

Annual Update of Key Results 2014/15

New Zealand Health Survey



New Zealand Health Survey

Citation: Ministry of Health. 2015. *Annual Update of Key Results 2014/15: New Zealand Health Survey*. Wellington: Ministry of Health.

Published in December 2015
by the Ministry of Health
PO Box 5013, Wellington 6145, New Zealand

ISBN 978-0-947491-49-9
HP 6312

This document is available at health.govt.nz



MANATŪ HAUORA



This work is licensed under the Creative Commons Attribution 4.0 International licence. In essence, you are free to: share ie, copy and redistribute the material in any medium or format; adapt ie, remix, transform and build upon the material. You must give appropriate credit, provide a link to the licence and indicate if changes were made.

Foreword

I am pleased to present the latest findings from the New Zealand Health Survey. This report provides information on the health of both adults and children from July 2014 to June 2015, together with trend data.

The New Zealand Health Survey became a continuous survey in 2011, enabling annual updates on the health of New Zealanders to be published. This report updates the *Annual Update of Key Results 2013/14: New Zealand Health Survey*.

Having up-to-date information on the key health issues facing New Zealanders enables us to monitor trends and identify changing patterns of disease. The New Zealand Health Survey is only one source of data on disease, but it is the only or the best source of data on many risk factors, including obesity. These findings will help us ensure health services in New Zealand are able to meet the current needs of our population and are better prepared to meet the challenges of the future.

Some of the data collected by the New Zealand Health Survey have been designated as key official statistics. These statistics, known as Tier 1 statistics, include smoking (current), past-year drinking, hazardous drinking, obesity, unmet need for a general practitioner due to cost, unfilled prescription due to cost, self-rated health and mental health status (psychological distress). This report has been produced, analysed and released according to the high statistical standards expected of producers of Tier 1 statistics.

I would like to thank the many people who have been involved in the survey. I would also like to extend a special thank you to the many thousands of New Zealanders who gave their time to take part. The information they have provided is critical in developing and monitoring health policy and services in New Zealand.

I hope you find this report of interest.

Chai Chuah
Director-General of Health
Ministry of Health

Authors

This report was written by Bridget Murphy, with support from Deepa Weerasekera, Sharon Cox, Maria Turley, Jackie Fawcett and Grant Pittams. All of these authors are employed by the Health and Disability Intelligence Group, Ministry of Health.

Input into the report and peer review were also provided by Alan Henderson, Andrea Mill, Anne O'Connell, Barry Welsh, Elizabeth Aitken, Jane Carpenter, Harriet Carr, David Schaaf, John Stribling, Roimata Timutimu and Ross Judge, all employed by the Ministry of Health.

Acknowledgements

The New Zealand Health Survey would not have been possible without the support and enthusiasm of many individuals, and the surveyors who worked so diligently to collect the data.

Thank you also to the many thousands of New Zealanders who gave their time to participate in the New Zealand Health Survey. This report would not have been possible without your generosity.

Contents

Foreword	iii
Executive summary	vi
Introduction	1
Overview	1
Methodology	2
How are the results reported?	6
The health of New Zealand adults	7
Health status, health behaviours and risk factors	11
Health conditions	20
Access to health care	29
Oral health	38
The health of New Zealand children	41
Health status, health behaviours and risk factors	45
Health conditions	51
Access to health care	53
Oral health	62
References	64
Appendix 1: Definitions and statistical methods	65
List of Tables	
Table 1: Sample sizes for children and adults, by ethnic group, NZHS 2014/15	2
Table 2: Annual indicators from the survey	3
Table 3: Key survey results for adults (15 years and over)	8
Table 4: Key survey results for Māori adults	9
Table 5: Key survey results for Pacific adults	10
Table 6: Key survey results for children (aged 0–14 years)	42
Table 7: Key survey results for Māori children	43
Table 8: Key survey results for Pacific children	44

Executive summary

The following is a summary of the key findings of the 2014/15 New Zealand Health Survey, including notable trends and differences between population groups.

- **Most New Zealanders report being in good health:** Most adults rate their own (89%) and their children's (98%) health as good, very good or excellent. Self-rated health declines with increasing age: 93% of those aged 15–24 years report being in good health, compared with 81% of those aged 75 years and over. Unlike for adult self-rated health, reported health does not differ between children living in the most socioeconomically deprived areas and those living in the least deprived areas, or between children in different ethnic groups.
- **The smoking rate is decreasing slowly:** The current smoking rate (adults who smoke at least monthly) has fallen from 20% in 2006/07 to 17% in 2014/15. The most substantial reduction in current smoking rates is for youth (those aged 15–17 years), for whom the rate has more than halved from 16% in 2006/07 to 6% in 2014/15. Māori have the highest current smoking rate of 38%. Although the Māori current smoking rate has not improved significantly, the average number of cigarettes smoked per day by Māori daily smokers has declined over the period 2006/07 to 2014/15. Smoking is strongly linked to socioeconomic deprivation: 28% of adults living in the most deprived areas smoke. Adults living in the most deprived areas are 3.1 times as likely to smoke as those living in the least deprived areas, after adjusting for age, sex and ethnic differences.
- **The hazardous drinking rate has risen again, returning to the 2006/07 rate:** The percentage of adults who are hazardous drinkers has increased to 18%, back up to 2006/07 levels, following a low of 15% in 2011/12. This rise is largely due to an increase in hazardous drinking by adults aged 45–54 years, from 12% in 2006/07 up to 18% in 2014/15. Hazardous drinking rates fluctuate by age; they peak at 34% in youth aged 18–24 years, which is lower than in 2006/07 when it was 43%. While Pacific adults are less likely to have drunk alcohol in the past year than non-Pacific adults, those who drink are more likely to be hazardous drinkers than non-Pacific adults who drink. Over half of male Pacific past-year drinkers (52%) are hazardous drinkers.
- **Less than half of all adults eat enough servings of vegetables and fruit:** Four in ten adults (40%) eat at least three servings of vegetables and two servings of fruit each day, as recommended in the *Eating and Activity Guidelines for New Zealand Adults* (Ministry of Health 2015). The percentage of adults eating sufficient vegetables and fruit has dropped from 43% in 2006/07.
- **Adult morbid obesity rates are increasing:** Thirty-one percent of adults are obese, up from 29% in 2011/12). Of concern, adult morbid obesity rates are continuing to grow – from 3.4% in 2006/07 to 5.3% in 2014/15. One in nine children aged 2–14 years is obese. Obesity rates are strongly linked to socioeconomic deprivation: the obesity rate for children living in the most deprived neighbourhoods is five times that of those living in the least deprived neighbourhoods; and for adults the equivalent rate ratio is 1.7 times, after adjusting for age, sex and ethnic differences.
- **Physical inactivity rates are increasing:** One in seven adults (14%) is physically inactive. That is, they have done less than 30 minutes of physical activity in the past week; this rate is higher than in 2006/07, when one in ten adults was physically inactive.

- **Child physical punishment rates are declining:** The percentage of children who were physically punished (eg, smacked) by their parent/caregiver in a four-week period has fallen from 10% in 2006/07 to 6% in 2014/15. Māori and Pacific children are nearly twice (1.8 times) as likely to be physically punished as non-Māori and non-Pacific children, after adjusting for age and sex differences.
- **The prevalence of chronic pain and arthritis (a cause of chronic pain) is increasing:** The prevalence of chronic pain has increased from 17% in 2006/07 to 20% in 2014/15. Similarly, the prevalence of arthritis has increased from 15% to 17% over the same period.
- **Pacific adults experience high rates of psychological distress, but low rates of diagnosed mood and/or anxiety disorders:** Eight percent of Pacific adults are diagnosed with a mood/and or anxiety disorder. Pacific adults are much less likely to have been diagnosed with a mood/and or anxiety disorder than non-Pacific adults, after adjusting for age and sex differences. However, Pacific adults are 1.6 times as likely to have experienced high or very high levels of psychological distress in the past four weeks, indicating a high probability of an anxiety or depressive disorder.
- **Confidence and trust in general practitioners (GPs) are falling:** Most adults (80%) have confidence and trust in the GP they last visited; however, this figure is lower than it was in 2011/12 (84%). The same period has seen a similar drop (from 83% to 78%) in parents' confidence and trust in the GP their child last visited. Older adults are more likely to report confidence and trust in their GP than younger adults: 85% of adults aged 65 years and over have confidence and trust in the GP they last visited compared with 76% of those aged 25–44 years.
- **Cost is more likely to be a barrier to visiting a GP for younger adults than for older adults:** Fourteen percent of adults have not been able to visit a GP due to cost when they had a medical problem in the past 12 months. The cost of visiting a GP is much less likely to be a barrier for adults aged 65 years and over: less than 7% experience unmet need for this reason, compared with more than 14% of those aged 25–54 years. At the other end of the age spectrum, 6% of children have been unable to visit a GP due to cost in the past 12 months; only 1.8% of children younger than six years have had an unmet need for GP services due to cost.
- **The percentage of people who cannot afford prescriptions has remained fairly constant over the last four years:** Seven percent of adults and 5% of children have not collected one or more prescription items due to cost in the past 12 months. This rate is similar to 2011/12, when 7% of adults and children missed out on prescriptions due to cost. Children and adults living in the most deprived areas are respectively 5.2 and 6.4 times more likely to miss out on prescriptions due to cost than adults and children living in the least deprived areas, after adjusting for age, sex and ethnic differences.
- **Tooth extractions in the past year are more common for Pacific peoples, Māori and those living in the most socioeconomically deprived neighbourhoods:** Adults of Pacific and Māori ethnicity, and adults living in the most deprived areas are more likely to have had a tooth removed in the past year (due to tooth decay, abscess, infection or gum disease), and less likely to have visited a dental health care worker in the past year, than non-Pacific, non-Māori and adults living in the least deprived areas. Similarly Māori and Pacific children are twice as likely to have had a tooth extracted in the past year as non-Māori and non-Pacific children. One in twenty Māori and Pacific children has had a tooth extracted in the past year. However, the percentage of Pacific and Māori children who have visited a

dental health care worker in the past year does not differ from that for non-Pacific and non-Māori children respectively.

- **Māori have poorer health and more unmet need for health care:** Māori adults have higher rates for most health risks and conditions, such as smoking, hazardous drinking, obesity, being physically inactive, asthma and psychological distress, than non-Māori adults. Māori children also have comparatively high rates of obesity.

Māori have a greater level of unmet need for primary health care than non-Māori, and the disparity is greater for children. One reason for unmet need for primary health care is prescription costs. Māori adults and Māori children are more than twice as likely to have an unfilled prescription due to cost as non-Māori adults and non-Māori children, after adjusting for age and sex differences. Fifteen percent of Māori adults and 9% of Māori children miss out on prescriptions due to cost.

- **Pacific peoples have poorer health and more unmet need for health care:** Pacific adults have higher rates of risky behaviours and poor health such as smoking, hazardous drinking, being physically inactive and psychological distress than non-Pacific adults.

Pacific adults and children have the highest rates of obesity. About two-thirds of Pacific adults (66%) and almost one-third of Pacific children (30%) are obese.

On a positive note, Pacific infants are half as likely as non-Pacific infants to have been introduced to solid foods before the age of four months, after adjusting for age and sex differences.

Cost may be a barrier to accessing prescription medications to treat health problems. Prescription costs have prevented 17% of Pacific adults and the parents of 14% of Pacific children from collecting a prescription in the past 12 months. Rates of being unable to collect a prescription due to cost are almost triple for Pacific adults and more than triple for Pacific children compared with those for non-Pacific adults and non-Pacific children, after adjusting for age and sex differences.

- **Asian health is generally good:** Asian adults have low rates of smoking and hazardous drinking compared with non-Asian adults. Asians have comparatively low rates of obesity, mental health conditions, asthma, arthritis and chronic pain.

Asian adults generally report lower use of primary health services than other adults, possibly due to their better health status. Asian adults and children are less likely to report unmet need for health care than non-Asian adults and children.

Note that the Asian ethnic group is very diverse, and therefore data should be interpreted with caution. For example, the health profile of Indians is different to that of Chinese. Furthermore, profiles differ within these Asian groups; for example, depending on whether people were born in New Zealand or overseas.

- **People living in more socioeconomically deprived areas have poorer health and report greater unmet need for health care:** Adults living in the most deprived areas are slightly less likely to report being in good health than those living in the least deprived areas. There is no significant difference between children living in these different areas.

Adults living in the most socioeconomically deprived areas have significantly higher levels of most health risks, including smoking, hazardous drinking, inadequate vegetable and fruit intake, physical inactivity and obesity. They also have higher rates of psychological distress, diagnosed mood and/or anxiety disorders, and chronic pain.

Children living in socioeconomically deprived areas also have higher levels of most health risks than those living in the least deprived areas. For example, they are more likely to watch two or more hours of television each day, and are more likely to be obese. They also have higher rates of emotional or behavioural problems. Children living in the most deprived areas are more than twice as likely to be physically punished as those living in the least deprived areas, after adjusting for age, sex and ethnic differences.

Although adults and children living in the most deprived areas report similar levels of use of GPs over the past year to those living in the least deprived areas, they have much higher levels of unmet need for health care. Adults living in the most deprived areas are more than twice as likely as those living in the least deprived areas to have not visited a GP due to cost in the past year. The socioeconomic disparity is even more pronounced for unfilled prescriptions: over five times as many adults and children living in the most deprived areas have not filled a prescription due to cost in the past year, compared with those living in the least deprived areas, after adjusting for age, sex and ethnic differences. These types of unmet need for health care are of particular concern where they affect people who are already in poor health.

Did you find what you were looking for?

Please help us improve our reports – tell us whether we are giving you the information you want at **www.health.govt.nz/nzhs-feedback**

It will only take a minute or two, and we really value your feedback!

Introduction

Overview

The New Zealand Health Survey (NZHS) conducts face-to-face interviews with over 13,000 adults and the parents/ caregivers of over 4000 children annually. The survey collects a wealth of information on the health and wellbeing of New Zealanders. Every year it includes a core set of questions, which help the Ministry of Health identify key issues and monitor trends.

This report presents the annual update of key results from the 2014/15 NZHS, which collected data from July 2014 to June 2015. It includes data for key survey indicators, providing a snapshot of health behaviours, health status and access to health care for both adults and children. These key indicators help highlight at-risk groups and focus attention on important issues, as well as identifying areas for further research.

