Good oral health is important for good health and wellbeing more generally. Poor oral health is a common cause of discomfort, pain, disability and poor self-image.

Regular dental visits can help keep teeth and gums healthy. At these visits, the dental health care worker can identify oral health problems early or take action to prevent them. To maintain oral health, the Ministry of Health also recommends that people brush their teeth at least twice a day with fluoride toothpaste.

This section focuses on three key indicators relating to oral health status and the use of dental services.

For more information on oral health, see Our Oral Health (Ministry of Health 2010), which presents key findings from the 2009 New Zealand Oral Health Survey.
Key findings

- **About 270,000 adults have had a tooth removed in the past year**
  > About 8% of adults (270,000 adults) had a tooth removed in the past year due to decay, gum disease, abscess or infection.

- **Less than one in two adults has had a dental visit in the past year**
  > Among adults with natural teeth (dentate adults), less than half (49%) had visited a dental health care worker in the past 12 months. This rate has dropped since 2006/07 (when it was 52%).
  > More than half of dentate adults reported that they only visit a dental health care worker when they have a dental problem (or never), rather than for regular check-ups. This rate has increased since 2006/07.

- **Māori, Pacific and Asian adults are less likely to have visited a dental health care worker in the past year**
  > People of Māori, Pacific and/or Asian ethnicity were less likely than other people to have visited a dental health care worker in the past year. They were also more likely to only visit when they have dental problems, or never visit.

- **Living in deprived areas is clearly linked to dental visiting patterns and poorer oral health**
  > Compared with people in less deprived areas, people living in more deprived areas were much more likely to only visit a dental health care worker when they had dental problems, or never visit. They were also more likely to have had a tooth removed in the past year due to decay, gum disease, abscess or infection.

**Table 34: Summary of oral health care and status for adults aged 15 years and over, 2011/12**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Percent</th>
<th>Estimated number</th>
<th>Time trend since 2006/07</th>
</tr>
</thead>
<tbody>
<tr>
<td>Had any teeth removed due to decay, abscess, infection or gum disease in the past 12 months</td>
<td>8</td>
<td>270,000</td>
<td>Not collected in 2006/07</td>
</tr>
<tr>
<td>Visited a dental health care worker in the past 12 months (dentate adults only)</td>
<td>49</td>
<td>1,584,000</td>
<td>▼ Decrease</td>
</tr>
<tr>
<td>Usually only visit a dental health care worker for a toothache (or never) (dentate adults only)</td>
<td>55</td>
<td>1,778,000</td>
<td>▲ Increase</td>
</tr>
</tbody>
</table>
8.1 Had a tooth removed in past 12 months

Over quarter of a million adults have had a tooth removed in the past year due to decay, infection, an abscess or gum infection.

Conditions that can cause poor oral health include tooth decay, abscesses, infections in the mouth, and gum disease. A tooth may be removed (extracted) if it cannot be repaired, or if the person would prefer to have the tooth removed rather than treated (due to the treatment cost or another reason). Tooth loss affects quality of life and is related to poorer health more generally.

A poor diet, not brushing teeth at least twice a day and cigarette smoking can contribute to poor oral health. Studies also suggest that people living in areas without fluoridated water have poorer oral health than those living in areas with fluoridated water.

In this report, people who had a tooth removed includes people who reported that a dental health care worker had removed at least one of their teeth in the past 12 months because of tooth decay, an abscess, infection or gum disease. It does not include people who have lost teeth for other reasons such as injury, crowded mouth or orthodontics.

About 8% of adults have had a tooth removed in the last year due to poor oral health

Overall, about 8% of adults aged 15 years and over had a tooth removed in the past 12 months due to decay, infection, abscess or gum disease. This is about 270,000 adults.

A similar proportion of men (8%) and women (7%) had a tooth removed in the past year.

Adults aged 35–64 years are more likely to have had a tooth removed in the past year

Almost 10% of adults aged 35–64 years had a tooth removed in the past year due to decay, infection, abscess or gum disease.

The younger and older age groups were generally less likely to have had a tooth removed in the past year than other age groups (Figure 70).

Figure 70: Had a tooth removed in the past 12 months due to decay, abscess, infection or gum disease, by age group and sex

Source: 2011/12 New Zealand Health Survey (15 years and over)
Māori adults are more likely to have had a tooth removed

About 12% of Māori adults and 11% of Pacific adults had a tooth removed in the past 12 months due to decay, abscess, infection or gum disease (Table 35).

