organized by the NTP Board of Scientific Counselors. This document is now complete and available for reference.

The findings of the report are as follows:¹⁰

*The NTP monograph concluded, with moderate confidence, that higher levels of fluoride exposure, such as drinking water containing more than 1.5 milligrams of fluoride per liter, are associated with lower IQ in children. The NTP review was designed to evaluate total fluoride exposure from all sources and was not designed to evaluate the health effects of fluoridated drinking water alone. **It is important to note that there were insufficient data to determine if the low fluoride level of 0.7 mg/L currently recommended for U.S.***

***community water supplies has a negative effect on children's IQ.** The NTP found no evidence that fluoride exposure had adverse effects on adult cognition.*

⁷ National Toxicology Program, '[Fluoride Exposure: Neurodevelopment and Cognition](#)', U.S.. Department of Health and Human Services, n.d., accessed 17 January 2025.

⁸ National Toxicology Program, '[Fluoride Exposure: Neurodevelopment and Cognition](#)', U.S.. Department of Health and Human Services, n.d., accessed 17 January 2025.

⁹ National Toxicology Program, '[Fluoride Exposure: Neurodevelopment and Cognition](#)', U.S.. Department of Health and Human Services, n.d., accessed 17 January 2025.

¹⁰ National Toxicology Program, '[Fluoride Exposure: Neurodevelopment and Cognition](#)', U.S.. Department of Health and Human Services, n.d., accessed 17 January 2025 [bold text as per original].

The NTP uses 4 confidence levels - high, moderate, low, or very low - to characterize the strength of scientific evidence that associates a particular health outcome with an exposure. After evaluating studies published through October 2023, the NTP Monograph concluded there is moderate confidence in the scientific evidence that showed an association between higher levels of fluoride and lower IQ in children.

The determination about lower IQs in children was based primarily on epidemiology studies in non-U.S. countries such as Canada, China, India, Iran, Pakistan, and Mexico where some pregnant women, infants, and children received total fluoride exposure amounts higher than 1.5 mg fluoride/L of drinking water. The U.S. Public Health Service currently recommends 0.7 mg/L, and the World Health Organization has set a safe limit for fluoride in drinking water of 1.5 mg/L.

On 6 January 2025, Taylor et al published a study in *JAMA Pediatrics* titled '[Fluoride exposure and children's IQ scores: A systematic review and meta-analysis](#)'.¹¹

The study provides the following conclusions and relevance statement based on their review of the literature, which found higher fluoride exposure is linked to a lower IQ in children:¹²

This systematic review and meta-analysis found inverse associations and a dose-response association between fluoride measurements in urine and drinking water and children's IQ across the large multicountry epidemiological literature. There were limited data and uncertainty in the dose-response association between fluoride exposure and children's IQ when fluoride exposure was estimated by drinking water alone at concentrations less than

1.5 mg/L. These findings may inform future comprehensive public health risk-benefit assessments of fluoride exposures.

On 14 January 2025, in an article published by *The Conversation*, Professor of Dental Public Health Loc Do of The University of Queensland responded to the results of Taylor et al's review:¹³

Water fluoridation is a population-based program where a precise, small amount of fluoride is added to public drinking water systems. Water fluoridation began in Australia [in the 1950s](#). Today more than [90% of Australia's population](#) has access to fluoridated tap water.

But a [recently published review](#) found higher fluoride exposure is linked to lower intelligence quotient (IQ) in children. So how can we interpret the results?

Much of the data analysed in this review is poor quality. Overall, the findings don't give us reason to be concerned about the fluoride levels in our water supplies.

¹¹ K W Taylor et al., '[Fluoride exposure and children's IQ scores: A systematic review and meta-analysis](#)', *JAMA Pediatrics*, 6 January 2025.

¹² K W Taylor et al., '[Fluoride exposure and children's IQ scores: A systematic review and meta-analysis](#)', *JAMA Pediatrics*, 6 January 2025.

¹³ L Do, '[Is fluoride really linked to lower IQ, as a recent study suggested? Here's why you shouldn't worry](#)', *Conversation*, 14 January 2025.

Professor Do provides an overview of the historical debate regarding the human health effects of fluoride, noting that the US NTP report referenced above did not pass quality assessment by the [US National Academies of Sciences, Engineering and Medicine](#).¹⁴

A potential link between fluoride and IQ (and cognitive function more broadly) has been a contentious topic for [more than a decade](#). This started with reports from studies in China and India.

