

# CHILD & ADOLESCENT ORAL HEALTH

## What is this?

**Oral health relates to the health of children's teeth and gums specifically measured through numbers of decayed, missing or filled teeth.**

This measure generally refers to two points in time, starting school (Year one or 5 years old) and the year before beginning high school (Year 8 or 12-13 years old).



## Why is it important?

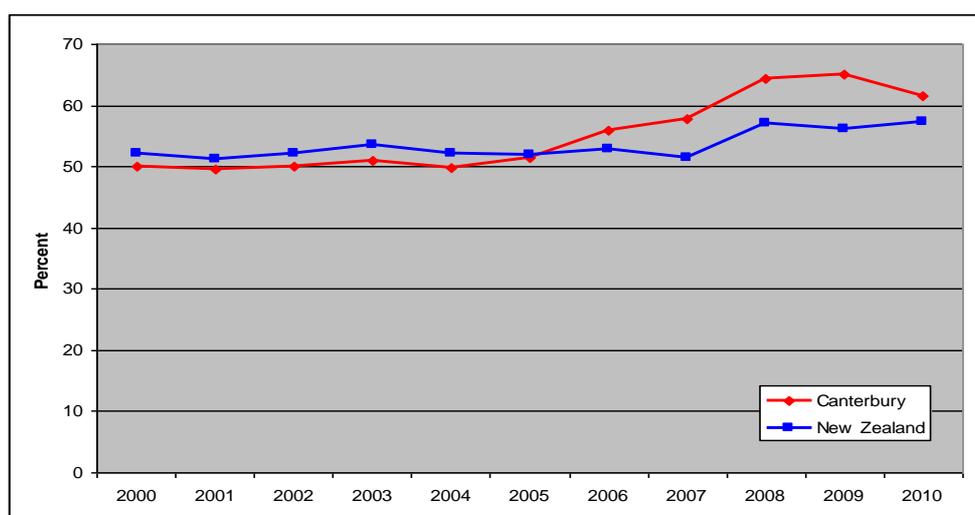
Oral health status is known to have an impact on physical development, the ability to chew, speak, and taste food, on psychological and social wellbeing and general quality of life.<sup>1</sup> Impacting positively on this during childhood is likely to reduce the negative effects of poor oral health.

## Data

In 2010 the Ministry of Health published the results of a nationwide survey of the oral health status among all sectors of the population this had some good news and many areas to work on. This was the first nationwide survey to be conducted in 21 years and included interviews with 4906 New Zealanders, and dental examinations of 3196 of those surveyed.<sup>2</sup> What it did show is that the proportion of 12–13-year-olds who are caries-free almost doubled between 1988 (29%) and 2009 (51%). The 2009 figure is similar to the one from the school dental service (see below).

Oral health status data is collected by the CDHB Community Dental Service and reported to the Ministry of Health for children in Year 1 and 8 of school (5 years and 12-13 years). Figure 1 shows Canterbury DHB having a slightly greater percentage of children caries free at age 5 years compared to New Zealand children overall.

**Figure 1 Percentage of 5 year old children caries-free, Canterbury DHB compared to all DHBs, 2000 and 2010.**

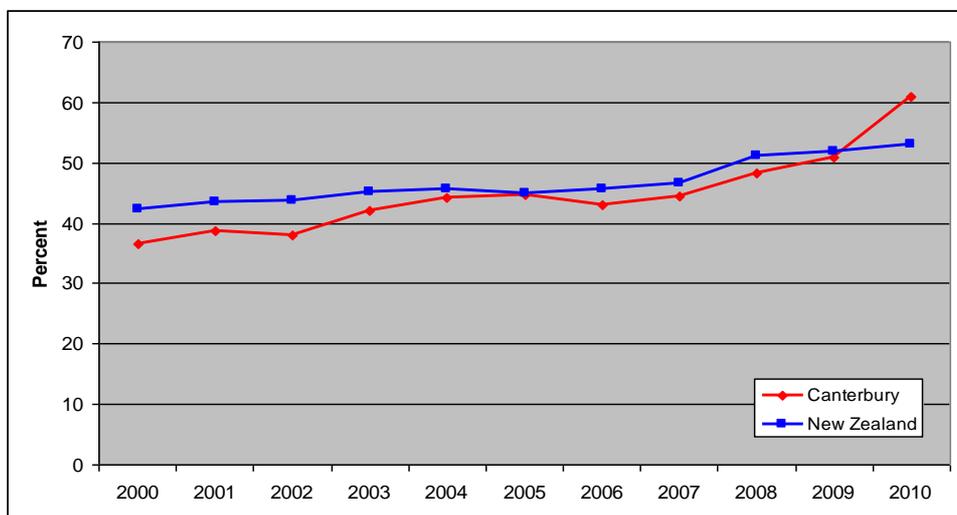


<sup>1</sup> Sheiham, A. 2005. Oral health, general health and quality of life. Bulletin of the World Health Organization, 83, 644-645.