After adjusting for age and sex differences, Māori adults were 1.7 times as likely as non-Māori to have had a tooth removed in the past 12 months. Similarly Pacific adults were 1.6 times as likely as non-Pacific adults to have had a tooth removed.

Table 35: Had a tooth removed in the past 12 months due to decay, abscess, infection or gum disease, by ethnic group and sex

<table>
<thead>
<tr>
<th>Percent (%)</th>
<th>Total</th>
<th>Men</th>
<th>Women</th>
<th>Estimated number¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total NZ</td>
<td>8</td>
<td>8</td>
<td>7</td>
<td>270,000</td>
</tr>
<tr>
<td>Māori</td>
<td>12</td>
<td>12</td>
<td>11</td>
<td>52,000</td>
</tr>
<tr>
<td>Pacific</td>
<td>11</td>
<td>10</td>
<td>11</td>
<td>22,000</td>
</tr>
<tr>
<td>Asian</td>
<td>6</td>
<td>7</td>
<td>6</td>
<td>24,000</td>
</tr>
<tr>
<td>European/Other</td>
<td>7</td>
<td>8</td>
<td>7</td>
<td>200,000</td>
</tr>
</tbody>
</table>

Adjusted rate ratios (comparing each ethnic group with people not in that ethnic group)²

Māori | 1.7* | 1.7* | 1.7* |
Pacific | 1.6* | 1.5 | 1.7* |
Asian | 0.8 | 0.8 | 0.9 |

* Significant at the 5% level (for adjusted rate ratios).

Notes: Total response measure of ethnicity. Adults may be counted in more than one ethnic group.

1 Due to total response ethnicity, summed numbers across ethnic groups may add to more than the total.

2 Adjusted rate ratios compare people, men or women in each ethnic group with people, men or women not in that ethnic group. Adjusted rate ratios adjust for age and, for the total column, sex.

Source: 2011/12 New Zealand Health Survey (15 years and over)

People living in more deprived areas are more likely to have had a tooth removed

People living in the most deprived areas were more likely to have had a tooth removed in the past 12 months (10%) than people in the least deprived areas (6%) (Figure 71).

Figure 71: Had a tooth removed in the past 12 months due to decay, abscess, infection or gum disease, by neighbourhood deprivation

Percent

<table>
<thead>
<tr>
<th>NZDep2006 quintile</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (least deprived)</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>5 (most deprived)</td>
<td>15</td>
</tr>
</tbody>
</table>

Source: 2011/12 New Zealand Health Survey (15 years and over)
Adjusting for differences in age, sex and ethnic group, people in the most deprived areas were 1.6 times as likely to have had a tooth removed in the past 12 months as people in the least deprived areas.

**Some adults have had all their teeth removed**

About 8% of adults aged 15 years and over reported that, in their lifetime, they had had all of their teeth removed due to decay, gum disease, abscess or infection. This is about 280,000 adults.

Women were more likely to have had all their teeth removed (9%) than men (7%). This difference remained significant after adjusting for age differences.

Older people were much more likely to have had all of their teeth removed than younger age groups. The following percentage of people in each age group had had all of their teeth removed:

- less than 1% aged 15–44 years
- 4% aged 45–54 years
- 13% aged 55–64 years
- 23% aged 65–74 years
- 42% aged 75+ years.

About 8% of Māori adults had had all their teeth removed due to decay, abscess, infection or gum disease. After adjusting for age and sex differences, Māori adults were 1.4 times as likely as non-Māori to have had all their teeth removed. There were no other differences by ethnic groups.

About 11% of people living in the most deprived areas had had all their teeth removed, compared with 5% of those in the least deprived areas. People in the most deprived areas were 1.5 times as likely to have had all their teeth removed as those in the least deprived areas, after adjusting for age, sex and ethnic differences.

**How do these findings compare with the 2009 New Zealand Oral Health Survey?**

The 2009 New Zealand Oral Health Survey collected comprehensive information about the oral health of New Zealand adults and children (Ministry of Health 2010).

In the 2011/12 New Zealand Health Survey, the percentage of adults who reported they had no teeth (8% of adults aged 15 years and over) was similar to the percentage in the 2009 New Zealand Oral Health Survey (9% of adults aged 18 years and over).

The 2011/12 survey found women were more likely to have had all their teeth removed than men. By contrast, the 2009 survey found no difference between men and women, although this result may be due to a smaller sample size and less statistical power than the 2011/12 survey.