But it's important to note these studies were limited by poor methodology, and water in these countries had high levels of natural fluoride when the studies were conducted – many times higher than the levels recommended for water fluoridation programs. Also, the studies did not control for other contaminants in the water supply.

Recent [reviews](#) focusing on the [level of fluoride](#) used in water fluoridation have concluded fluoride is not linked to lower IQ.

*Despite this, some have continued [to raise concerns](#). The United States National Toxicology Program conducted [a review](#) of the potential link. **However, this review did not pass***

the [quality assessment](#) by the US National Academies of Sciences, Engineering and Medicine due to significant limitations in the conduct of the review.

The authors followed through with their study and published it as an independent publication in the journal [JAMA Paediatrics](#) last week. This is the study which has been [generating media attention](#) in recent days.

Professor Do provides a summary of the NTP report and notes the following limitations of the NTP report's findings:¹⁵

While this review combined many studies, there are several limitations that cast serious doubt over its conclusion. Scientists immediately [raised concerns](#) about the quality of the review, including in a [linked editorial](#) published in JAMA.

The low quality of the majority of included studies is a major concern, rendering the quality of the review equally low. Importantly, most studies were not relevant to the recommended levels of fluoride in water fluoridation programs.

Several included studies from countries with controlled public water systems (Canada, New Zealand, Taiwan) showed no negative effects. Other recent studies from comparable populations (such as [Spain](#) and [Denmark](#)) also have not shown any negative effect of fluoride on IQ, but they were not included in the meta-analysis.

For context, the review found there was no significant association with IQ when fluoride was measured at less than 1.5mg per litre in water. In Australia, the recommended levels of fluoride in public water supplies range from [0.6 to 1.1 mg/L](#).

Also, the primary outcome, IQ score, is [difficult to collect](#). Most included studies varied widely on the methods used to collect IQ data and did not specify their focus on ensuring reliable and consistent IQ data. Though this is a challenge in most research on this topic, the significant variations between studies in this review raise further doubts about the combined results.

¹⁴ L Do, '[Is fluoride really linked to lower IQ, as a recent study suggested? Here's why you shouldn't worry](#)', *Conversation*, 14 January 2025 [bold text added by the QPL].

¹⁵ L Do, '[Is fluoride really linked to lower IQ, as a recent study suggested? Here's why you shouldn't worry](#)', *Conversation*, 14 January 2025.

In conclusion, Professor Do states that there is no cause for alarm in Australia with regard to fluoride exposure in early childhood development:¹⁶

Although no Australian studies were included in the review, Australia has its own studies investigating a potential link between fluoride exposure in early childhood and child development.

I've been involved in population-based longitudinal studies investigating a link between [fluoride and child behavioural development and executive functioning](#) and between [fluoride and IQ](#). The IQ data in the second study were collected by qualified,

trained psychologists – and calibrated against a senior psychologist – to ensure quality and consistency. Both studies have provided strong evidence fluoride exposure in Australia does not negatively impact child development.

This new review is not a reason to be concerned about fluoride levels in Australia and other developed countries with water fluoridation programs. Fluoride remains important in maintaining the public's dental health, particularly that of more vulnerable groups.

That said, high and uncontrolled levels of fluoride in water supplies in less developed countries warrant attention. There are [programs underway](#) in a range of countries to reduce natural fluoride to the recommended level.

On 11 January 2025, Vox published an [article and video](#) that discusses whether the doses of fluoride in US water levels affects neurodevelopment:¹⁷

The video explains how this renewed attention on water fluoridation is happening at a time when new science is emerging on the topic. Historically, water fluoridation has done wonders for combatting tooth decay, primarily in children. But scientists are looking into whether it's still having the same effect today, given how widespread topical fluoride and regular dental care is now.

With regard to research on fluoride doses, the article notes that all studies discussed are limited in that they are only observational studies:¹⁸

Part of the difficulty of the science on fluoride is that when it comes to studying fluoride's risks, there has never been a double-blind, randomized, placebo-controlled study — the gold standard in science for proving causation. All of the studies we mention in the video are observational. This lack of study is typical in epidemiology when researching something that could be harmful in some doses. But surprisingly, there's never been this kind of trial on the benefits of water fluoridation, either. However, the University of North Carolina is currently conducting the first-ever trial of this kind on the [benefits of water fluoridation](#).