<sup>2</sup> Ministry of Health, 2010 Our Oral Health: Key findings of the 2009 New Zealand Oral Health Survey <http://www.health.govt.nz/system/files/documents/publications/our-oral-health-2010.pdf> Accessed 12.09.12.

The percentage caries free for five year olds has improved more in Christchurch since 2006 than for New Zealand. It is not clear why this is the case. However, the percentage reduced in 2010 compared with 2009.<sup>3</sup>

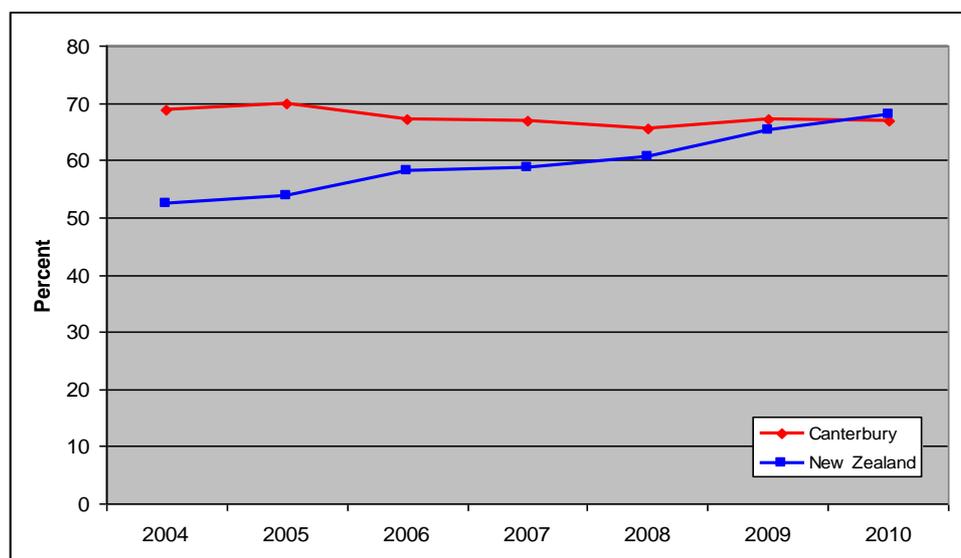
**Figure 2 Percentage of Year 8 (12-13years) children caries-free, Canterbury DHB compared to all DHBs, 2000 and 2010.**



For children in Year eight, the Canterbury DHB figure of those that were caries free was continuously below the national figure from 2000 to 2009. However, in 2010 the Canterbury DHB figure increased dramatically to be 8% above the national figure.

Figure 3, compares the percentage of adolescents in the Canterbury DHB area utilising the free oral health services available to all under-18-year-olds with the percentage for all DHBs over the years since 2004.<sup>4</sup>

**Figure 3 Percentage of under-18-year-olds using free oral health services, 2004-2009.**



<sup>3</sup> Tables available from <http://www.health.govt.nz/nz-health-statistics/health-statistics-and-data-sets/oral-health-data-and-stats> Accessed 12.09.12.

<sup>4</sup> Data available from: <http://www.health.govt.nz/nz-health-statistics/health-statistics-and-data-sets/oral-health-data-and-stats> Accessed 12.09.12.

There has not been much change over time in Canterbury. In 2010 approximately 67% of adolescents in the Canterbury DHB area were utilising the free oral health services. This was slightly lower than the overall figure of 68% of adolescents New Zealand wide.

The New Zealand Health Survey found that in 2011/12, 78% of children aged 1–14 years had visited a dental health care worker in the past 12 months. This proportion has increased from 75% in 2006/07.<sup>5</sup>

### ***Impact on inequalities***

Māori and Pacific children at age five have significant inequalities in both prevalence and severity of oral health disease compared with other children of the same age, this is independent of fluoridated water supplies.<sup>6,7</sup> In 2010 approximately 42% of Māori and 31% of Pacific five year olds in the Canterbury DHB area were caries-free compared to 38% and 33% respectively of all Māori and Pacific five year olds. These figures are substantially lower than for all Canterbury five year olds (62%) and for all five year olds nationally (57%).<sup>8</sup>

### ***Solutions***

When children have regular dental visits, oral health problems can be detected early and timely preventive measures and treatments can be used to improve oral health.<sup>9</sup> All children under the age of 18 years in the CDHB area are eligible for free dental care. Once children reach year 9 at high school, they are able to enrol with a private contracted dentist who will provide the free service until they are 18 years. Almost a third of 18 year olds were not accessing dental care so there is room to improve on this. Cost and convenience are likely to be a factor. Some internal work by the Community Dental Services identified that adolescents preferred a service similar to primary school so future plans are to put forward a case for services at low decile high schools.

