Water Fluoridation

Case Study

Case Study 1: Australia

The availability of community water supplies for most of the population is a pre-requisite for implementing a successful water fluoridation program. Nearly two thirds of the Australian population resides in an area with adjusted levels of fluoride in the water supply.¹

Evidence from studies in Australia report average reductions of 2.0 dmfs in the primary dentition and between 0.12 and 0.30 DMFS in the permanent dentition per child compared with non-exposed children following long term exposure to fluoride in the water.¹ A public health infrastructure is needed to maintain the necessary surveillance systems that monitor fluoride levels and engineering guidelines that govern safety. In Australia, the addition of fluoride to water first started in 1953 in Beaconsfield, Tasmania.³ Since then it has been the most successful public health intervention adopted in Australia.⁴ A fluoride in the water concentration of 0.7 ppm is estimated to reach 69.1% of the population in Australia.⁴ This number is expected to increase due to the continuing widespread implementation of fluoride in the water within the country. The Australian Institute of Health and Welfare on water fluoridation and children’s dental health reported that water fluoridation was associated with lower caries rates among children regardless of their socio-economic status.⁴ Evidence from studies in Australia report average reductions of 2.0 dmfs and between 0.12 and 0.30 DMFS per child compared with non-exposed children following long term exposure to fluoride in water.¹

A review by Australian National Health and Medical Research Council on the safety and efficacy reported that water fluoridation was safe and beneficial.²
References:


