

Access to fluoridated drinking-water

This factsheet presents information about the population with access to fluoridated drinking-water in New Zealand.

Key facts



60% of New Zealanders on registered drinking-water supplies had access to fluoridated drinking-water, 2018–2019. This proportion has remained relatively stable since 2014–2015.



People in major urban areas were more likely to have access to fluoridated drinking-water compared to other areas.



People in the South Island were less likely to have access to fluoridated drinking-water (18%) compared to people in the North Island (75%).

Background information

Tooth decay (dental caries) is a major chronic disease among New Zealanders of all ages. It is often accompanied by pain, infection, tooth loss and can lead to absence from work or school (Royal Society of New Zealand 2014).

Dental caries are caused by acids that are produced by oral bacteria. The acid dissolves the hard mineral structure ('enamel') of the tooth surface and initiates dental decay. A diet high in sugar can raise the number of bacteria that cause decay, which in turn increases the production of acids (Ministry of Health 2010; Royal Society of New Zealand 2014).

Fluoride is known to protect teeth against dental caries, so adding fluoride to drinking-water supplies can help limit tooth decay. Fluoride works to protect teeth in three ways (Royal Society of New Zealand 2014):

- Strengthens tooth enamel and makes teeth more resistant to decay
- Interferes with the growth of bacteria that cause cavities
- Helps to repair early stages of tooth decay

60% of New Zealanders on registered drinking-water supplies have access to fluoridated drinking-water

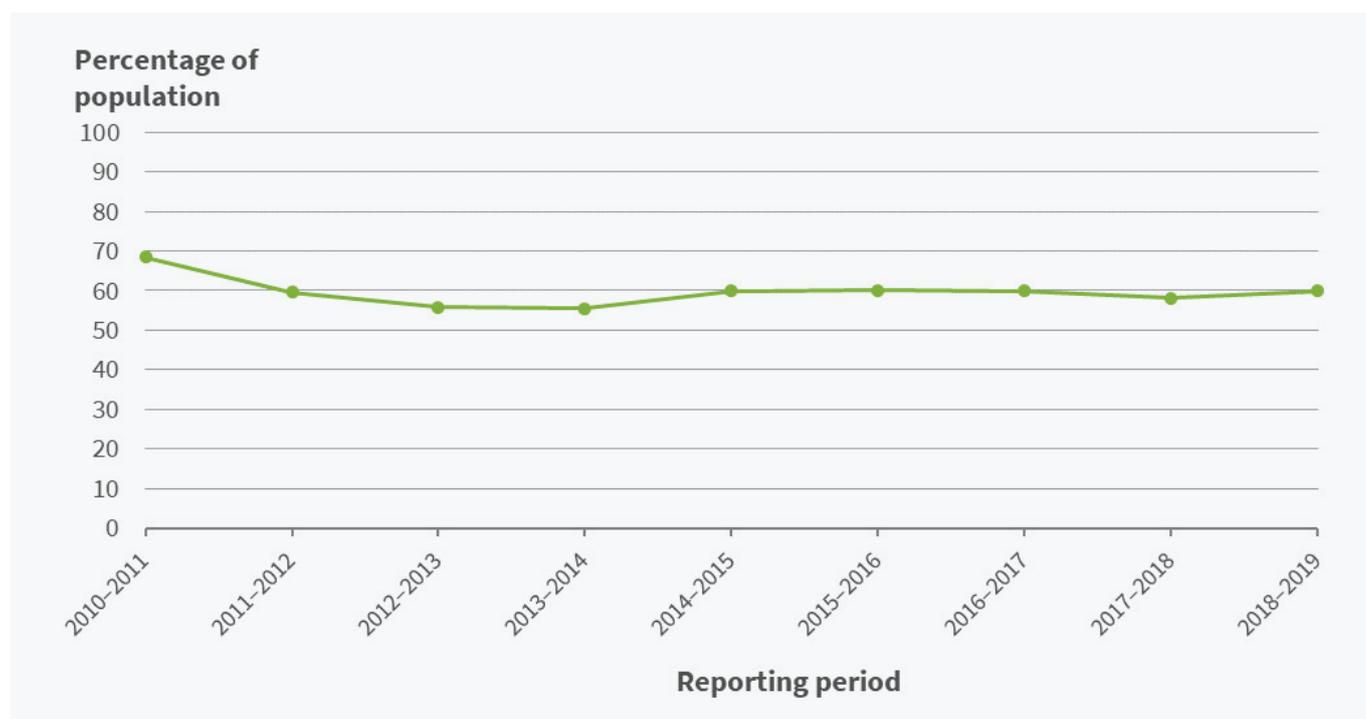
About 4.1 million New Zealanders (83% of the population) were served water from registered drinking-water supplies during the 2018–2019 reporting period. The remainder of the population received drinking-water from very small community supplies and self-supplies e.g. rainwater tanks. Of the population on registered supplies, 60.0% (2,445,000 people) had access to fluoridated drinking-water. From 2014–2015 onwards, this proportion has remained relatively stable, ranging between 58.1% and 60.0% (Figure 1).

Hastings removed fluoride from supplies in 2016, reflected from the 2017–2018 reporting period onwards.

Hamilton removed fluoride from drinking-water supplies in 2013, resulting in lower access to fluoridated drinking water for the 2012–2013 and 2013–2014 reporting periods. Fluoride was reintroduced in 2014.

Differing population growth rates between communities of different fluoridation status also affects the proportion of New Zealanders receiving fluoridated drinking water.