Children aged 0-5 years can enrol with the CDHB Community Dental Service (CDS) through a range of methods. They usually have their first dental visit between their 1st and 2nd birthdays and continue to receive care through a local School Dental Clinic/Community or mobile Dental Clinic.

In 2007 a two-year Primary Health Organisation (PHO)-Based Adolescent Oral Health Promotion project was funded by the Ministry of Health.<sup>10</sup> The project had board aims to encourage collaboration among general practices, community dental providers, the Community Dental Service (as part of the CDHB)<sup>11</sup> as well as increasing the profile of oral health care by improving awareness of positive oral health, encouraging the uptake of free oral health care and, in turn, improving oral health among the 0-5 year old and adolescent population groups.

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<sup>5</sup> Ministry of Health. 2012. The Health of New Zealand Children 2011/12: Key findings of the New Zealand Health Survey. <http://www.health.govt.nz/publication/health-new-zealand-children-2011-12#oh> Accessed 21.12.12

<sup>6</sup> Bidwell Susan. 2010. Oral Health Promotion for children 0-5 years and adolescents 13-17 years: literature review. Paper prepared as background for Christchurch Community PHO oral health promotion. Christchurch: Community & Public Health, CDHB [unpublished].

<sup>7</sup> Kilpatrick N, Gussy M, & Mahoney E. 2008. Maternal and child oral health: systematic review and analysis: a report for the New Zealand Ministry of Health. Melbourne: Murdoch Children's Research Institute.

<sup>8</sup> Ministry of Health. 2010. Age 5 and year 8 oral health data from the School Dental Service, Wellington, Ministry of Health. <http://www.health.govt.nz/nz-health-statistics/health-statistics-and-data-sets/oral-health-data-and-stats/age-5-and-year-8-oral-health-data-school-dental-services> Accessed 12.09.12.

<sup>9</sup> Ministry of Health. 2012. The Health of New Zealand Children 2011/12: Key findings of the New Zealand Health Survey. <http://www.health.govt.nz/publication/health-new-zealand-children-2011-12#oh> Accessed 21.12.12.

<sup>10</sup> Information on the PHO services provided by Nicola Wilmot, PHO-Based Oral Health Promoter, Partnership Health Canterbury PHO, 2011.

<sup>11</sup> Information on the Community Dental Service <http://www.cdhb.govt.nz/dentalcare>

The project targeted adolescents aged 13-17 years, especially Māori, Pasifika, and those living in socially disadvantaged families. In 2008 the project, led by Partnership Health on behalf of all Canterbury PHOs had the timeframe extended for three years and also linked in with a new PHO-based initiative promoting oral health for the 0-5 year old population in Canterbury. These promotions are delivered through general practices, community organisations and at local events, through providing oral health education and promotion to parents and caregivers and adolescents in the Canterbury region in collaboration with all Canterbury PHOs, oral health providers and other key stakeholders.

### ***Data limitations***

Data collected by Community Dental Health services provides good quality annual data. The oral health survey undertaken by the Ministry of Health is the first of such studies. The 2012 Oral Health Survey results will be released in the 2013. Data on the impact of lifestyle changes on dental health would be valuable for this measure.

### ***Connections with other issues***

Drinking Water, Education, Food Security.

### ***Impact of earthquakes***

*As time passes and these papers are updated the initial sections on the impact of the earthquake are going to be kept as an archive of what we thought the situation was at the time. Updates where possible are provided.*

#### **As at December 2012**

As of July 2012, the Hospital Dental Service (HDS) were back to providing services as they were prior to the earthquakes. The HDS is currently treating children within MOH designated timeframes, however, significant time is being spent tracking down a large number of children who have relocated since the earthquake.

#### **As at November 2011**

Significant numbers of children have left schools in east Christchurch, however the CDS expects limited impact on oral health as they will be engaged by the Service at the next school they enrol at - maintaining contact with the families of preschool children may be more difficult.

One area of concern is the disruption to services provided by the Hospital Dental Service. Prior to February 2011, the HDS was providing 19 operating sessions per month. After the initial post-earthquake disruption, they were providing 15 operating sessions by May 2011, and by July this has increased to 16. Unless additional sessions can be arranged, this will extend the referral to treatment waiting time well beyond the typical six months for these children with significant dental problems.<sup>12</sup>

Prepared by Community and Public Health, with input from CDHB Community Dental Service.

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<sup>12</sup> Personal communication with Community Dental Service, CDHB