Data from the 2014/15 NZHS are made available in a range of formats to suit the needs of different users, including:

- an annual update of key findings (this report)
- adult and child online tables – detailed national results broken down by age, sex, ethnic group and socioeconomic deprivation (previous survey results are also provided for comparison).

The 2014/15 NZHS publications are intended to answer three questions for each indicator.

1 What is the rate in the total population?

- The report presents 2014/15 rates (and estimated numbers) for adults and children.

2 What is changing?

- Where available, the report presents rates for the key survey indicators for all years of the NZHS since 2006/07[◊], allowing comparisons to be made over time.
- At the beginning of the adult and child sections of this report are key survey indicators for Māori and Pacific peoples, allowing comparisons to be made over time.
- Online tables provide more detailed trend data, including analyses by sex, age and ethnicity.

3 Are the results the same for everyone? In particular, do indicators vary by sex, age, ethnicity or neighbourhood deprivation?

- Rate ratios compare males with females, Māori with non-Māori, Pacific with non-Pacific peoples, and people living in high-deprivation with those in low-deprivation areas for each key survey indicator. These rate ratios are adjusted for differences in the age, sex and ethnic structure of the population groups being compared.
- A bar chart summarises the age distribution of each indicator. The online tables provide detailed results, including trends by sex, age and ethnicity.

[◊] Previous New Zealand Health Surveys were conducted in 1992/93, 1996/97, 2002/03 and 2006/07. The NZHS has been in continuous operation since July 2011.

Methodology

Sample selection

The 2014/15 results provided in this report refer to the sample selected from 1 July 2014 to 30 June 2015. The survey results refer to the usually resident population of all ages living in permanent dwellings, aged-care facilities and student accommodation. Not included in the survey were: people living in institutions (such as for long-term hospital care, hospital- and dementia-level care in aged-care facilities, and in prisons), the homeless, short-term visitors and tourists. Trained surveyors from CBG Health Research Ltd randomly selected participants and carried out the survey interviews.

Sample size

Of those invited to participate in the survey, 79% of adults (13,497 adults) and 83% of parents/caregivers (representing 4754 children) agreed to be interviewed. Table 1 summarises the number of survey respondents by ethnic group. Please note that the data in the table are based on total response ethnicity so, when the different categories are summed, the total is greater than the total number of respondents. Appendix 1 provides further information on total response ethnicity.

Table 1: Sample sizes for children and adults, by ethnic group, NZHS 2014/15

Ethnic group (total response)	Adults	Children
European/Other	9729	3061
Māori	3166	1773
Pacific	885	689
Asian	1174	598
Total	13,497	4754

Note that the Asian ethnic group is very diverse, and therefore data should be interpreted with caution. For example, the health profile of Indians is different to that of Chinese. Furthermore, profiles differ within these Asian groups; for example, depending on whether people were born in New Zealand or overseas.

Interview process

Data collection involved a face-to-face interview, followed by measurement of height and weight (in those aged two years and over), waist circumference (in those aged five years and over) and blood pressure (in adults).

Annual indicators from the survey

Table 2 lists the annual indicators from the survey for adults and children. The annual indicators either relate to single survey questions or are derived indicators based on a number of questions. This table provides a brief definition of each indicator presented in this report. The *Indicator Interpretation Guide 2014/15: New Zealand Health Survey* provides more detailed definitions, and includes the survey questions.

In addition to the tables in this report, online tables include a number of supplementary indicators.

Table 2: Annual indicators from the survey

Topic	Adult indicator	Child indicator
Health status, health behaviours and risk factors	Good or better self-rated health	Good or better parent-rated health
	<i>Self-rated health: full response breakdown</i>	<i>Parent-rated health: full response breakdown</i>
	Current smokers	Solid food before four months (four months to four years)
	Daily smokers	Solid food before six months (six months to four years)
	<i>Ex-smokers</i>	<i>Fast food intake at least once per week (2–14 years)</i>
	<i>Mean number of cigarettes smoked per day (daily smokers)</i>	<i>Fast food intake 3+ times per week (2–14 years)</i>
	Past-year drinkers	<i>Fizzy drink intake at least once per week (2–14 years)</i>
	Hazardous drinkers (total population)	<i>Fizzy drink intake 3+ times per week (2–14 years)</i>
	<i>Hazardous drinkers (past-year drinkers)</i>	Breakfast eaten at home every day (2–14 years)
	<i>Consumption of 6+ drinks on one occasion at least monthly (total population)</i>	<i>Breakfast eaten at home less than 5 days in past week (2–14 years)</i>
	<i>Consumption of 6+ drinks on one occasion at least monthly (past-year drinkers)</i>	<i>Vegetable intake (2–14 years)</i>
	<i>Consumption of 6+ drinks on one occasion at least weekly (total population)</i>	<i>Fruit intake (2–14 years)</i>
	<i>Consumption of 6+ drinks on one occasion at least weekly (past-year drinkers)</i>	Television watching (2–14 years)
	Vegetable intake	<i>Active travel (5–14 years)</i>
	Fruit intake	<i>Mean weight (2–14 years)</i>
	<i>Vegetable and fruit intake</i>	<i>Mean height (2–14 years)</i>
	Physical activity	<i>Mean waist (5–14 years)</i>
	Little or no physical activity	<i>Mean BMI (2–14 years)</i>
	<i>Mean weight</i>	<i>BMI: full response breakdown</i>
	<i>Mean height</i>	<i>Thinness (2–14 years)</i>
	<i>Mean waist</i>	<i>Healthy weight (2–14 years)</i>
	<i>Mean body mass index (BMI)</i>	<i>Overweight (but not obese) (2–14 years)</i>
	<i>BMI: full response breakdown</i>	<i>Overweight or obese (2–14 years)</i>
	<i>Underweight</i>	Obesity (2–14 years)
	<i>Healthy weight</i>	<i>Obese class 1 (2–14 years)</i>
	<i>Overweight (but not obese)</i>	<i>Obese class 2 or 3 (2–14 years)</i>
	<i>Overweight or obese</i>	Physical punishment in past 4 weeks
	Obesity	
	<i>Obese class 1</i>	
	<i>Obese class 2</i>	
	<i>Obese class 3</i>	

Topic	Adult indicator	Child indicator
Health conditions	<p>High blood pressure (medicated)</p> <p>High cholesterol (medicated)</p> <p>Ischaemic heart disease (diagnosed)</p> <p><i>Heart failure (diagnosed)</i></p> <p>Stroke (diagnosed)</p> <p><i>Diabetes (diagnosed)</i></p> <p><i>Type 2 diabetes (proxy)</i></p> <p>Asthma (medicated)</p> <p>Arthritis (diagnosed)</p> <p><i>Osteoarthritis (diagnosed)</i></p> <p><i>Rheumatoid arthritis (diagnosed)</i></p> <p><i>Gout (diagnosed)</i></p> <p>Chronic pain</p> <p>Mood or anxiety disorder (diagnosed)</p> <p><i>Depression (diagnosed)</i></p> <p><i>Bipolar disorder (diagnosed)</i></p> <p><i>Anxiety disorder (diagnosed)</i></p> <p><i>Mood disorder (diagnosed depression or bipolar)</i></p> <p>Psychological distress</p>	<p>Asthma (medicated) (2–14 years)</p> <p><i>Eczema (medicated)</i></p> <p>Emotional and/or behavioural problems (diagnosed) (2–14 years)</p> <p><i>Depression (diagnosed) (2–14 years)</i></p> <p><i>Anxiety disorder (diagnosed) (2–14 years)</i></p> <p><i>Attention deficit disorder or attention deficit hyperactivity disorder (diagnosed) (2–14 years)</i></p> <p><i>Autism spectrum disorder (diagnosed) (2–14 years)</i></p>
Access to health care	<p>GP visit</p> <p><i>Mean number of GP visits</i></p> <p>Practice nurse (only) visit</p> <p><i>Mean number of practice nurse (only) visits</i></p> <p>After-hours medical centre visit</p> <p><i>Mean number of after-hours medical centre visits</i></p> <p>Unmet need for primary health care</p> <p>Unable to get an appointment at usual medical centre within 24 hours</p> <p>Unmet need for GP services due to cost</p> <p><i>Unmet need for GP services due to lack of transport</i></p> <p>Unmet need for after-hours services due to cost</p> <p><i>Unmet need for after-hours services due to lack of transport</i></p> <p>Unfilled prescription due to cost</p> <p>Definite confidence and trust in GP</p> <p><i>GP was very good or good at explaining health conditions and treatments</i></p> <p><i>GP was very good or good at involving patient in decisions</i></p>	<p>GP visit</p> <p><i>Mean number of GP visits</i></p> <p><i>Last GP visit (GP clinic) was free</i></p> <p><i>Last GP visit (any location) was free</i></p> <p>Practice nurse (only) visit</p> <p><i>Mean number of practice nurse (only) visits</i></p> <p><i>Last practice nurse (only) visit was free</i></p> <p>After-hours medical centre visit</p> <p><i>Mean number of after-hours medical centre visits</i></p> <p><i>Last after-hours medical centre visit was free</i></p> <p>Unmet need for primary health care</p> <p>Unable to get an appointment at usual medical centre within 24 hours</p> <p>Unmet need for GP services due to cost</p> <p><i>Unmet need for GP services due to lack of transport</i></p> <p><i>Unmet need for GP services due to lack of childcare</i></p> <p>Unmet need for after-hours services due to cost</p> <p><i>Unmet need for after-hours services due to lack of transport</i></p> <p>Unfilled prescription due to cost</p> <p>Definite confidence and trust in GP</p> <p><i>GP was very good or good at explaining health conditions and treatments</i></p>
Oral health status and service use	<p>Dental health care worker visit</p> <p>Teeth removed due to decay in past 12 months</p> <p><i>Teeth removed due to decay in lifetime</i></p> <p><i>All teeth removed due to decay</i></p> <p>Usually only visits dental health care worker for dental problems (or never visits)</p>	<p>Dental health care worker visit (1–14 years)</p> <p>Teeth removed due to decay in past 12 months (1–14 years)</p> <p><i>Teeth removed due to decay in lifetime (1–14 years)</i></p>

Note: Indicators in italics are included in online tables only.

Definitions and statistical methods

Appendix 1 provides information on the statistical methods used in this report.

Corrections to previously published data

We have made minor corrections to previously published data. Please use this report and the accompanying data tables for estimates for 2011/12, 2012/13 and 2013/14. The errors that were corrected are described in the *Methodology Report 2014/15: New Zealand Health Survey*.

Additional information

The following publications provide additional information about the NZHS:

- *Methodology Report 2014/15: New Zealand Health Survey*
- *Indicator Interpretation Guide 2014/15: New Zealand Health Survey*
- *Content Guide 2014/15: New Zealand Health Survey*.

How are the results reported?

Results for each of the survey indicators are summarised in the format shown below.

A brief definition of the indicator is given in the box title (more detailed definitions can be found in the survey's *Indicator Interpretation Guide*).

Results are presented as the percentage of the denominator, which is usually all survey respondents.

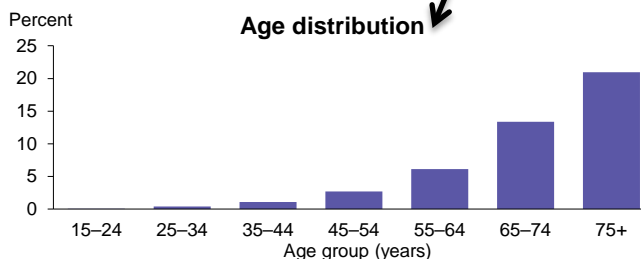
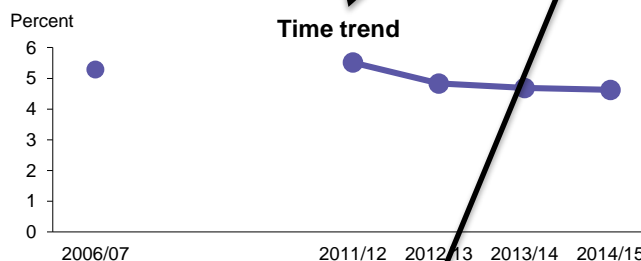
An estimate is provided of the total number of New Zealanders who fell within this category in 2014/15.

This graph shows how the results differ over time.

This graph shows how the results differ with age.

Box 12: Adults diagnosed with ischaemic heart disease, 2014/15

The prevalence was **4.6%** which is an estimated **169,000 adults**



Adjusted rate ratio

Men vs women	1.6 *
Māori vs non-Māori	1.8
Pacific vs non-Pacific	1.7
Asian vs non-Asian	0.8
Most vs least deprived	2.1

* There is a statistically significant difference between the two groups.

Ethnicity is reported using total response ethnicity, where people who reported more than one ethnic group are counted once in each group they reported.

This means that the total number of responses for all ethnic groups can be greater than the total number of people who stated their ethnicities.

Rate ratios are used to compare the results for different population groups. They tell us whether the results are more or less likely in the group of interest, as follows:

- a rate ratio above 1 = more likely
- a rate ratio of 1 = equally likely
- a rate ratio less than 1 = less likely.

For example, the above data show that Māori were 1.6 times as likely as non-Māori to have ischaemic heart disease.

The rate ratios presented in this report have been adjusted for other demographic factors that may be influencing the comparison, such as age, sex and ethnic group.

- The sex comparison is adjusted for age differences.
- Ethnic comparisons are adjusted for age and sex differences.
- Deprivation comparisons are adjusted for age, sex and ethnic differences.

In this report, we often compare the prevalence estimates for two groups. Following usual practice, we have said that a difference between the groups is statistically significant if the p -value is less than 0.05.

A statistically significant difference is likely to represent a real difference in the underlying populations, rather than representing random variation due to the sampling process.

To calculate p -values for the significance of differences between years, age-standardised prevalences have been used. These prevalences take into account changing age structures in the underlying populations over time.

The health of New Zealand adults

This section includes information on:

- key survey results for adults (Table 3)
- key survey results for Māori adults (Table 4)
- key survey results for Pacific adults (Table 5)
- health status, health behaviours and risk factors
- health conditions
- access to health care
- oral health.

