

The Cochrane Review: Questions & Answers

What is the Cochrane review and what did it conclude?

The British-based [Cochrane Collaboration](#) reviews the evidence for various oral health practices and then issues its reports. In October 2024, Cochrane released a report about the evidence for the benefits of water fluoridation. The review found that water fluoridation still reduces tooth decay “but with smaller effect sizes” than were shown in studies conducted decades ago.

Is Cochrane recommending that communities cease water fluoridation?

No. In fact, a co-author of the Cochrane review [told NBC News](#) that their document should not be viewed as a reason to stop fluoridation programs. The author, Anne-Marie Glenny, added that “contemporary studies are showing that water fluoridation is beneficial.” As [one health journalist wrote](#), researchers told her that “it would be a mistake for municipalities to interpret the findings as a reason to pull back on adding the cavity-fighting mineral” to their water systems.

Did Cochrane review studies from the U.S. and Canada showing an increase in tooth decay and dental treatment costs after two cities stopped fluoridation?

No, Cochrane did *not* include published peer-reviewed studies that showed a major decline in dental health after [a U.S. city](#) and [a Canadian city](#) ceased fluoridation.

Many peer-reviewed studies about fluoridation were not included in Cochrane’s review. Why not?

Cochrane has inclusion criteria that are so restrictive that only a few new studies qualified. In addition, [an important Canadian study](#) was published after Cochrane closed its review period.

What have we learned from this important Canadian study?

Young children who have multiple decayed teeth are typically treated in a hospital [under general anesthesia](#) (GA) — an expensive procedure. GA is used because toddlers and young children with severe decay might not cooperate with treatment in a dental office. [This Canadian study](#) compared GA treatment rates for children in the city of Calgary, where fluoridation ended in 2011, with Edmonton, a city that has remained fluoridated for many years. The study found that the rate of GA dental treatments in Calgary soared by 78%. By contrast, Edmonton’s rate rose by only 12%. Children are paying the price of Calgary’s decision to end fluoridation. Studies like this are partly why the city council in Calgary [voted to resume fluoridation](#).

You write that Cochrane only included only a few new studies in its latest review. Is that because those new studies are of exceptional quality?

Not at all. Many concerns have been raised about the scientific quality of the so-called CATFISH study, which is one of the new studies that Cochrane accepted. [CATFISH](#) examined two groups of British children — one living in fluoridated areas and the other group in non-fluoridated areas. But the study was seriously compromised because an equipment repair forced a water plant in the fluoridated area to stop the practice for one year. This meant that *more than half of the children* in the supposedly fluoridated group were not receiving fluoridated water. This casts a cloud over the CATFISH findings.

Were there other quality concerns about the CATFISH study which Cochrane included?

Yes, there were. For example, we know that children living in low-income households are at greater risk of tooth decay than those living in wealthier circumstances. In the CATFISH study, the children in the fluoridated group were more likely to come from the highest-poverty households than those in the non-fluoridated group. In other words, fluoridation faced *a pre-existing disadvantage* in the CATFISH study, artificially diminishing fluoridation’s benefits.