¹⁶ L Do, '[Is fluoride really linked to lower IQ, as a recent study suggested? Here's why you shouldn't worry](#)', Conversation, 14 January 2025.

¹⁷ L Bult, '[Should fluoride be in our water?](#)', Vox News, 11 January 2025.

¹⁸ L Bult, '[Should fluoride be in our water?](#)', Vox News, 11 January 2025.

In addition, the article notes that there are methodological issues regarding the measurement of IQ:¹⁹

It's worth noting that this video talks about studies that look at the link between childhood IQ and high fluoride levels. These types of studies are done on a population level — so, averaging IQ across a large group. The study of IQ is problematic in some scenarios. But one expert I spoke to explained why it's the best tool epidemiologists have for doing this type of research.

“Historically, there have been concerns about how IQ is racially biased, “Bruce Lanphear, a professor of health sciences at Simon Fraser University, told me. “But in fact, probably of all the different measures we use for brain function broadly, IQ is the optimal one we use. In contrast with some of the behavioral scores ... which are most typically based upon parent report. And those are valuable and they’ve been validated. But IQ is not only validated, it’s been shown to work consistently, at least within homogeneous groups.”

National Health and Medical Research Council

Information and resources regarding the [health effects of fluoridation](#) are available on the Australian National Health and Medical Research Council (NHMRC) website.²⁰

In 2017, the NHMRC published a [public statement](#) stating that community water fluoridation is safe and effective:²¹

*this Public Statement **recommends community water fluoridation as a safe, effective and ethical way to help reduce tooth decay**, and a range within which NHMRC supports states and territories fluoridating their drinking water supplies.*

The 2017 Public Statement is based on a comprehensive review of the evidence, [published in 2016](#), and the translation of this evidence into the NHMRC Information Paper – Water fluoridation: dental and other human health outcomes, published in 2017. It also takes into consideration what the situation is here in Australia (compared to that in many countries in the northern hemisphere which have high levels of naturally occurring fluoride).

In 2016, NHMRC published an information paper that explores the [relationship between water fluoridation and human health](#).²²

The information paper notes that there is no reliable evidence to show that water fluoridation causes health problems, however, there is evidence that water fluoridation relates to dental fluorosis:²³

¹⁹ L Bult, [‘Should fluoride be in our water?’](#), Vox News, 11 January 2025.

²⁰ Australia. National Health and Medical Research Council, [‘Health effects of water fluoridation’](#), *Public Health*, n.d., accessed 13 January 2025.

²¹ Australia. National Health and Medical Research Council, [‘2017 Public Statement – Water fluoridation and human health’](#), *Publications*, n.d., accessed 13 January 2025 [hyperlink added by the QPL].

²² Australia. National Health and Medical Research Council, [‘Water fluoridation: dental and other human health outcomes’](#), *Publications*, n.d., accessed 13 January 2025.

The 2016 NHMRC Evidence Evaluation shows that water fluoridation helps to reduce tooth decay in children and adults. **There is no reliable evidence that water fluoridation at current Australian levels causes health problems.**

NHMRC found consistent evidence of an association between water fluoridation and dental fluorosis. In Australia, however, most dental fluorosis is very mild or mild, does not affect the function of teeth and is not of aesthetic concern to those who have it. Dental fluorosis is a change in the appearance of teeth that most commonly appears as white lines or areas on tooth surfaces. It is caused by a high intake of fluoride from one or more sources during the time when teeth are developing. During the time period between the 1990s and 2014, when the extent of fluoridation in Australia has expanded, dental fluorosis has declined from about 40% of children showing any dental fluorosis to 16.8%.

Western Australia Department of Health

The Western Australia Department of Health (the Department) provides a [digital collection](#) of publications, media releases, surveys and debates related to water fluoridation.²⁴

The Department includes the following details of their 2016 study on water fluoridation and dental health of children in WA:²⁵

The study [Water Fluoridation and Dental Health of Children in WA](#) was published by the Department of Health in 2016. This study analysed both the frequency and extent of tooth decay in fluoridated and unfluoridated areas of WA, for both deciduous and permanent teeth. It revealed that children from unfluoridated areas in the South West of Western Australia were at greater risk of having a worse tooth decay experience, compared with children from the fluoridated Perth metropolitan area. The peer-reviewed report [Oral health of school children in Western Australia \(external site\)](#), published in the Australian Dental Journal in 2016, also made a similar finding.