Table 3: Key survey results for adults (15 years and over)

Indicator	Percent 2014/15	Percent 2011/12	Percent 2006/07	Change since 2011/12	Change since 2006/07
Health status, health behaviours and risk factors					
Good or better self-rated health	88.9	89.3	89.6	=	=
Current smokers	16.6	18.2	20.1	▼	▼
Daily smokers	15.0	16.3	18.3	▼	▼
Past-year drinkers	79.5	79.5	83.6	=	▼
Hazardous drinkers (total population)	17.7	14.9	18.0	▲	=
Vegetable intake (3+ servings per day)	64.9	68.6	63.9	▼	=
Fruit intake (2+ servings per day)	55.3	58.6	59.9	▼	▼
Physical activity	50.7	54.4	52.0	▼	=
Little or no physical activity	14.3	12.5	10.0	▲	▲
Obesity	30.7	28.6	26.5	▲	▲
Health conditions					
High blood pressure (medicated)	16.3	16.0	13.8	=	=
High cholesterol (medicated)	11.3	10.5	8.4	=	▲
Ischaemic heart disease (diagnosed)	4.6	5.5	5.3	▼	▼
Stroke (diagnosed)	1.6	1.8	1.9	=	=
Asthma (medicated)	11.0	11.0	11.3	=	=
Arthritis (diagnosed)	17.0	15.1	14.9	▲	=
Chronic pain	19.9	16.2	17.0	▲	▲
Mood or anxiety disorder (diagnosed)	17.4	16.3	12.7	=	▲
Psychological (mental) distress	6.2	4.5	6.6	▲	=
Access to health care					
GP visit in the past 12 months	80.0	78.3	81.3	▲	▼
Practice nurse visit in the past 12 months	29.6	30.5	28.7	=	=
After-hours visit in the past 12 months	10.3	12.6	.	▼	.
Experienced any unmet need for primary health care in the past 12 months	27.1	26.6	.	=	.
Unable to get an appointment at usual medical centre within 24 hours	16.8	15.5	17.6	=	▼
Unmet need for GP due to cost	13.7	13.6	.	=	.
Unmet need for after-hours due to cost	5.8	6.7	.	=	.
Unfilled prescription due to cost	6.5	7.2	.	=	.
Definite confidence and trust in GP	80.0	84.2	.	▼	.
Oral health					
Dental health care worker visit in the past 12 months ¹	48.1	48.9	51.5	=	▼
Teeth removed due to decay in the past 12 months	7.5	7.5	.	=	.
Usually only visits a dental health care worker for dental problems (or never visits) ¹	54.1	54.4	49.1	=	▲
Key: ▲ Statistically significant increase ² = No statistically significant change ▼ Statistically significant decrease ² . Data not available					
1 Among adults with natural teeth					
2 The significance (p-values) of differences between years is based on age-standardised rates					

Table 4: Key survey results for Māori adults

Indicator	Percent 2014/15	Percent 2011/12	Percent 2006/07	Change since 2011/12	Change since 2006/07
Health status, health behaviours and risk factors					
Good or better self-rated health	85.0	83.6	86.5	=	=
Current smokers	38.1	40.2	42.1	=	=
Daily smokers	35.5	37.7	39.2	=	=
Past-year drinkers	82.3	78.9	84.3	▲	=
Hazardous drinkers	32.4	28.6	33.5	▲	=
Vegetable intake (3+ servings per day)	60.9	64.7	59.9	=	=
Fruit intake (2+ servings per day)	46.7	49.1	55.2	=	▼
Physical activity	53.1	57.5	56.3	=	=
Little to no physical activity	16.8	13.4	8.7	▲	▲
Obesity	46.5	44.1	41.6	=	▲
Health conditions					
High blood pressure (medicated)	12.9	13.8	10.3	=	=
High cholesterol (medicated)	9.7	8.0	5.5	=	▲
Ischaemic heart disease (diagnosed)	4.6	5.2	4.7	=	=
Stroke (diagnosed)	1.3	2.2	1.8	▼	=
Asthma (medicated)	15.3	17.0	15.4	=	=
Arthritis (diagnosed)	13.9	11.9	11.1	=	=
Chronic pain	19.3	17.8	17.2	=	=
Mood or anxiety disorder (diagnosed)	17.4	16.4	11.9	=	▲
Psychological (mental) distress	9.6	7.4	10.9	▲	=
Access to health care					
GP visit in the past 12 months	73.6	75.0	78.8	=	▼
Practice nurse visit in the past 12 months	29.3	30.2	27.7	=	=
After-hours visit in the past 12 months	9.3	13.1	.	▼	.
Experienced any unmet need for primary health care in the past 12 months	33.4	38.8	.	▼	.
Unable to get an appointment at usual medical centre within 24 hours	18.3	20.0	22.4	=	▼
Unmet need for GP due to cost	19.7	22.5	.	=	.
Unmet need for after-hours due to cost	10.9	13.6	.	=	.
Unfilled prescription due to cost	14.5	17.8	.	=	.
Definite confidence and trust in GP	74.4	80.7	.	▼	.
Oral health					
Dental health care worker visit in the past 12 months ¹	37.9	38.1	38.6	=	=
Teeth removed due to decay in past 12 months	10.1	11.4	.	=	.
Usually only visits a dental health care worker for dental problems (or never visits) ¹	70.4	72.9	69.7	=	=
Key: ▲ Statistically significant increase ² = No statistically significant change					
▼ Statistically significant decrease ² . Data not available					
1 Among adults with natural teeth					
2 The significance (p-values) of differences between years is based on age-standardised rates					

Table 5: Key survey results for Pacific adults

Indicator	Percent 2014/15	Percent 2011/12	Percent 2006/07	Change since 2011/12	Change since 2006/07
Health status, health behaviours and risk factors					
Good or better self-rated health	85.0	87.2	85.5	=	=
Current smokers	24.7	25.9	27.1	=	=
Daily smokers	22.4	22.6	24.8	=	=
Past-year drinkers	55.8	58.1	59.5	=	=
Hazardous drinkers	23.4	19.3	23.4	=	=
Vegetable intake (3+ servings per day)	52.2	45.5	44.9	=	▲
Fruit intake (2+ servings per day)	57.2	53.8	58.8	=	=
Physical activity	54.3	47.4	48.9	▲	=
Little to no physical activity	16.3	14.0	13.9	=	=
Obesity	66.2	61.4	63.4	=	=
Health conditions					
High blood pressure (medicated)	14.4	11.4	10.6	=	=
High cholesterol (medicated)	10.6	7.3	6.7	=	=
Ischaemic heart disease (diagnosed)	4.5	1.7	2.9	▲	=
Stroke (diagnosed)	0.9	0.6	2.1	=	=
Asthma (medicated)	9.9	9.6	9.0	=	=
Arthritis (diagnosed)	13.6	6.7	7.9	=	=
Chronic pain	16.3	13.7	12.0	=	▲
Mood or anxiety disorder (diagnosed)	7.6	6.9	6.2	=	=
Psychological (mental) distress	10.2	8.5	13.2	=	=
Access to health care					
GP visit in the past 12 months	76.9	75.6	78.1	=	=
Practice nurse visit in the past 12 months	19.7	20.3	17.9	=	=
After-hours visit in the past 12 months	9.6	12.9	.	=	.
Experienced any unmet need for primary health care in the past 12 months	31.5	29.1	.	=	.
Unable to get an appointment at usual medical centre within 24 hours	13.7	14.5	20.7	=	▼
Unmet need for GP due to cost	20.1	16.3	.	=	.
Unmet need for after-hours due to cost	7.6	9.6	.	=	.
Unfilled prescription due to cost	17.3	13.0	.	=	.
Definite confidence and trust in GP	75.8	78.9	.	=	.
Oral health					
Dental health care worker visit in the past 12 months ¹	31.3	33.0	34.8	=	▼
Teeth removed due to decay in past 12 months	12.7	10.8	.	=	.
Usually only visits a dental health care worker for dental problems (or never visits) ¹	80.0	78.0	76.8	=	▲
Key: ▲ Statistically significant increase ² = No statistically significant change ▼ Statistically significant decrease ² . Data not available					
1 Among adults with natural teeth					
2 The significance (p-values) of differences between years is based on age-standardised rates					

Health status, health behaviours and risk factors

Most adults report that they are in good health

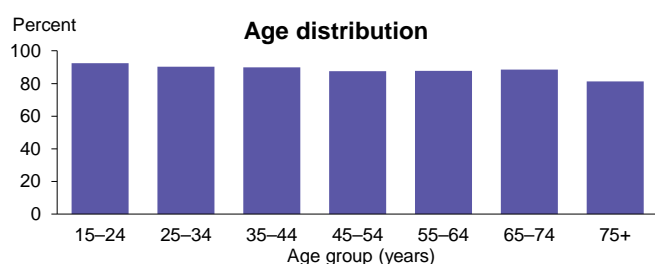
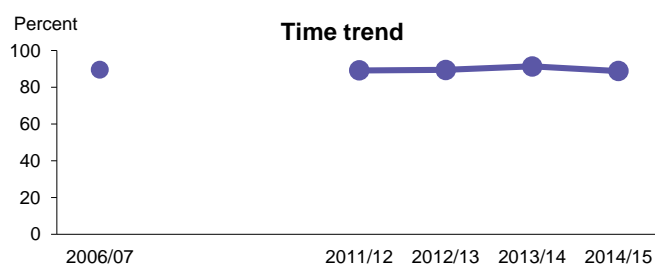
Box 1: Adults who rated their health as at least good (including excellent, very good or good), 2014/15

The prevalence was **88.9%**
which is an estimated
3,247,000 adults

Adjusted rate ratio

Men vs women	1.0
Māori vs non-Māori	0.9 *
Pacific vs non-Pacific	0.9 *
Asian vs non-Asian	1.0
Most vs least deprived	0.9 *

* There is a statistically significant difference between the two groups.



Self-rated health is a widely used indicator of health and wellbeing. Surveyors asked adults whether they considered their health to be ‘excellent, very good, good, fair or poor’. In this report, ‘good health’ means good, very good or excellent health.

Most adults (89%) were in good health, similar to 2006/07 (90%). There was no difference in the percentage of men and women who reported that they were in good health

The percentage of people who reported being in good health was high for all age groups. However, it did decline with increasing age: the percentage of young people aged 15–24 years who reported being in good health (93%) was higher than that for older people aged 75 years and over (81%).

Eighty-five percent of Māori and Pacific adults reported that they were in good health.† Māori and Pacific adults were less likely to report being in good health than non-Māori and non-Pacific adults respectively, after adjusting for age and sex differences.

Adults living in the most socioeconomically deprived areas were less likely to rate themselves as being in good health compared with adults living in the least deprived areas; the rates were 84% and 92% respectively.‡

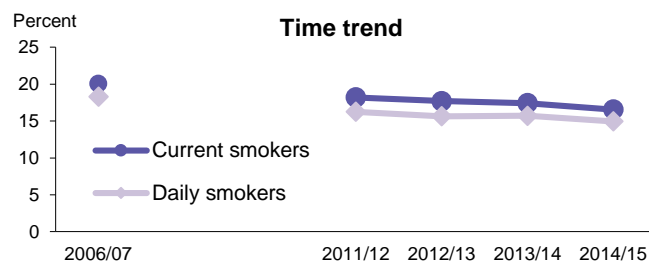
† Results for Māori and Pacific adults are provided in Tables 4 and 5 at the beginning of this section.

‡ Results are available in the online tables accompanying this report.

The smoking rate is decreasing for adults aged under 45 years

Box 2: Adults who are current smokers (smoke at least monthly) and time trend for adults who are daily smokers, 2014/15

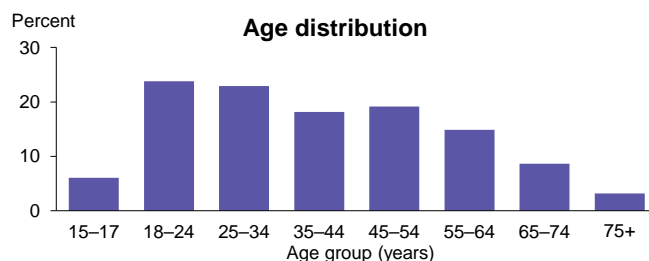
The prevalence was **16.6%**
which is an estimated
605,000 adults



Adjusted rate ratio

Men vs women	1.2 *
Māori vs non-Māori	2.7 *
Pacific vs non-Pacific	1.4 *
Asian vs non-Asian	0.3 *
Most vs least deprived	3.1 *

* There is a statistically significant difference between the two groups.



Smoking was one of the two leading modifiable risks to health in 2013 (the other being high body mass index), accounting for about 9% of all illness, disability and premature mortality (IHME 2015). Smoking harms nearly every organ and system in the body. It is the main cause of lung cancer and chronic obstructive pulmonary disease. It is also a major cause of heart disease, stroke and other cancers.

In 2014/15, 17% of adults were current smokers (smoke at least monthly), including 15% who smoked daily. Both current and daily cigarette smoking rates declined from 2011/12, when 18% of the population were current smokers, including 16% who were daily smokers.‡

Men were more likely to be current smokers than women (the rates were 18% and 15% respectively).‡ However, Māori women (42%) were more likely to be current smokers than Māori men (34%).

The most substantial reduction in current smoking since 2006/07 was for youth (those aged 15–17 years), 6% of whom smoked in 2014/15, compared with 16% in 2006/07. Adults aged 18–34 years had the highest rates of current smoking (24% for those aged 18–24 years and 23% for those aged 25–34 years). Current smoking rates for those aged 18–45 years declined from 2011/12.‡ However, smoking rates in older adults have not changed since 2006/07. About one in five adults aged 45–54 years (19%) were current smokers – not significantly different to 2011/12 (17%). Furthermore, the current smoking rate for those aged 55–64 years remained the same: 15% in both 2011/12 and 2014/15.

The current smoking rate for Asian adults almost halved since 2006/07, from 11% to 6%, while the European/Other rate declined from 19% to 15%.‡ In contrast, Māori (38%) and Pacific (25%) adults' current smoking rates have not declined significantly since 2006/07.

The average number of cigarettes smoked per day declined from 11.5 in 2006/07 to 10.6 in 2014/15. However, this decline was only significant for the total population, Māori and Asian daily smokers.‡

Adults living in the most socioeconomically deprived areas were 3.1 times as likely to be current smokers compared with adults living in the least deprived areas, after adjusting for age, sex and ethnic differences.

‡ Results are available in the online tables accompanying this report.