**Where can you go for more information?**

You can find the data from the 2011/12 New Zealand Health Survey for the indicator ‘had a tooth removed due to decay, abscess, infection or gum disease in the past 12 months’ in Appendix 3 and in the online data tables.
Data for the following indicators from the 2011/12 New Zealand Health Survey are also available in the online data tables:

- ever had any teeth removed due to decay, an abscess, infection or gum disease
- has had all teeth removed due to decay, an abscess, infection or gum disease.

For more information about oral health from the 2009 New Zealand Oral Health Survey, see the report *Our Oral Health* (Ministry of Health 2010).

**What were the survey questions?**

The 2011/12 New Zealand Health Survey asked people aged 15 years and over:

- How many of your teeth have been removed by a dental health care worker because of tooth decay, an abscess, infection or gum disease? Do not include teeth lost for other reasons such as injury, crowded mouth or orthodontics. (Include baby teeth and wisdom teeth only if removed because of tooth decay, an abscess, infection or gum disease.)

- Were any of these teeth removed in the last 12 months?

The analyses of people who have had all their teeth removed used the approximate definition of having had 28–32 teeth removed due to decay, abscess, infection or gum disease. This definition was used to reduce the impact of variation in interviewer coding of the number of missing teeth. It may have excluded a small number of adults who have no natural teeth because they had all their teeth removed for reasons other than poor oral health.
8.2 Visited a dental health care worker in the past 12 months

Among adults with natural teeth, less than half have visited a dental health care worker in the past 12 months.

Dental visiting rates are lower among some ethnic groups and people living in more deprived areas.

The Ministry of Health and the New Zealand Dental Association recommend regular dental checks as one of the ways to keep teeth and gums healthy.

Dental health care workers can detect oral health problems (including decay and oral cancer) early. They can also provide timely preventive measures and treatments (such as fillings) to maintain and improve people's oral health. In this report, dental health care workers mean dentists and other dental health care workers, such as dental therapists, dental nurses, dental hygienists, and dental health specialists such as orthodontists.

Dentate adults means adults aged 15 years and over with natural teeth. It does not include people who have had all their teeth removed due to decay, abscess, gum infection or disease (which is most common in the older age groups).

About half of dentate adults have visited a dental health care worker in the past 12 months

In 2011/12, 49% of dentate adults had visited a dental health care worker in the past 12 months. This is 45% of all adults (with and without natural teeth), or about 1.6 million adults.

Among dentate adults, about 51% of women had visited a dental health care worker in the past year, compared with 47% of men. Adjusting for age, women were 1.1 times as likely as men to have had a dental visit in the last 12 months.

Fewer dentate women had a dental visit in 2011/12 than in 2006/07

Among dentate adults, the percentage who had visited a dental health care worker in the past 12 months fell from 52% in 2006/07 to 49% in 2011/12.

The percentage of dentate women who had a dental visit in the past year decreased from 55% in 2006/07 to 51% in 2011/12 (Figure 72).

There was no change for men over this time.
**Adults aged 18–44 years are less likely to visit a dentist**

Patterns in dental visiting rates were clearly linked to age.

People aged 18–44 years had the lowest dental visiting rates: less than half of them had visited a dental health care worker in the past year (Figure 73).

In New Zealand, basic oral health services are publicly funded for children and adolescents from birth up until their 18th birthday. This funding arrangement clearly influenced the trends by age group, as those aged 1–17 years were generally more likely to have visited a dental health care worker than adults aged 18 years and over.

**Dental visiting rates are low among Māori, Pacific and Asian adults**

Adults of Māori, Pacific and/or Asian ethnicity were much less likely than other people to have visited a dental health care worker in the past 12 months.
Among dentate adults, two in five Māori (38%) had visited a dental health care worker in the past 12 months (Table 36). There were also much lower dental visiting rates for Pacific (33%) and Asian (37%) dentate adults. These rates remained lower than those for non-Māori, non-Pacific and non-Asian adults respectively, after adjusting for age and sex differences.