On their website, the Department writes the following response to the question ‘are there any adverse health effects from drinking fluoridated drinking water?’:²⁶

No. Sound evidence and research, as well as more than 60 years of experience around the world, including over 40 years in Western Australia, has clearly shown that the optimum amount of fluoride in drinking water simply poses no risk to health.

²³ Australia. National Health and Medical Research Council, ‘[Water fluoridation: dental and other human health outcomes](#)’, *Publications*, n.d., accessed 13 January 2025 [bold text added by the QPL].

²⁴ Western Australia. Department of Health, [Fluoridation](#), 1 August 2024.

²⁵ Western Australia. Department of Health, [Fluoridation](#), 1 August 2024.

²⁶ Western Australia. Department of Health, ‘[Fluoridated drinking water](#)’, *Healthy living*, n.d., accessed 13 January 2025.

Academic research

Professor of Chemistry Oliver A.H. Jones writes in an article for *The Conversation* that research has found no evidence that water fluoridation harms cognitive development:²⁷

A [2019 study](#) also claimed fluoride affected the IQ of children. But this work has been [roundly criticised](#) and a 2024 study detailed [serious weaknesses](#) in the study design.

Multiple reviews of high-quality studies from many different countries, including the [US](#) and [Australia](#), have found no evidence of harm.

One study followed people [over 30 years](#), testing their IQs at various ages, and found no link between fluoride levels and IQ scores.

In 2024, researchers investigating [early childhood exposures to fluoride](#) at The University of Queensland ‘found no link between exposure to water fluoridation as a young child and negative cognitive development’.²⁸

In 2023, Senevirathna et al published a [systematic review of research on water fluoridation in Australia](#). Their review of nationwide evaluations found that water fluoridation reduces dental caries in the Australian population.²⁹

Of the limited studies conducted in Australia which they identified, Senevirathna et al found that ‘water fluoridation at optimal levels is not associated with any adverse health effects’:³⁰

*It is worth noting that though a limited number of studies have been conducted in Australia to investigate possible adverse impacts of fluoridation, **these studies have concluded that water fluoridation at optimal levels is not associated with any adverse health effects in any age group** (Do et al., 2023; McCoomb, 2017). For example, Laurence et al. (2012) conducted a cross-sectional study in the NSW Central Coast region and reported that dental fluorosis levels in children were not significantly varied across fluoridated and non- fluoridated regions. Interestingly, two studies have reported an increased prevalence of enamel defects in children with lifelong or near lifelong exposure to water fluoride levels at 1 ppm in South Australia (Dooland and Carr, 1985; Dooland and Wylie, 1989). However, further studies have revealed that dental fluorosis among South Australian children is very mild to mild (Do and Spencer, 2007). This was supported by another study conducted in Western Australia assessing dental fluorosis in 12-year-olds in fluoridated and non-fluoridated areas, which also reported similar observations (Riordan, 1991).*

²⁷ O A H Jones, ‘[Fluoride in drinking water is in the spotlight again. Let’s not forget how it transformed our oral health](#)’, *Conversation*, 10 December 2024.

²⁸ L.G. Do et al., ‘[Early childhood exposures to fluorides and cognitive neurodevelopment: A population-based longitudinal study](#)’, *Journal of Dental Research*, 18 December 2024; University of Queensland, ‘[Study finds fluoride in water does not affect brain development](#)’, *News*, 19 December 2024.

²⁹ L Senevirathna et al., ‘[Water fluoridation in Australia: A systematic review](#)’, *Environmental Research*, vol 237, part 1, 15 November 2023, p 7.

³⁰ L Senevirathna et al., ‘[Water fluoridation in Australia: A systematic review](#)’, *Environmental Research*, vol 237, part 1, 15 November 2023, p 7 [bold text added by the QPL].

In addition, they found that in Australia researchers have identified no association between water fluoridation and cancer:³¹

Researchers have also investigated potential associations between cancer and water fluoridation. For example, the standardized cancer mortality ratios in fluoridated and non- fluoridated regions in NSW were compared and it was reported that there was no association between the two (Richards and Ford, 1979). In addition to the research activities on dental fluorosis and cancer mortality, a recent population-based longitudinal study using data from Australia’s National Child Oral Health Study 2012–14 reported the absence of an association between exposure to fluoridated water during the first five years of life and altered measures of executive functioning and emotional and behavioural development of children (Do et al., 2023).

Australian jurisdictions

Table 1 provides a list of Australian jurisdictions and information relating to:

- legislation and regulations regarding water fluoridation
- the level of government responsible for the regulation of water fluoridation.

Information relating to legislation was sourced by the QPL using:

- chapter 8 of the NHMRC [Australian Drinking Water Guidelines](#)
- National Health and Medical Research Council (NHMRC), [Water Fluoridation and Human Health in Australia: Questions And Answers](#), and
- general internet searches.

³¹ L Senevirathna et al., [‘Water fluoridation in Australia: A systematic review’](#), *Environmental Research*, vol 237, part 1, 15 November 2023, pp 7-8.

Table 1 Water fluoridation in Australian jurisdictions

Jurisdiction	Legislation	Level of government
Queensland	<ul style="list-style-type: none"> • Water Fluoridation Act 2008 (Qld) • Water Fluoridation Regulation 2020 • Water Fluoridation Code of Practice, October 2021 	<p>According to Queensland Health, local governments regulate water fluoridation in Queensland:³²</p> <p><i>Under the Water Fluoridation Act 2008 each local government in Queensland is able to make the decision whether or not the town water supplies within their area are fluoridated.</i></p> <p><i>Read frequently asked questions to help local governments (PDF 107 kB) make decisions about how fluoridation is implemented in their local government area.</i></p> <p><i>Where there is a single water supplier for multiple local government areas (e.g. in South East Queensland), each individual local government must take account of the impact of their decision on other local governments serviced by that water supplier.</i></p> <p>The Water Fluoridation Code of Practice states:³³</p> <p><i>This legislative framework was introduced in 2008 and, at that time, prescribed mandatory fluoridation of all water supplies serving at least 1,000 people. Subsequent amendments to the Act in late 2012 removed the mandatory requirement, instead allowing local governments to determine whether it is in the best interests of their communities to add, not add, or cease to add fluoride to water supplies in their area.</i></p>

³² Queensland Health, '[Water fluoridation](#)', *Water*, 14 November 2024.

³³ Queensland Health, [Water Fluoridation Code of Practice](#), October 2021, p 9.

Jurisdiction	Legislation	Level of government
		<p><i>When determining whether it is in the best interests of a community to add, not add or cease to add fluoride to a water supply, one local government must not affect another local government's water security or water supply or the fluoridation of another local government's water supply without the other local government's agreement.</i></p> <p><i>Once a decision to add, or cease to add, fluoride to a water supply is made, the local government must give the Chief Executive of the Department of Health a notice stating that a decision has been made and the nature of the decision. In addition, the local government must publish a notice at least once in a newspaper circulating in the area serviced by the relevant water supply.</i></p> <p><i>In instances where the local government and water supplier are different entities, the local government is obliged to notify the water supplier of a decision to add, not add or to cease adding fluoride. The water supplier is obliged to comply with a decision by a local government to add, not add, or cease adding fluoride. However, the costs incurred in giving effect to the local government's determination must be met by the local government.</i></p> <p><i>Any water supplier adding fluoride to a public potable water supply must do so in accordance with the regulatory requirements spelt out in the Regulation.</i></p> <p><i>Queensland Health is the government agency responsible for the administration and enforcement of the water fluoridation legislative framework.</i></p>

Jurisdiction	Legislation	Level of government
New South Wales (NSW)	<ul style="list-style-type: none"> • Fluoridation of Public Water Supplies Act 1957 (NSW) • Fluoridation of Public Water Supplies Regulation 2022 • NSW Code of Practice for Fluoridation of Public Water Supplies 	<p>The NSW Code of Practice for Fluoridation of Public Water Supplies states:³⁴</p> <p><i>Legislation providing for water fluoridation in New South Wales is described as permissive or enabling legislation. The legislation, first passed in 1957 (Fluoridation of Public Water Supplies Act 1957), permits the Secretary of NSW Health to define the conditions when fluoride may be added to a water supply. The Act provides for the establishment of the Fluoridation of Public Water Supplies Advisory Committee with the power to initiate and refer to the Minister proposals concerning the addition of fluoride to public water supplies.</i></p> <p>Under s 6 of the <i>Fluoridation of Public Water Supplies Act</i>:</p> <ul style="list-style-type: none"> • a water supply authority may, add fluorine to any public water supply under its control • a water supply authority shall add fluorine to any public water supply under its control, if directed to do so by the Secretary. • a water supply authority shall not add fluorine to any public water supply except with the approval of or at the direction of the Secretary <p>subject to the provisions of the act and regulations.</p> <p>Under s 6A of the <i>Fluoridation of Public Water Supplies Act</i>:</p>