Over half of youth aged 15–17 years have had alcohol in the past year

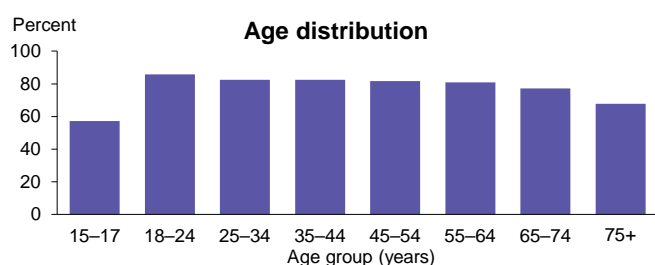
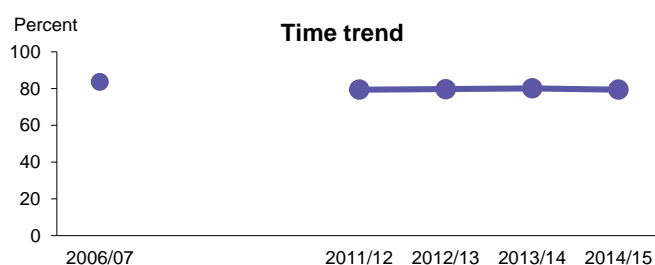
Box 3: Adults who drank alcohol in the past 12 months, 2014/15

The prevalence was **79.5%**
which is an estimated
2,905,000 adults

Adjusted rate ratio

Men vs women	1.1 *
Māori vs non-Māori	1.0 *
Pacific vs non-Pacific	0.7 *
Asian vs non-Asian	0.6 *
Most vs least deprived	0.8 *

* There is a statistically significant difference between the two groups.



Alcohol harm is driven by the total volume consumed and by patterns of drinking (WHO 2014). Alcohol accounted for about 4% of total health loss in 2013 (IHME 2015). Half of health loss was due to disease (especially mental illness, such as alcohol use disorder); the remainder was due to injury. The percentage of adults who had a drink containing alcohol in the past year, ‘past-year drinkers’, provides context to the potential for alcohol-related harm.

Four out of five adults (80%) were past-year drinkers, no different to the previous three years. Men were more likely to be past-year drinkers than women (the rates were 84% and 75% respectively).‡

Over half of youth aged 15–17 years (57%) were past-year drinkers. About four out of five adults aged 18–74 years drank in the past year, while the rate declined for those aged 75 years. The decline was sharper in older women than men: the rate of 73% of women aged 65–74 years fell to 59% for those aged 75 years and over; for men in the same age groups, the rate fell from 82% to 79%.

Only 56% of Asian and Pacific adults were past-year drinkers.‡ Asian and Pacific adults were much less likely to be past-year drinkers than non-Asian and non-Pacific adults respectively, after adjusting for age and sex differences.

Adults in the most socioeconomically deprived areas were less likely to be past-year drinkers (71%) than people in the least deprived areas (85%).‡ This disparity in alcohol use was reversed for drinking patterns hazardous to health: those living in the most deprived areas were more likely to be hazardous drinkers than those living in the least deprived areas (see page 14).

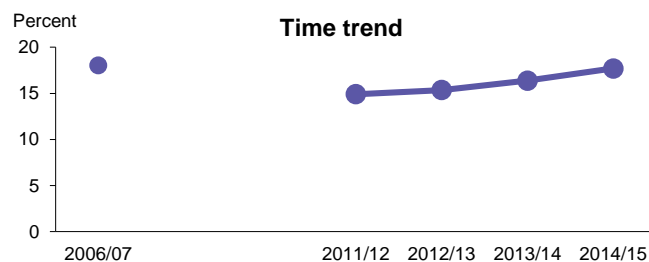
According to Statistics New Zealand (2015), the average amount of standard alcohol drinks available for consumption by adults aged 15+ years in 2014 has not changed since 2013: 2.0 standard drinks per day. This does not include alcohol produced by households (eg, homebrew).

‡ Results are available in the online tables accompanying this report.

Hazardous drinking rate has risen back to 2006/07 rate

Box 4: Adults who are hazardous drinkers (score 8 or more on an Alcohol Use Disorders Identification Test), 2014/15

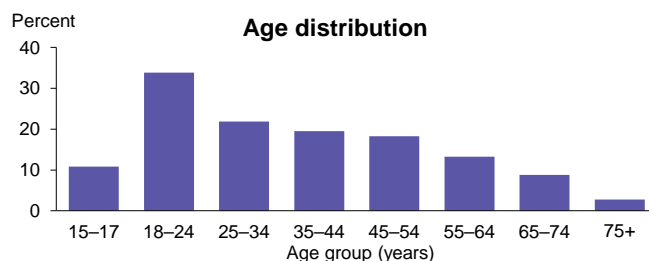
The prevalence was **17.7%**
which is an estimated
646,000 adults



Adjusted rate ratio

Men vs women	2.2 *
Māori vs non-Māori	1.9 *
Pacific vs non-Pacific	1.2 *
Asian vs non-Asian	0.2 *
Most vs least deprived	1.5 *

* There is a statistically significant difference between the two groups.



‘Hazardous drinking’ refers to an established drinking pattern that carries a risk of harming the drinker’s physical or mental health, or having harmful social effects on the drinker or others. Hazardous drinking is defined as a score of 8 points or more on the Alcohol Use Disorders Identification Test (AUDIT).

About one in six (18%) adults (including non-drinkers) had a hazardous drinking pattern. However, among past-year drinkers, about one in five (22%) had a hazardous drinking pattern.‡

Following a decline in 2011/12 (to 15%), the hazardous drinking rate returned to the 2006/07 rate (18%). The greatest increase in hazardous drinking was for those aged 45–54 years (18%, up from 12% in 2006/07).‡ Hazardous drinking rates for those aged 18–24 years (34%) remained lower than in 2006/07 (43%).

Rates of hazardous drinking varied by sex, age, ethnic group and area deprivation, as follows.‡

- Twenty-five percent of men were hazardous drinkers compared with 11% of women.
- Hazardous drinking rates peaked among young adults (43% of men and 24% of women aged 18–24 years), and decreased thereafter. By the age of 75 years and over, hazardous drinking rates decreased to 5.4% of men and 0.8% of women. Young adults (aged 18–24 years) also had the highest rate of drinking six or more drinks on one occasion (also known as binge drinking) at least weekly (19%).
- About one in three Māori adults (32%) had a hazardous drinking pattern, as did 23% of Pacific adults. Despite relatively low rates of Pacific adults drinking alcohol in the past year (see page 13), Pacific adults were more likely to have a hazardous drinking pattern than non-Pacific adults, after adjusting for age and sex differences. Over half of male Pacific drinkers (52%) were hazardous drinkers. Asian adults (5%) were much less likely to be hazardous drinkers than non-Asians, after adjusting for age and sex differences.
- Adults in the most socioeconomically deprived areas were more likely to be hazardous drinkers (23%) than those in the least deprived areas (14%).

‡ Results are available in the online tables accompanying this report.

Women are more likely than men to eat at least three servings of vegetables daily

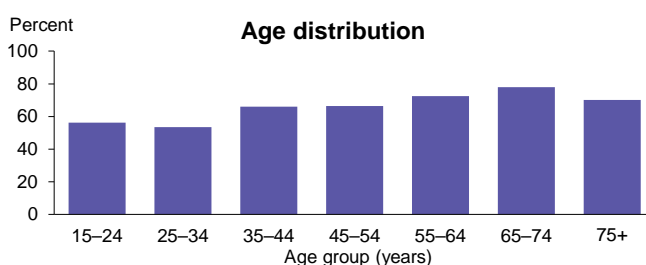
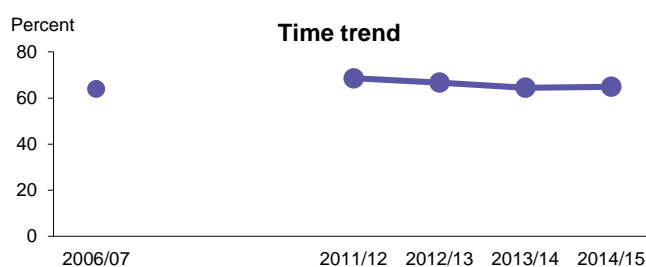
Box 5: Adults who eat at least three servings of vegetables per day, as recommended by the Ministry of Health, 2014/15

The prevalence was **64.9%**
which is an estimated
2,371,000 adults

Adjusted rate ratio

Men vs women	0.9 *
Māori vs non-Māori	1.0
Pacific vs non-Pacific	0.8 *
Asian vs non-Asian	0.8 *
Most vs least deprived	0.8 *

* There is a statistically significant difference between the two groups.



Eating plenty of vegetables and fruit can help protect against major diseases like heart disease, stroke, high blood pressure and some cancers. The *Eating and Activity Guidelines for New Zealand Adults* (Ministry of Health 2015) recommend eating at least three servings of vegetables and at least two servings of fruit per day for good health.

About two in three adults (65%) ate at least three servings of vegetables each day, representing no significant change from 2006/07 (64%).

Women were more likely to eat at least three servings of vegetables per day than men; the rates were 68% and 62% respectively.‡

Older adults were more likely to eat three servings of vegetables each day than younger adults. Only 54% of those aged 25–34 years ate at least three servings of vegetables per day, compared with 78% of those aged 65–74 years.

About one in two Pacific and Asian adults ate at least three servings of vegetables per day (the rates were 52% and 51% respectively).‡ Pacific and Asian adults were less likely than non-Pacific and non-Asian adults respectively to eat at least three servings of vegetables per day, after adjusting for age and sex differences.

Adults in the most socioeconomically deprived areas were less likely to eat the recommended three or more servings of vegetables each day than people in the least deprived areas (the rates were 56% and 70% respectively).‡

Similar patterns were seen for meeting the vegetable and fruit intake guidelines (that is, at least three servings of vegetables and at least two servings of fruit per day). Only 40% of adults met both the vegetable and fruit intake guidelines, down from 43% in 2006/07.‡

‡ Results are available in the online tables accompanying this report.

The proportion of adults eating at least two servings of fruit is trending down

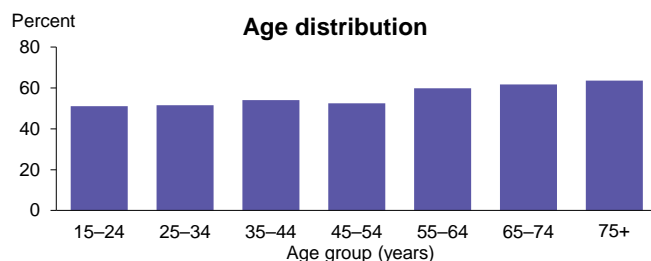
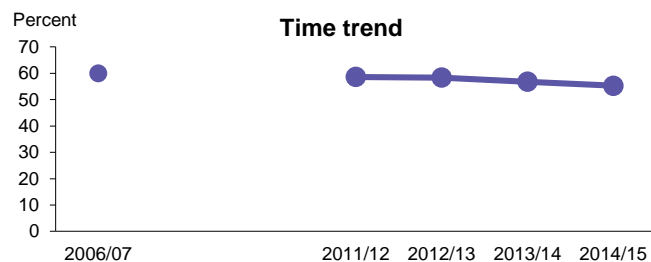
Box 6: Adults who eat at least two servings of fruit per day, as recommended by the Ministry of Health, 2014/15

The prevalence was **55.3%**
which is an estimated
2,020,000 adults

Adjusted rate ratio

Men vs women	0.8 *
Māori vs non-Māori	0.8 *
Pacific vs non-Pacific	1.1
Asian vs non-Asian	1.0
Most vs least deprived	0.7 *

* There is a statistically significant difference between the two groups.



The percentage of adults who ate at least two servings of fruit per day continued to decrease to 55%, down from 59% in 2011/12 and 60% in 2006/07. Sixty-two percent of women ate at least two servings of fruit, compared with 49% of men.‡

The percentage of adults eating at least two servings of fruit increased with age: 60% of those aged 55–64 years ate at least two servings of fruit per day, compared with about half of adults aged 15–34 years.

Less than half of all Māori adults (47%) ate at least two servings of fruit per day, continuing a steady decline in fruit intake from 55% in 2006/07.†

Adults living in the most socioeconomically deprived areas were less likely to eat at least two servings of fruit per day compared with adults living in the least deprived areas (the rates were 46% and 63% respectively).

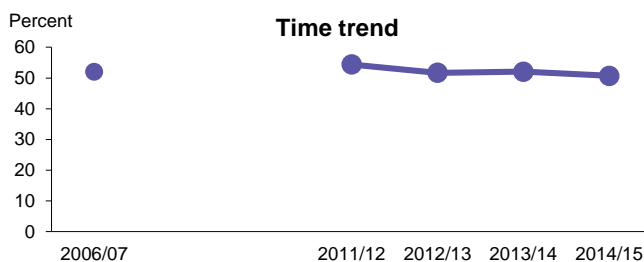
‡ Results are available in the online tables accompanying this report.

† Results for Māori and Pacific adults are provided in Tables 4 and 5 at the beginning of this section.

Men are more likely to be physically active than women

Box 7: Adults who were physically active for at least 30 minutes on five or more days in the past week, 2014/15

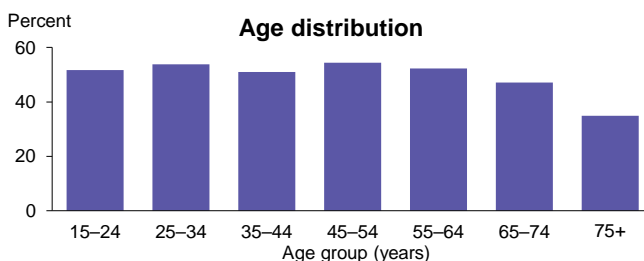
The prevalence was **50.7%**
which is an estimated
1,853,000 adults



Adjusted rate ratio

Men vs women	1.2 *
Māori vs non-Māori	1.0
Pacific vs non-Pacific	1.1
Asian vs non-Asian	0.8 *
Most vs least deprived	0.9

* There is a statistically significant difference between the two groups.