**Table 36: Visited a dental health care worker in the past 12 months, by ethnic group and sex, among dentate adults**

<table>
<thead>
<tr>
<th>Percent (%)</th>
<th>Total NZ</th>
<th>Men</th>
<th>Women</th>
<th>Estimated number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total NZ</td>
<td>49 47 51</td>
<td>1,584,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Māori</td>
<td>38 35 41</td>
<td>156,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pacific</td>
<td>33 34 32</td>
<td>66,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td>37 31 42</td>
<td>135,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>European/Other</td>
<td>53 51 55</td>
<td>1,343,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Adjusted rate ratios (comparing each ethnic group with people not in that ethnic group)**

<table>
<thead>
<tr>
<th></th>
<th>Māori</th>
<th>Pacific</th>
<th>Asian</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.8*</td>
<td>0.7*</td>
<td>0.8*</td>
</tr>
<tr>
<td>Men</td>
<td>0.8*</td>
<td>0.7*</td>
<td>0.6*</td>
</tr>
<tr>
<td>Women</td>
<td>0.6*</td>
<td>0.9*</td>
<td>0.9*</td>
</tr>
</tbody>
</table>

* Significant at the 5% level (for adjusted rate ratios).

Notes: Total response measure of ethnicity. Adults may be counted in more than one ethnic group.
1 Due to total response ethnicity, summed numbers across ethnic groups may add to more than the total.
2 Adjusted rate ratios compare people, men or women in each ethnic group with people, men or women not in that ethnic group. Adjusted rate ratios adjust for age and, for the total column, sex.

Source: 2011/12 New Zealand Health Survey (15 years and over)

The proportions of dentate Māori, Pacific and Asian adults visiting a dental health care worker in the past 12 months have not changed since 2006/07.

**Visiting a dental health care worker is less common in more deprived areas**

Dental visiting patterns were strongly related to neighbourhood deprivation levels for adults.

Just over a third (37%) of people living in the most deprived areas had visited a dental health care worker in the past 12 months, compared with over half (59%) of people living in the least deprived areas (Figure 74).

**Figure 74: Visited a dental health care worker in the past 12 months, by neighbourhood deprivation, among dentate adults**

Source: 2011/12 New Zealand Health Survey (15 years and over)
People living in the least deprived areas were 1.5 times as likely to have visited a dental health care worker in the past 12 months as people in the most deprived areas, after adjusting for age, sex and ethnic differences.

**Cost is a common reason for not visiting a dental health care worker**

For many people, cost is likely to be a reason why they do not visit a dental health care worker regularly.

In the 2009 New Zealand Oral Health Survey, about 44% of adults aged 18 years and over reported that they had avoided dental care in the last 12 months due to the cost. Rates were higher among those aged 18–44 years, Māori and Pacific adults, and people living in the most deprived neighbourhoods (Ministry of Health 2010).

**Where can you go for more information?**

You can find the data for the indicator ‘visited a dental health care worker in the last 12 months (dentate adults)’ in Appendix 3 and in the online data tables. Data for the following indicators are also available in the online data tables:

- visited a dental health care worker in the last 12 months (for dentate adults and for total adults)
- visited a dental health care worker in the last two years (for dentate adults)
- visited a dental health care worker in the last five years (for dentate adults).

For further results from the 2009 New Zealand Oral Health Survey, see the publication *Our Oral Health* (Ministry of Health 2010).

**What was the survey question?**

The 2011/12 New Zealand Health Survey asked people aged 15 years and over:

- The next questions are about dental health care services. When I say ‘dental health care worker’, I mean dentists, dental therapists, dental nurses, dental hygienists, as well as any dental health specialists such as orthodontists.

- How long has it been since you last visited a dental health care worker about your own dental health, for any reason? Within the past year (any time less than 12 months ago); within the past two years (more than 1 year but less than 2 years ago); within the past five years (more than 2 years but less than 5 years ago); five or more years ago; have never seen a dental health care worker.

This indicator presents data for **dentate** adults only; that is, adults who reported that they had not had all their teeth removed due to decay, gum disease, abscess or infection.

This approach means the analyses only cover people who still have teeth. It also allows comparisons with the 2006/07 survey, which did not ask people who had had all their teeth removed about their dental visits. However, this focus is different from that of the 2009 New Zealand Oral Health Survey, which asked the total population about dental visits, so the results are not strictly comparable between the 2009 and 2011/12 surveys.

In practical terms, analyses defined dentate adults as people who reported having only 0–27 teeth removed due to decay, gum disease, abscess or infection, to reduce the impact of variation in interviewer coding of the number of missing teeth. A few adults who have no natural teeth may have been included in this group of dentate adults, for example, if they had all their teeth removed for a reason other than poor oral health.
8.3 Usually only visits a dental health care worker for dental problems, or never visits

Over half of adults usually only visit a dental health care worker when they have a toothache or another dental problem – or they never visit at all.