³⁴ [NSW Code of Practice for Fluoridation of Public Water Supplies](#), April 2018, p 3

Jurisdiction	Legislation	Level of government
		<ul style="list-style-type: none"> the Secretary may, by notification published in the Gazette, direct a water supply authority to add fluorine to a public water supply a direction may be given only if the water supply authority has referred the question of fluoridating the public water supply to the Secretary for consideration and the Secretary has received the advice of the Committee. <p>According to an information sheet published by NSW Health in 2013, local government held responsibility for water fluoridation in NSW.³⁵</p> <p>According to a media article, in 2014 the NSW government voted down a bill that would have it assume responsibility for water fluoridation.³⁶</p>
Victoria	<ul style="list-style-type: none"> Health (Fluoridation) Act 1973 (Vic) Code of practice for fluoridation of drinking water supplies (Second Edition)- Health (Fluoridation) Act 1973 	The Victoria Department of Health is responsible for water fluoridation, as legislated in the <i>Health (Fluoridation) Act 1973 (Vic)</i> . ³⁷ Specifically ss 5 and 6 of the <i>Health (Fluoridation) Act</i> regulate powers and mandatory procedures for the use of fluoride by a water supply authority. ³⁸

³⁵ New South Wales. NSW Health, [Water fluoridation in NSW](#), September 2013, p 1.

³⁶ ['NSW Government votes against taking responsibility for fluoridation'](#), ABC News, 27 February 2014.

³⁷ See also V Dickson-Swift et al., ['Access to community water fluoridation in rural Victoria: It depends where you live...'](#), *The Australian Journal of Rural Health*, vol 31, no 3, 24 February 2023, p 495.

³⁸ Victoria, [Health \(Fluoridation\) Act 1973\(Vic\)](#), s 5 and 6.

Jurisdiction	Legislation	Level of government
		<p>The <i>Code of practice for fluoridation of drinking water supplies</i>, supports the <i>Health (Fluoridation) Act</i>, and provides:³⁹</p> <p><i>2.2.1 Department of Health and Human Services</i></p> <p><i>The department is responsible for administering the Health (Fluoridation) Act, the SDWA and associated regulations.</i></p> <p><i>Under the Act, the Secretary to the Department of Health and Human Services, or their delegate, may:</i></p> <ul style="list-style-type: none"> • <i>require a water agency to add fluoride to a drinking water supply for dental health purposes (s. 5(1))</i> • <i>approve a proposed plant by specifying the fluoride concentration, the fluoride chemical and the public water supply to which fluoride is to be added by a water agency (s. 6)</i> • <i>provide funding for the net capital costs and expenses (s. 8).</i> <p><i>Before approving the proposed fluoridation plant, the department reviews the plans and specifications submitted and determines the ability of a water agency to operate the plant safely and effectively. This includes carrying out a technical appraisal of the plant to determine compliance with the code of practice. Approval of the plant may also provide direction to a water agency on related matters such</i></p>

³⁹ Department of Health and Human Services, [Code of practice for fluoridation of drinking water supplies Second edition Health \(Fluoridation\) Act 1973](#), March 2018, p 3.

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		<p><i>as the requirement to update its water quality risk management plan under the SDWA.</i></p> <p><i>2.2.2 Water agency</i></p> <p><i>A water agency may decide to fluoridate a drinking water supply for dental health purposes.</i></p> <p><i>Under the Act a water agency must:</i></p> <ul style="list-style-type: none"> <i>• add fluoride to a water supply when required by the department (s. 5)</i> <i>• before adding fluoride to any water supply, submit plans, specifications and information to the department for consideration (s. 6(1))</i> <i>• in accordance with s. 6(3) of the Act</i> <ul style="list-style-type: none"> <i>– regulate the fluoride concentration to ensure the maximum concentration does not exceed the direction of the department under s. 6(2)</i> <i>– not add fluoride in any other form than that directed by the department under s. 6(2).</i> <p><i>Water agencies must follow the procedure to fluoridate described in section 2.3 of this code of practice.</i></p> <p><i>Water agencies are responsible for designing, installing and operating the fluoridation plant in accordance with the code of practice and all relevant legislative requirements. Communication with the department is required at all stages of the project.</i></p>