Figure 1: Percentage of the population on registered community drinking-water supplies with access to fluoridated drinking-water, 2010–2019



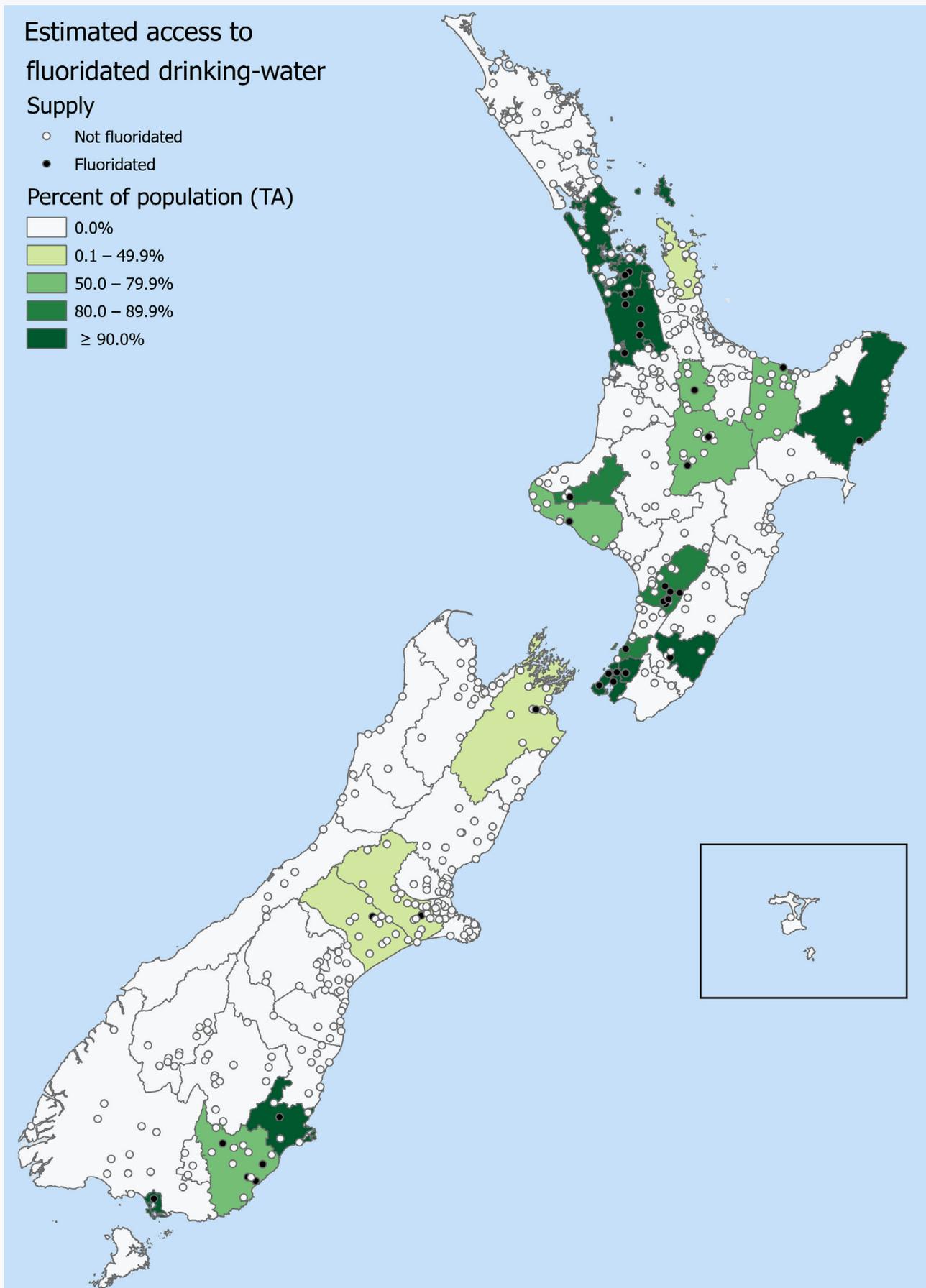
Source: Ministry of Health, 2020.

People in the North Island were four times more likely to have access to fluoridated drinking-water than people in the South Island

Seventy-six percent of the population on registered drinking-water supplies in the North Island were served fluoridated water in 2018–2019. In the South Island, 18% of the population were served fluoridated water (Figure 2).

Most of the territorial authorities with access to fluoridated drinking-water were those containing major urban areas, especially in the North Island. Of the major urban areas, Wellington, Lower Hutt, Hamilton, Auckland and Dunedin had greater than 90% of their population with access to fluoridated drinking-water. Neither Christchurch nor Tauranga are served by fluoridated drinking-water supplies.

Figure 2: Percentage of the population on registered drinking-water supplies with access to fluoridated drinking-water, by territorial authority, 2018–2019



Source: Ministry of Health, 2020.

Data for this indicator

The datasets for this indicator come from the Ministry of Health's 'Annual report on drinking-water quality'. Drinking-water statistics are presented for all registered community drinking-water supplies that served more than 100 people. This describes the access to drinking-water for 4.1 million New Zealanders (83% of the population) (Ministry of Health 2020).

References

Ministry of Health. (2010). *Our Oral Health: Key findings of the 2009 New Zealand Oral Health Survey*. Wellington: Ministry of Health.

Ministry of Health. (2020). *Annual report on drinking-water quality 2018-2019*. Wellington: Ministry of Health.

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

Other related topics include:

[Water-borne diseases related to drinking-water](#)

[Access to safe drinking-water](#)

[Oral health of children](#)

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