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The PMCSA welcomes the recent release of the draft Information paper: [Effects of Water Fluoridation on Dental and Other Health Outcomes](#) by the Australian National Health and Medical Research Council (NHMRC). The report should serve to reassure the public over some ongoing contentious issues on the topic of community water fluoridation and public health by re-assessing the strength of the existing evidence base and analysing new data.

As in New Zealand, community water fluoridation began in Australia in the 1950s and was followed by improved dental health across the lifespan and across socioeconomic groups. Numerous studies and systematic reviews over the last 60+ years have continued to examine the effects of water fluoridation on virtually all aspects of human health.

The NHMRC information paper is the result of an extensive review of recent evidence following on from the [NHMRC's own systematic review published in 2007](#), which confirmed the efficacy and safety of water fluoridation, and recommended a target range of between 0.6 and 1.1 parts per million (ppm). The recommendation of the New Zealand Ministry of Health falls within this range (0.7 to 1.0 ppm).

The aim of the review was to examine any new evidence that might alter the conclusions of the 2007 assessment. Studies included in the review were assessed using the formal Grading of Recommendations, Assessment, Development and Evaluation (GRADE) framework, an internationally recognised system for rating the quality of evidence and strength of recommendations in healthcare. Supplementary material detailing the evidence grading of each study is available [here](#).

The Australian community was invited to submit published studies to be evaluated as part of the systematic review in 2014. Literature that met the scope of the systematic review was provided to the evidence review team at the University of Sydney. They evaluated studies identified by the community in exactly the same way that they evaluated studies found using their own systematic searches.

The review team found **consistent evidence that water fluoridation at current Australian (and New Zealand) levels decreased the occurrence and severity of tooth decay across the lifespan**. The only effect of fluoride exposure is an increased chance of having very mild or mild dental fluorosis that does not affect the function of teeth.

The evidence also **consistently showed that there is no association between water fluoridation and cancer, Down syndrome, cognitive function/IQ, mortality, or musculoskeletal effects** (hip fracture, osteosarcoma, Ewing sarcoma, skeletal fluorosis).

The report looked into resource use and cost-effectiveness, drawing on evidence from Australia and New Zealand, and found that the cost of establishing and maintaining a fluoridated water supply was significantly lower than the cost of averted dental treatments in those communities with fluoridated water, **confirming the cost-effectiveness of ongoing community water fluoridation**.

The conclusions are entirely consistent with those of the New Zealand report: [Health effects of water fluoridation: A review of the scientific evidence](#) published in 2014 on behalf of the Royal Society of New Zealand and the PMCSA.