Jurisdiction	Legislation	Level of government
South Australia	<p>According to the Australian Drinking Water Guidelines developed by the NHMRC, ‘there is no fluoride legislation in South Australia’.⁴⁰</p> <p>NHMRC states:⁴¹</p> <p><i>Water fluoridation is implemented by SA Water as a matter of Government policy and maintained by Ministerial direction under the Public Corporations Act.</i></p>	<p>According to SA Water, fluoride is added to South Australia’s metropolitan and major country drinking water supplies, as ‘mandated’ by the state health authority, SA Health.⁴²</p>
Western Australia	<ul style="list-style-type: none"> • Fluoridation of Public Water Supplies Act 1966 (WA) 	<p>The Western Australian Department of Health states:⁴³</p> <p><i>Water fluoridation was introduced in Western Australia in 1968. Currently, around 92 per cent of the Western Australia population is provided with fluoridated drinking water, principally in the Perth metropolitan area and most larger regional centres.</i></p>

⁴⁰ Australia. National Health and Medical Research Council, [‘8.4.1 Fluoridation’](#), *Australian Drinking Water Guidelines*, last updated 3 months ago, accessed 13 January 2025.

⁴¹ National Health and Medical Research Council, [Water Fluoridation and Human Health in Australia: Questions And Answers](#), n.d. accessed on 15 January 2025, p 15.

⁴² SA Water, [Fluoride](#), n.d., accessed 13 January 2025.

⁴³ Western Australia, Department of Health, [Fluoride facts for Western Australia](#), 2 September 2024.

Jurisdiction	Legislation	Level of government
		<p>The Western Australian Department of Health further states:⁴⁴</p> <p><i>In Western Australia drinking water supplies can only be fluoridated by direction from the Minister for Health, in accordance with the Fluoridation of Public Water Supplies Act 1966 (External link) (the Act). Under the Act, the Minister for Health may only make such a direction on the advice of the Fluoridation of Public Water Supplies Advisory Committee.</i></p> <p><i>The Fluoridation of Public Water Supplies Advisory Committee (the Committee) is a statutory committee established under the Act and operating under the chairmanship of the Department of Health.</i></p>
Tasmania	<ul style="list-style-type: none"> • Fluoridation Act 1986 (Tas) • Fluoridation Regulations 2019 (Tas) • Tasmanian Code of Practice for the Fluoridation of Public Water Supplies (2022) 	<p>The Tasmanian Code of Practice for the Fluoridation of Public Water Supplies states:⁴⁵</p> <p><i>Section 8 broadly allows for the Committee to make a recommendation to the Tasmanian Minister for Health to add fluoride to a public water supply. In making that recommendation, the Committee can impose conditions in relation to the addition of fluoride. It is the intention that when the Committee makes any recommendation to the Minister for Health it will be conditional to the regulated entity complying with any approved Code in force from time-to-time. The Minister for Health will then issue a Ministerial Direction under Section 10(3) to the regulated entity, legally obliging them to fluoridate a water supply in accordance with the Committee's recommendation, and ultimately this Code.</i></p>

⁴⁴ Western Australia, Department of Health, [Fluoridation](#), 1 August 2024.

⁴⁵ Tasmanian Government, [Tasmanian Code of Practice for the Fluoridation of Public Water Supplies](#), July 2022.

Jurisdiction	Legislation	Level of government
		<p>Water fluoridation in Tasmania is supported by the Tasmania Department of Health:⁴⁶</p> <p><i>Community water fluoridation is supported by the Department of Health (Tasmania). The Department has issued a Tasmanian Code of Practice for the Fluoridation of Public Water Supplies. This is based on the legislative requirements under the Fluoridation Act 1968 and the Fluoridation Regulations 2019</i></p> <p><i>The Code of Practice sets the requirements for TasWater to comply with the legislative framework, including the</i></p> <ul style="list-style-type: none"> • <i>optimal range</i> • <i>testing</i> • <i>monitoring and</i> • <i>management activities.</i> <p><i>The legislative framework establishes a Fluoridation Committee that advises the Minister for Health on matters relating to fluoride and public health. The Committee comprises members from within the Department and external.</i></p>
Northern Territory	The QPL did not identify any legislation relating to water fluoridation in the Northern Territory.	Fluoridated water is supplied throughout a majority of the Northern Territory by the government-owned organisation Power and Water Corporation (PWC). ⁴⁹

⁴⁶ Tasmania. Department of Health, '[Fluoridation of drinking water](#)', *Environmental health*, 29 July 2022.