Physical activity helps protect against heart disease, stroke, type 2 diabetes, certain cancers, osteoporosis and depression. It is also important for maintaining a healthy weight. Physical activity is defined as any musculoskeletal movement that requires energy expenditure above resting level. It includes deliberate exercise (eg, running and sports) that is planned, structured and repetitively performed; activities of daily living (eg, housework); work-related activity; and active transport. Low physical activity (which includes low and no activity) accounted for about 3% of all illness, disability and premature mortality in 2013 (IHME 2015).

The Ministry of Health recommends that adults do at least 30 minutes of moderate-intensity physical activity (eg, brisk walking or equivalent vigorous activity, see *Indicator Interpretation Guide 2014/15: New Zealand Health Survey*) at least five days per week. In this report, being physically active is defined as meeting this recommendation. Note: For children and young people (5–18 years of age), the Ministry of Health recommends at least 60 minutes of physical activity every day. While those aged 15–18 years fall under the children and young people's guidelines, for NZHS purposes they are analysed here using the adult guidelines. The NZHS categorises physical activity into three groups: those who are physically active; those who are somewhat active but do not meet the physical activity guidelines; and those who do little or no physical activity (defined as less than 30 minutes per week). This report presents data on the first and third categories.

About one in two adults (51%) were physically active. Men (55%) were more likely to be physically active than women (47%).[‡]

There was little variation in physical activity by age group, apart from for those aged 75 years and over, of whom only 35% were physically active. This exception is consistent with the high proportion of adults in the same age group who did little or no physical activity (see page 18).

Less than half of Asian adults (45%) were physically active. Asian adults were 25% less likely to be physically active than non-Asian adults, after adjusting for age and sex differences.

[‡] Results are available in the online tables accompanying this report.

The percentage of adults who are physically inactive is increasing

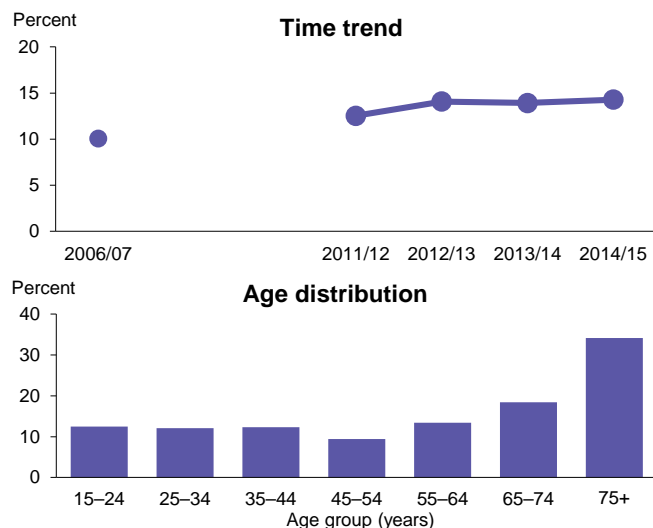
Box 8: Adults who were physically active for less than 30 minutes in the past week, 2014/15

The prevalence was **14.3%**
which is an estimated
522,000 adults

Adjusted rate ratio

Men vs women	0.7 *
Māori vs non-Māori	1.3 *
Pacific vs non-Pacific	1.3 *
Asian vs non-Asian	1.3 *
Most vs least deprived	2.0 *

* There is a statistically significant difference between the two groups.



Physical inactivity is different to sedentary behaviour, which is classed as doing activities that use very little or no energy (eg, sitting down, lying down, watching television or using a computer). Adults who engaged in little or no physical activity – that is, less than 30 minutes physical activity in the past week – are described as physically inactive in this report.

One in seven adults (14%) was physically inactive, which was a higher proportion than in 2006/07 when one in ten adults was physically inactive (10%).

Women were more likely to be physically inactive than men: one in six women (16%) and about one in eight men (12%) were physically inactive.‡

Levels of physical inactivity increased from 55 years onwards. At the peak of this trend, about one in three adults (34%) aged 75 years and over was physically inactive.

Māori, Pacific and Asian adults were 30% more likely to be physically inactive than non-Māori, non-Pacific and non-Asian adults respectively, after adjusting for age and sex differences. The proportion of physically inactive Māori adults almost doubled from 9% in 2006/07 to 17% in 2014/15.

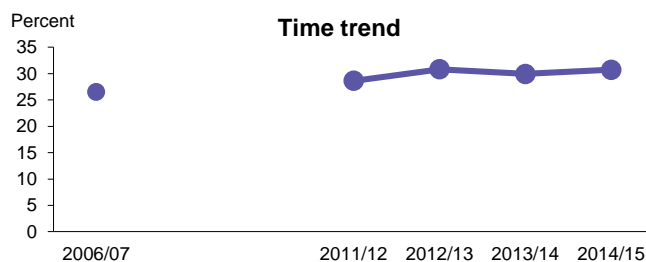
Adults living in the most socioeconomically deprived areas were twice as likely to be physically inactive as adults living in the least deprived areas, after adjusting for age, sex and ethnic differences.

‡ Results are available in the online tables accompanying this report.

Three in ten adults are obese

Box 9: Adults who are obese, with a measured body mass index (BMI) of 30 or more (or equivalent for <18 years), 2014/15

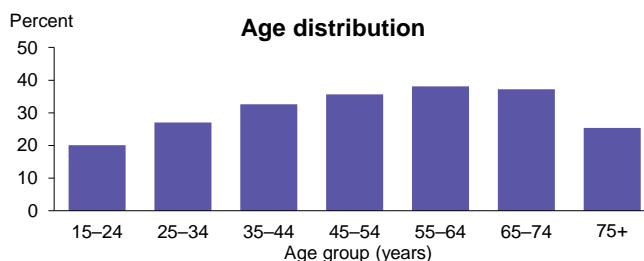
The prevalence was **30.7%**
which is an estimated
1,122,000 adults



Adjusted rate ratio

Men vs women	0.9 *
Māori vs non-Māori	1.7 *
Pacific vs non-Pacific	2.4 *
Asian vs non-Asian	0.4 *
Most vs least deprived	1.7 *

* There is a statistically significant difference between the two groups.



Excess weight is a leading contributor to a number of health conditions, including type 2 diabetes, cardiovascular diseases, some types of cancer (eg, kidney and uterus), osteoarthritis, gout, sleep apnoea, some reproductive disorders and gallstones. High BMI (overweight or obese) accounted for about 9% of all illness, disability and premature mortality in 2013, making it the leading modifiable risk to health, equal with smoking (IHME 2015). Obesity is defined as a BMI of 30 or more (or equivalent for those younger than 18 years). Surveyors measured respondents' height and weight, from which BMI is calculated, gaining these measurements for 96% of adults (excluding pregnant women).

Three in ten adults (31%) were obese, which was an increase since 2011/12 (29%), but no different to 2012/13 (31%).[‡] However, mean BMI and mean waist measurements continued to increase in nearly all population groups since 2011/12.[‡] Furthermore, the percentage of people who were morbidly obese (that is, in obese class 3, with a BMI of 40 or more) increased from 3.4% in 2006/07, to 3.8% in 2011/12, to 5.3% in 2014/15. The inequality between adults living in the most deprived and the least deprived neighbourhoods was bigger for morbid obesity rates (adjusted rate ratio of 3.1) than for obesity rates (adjusted rate ratio of 1.7).

Rates of obesity varied by sex, age, ethnic group and neighbourhood deprivation, as follows.[‡]

- Thirty-two percent of women were obese compared with 29% of men.
- The obesity rate increased with age, but was lowest at either end of the age spectrum: one in five aged 15–24 years (20%) and one in four aged 75 years and over (25%) were obese.
- Of the 1.1 million obese adults in New Zealand, 73% (816,000) were of European/Other ethnicity.[‡] Obesity rates were highest in Pacific adults (66%) and Māori adults (47%) and lowest in Asian adults (12%). After adjusting for age and sex differences, Pacific and Māori adults were more likely to be obese than non-Pacific and non-Māori adults respectively, and Asian adults less likely to be obese than non-Asian adults.
- Forty-two percent of those living in the most deprived areas were obese, compared with 22% in the least deprived areas.

[‡] Results are available in the online tables accompanying this report.

Health conditions

One in six adults has high blood pressure and is taking medication to treat it

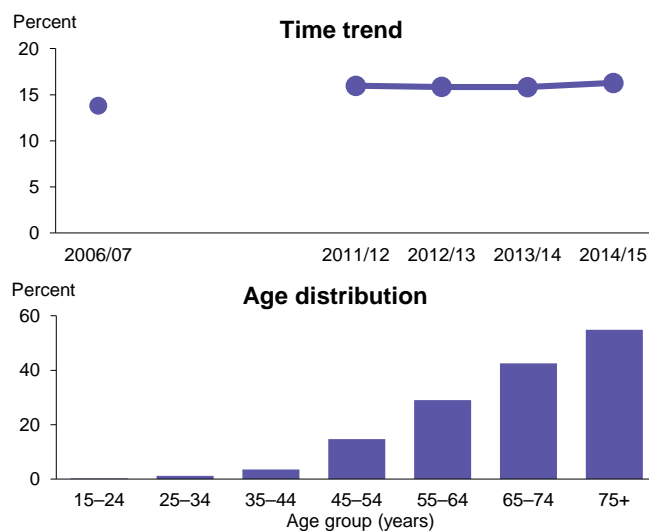
Box 10: Adults diagnosed with high blood pressure and currently taking medication for this condition (excludes pregnant women), 2014/15

The prevalence was **16.3%**
which is an estimated
594,000 adults

Adjusted rate ratio

Men vs women	1.0
Māori vs non-Māori	1.2 *
Pacific vs non-Pacific	1.4 *
Asian vs non-Asian	1.1
Most vs least deprived	1.3 *

* There is a statistically significant difference between the two groups.



High blood pressure (also called hypertension) can damage the heart and kidneys. It can also lead to ischaemic heart disease, stroke and kidney (renal) failure. High blood pressure accounted for about 8% of illness, disability and premature mortality in 2013 (IHME 2015). In this report, high blood pressure (medicated) is defined as those adults currently taking medication for this condition.

One in six adults (16%) reported high blood pressure (medicated), similar to 2006/07 (14%).

The prevalence of high blood pressure (medicated) increased steeply with age; over half of adults aged 75 years and over (55%) reported taking medication for high blood pressure.‡

Although the observed rate was highest for the European/Other group (17%), when age and sex were adjusted for, Pacific and Māori adults were more likely to report high blood pressure (medicated) than non-Pacific and non-Māori adults respectively.‡ Fourteen percent of Pacific adults and 13% of Māori adults reported high blood pressure (medicated).

Adults in the most socioeconomically deprived areas (17%) were more likely to take medication for high blood pressure than adults in the least deprived areas (15%).

Since 2012/13 the NZHS has measured adult blood pressure. In 2016 the Ministry of Health plans to produce a separate report examining measured blood pressure results from the 2012/13, 2013/14 and 2014/15 NZHS and the 2008/09 Adult Nutrition Survey (University of Otago and Ministry of Health 2011).

‡ Results are available in the online tables accompanying this report.

One in nine adults is taking medication for high cholesterol

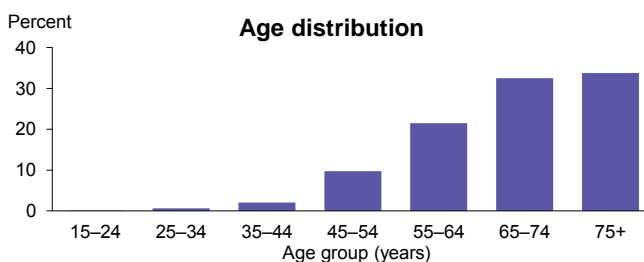
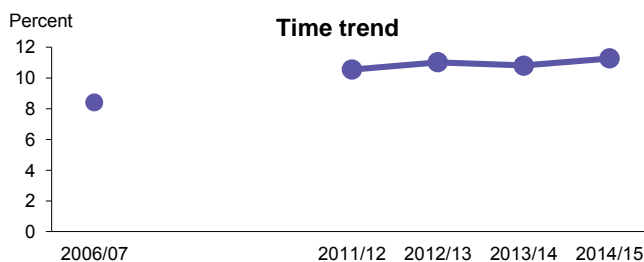
Box 11: Adults diagnosed with high cholesterol and currently taking medication for this condition, 2014/15

The prevalence was **11.3%**
which is an estimated
412,000 adults

Adjusted rate ratio

Men vs women	1.5
Māori vs non-Māori	1.3
Pacific vs non-Pacific	1.4
Asian vs non-Asian	1.3
Most vs least deprived	1.3

* There is a statistically significant difference between the two groups.



High blood cholesterol increases a person's risk of developing ischaemic heart disease and ischaemic stroke. High blood cholesterol accounted for about 4% of illness, disability and premature mortality in 2013 (IHME 2015). In this report, high cholesterol (medicated) is defined as those adults currently taking medication for this condition.

About 412,000 adults (11%) reported high cholesterol (medicated), up from 8% in 2006/07.* However, there has been little or no change in the prevalence of high cholesterol (medicated) since 2011/12 (11%).

The prevalence of high cholesterol (medicated) increased steeply with age, and peaked at one in three adults aged 65 years and older.

In 2014/15 the NZHS measured blood cholesterol levels in a sub-sample of adults. The Ministry of Health will produce a report examining measured cholesterol results in 2016.

* This may partly reflect the introduction of the health target 'Better diabetes and cardiovascular services' in 2009. From 1 January 2012, the target was called 'More heart and diabetes checks'.

One in twenty adults has diagnosed ischaemic heart disease

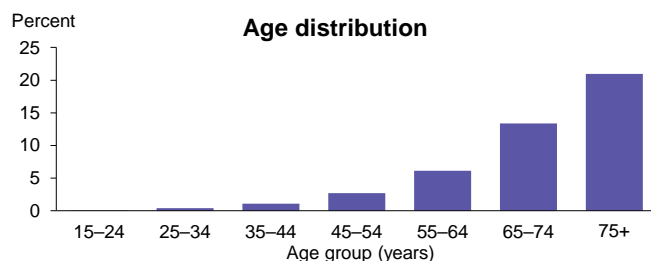
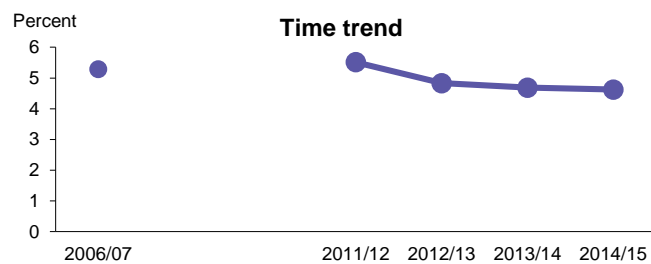
Box 12: Adults diagnosed with ischaemic heart disease, 2014/15

The prevalence was **4.6%**
which is an estimated
169,000 adults

Adjusted rate ratio

Men vs women	1.6 *
Māori vs non-Māori	1.8
Pacific vs non-Pacific	1.7
Asian vs non-Asian	0.8
Most vs least deprived	2.1

* There is a statistically significant difference between the two groups.