Regular dental visits for check-ups are important for our oral health. Through these check-ups, dental health care workers can detect early signs of oral disease and provide timely treatment and/or preventive measures.

This indicator, usually only visits a dental health care worker for dental problems or never visits, is defined as people who reported that they only visit a dental health care worker when they have a toothache or other similar trouble, or that they never visit. The results are presented for adults with natural teeth (dentate adults).

More than half of dentate adults only visit a dental health care worker for dental problems, or never visit

Overall, 39% of dentate adults reported that they usually visited a dental health care worker for a check-up at least every two years (Figure 75). A further 7% reported they usually visited for check-ups but less frequently than every two years.

Nearly half of dentate adults (46%) usually only visit a dental health care worker when they had dental problems. A further 8% never visits a dental health care worker.

Figure 75: Regularity of dental checks, among dentate adults

<table>
<thead>
<tr>
<th>Frequency Description</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usually visits for a check-up at least every 2 years</td>
<td>39</td>
</tr>
<tr>
<td>Usually visits for a check-up, but not every 2 years</td>
<td>7</td>
</tr>
<tr>
<td>Only visits for toothache or other similar trouble</td>
<td>46</td>
</tr>
<tr>
<td>Never visits</td>
<td>8</td>
</tr>
</tbody>
</table>

Source: 2011/12 New Zealand Health Survey (15 years and over)

This indicator focuses on the 55% of dentate adults who reported that they usually only visited a dental health care worker for dental problems, or that they never visited. There were no differences between men (56%) and women (54%) for this indicator.

More women only have dental visits for dental problems (or never visits) compared with 2006/07

Since 2006/07 the percentage of dentate women who report that they usually only visit a dental health care worker when they have dental problems, or that they never visit, has significantly increased, from 45% to 54% (Figure 76). Among all dentate adults, the rate also increased, from 49% in 2006/07 to 55% in 2011/12.
People aged 18–44 years are more likely to only visit a dental health care worker for problems or never visit

Most people aged 18–44 years reported that they only visit a dental health care worker when they have dental problems or that they never visit (Figure 77).

Māori, Pacific and Asian adults are more likely to only visit a dental health care worker for problems or never visit

Among dentate adults, the majority of Māori (73%), Pacific (78%) and Asian (66%) adults reported that they usually only visit a dental health care worker for dental problems, or that they never visit (Table 37).

These rates were significantly higher than those for other people, after adjusting for age and sex differences.
The percentage of dentate Māori women reporting that they usually only visit a dental health care worker for dental problems or that they never visit increased from 2006/07 (66%) to 2011/12 (73%). This increase remained significant after adjusting for age (Figure 78).

The majority of dentate adults living in the most deprived areas (75%) usually only visit a dental health care worker when they had dental problems, or never visit (Figure 79). This rate was much higher than the rate among those in the least deprived areas (37%).
People living in the most deprived areas were twice as likely as people in the least deprived areas to usually only visit a dental health care worker when they have dental problems, or never visit, after adjusting for age, sex and ethnic differences.

**What do we know from the 2009 New Zealand Oral Health Survey?**

The 2009 New Zealand Oral Health Survey also examined dental visiting patterns among adults, in relation to people’s oral health status.

The survey found that 61% of adults aged 18 years and over reported usually visiting a dental professional for a dental problem rather than a check-up.

People who only visited a dental professional for a dental problem were much more likely to have untreated dental decay. They were over twice as likely to have untreated decay on the crowns of one or more teeth, and 1.5 times as likely to have root decay, than those who usually visited for a check-up. They were also twice as likely to rate their oral health as fair or poor.

**Where can you go for more information?**

You can find the data for the indicator ‘usually only visiting a dental health care worker for dental problems’ in Appendix 3 and in the online data tables. Data for the following indicator are also available in the online data tables:

- usually visits a dental health care worker for a check-up at least every two years
- regularity of dental checks.

For further results from the 2009 New Zealand Oral Health Survey, see the publication *Our Oral Health* (Ministry of Health 2010).
What was the survey question?
The 2011/12 New Zealand Health Survey asked people aged 15 years and over:

> Which of the following statements best describes the regularity of your consultations with a dental health care worker?
> I visit a dental health care worker at least every two years for a check-up.
> I visit a dental health care worker for check-ups regularly, but with intervals of more than two years.
> I only visit a dental health care worker when I have a toothache or other similar trouble.
> I never visit a dental health care worker.