

FLUORIDATED WATER BENEFITS THE DENTAL HEALTH OF AUSTRALIAN CHILDREN

A new report released by the Australian Institute of Health and Welfare (AIHW), *Water fluoridation and children's dental health: The Child Dental Health Survey, Australia 2002*, shows that children in Australia have better oral health than children in many other countries, due largely to fluoridated water.

Of the 44 countries with comparable national data available, Australian 12 year-olds have the seventh lowest average number of decayed, missing and filled permanent teeth.¹

Comparisons amongst Australian children found that across all age groups, in both baby teeth and permanent teeth, children who lived in areas with optimal fluoridated water had less tooth decay than those from areas with low concentration of fluoride levels. The differences in the mean dmft (decayed, missing, filled teeth) or disease experience between fluoridated and non-fluoridated areas were as high as 66% for seven year-olds.²

It was also evident that large differences in the average number of decayed, missing and filled teeth were found between areas with differing concentrations of fluoride in drinking water for both 5–6 and 11–12 year-old children from all socio-economic backgrounds. Water fluoridation was associated with better dental health, regardless of whether children lived in the least or most socio-economically disadvantaged areas.³

This report is timely, with Premier Bligh's announcement on 5 December 2007 that the Government would tackle the poor condition of Queensland's oral health by introducing fluoride into the State's water supplies.

The move will bring Queensland into line with all other States and Territories. Currently, less than 5% of Queenslanders have access to fluoridated public water. Within two years 80% of Queenslanders will be drinking fluoridated water, growing to more than 90% in 2012.

"Clear solid scientific evidence exists that water fluoridation has proven to be an efficient, effective and an equitable public health measure for reducing the

prevalence of dental decay in all age groups," said Dr John Matthews, President of the Australian Dental Association.

Fluoride reduces dental decay by making teeth less susceptible to the acids formed by micro-organisms living on and around the teeth. Fluoride can also assist in reversing the process of decay once it has commenced.⁴ Children in Townsville, one of the few Queensland towns to begin fluoridation (in 1964), have 45% less tooth decay than their counterparts in Brisbane, a city of nearly 1.8 million people that has no fluoride in its public water.⁵

"Tooth decay has ranked as one of Queensland's most expensive health problems and whilst fluoride will benefit all Queenslanders immediately, children and future generations will be the real winners", Dr Matthews said. "Research shows that tooth decay in children in this State

is higher than the national average.⁶ Six year-olds have 30% more decay in their baby teeth,

with a similar result for permanent teeth in 12 year-olds. Fluoridation will turn this around and deliver better oral health for Queensland."

The ADA has been a strong advocate of water fluoridation. Dr Matthews expressed his appreciation and thanked all the dentists for their support in this pro-fluoride campaign and to the State Government of Queensland for recognising that fluoridation of public water supplies is a significant public health initiative in Australia.

It appears that Victorian Premier John Brumby will also follow suit. He outlined his Government's stance on fluoride in a letter recently that said, "Given the strength of evidence as to the health benefits and safety of water fluoridation, it would be unfair for the Government not to increase access to fluoridated water supplies to allow more Victorians, and in particular children, to enjoy the benefits."⁷ Warrnambool and Ballarat look set to be fluoridated next.

The ADA has an entire section devoted to fluoride/fluoridation on its website called 'Fluoride Now': www.ada.org.au/oralhealth/flnfront.aspx

"... children in Australia have better oral health than children in many other countries, due largely to fluoridated water."



References

1. Armfield JM, Slade GD and Spencer AJ (2007) *Water fluoridation and children's dental health – The National Child Dental Health Survey, Australia 2002*. AIHW Cat No. DEN 170, DSRS No. 36, p. 34.
 2. Ibid, p. 27.
 3. Ibid, p. 29.
 4. Ibid, p. 26.
 5. Slade et al (1996) in Slade GD, Spencer AJ and Roberts-Thomson KF (2007) *Australia's dental generations – The National Survey of Adult Oral Health 2004-06*, AIHW, DSRS No. 34, p. 58.
 6. Robertson (2006a) in AIHW, *ibid*, p. 58.
 7. Johnson A (2007) 'Brumby rejects vote call'. *Warrnambool Standard*, 12 December 2007, p. 11.
- 