Ischaemic heart disease was the leading cause of health loss in 2013, accounting for about 8% of illness, disability and premature mortality (IHME 2015). Ischaemic heart disease was the second leading cause of death after cancer in 2011 (Ministry of Health 2014).

In this report, a person is defined as having ischaemic heart disease if they have been admitted to hospital with a heart attack at some time in their life, or if they have been diagnosed with angina (typically temporary chest pain while doing exercise) by a doctor.

In 2014/15 nearly one in twenty adults (4.6%) reported that they had ischaemic heart disease, down from 5.3% in 2006/07.

Six percent of men had ischaemic heart disease, compared with 3.7% of women.† Men were 1.6 times as likely as women to have had ischaemic heart disease, after adjusting for age differences. This sex ratio was mirrored in the ischaemic heart disease mortality statistics which are age standardised: in 2011 the male rate was 1.8 times the female rate (Ministry of Health 2014).

Ischaemic heart disease prevalence increased with age: about one in five people (21%) aged 75 years and over was affected.

About one in twenty Māori adults (4.6%) had ischaemic heart disease. After adjusting for age and sex differences, Māori adults were 1.8 times as likely to have ischaemic heart disease as non-Māori adults, although this difference was not statistically significant. This finding was consistent with mortality data: in 2011, the Māori ischaemic heart disease mortality rate (age standardised) was about twice as high as that for non-Māori (Ministry of Health 2014); the Māori male rate was 1.7 times the rate for non-Māori males, and the rate for Māori females was more than twice the rate for non-Māori females.

† Results are available in the online tables accompanying this report.

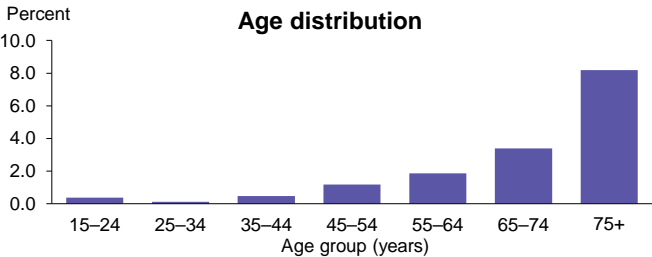
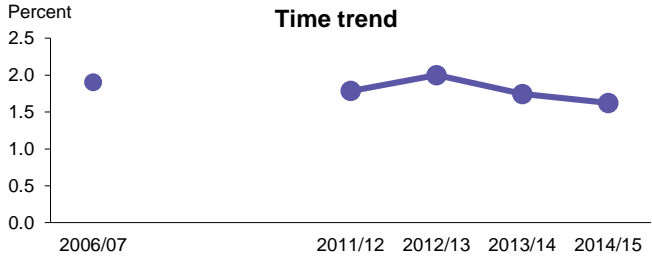
One in twelve adults aged 75 years and over has had a stroke

Box 13: Adults diagnosed as having had a stroke, excluding transient ischaemic attacks (TIA), 2014/15

The prevalence was **1.6%**
which is an estimated
59,000 adults

Adjusted rate ratio	
Men vs women	1.0
Māori vs non-Māori	1.3
Pacific vs non-Pacific	0.9
Asian vs non-Asian	0.8
Most vs least deprived	2.3

* There is a statistically significant difference between the two groups.



After a stroke, many people recover well; however, some may be permanently disabled or die. Stroke accounted for about 3% of illness, disability and premature mortality in 2013 (IHME 2015). Stroke (cerebrovascular disease) was the third leading cause of death in 2011, after cancer and ischaemic heart disease (Ministry of Health 2014).

In this report, a person is defined as having had a stroke if a doctor has told them at some time in their life that they have had a stroke (this excludes transient ischaemic attacks, which are sometimes referred to as mini-strokes).

About 59,000 adults (1.6%) reported having had a stroke during their lifetime.

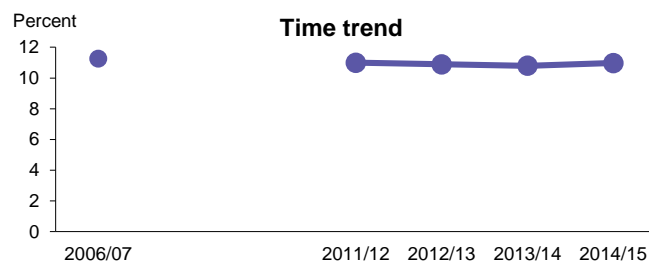
Older people were more likely to have had a stroke than those in younger age groups. About one in twelve adults aged 75 years and over (8%) reported having had a stroke. Nevertheless, 61% of adults who had had a stroke (36,000 adults) were younger than 75 years.‡

‡ Results are available in the online tables accompanying this report.

Women are more likely to have asthma (medicated) than men

Box 14: Adults diagnosed with asthma and currently taking medication for this condition, 2014/15

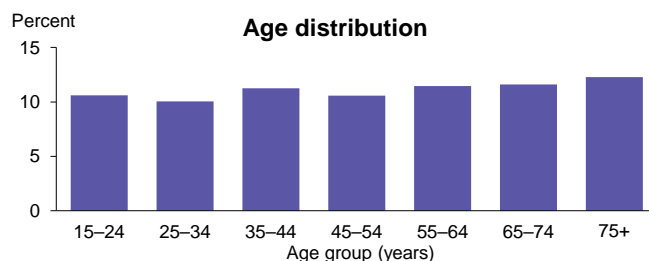
The prevalence was **11.0%**
which is an estimated
401,000 adults



Adjusted rate ratio

Men vs women	0.7 *
Māori vs non-Māori	1.5 *
Pacific vs non-Pacific	0.9
Asian vs non-Asian	0.4 *
Most vs least deprived	1.1

* There is a statistically significant difference between the two groups.



In this report, the term 'asthma (medicated)' refers to people who reported that a doctor had told them that they had asthma and that they were currently taking medication to treat it. Medication could be taken daily to prevent symptoms, or only when needed to relieve symptoms.

The prevalence of asthma (medicated) has remained stable since 2006/07, at 11% of adults.

Women were more likely to have asthma (medicated) than men. About one in eight women (13%) had asthma (medicated) compared with about one in eleven men (9%).[‡]

Asthma (medicated) prevalence varied by ethnic group: the rate was highest in Māori adults (15%) and lowest in Asian adults (5%).[‡] After adjusting for age and sex differences, Māori were more likely to have asthma (medicated) than non-Māori, and Asians were less likely to have asthma (medicated) than non-Asians.

[‡] Results are available in the online tables accompanying this report.

The prevalence of diagnosed arthritis is rising

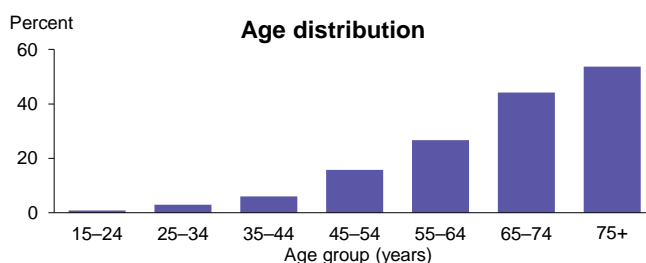
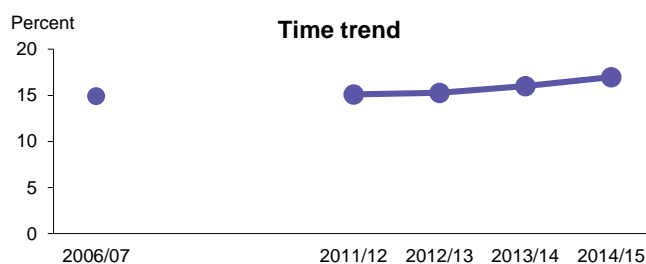
Box 15: Adults diagnosed with arthritis, including osteoarthritis, rheumatoid arthritis, gout, lupus and psoriatic arthritis, 2014/15

The prevalence was **17.0%**
which is an estimated
620,000 adults

Adjusted rate ratio

Men vs women	1.0
Māori vs non-Māori	1.2 *
Pacific vs non-Pacific	1.2
Asian vs non-Asian	0.6 *
Most vs least deprived	1.0

* There is a statistically significant difference between the two groups.



There are many different types of arthritis, which can affect people of any age. Chronic (long-term) arthritis can result in long-lasting pain and deformity, and is a major cause of disability in older people.

In this report, the term 'arthritis' refers to people who reported that a doctor had told them at some time in their life that they had any type of arthritis, including osteoarthritis, rheumatoid arthritis, gout, lupus and psoriatic arthritis.

About 620,000 adults (17%) had arthritis, up from 15% in 2006/07. The prevalence of arthritis in men increased from 13% in 2006/07 to 16% in 2014/15, which was close to the prevalence among women (18%).[‡]

The prevalence of arthritis increased steeply with age, with more than half of adults aged 75 years and over (54%) affected.

Arthritis prevalence varied by ethnic group. Although the observed rate was highest for the European/Other group (19%), when age and sex differences were adjusted for, Māori adults were 1.2 times more likely to have arthritis than non-Māori adults.[‡] Asian adults had the lowest prevalence of arthritis (6%). Asian adults were nearly half as likely to have arthritis as non-Asian adults, after adjusting for age and sex differences.

The most common form of arthritis was osteoarthritis, which affected 11% of adults.[‡] The prevalence of osteoarthritis increased from 9% in 2011/12 to 11% in 2014/15.

Gout was the second most common form of arthritis, affecting 3.0% of adults.[‡] About one in twenty men (5.1%) had gout, compared with 1.0% of women. Gout was 5.4 times more common in men than in women, after adjusting for age differences. Pacific and Māori men had the highest rates of gout (11% and 7% respectively), and after adjusting for age differences had much higher rates than non-Pacific and non-Māori men (adjusted rate ratios of 3.2 and 2.2 respectively).

[‡] Results are available in the online tables accompanying this report.

More adults experience chronic pain

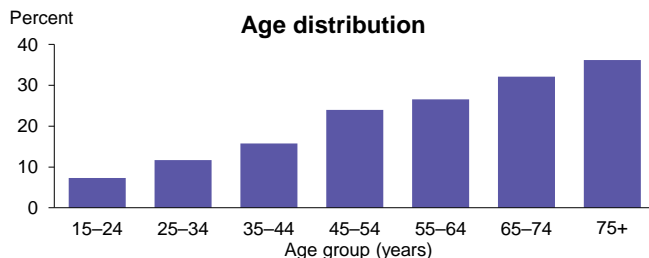
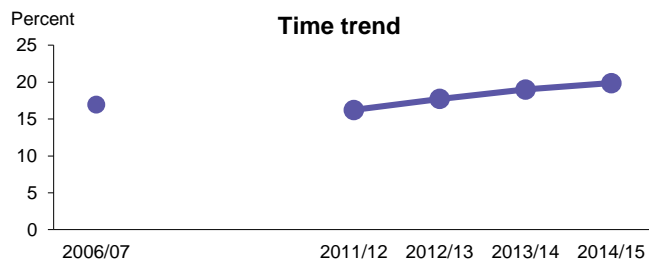
Box 16: Adults with chronic pain, 2014/15

The prevalence was **19.9%**
which is an estimated
726,000 adults

Adjusted rate ratio

Men vs women	0.9 *
Māori vs non-Māori	1.2 *
Pacific vs non-Pacific	1.0
Asian vs non-Asian	0.6 *
Most vs least deprived	1.4 *

* There is a statistically significant difference between the two groups.



Chronic pain can be debilitating, and affect a person's ability to carry out their usual activities.

In this report, 'chronic pain' is defined as pain that is present almost every day and has lasted, or is expected to last, more than six months.

One in five adults (20%) experienced chronic pain, up from 17% in 2006/07.

Women were more likely to experience chronic pain than men, after adjusting for age differences. The rates were 21% and 18% respectively.

Rates of chronic pain increased with age: almost a third of adults in the age group of 65–74 years (32%) were affected.

One in nine Asian adults (11%) experienced chronic pain.‡ Asian adults were less likely to experience chronic pain than non-Asians, after adjusting for age and sex differences.

‡ Results are available in the online tables accompanying this report.

Asian and Pacific adults have low rates of diagnosed mood and/or anxiety disorders

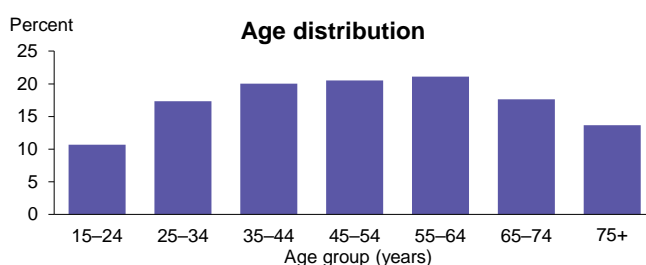
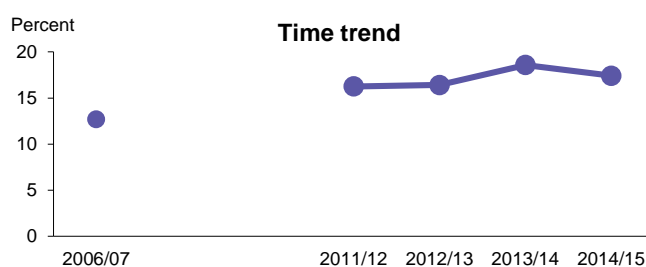
Box 17: Adults diagnosed with a mood (depression or bipolar disorder) and/or anxiety disorder, 2014/15

The prevalence was **17.4%**
which is an estimated
636,000 adults

Adjusted rate ratio

Men vs women	0.5 *
Māori vs non-Māori	1.0
Pacific vs non-Pacific	0.4 *
Asian vs non-Asian	0.3 *
Most vs least deprived	1.6 *

* There is a statistically significant difference between the two groups.