⁴⁹ Power Water, '[Drinking water quality](#)', *Your Water*, n.d., accessed 13 January 2025; PowerWater, *About Power and Water*, n.d., accessed 15 January 2025.

Jurisdiction	Legislation	Level of government
	<p>The NHMRC notes that in November 2010 the Northern Territory government issued a position statement on the use of fluorides in the Northern Territory.⁴⁷</p> <p>According to a research article published by Chondur et al in the Rural and Remote Health journal, water fluoridation is not legislated in the Northern Territory.⁴⁸</p>	<p>PWC states that fluoride may be added to meet requirements set by the Northern Territory Department of Health.⁵⁰</p> <p>In a written question submitted to the Minister for Essential Services by Mr Higgins in the Legislative Assembly of the Northern Territory in 2019, the Minister states that PWC provides fluoridated water to customers in the Northern Territory.⁵¹</p> <p><i>Power and Water provides fluoridated water to 86% of its drinking water customers across its 92 locations (major and minor centres plus remote communities)</i></p> <p>....</p> <p><i>The current policy position is informed by a cost benefit analysis, which states the ideal cost-benefit ratio would be achieved in the Northern Territory by fluoridating communities with a population of 600 or greater, where naturally occurring levels of fluoride are below beneficial levels. The policy does not mandate fluoridation.</i></p>

⁴⁷ Northern Territory. NT Health Library Services, [Position statement: The use of fluorides in the Northern Territory](#), n.d., accessed 13 January 2025.

⁴⁸ Chondur et al., [‘Effects of community water fluoridation on child dental caries in remote Northern Territory, Australia: a difference-in-difference analysis’](#), *Rural and Remote Health*, vol 24, no 3, 25 September 2024.

⁵⁰ Power Water, [‘Drinking water quality’](#), *Your Water*, n.d., accessed 13 January 2025.

⁵¹ [‘Question on Notice: Fluoride in the Water’](#) [Questioner: Mr Higgins], Northern Territory, *debates*, no 556, 3 April 2019.

Jurisdiction	Legislation	Level of government
		<p>Please note that the information contained in the written question to the Minister dates from 2019. The Parliamentary Library has not confirmed whether this continues to be the current policy.</p> <p>In addition, the Minister states that the Department of Health is the regulator of drinking water quality in the Northern Territory.⁵²</p>
Australian Capital Territory	<ul style="list-style-type: none"> Licensed condition issued under the Public Health Act 1997 (ACT) Clause 36 of the Utilities (Technical Regulation) Act 2014 (ACT) (exemption from offences relating to water contamination)⁵³ 	<p>Icon Water supplies drinking water to customers within the Australian Capital Territory and bulk water to the Queanbeyan-Palerang Regional Council.⁵⁴</p> <p>The Icon Water 2023-24 Drinking Water Quality Report states:⁵⁵</p> <p><i>The Drinking Water Utility Licence, issued by ACT Health, requires fluoride to be added to the ACT's drinking water system at a concentration between 0.6 and 1.1 mg/L.</i></p>

Source: Compiled by the QPL using Australia. National Health and Medical Research Council, '[8.4.1 Fluoridation](#)', *Australian Drinking Water Guidelines*, last updated 3 months ago, accessed 13 January 2025 and other sources included in the table, as hyperlinked and referenced.

⁵² '[Question on Notice: Fluoride in the Water](#)' [Questioner: Mr Higgins], Northern Territory, *debates*, no 556, 3 April 2019.

⁵³ National Health and Medical Research Council, [Water Fluoridation and Human Health in Australia: Questions And Answers](#), n.d. accessed on 15 January 2025, p 15.

⁵⁴ Icon Water, [Drinking Water Quality Report 2023-24](#), 2024.

⁵⁵ Icon Water, [Drinking Water Quality Report 2023-24](#), 2024.