

Naturally occurring fluoride in Quilpie's drinking water

Fluoride is a natural mineral found in water, soil, plants, rocks, air and some foods. It helps protect our teeth from decay, and drinking water with small amounts of fluoride can reduce tooth decay for people of all ages.

What is the drinking water standard for fluoride?

The Australian Drinking Water Guidelines recommend a maximum of 1.5 milligrams per litre (mg/L) of fluoride in drinking water.

To picture this, it's about the same as one twentieth of a teaspoon of fluoride in a whole bathtub of water.

Many towns in Western Queensland use groundwater from bores, and these sources can naturally contain higher levels of fluoride.

Testing shows that Quilpie's drinking water contains about 1.7 mg/L of naturally occurring fluoride – slightly above the recommended limit.

Most standard water treatment processes and household water filters do not remove fluoride.

What are the risks of elevated levels of fluoride in drinking water?

Side effects associated with elevated levels fluoride in drinking water include:

- dental fluorosis (the most common)
- skeletal fluorosis (very rare and only seen with extremely high fluoride levels).

What is dental fluorosis?

Dental fluorosis affects the appearance of developing teeth. It's mostly a cosmetic issue, not a disease.

It usually appears as faint lines or streaks on the enamel.

In rare, more severe cases, there may be pitting or brown staining of the enamel.

Dental fluorosis can occur when children consume too much fluoride while their teeth are still forming – generally up to about 6 to 8 years of age. Teeth that have already erupted are not at risk.

The chance of fluorosis increases as fluoride levels rise, although it can occasionally occur even at lower levels.

Bathing or showering in water with higher fluoride levels does not cause fluorosis.

How to reduce the risk of dental fluorosis?

If your drinking water contains more than 1.5mg/L of naturally occurring fluoride, you can help protect your child's developing teeth by:

- offering bottled drinking water to children up to around 6 years old (but avoid replacing water with sugary drinks).
- avoiding fluoride supplements such as tablets or drops.
- brushing children's teeth without toothpaste until they are 18 months of age, unless advised otherwise by a dentist.
- offering a low fluoride toothpaste (500-550 ppm or 0.05-0.055% w/w) for children aged 18 months to 6 years old, using only a pea-sized amount and encouraging spitting, not swallowing.
- using standard fluoride toothpaste (1000-1500 ppm or 0.1-0.15% w/w) for children aged 6 years and older, using only a pea-sized amount and encouraging spitting, not swallowing.
- keeping an eye on other fluoride sources in their diet (e.g., tea, seafood).
- breastfeeding where possible and using bottled water when preparing infant formula.

Need help or more information?

- Darling Downs Public Health Unit: (07) 4699 8240
- your dental professional
- Queensland Health Oral Health: www.health.qld.gov.au/oralhealth
- 13 HEALTH (13 43 25 84) for confidential health advice 24 hours a day, seven days a week
- Email: oral_health@health.qld.gov.au

This information only applies to areas where naturally occurring fluoride levels are above 1.5mg/L.

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