Good mental health is an essential part of overall good health and wellbeing. Mental health conditions can affect people's ability to perform everyday tasks, have healthy relationships and cope with anger or stress. Anxiety, depressive and bipolar disorders accounted for about 7% of all illness, disability and premature mortality in 2013 ((IHME 2015).

In this report, 'diagnosed with mood disorder and/or anxiety disorder' refers to people who reported that at some time in their life a doctor had told them they had depression, bipolar disorder and/or anxiety disorder (including generalised anxiety disorder, phobias, post-traumatic stress disorder and obsessive-compulsive disorder).

In 2014/15 an estimated 636,000 adults (17%) had been diagnosed with a mood disorder and/or anxiety disorder at some time in their life.

Prevalence of diagnosed mood and/or anxiety disorders varied by sex, age, ethnic group and neighbourhood deprivation, as follows.‡

- More women (22%) had been diagnosed with mood and/or anxiety disorders than men (12%).
- The prevalence of diagnosed mood and/or anxiety disorders was lowest for the youngest (15–24 years) and oldest (75 years and over) age groups. Reasons for the relatively low prevalence in older adults may be: practice has changed with regard to diagnoses of mental health conditions; adults born in the first half of the 20th century may be less likely to have mental health conditions than those born more recently; or older people may under-report mental health conditions to a greater extent.
- Asian (5%) and Pacific (8%) adults had the lowest rates of diagnosed mood and/or anxiety disorders. Despite these low rates, Pacific adults were more likely than non-Pacific adults to have experienced high levels of psychological distress in the past four weeks, which is indicative of anxiety or depressive disorders (see page 28).
- Adults in the most socioeconomically deprived areas were more likely to have been diagnosed with mood and/or anxiety disorders (19%) than those in the least deprived areas (17%).

‡ Results are available in the online tables accompanying this report.

Women experience higher rates of psychological distress than men

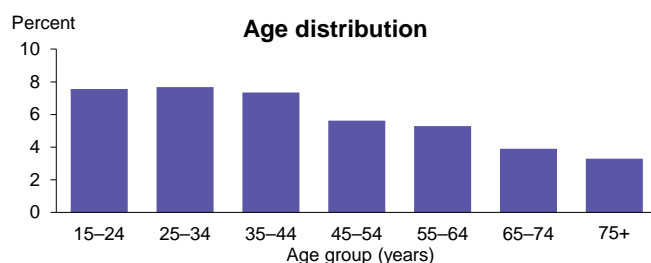
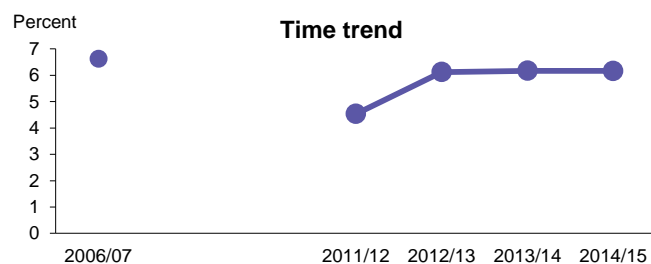
Box 18: Adults experiencing psychological distress in the past four weeks, with a score of 12 or more on the K10, 2014/15

The prevalence was **6.2%**
which is an estimated
225,000 adults

Adjusted rate ratio

Men vs women	0.6 *
Māori vs non-Māori	1.6 *
Pacific vs non-Pacific	1.6 *
Asian vs non-Asian	0.8
Most vs least deprived	3.0 *

* There is a statistically significant difference between the two groups.



The NZHS measures psychological (mental) distress using the Kessler Psychological Distress Scale (K10) (Kessler et al 2003). This measures a person's experience of symptoms such as anxiety, confused emotions, depression or rage in the past four weeks. People who have a score of 12 or more have a high probability of having an anxiety or depressive disorder.

In this report, 'psychological distress' means high or very high levels of psychological distress according to the K10 scale (ie, a score of 12 or more) in the past four weeks.

Six percent of adults experienced psychological distress in the past four weeks.

Prevalence of psychological distress varied by sex, age, ethnic group and neighbourhood deprivation, as follows.‡

- Women were more likely to have experienced psychological distress than men (the rates were 8% and 5% respectively).
- Psychological distress rates decreased with age. Less than 5% of adults aged 65 years and over experienced psychological distress in the past four weeks.
- One in ten Pacific and Māori adults experienced psychological distress in the past four weeks. After adjusting for age and sex differences, Pacific and Māori adults were 1.6 times as likely to have experienced psychological distress as non-Pacific and non-Māori adults respectively.
- The prevalence of psychological distress was higher in the most socioeconomically deprived neighbourhoods (10%), than in the least deprived neighbourhoods (3%). Those living in the most deprived areas were three times as likely to have experienced psychological distress as those in the least deprived areas, after adjusting for age, sex and ethnic differences.

Differences in the prevalence of psychological distress and diagnosed mood and anxiety disorders could indicate differences in people's understanding of their own symptoms, health service provision and use of health services by different groups.

‡ Results are available in the online tables accompanying this report.

Access to health care

Eight in ten adults have visited a GP in the past 12 months

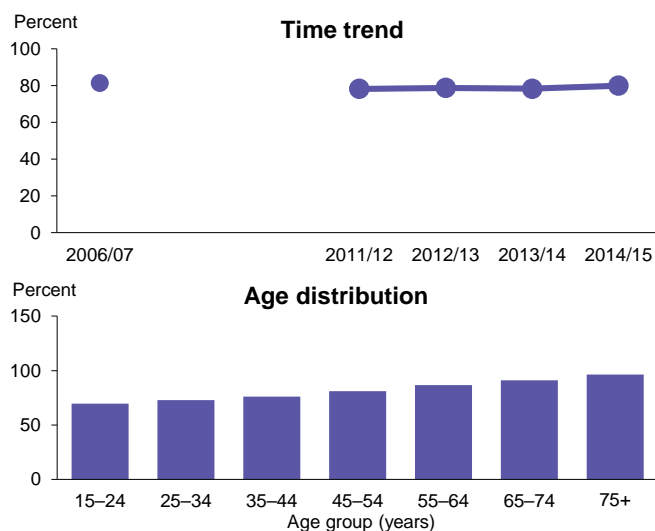
Box 19: Adults who had visited a GP in the past 12 months, 2014/15

The prevalence was **80.0%**
which is an estimated
2,923,000 adults

Adjusted rate ratio

Men vs women	0.9 *
Māori vs non-Māori	1.0 *
Pacific vs non-Pacific	1.0
Asian vs non-Asian	0.9 *
Most vs least deprived	1.0

* There is a statistically significant difference between the two groups.



Most New Zealand adults (94% or 3.4 million) are enrolled with a primary health organisation that is funded by their local district health board (DHB) to provide general practice and other primary care services. Additional funding is provided to meet the health needs of high-needs patients and to lower the cost of accessing services.

Four out of five adults (80%) had visited a GP in the past 12 months. Women were more likely to have visited a GP in the past 12 months (84%) than men (76%).[‡] This difference was only evident in those aged 15–44 years, when women may have visited a GP for reproductive health reasons.

Young men were the least likely to have visited a GP in the past 12 months. Only 64% of men aged 15–24 years and 63% of men aged 25–34 years had visited a GP in the past 12 months.[‡]

Older people were more likely to have visited a GP in the past 12 months than younger people: more than 90% of adults aged 65 years and over had visited a GP in the past 12 months, compared with less than 80% of those younger than 45 years.

Eighty-two percent of those in the least socioeconomically deprived neighbourhoods had visited a GP in the past 12 months, compared with 79% in the most deprived neighbourhoods. Any such difference between these groups was removed after adjusting for age, sex and ethnic differences. However, it should be noted that reported unmet need for primary health care was higher in the more deprived neighbourhoods than the least deprived neighbourhoods (see page 32), reflecting the higher rates of illness in the most deprived neighbourhoods.

On average, adults had visited a GP 3.1 times in the past 12 months (this average includes adults who had not visited a GP in the past 12 months).[‡] However, the number of GP visits was higher for older adults: 4.1 for those aged 65–74 years and 5.2 for those aged 75 years and over.

[‡] Results are available in the online tables accompanying this report.

Three in ten adults have visited a practice nurse in the past 12 months

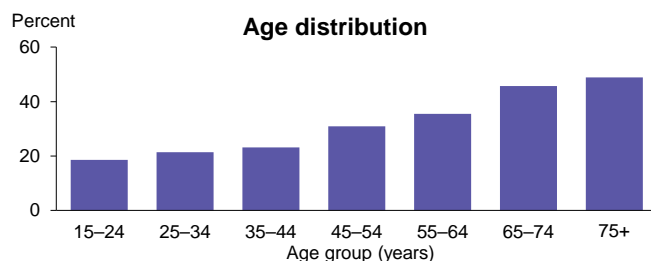
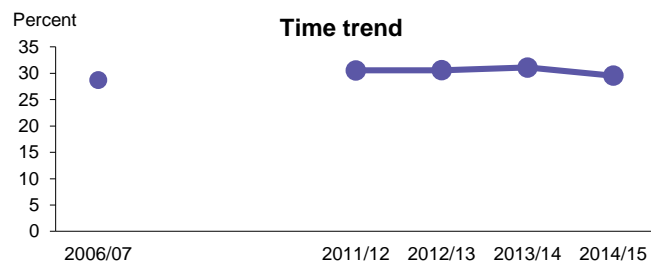
Box 20: Adults who had visited a practice nurse in the past 12 months without seeing a GP at the same visit, 2014/15

The prevalence was **29.6%**
which is an estimated
1,079,000 adults

Adjusted rate ratio

Men vs women	0.7 *
Māori vs non-Māori	1.1 *
Pacific vs non-Pacific	0.7 *
Asian vs non-Asian	0.5 *
Most vs least deprived	1.1

* There is a statistically significant difference between the two groups.



Practice nurses work within a general practice setting, providing a comprehensive range of primary health care services. They are a key part of the general practice team. Practice nurses focus on health promotion, disease prevention, wellness, first-point-of-contact care and disease management across the lifespan. They run screening and preventative programmes, such as immunisations, and have an important role in care coordination for patients and their families. In this report, the term 'visited a practice nurse in the past 12 months' only includes visiting a practice nurse without seeing a GP at the same visit.

Thirty percent of adults reported visiting a practice nurse in the past 12 months.

Rates of visiting a practice nurse in the past 12 months varied by sex, age and ethnic group, as follows.[‡]

- Women were more likely to have visited a practice nurse in the past 12 months than men (the rates were 34% and 25% respectively). This sex difference was most pronounced for adults under 45 years (probably reflecting the health care needs of women of childbearing age).
- Visits to a practice nurse for all adults increased with age. Over 40% of those aged 65 years and over had seen a practice nurse in the past 12 months. Less than a quarter of those aged under 45 years had visited a practice nurse in the past 12 months.
- Asian (14%) and Pacific (20%) adults had the lowest rates of having visited a practice nurse in the last 12 months. After adjusting for age and sex differences, Asian adults were half as likely as non-Asian adults, and Pacific adults were 0.7 times as likely as non-Pacific adults, to have visited a practice nurse.

Adults living in the most socioeconomically deprived areas were about as likely to have visited a practice nurse in the past 12 months (30%) as those living in the least deprived areas (29%).

On average, adults visited a practice nurse (without seeing a GP at the same visit) less than once in the past 12 months (0.7 visits). However, older adults (65 years and over) had at least one practice nurse visit, on average, in the past 12 months.[‡]

[‡] Results are available in the online tables accompanying this report.

The percentage of adults visiting an after-hours medical centre has declined since 2011/12

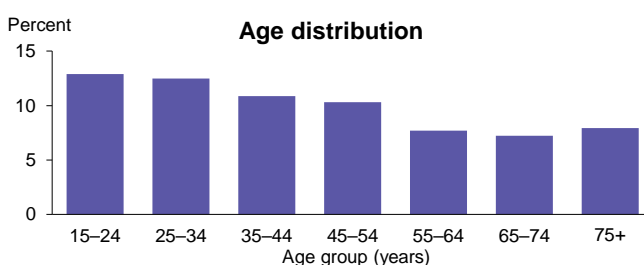
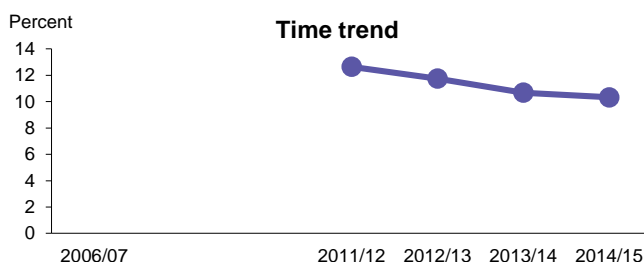
Box 21: Adults who had visited an after-hours medical centre in the past 12 months, 2014/15

The prevalence was **10.3%**
which is an estimated
377,000 adults

Adjusted rate ratio

Men vs women	0.9 *
Māori vs non-Māori	0.8
Pacific vs non-Pacific	0.9
Asian vs non-Asian	0.7 *
Most vs least deprived	1.1

* There is a statistically significant difference between the two groups.



After-hours medical centres provide primary health care outside usual business hours. District health boards are required to ensure that at least 95% of the enrolled population have access to after-hours care. The cost of care in after-hours medical centres is higher than it is for services during usual business hours, particularly for people who are not enrolled with a primary health organisation.

One in ten adults (10%) had visited an after-hours medical centre in the past 12 months, down from 13% in 2011/12.

The percentage of adults who had visited an after-hours medical centre in the past 12 months declined with age. Thirteen percent of those aged 15–24 years had visited an after-hours medical centre in the past 12 months, compared with less than 10% of those aged 55 years and over.

One in twelve Asian adults (8%) had visited an after-hours medical centre in the past 12 months.[‡] Asian adults were less likely to have visited an after-hours medical centre than non-Asian adults, after adjusting for age and sex differences.

[‡] Results are available in the online tables accompanying this report.

