New Zealand oral health survey findings on fluorosis prevalence

Figures from the 2008-2009 oral health survey in New Zealand found that 54.5% of children and adults between 8 and 30 years old in fluoridated areas showed no signs whatever of dental fluorosis, even in its very mildest forms, compared with 56.9% of those in non-fluoridated areas.

No one in any age group, whether in a fluoridated or non-fluoridated area, was found to have severe fluorosis. However, for levels of fluorosis classified between ‘very mild’ and ‘moderate’, slightly more people in New Zealand’s non-fluoridated areas were found to be affected than in its fluoridated areas.

It is perhaps worth noting that the York report on water fluoridation, published in 2000, classified dental fluorosis of potential aesthetic concern to be any level of fluorosis that was 'mild' or worse.

On this basis, the New Zealand figures suggest a prevalence of 4.7% of fluorosis of aesthetic concern in fluoridated areas and 10.1% in non-fluoridated areas.

continued

New Zealand oral health survey, 2008/09

Level of fluorosis	Prevalence of fluorosis among 8-30 year olds		
	All	Living in fluoridated areas	Living in non-fluoridated areas
None (level 0)	55.5%	54.5%	56.9%
Questionable (level 1)	27.2%	30.6%	22.7%
Very mild (level 2)	10.2%	10.2%	10.3%
Mild (level 3)	5.1%	3.0%	7.8%
Moderate (level 4)	2.0%	1.7%	2.3%
Severe (level 5)	0.0%	0.0%	0.0%

The New Zealand figures suggest a prevalence of 4.7% of fluorosis of aesthetic concern in fluoridated areas and 10.1% in non-fluoridated areas.

The figure for fluoridated areas is around the same as the UK Medical Research Council's estimate based on studies conducted of dental fluorosis in Europe. However, the New Zealand figure for non-fluoridated areas is considerably higher.

Commented British Fluoridation Society chairman Professor Mike Lennon: “At this stage we do not know enough about the characteristics of the non-fluoridated areas of New Zealand to be able to draw any definitive conclusions from the dental fluorosis figures. It is possible, for example, that the use of fluoride tablets and supplements in those areas may have contributed to the higher than expected levels of dental fluorosis.”