Rates of unmet need for primary health care are lowest for over 65-year-olds

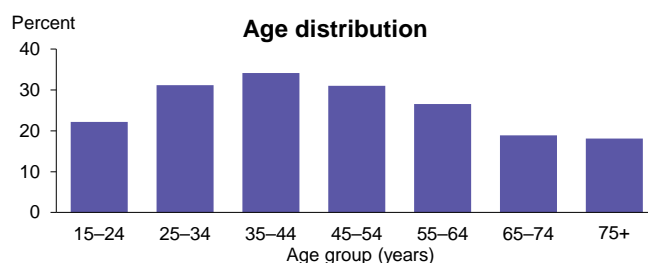
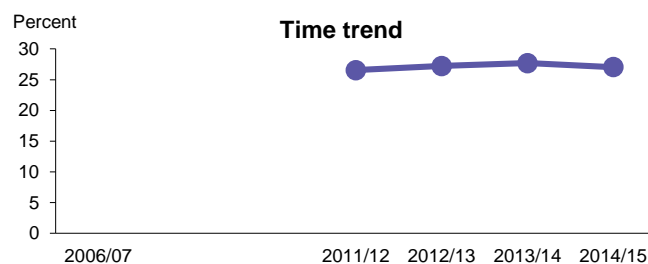
Box 22: Adults who have experienced one or more types of unmet need for primary health care in the past 12 months, 2014/15

The prevalence was **27.1%**
which is an estimated
988,000 adults

Adjusted rate ratio

Men vs women	0.7 *
Māori vs non-Māori	1.3 *
Pacific vs non-Pacific	1.2
Asian vs non-Asian	0.7 *
Most vs least deprived	1.5 *

* There is a statistically significant difference between the two groups.



This indicator investigates whether people had experienced any of the following five barriers to accessing primary health care in the past 12 months: unmet need for a GP due to cost; unmet need for after-hours services due to cost; unmet need for a GP due to lack of transport; unmet need for after-hours services due to lack of transport; and inability to get an appointment at their usual medical centre within 24 hours.

Most adults were able to access primary health care when they needed to (ie, they had not experienced any of the five barriers listed above). However, 27% of adults reported one or more types of unmet need for primary health care in the past 12 months. The most common reasons for this unmet need were: being unable to get an appointment within 24 hours (17%), the cost of GP services (14%) and the cost of after-hours services (6%).[‡] These three most common reasons for unmet need are covered in more detail on the following three pages.

Rates of unmet need for primary health care in the past 12 months varied by sex, age, ethnic group and neighbourhood deprivation, as follows.[‡]

- Women had higher rates of unmet need than men (the rates were 32% and 22% respectively).
- About one in five adults aged 65 years and over had experienced an unmet need for primary health care, compared with about one in three adults aged 25–54 years.
- One in three Māori adults (33%) had an unmet need for primary health care, which was an improvement on 2011/12 (39%). The Māori rate was 1.3 times as high as the rate for non-Māori adults, after adjusting for age and sex differences. The rate was lowest in Asian adults: about one in five Asian adults (21%) had an unmet need for primary health care.
- Adults living in the most socioeconomically deprived areas had higher rates of unmet need in the past 12 months (33%) than those living in the least deprived areas (23%).

[‡] Results are available in the online tables accompanying this report.

About one in five adults aged 25–64 years could not get an appointment at their usual medical centre within 24 hours

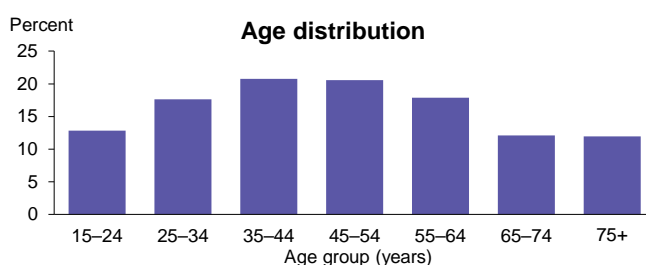
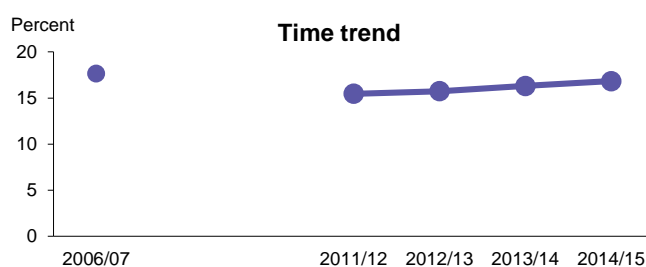
Box 23: Adults who were unable to get an appointment at their usual medical centre, within 24 hours, at any point in the past 12 months, 2014/15

The prevalence was **16.8%**
which is an estimated
580,000 adults

Adjusted rate ratio

Men vs women	0.7 *
Māori vs non-Māori	1.1
Pacific vs non-Pacific	0.8
Asian vs non-Asian	0.7 *
Most vs least deprived	1.1

* There is a statistically significant difference between the two groups.



Timely access to care when it is needed is an important dimension of quality of care.

This indicator is defined as whether there had been an occasion in the past 12 months when adults had wanted to see a GP, nurse or other health care worker at their usual medical centre within the next 24 hours, but this had not been possible.

Seventeen percent of adults had been unable to get an appointment at their usual medical centre within 24 hours at some point in the past 12 months. This rate has remained relatively stable since 2006/07, when it was 18%.

Women were more likely to have been unable to get an appointment than men (the rates were 20% and 13% respectively).[‡]

Rates of being unable to get an appointment peaked in those aged 25–64 years (prime working age), where about one in five had been unable to get an appointment within 24 hours. Among adults aged 55–64 years, the percentage who had been unable to get an appointment within 24 hours rose from 14% in 2006/07 to 18%.

Asian adults had the lowest rate (13%) of being unable to get an appointment at their usual medical centre within 24 hours.[‡]

Adults living in the most and the least socioeconomically deprived areas showed little or no difference from each other in terms of whether they had been unable to get an appointment at their usual medical centre in the past 12 months, after adjusting for age, sex and ethnic differences.

[‡] Results are available in the online tables accompanying this report.

Cost is more likely to be a barrier to visiting a GP for younger adults

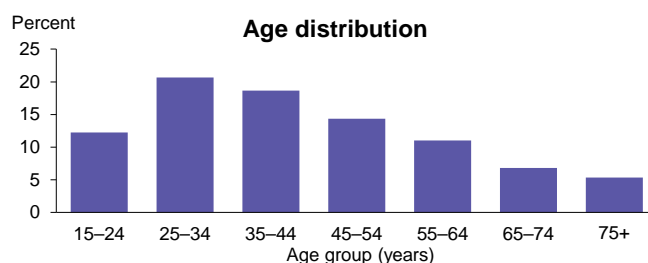
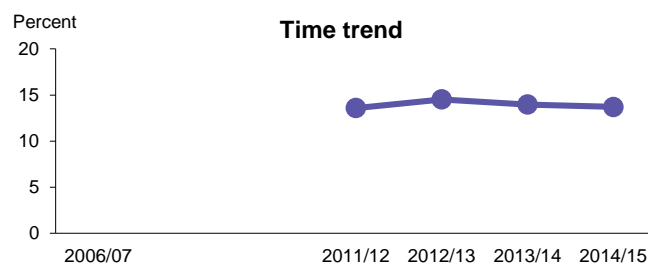
Box 24: Adults who did not visit a GP because of cost, at any point in the past 12 months, 2014/15

The prevalence was **13.7%**
which is an estimated
501,000 adults

Adjusted rate ratio

Men vs women	0.6 *
Māori vs non-Māori	1.4 *
Pacific vs non-Pacific	1.4 *
Asian vs non-Asian	0.6 *
Most vs least deprived	2.5 *

* There is a statistically significant difference between the two groups.



All New Zealanders are eligible for reduced health care costs when they go to their usual medical centre. However, cost may still be a barrier to accessing primary health care.

In this report, the term 'did not visit a GP due to cost' means that there had been an occasion in the past 12 months when adults who had a medical problem did not visit a GP because of cost.

Fourteen percent of adults reported not visiting a GP due to cost.

Rates of not visiting a GP due to cost varied by sex, age, ethnic group and neighbourhood deprivation, as follows.‡

- Women were almost twice as likely as men to not visit a GP due to cost, after adjusting for age differences (the rates were 17% and 10% respectively).
- Unmet need for GP visits due to cost peaked among those aged 25–44 years, at about one in five adults. Cost was much less likely to be a barrier for adults aged 65 years and over: less than 10% had experienced unmet need for this reason.
- One in five Pacific and Māori adults (20%) had not visited a GP due to cost. Pacific and Māori adults were 1.4 times as likely as non-Pacific and non-Māori adults respectively to not visit a GP due to cost, after adjusting for age and sex differences. Asian adults had the lowest rate of not visiting a GP due to cost: one in nine (11%).
- Eighteen percent of adults living in the most socioeconomically deprived areas had not visited a GP due to cost. These adults were 2.5 times as likely as those living in the least deprived areas to not visit a GP due to cost, after adjusting for age, sex and ethnic differences.

Another reason for not visiting a GP is a lack of transport, which was a barrier for 3.2% of adults in the past 12 months.‡ Lack of transport was patterned by deprivation; the rate was much higher for adults living in the most deprived areas (7.0%) than for those in the least deprived areas (1.4%).

‡ Results are available in the online tables accompanying this report.

The rate of unmet need for after-hours medical centre due to cost in the most deprived areas was triple that of the least deprived areas

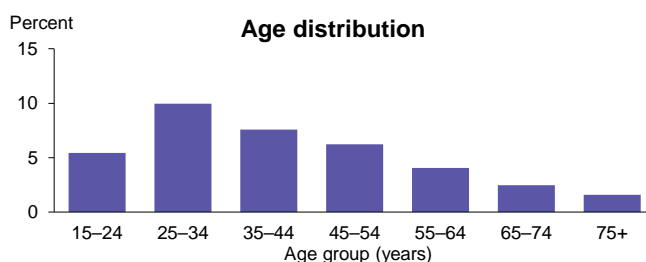
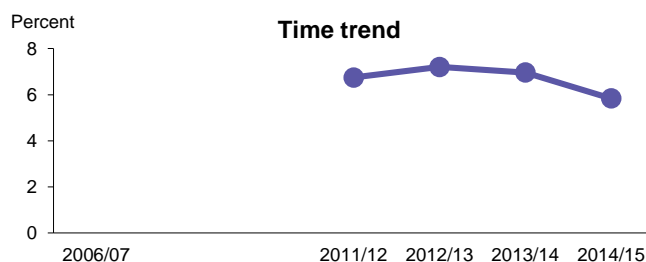
Box 25: Adults who did not visit an after-hours medical centre due to cost, at any point in the past 12 months, 2014/15

The prevalence was **5.8%**
which is an estimated
213,000 adults

Adjusted rate ratio

Men vs women	0.5 *
Māori vs non-Māori	1.9 *
Pacific vs non-Pacific	1.2
Asian vs non-Asian	0.5 *
Most vs least deprived	3.0 *

* There is a statistically significant difference between the two groups.



As outlined on page 31, after-hours medical centres provide primary health care outside usual business hours (nights, weekends and public holidays). DHBs are required to ensure that at least 95% of the enrolled population have access to after-hours care. The cost of care in after-hours medical centres is higher than for services during usual business hours, particularly for people who are not enrolled with a primary health organisation.

This indicator focuses on whether there had been a time in the past 12 months when people had a medical problem after hours, but did not visit an after-hours medical centre due to cost.

Six percent of adults had not visited an after-hours medical centre due to cost.

Rates of being unable to visit an after-hours medical centre due to cost in the past 12 months varied by sex, age, ethnic group and neighbourhood deprivation, as follows.[‡]

- More women (7.6%) than men (4.0%) had not visited an after-hours centre due to cost.
- Younger adults were more likely not to have visited an after-hours centre due to cost: less than 5% of adults aged 55 years and over experienced this barrier at some point in the past 12 months, compared with 10% of young adults aged 25–34 years.
- One in nine Māori adults (11%) had not visited an after-hours centre due to cost. After adjusting for age and sex differences, the Māori rate was nearly double that of non-Māori adults. Only 3.9% of Asian adults had not visited an after-hours medical centre due to cost.
- Adults living in the most socioeconomically deprived areas were three times as likely not to have visited an after-hours medical centre due to cost as those living in the least deprived areas, after adjusting for age, sex and ethnic differences. One in ten adults living in the most deprived areas had not visited an after-hours centre due to cost.

Another reason for not being able to visit an after-hours service is a lack of transport, which was a barrier for 1.2% of adults in the past 12 months.[‡]

[‡] Results are available in the online tables accompanying this report.

Not filling a prescription due to cost was much more common in socioeconomically deprived areas

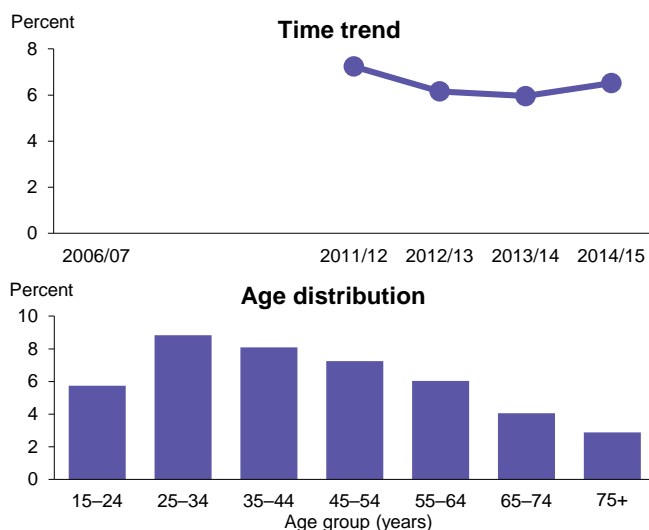
Box 26: Adults who had a prescription item that was not collected due to cost, at any point in the past 12 months, 2014/15

The prevalence was **6.5%**
which is an estimated
238,000 adults

Adjusted rate ratio

Men vs women	0.6 *
Māori vs non-Māori	2.6 *
Pacific vs non-Pacific	2.8 *
Asian vs non-Asian	0.7 *
Most vs least deprived	6.4 *

* There is a statistically significant difference between the two groups.



In New Zealand, most prescription medicines are subsidised under a co-payment system, so people pay a relatively small amount for each medication. The co-payment applies to the first 20 prescriptions per family per year. The co-payment for subsidised prescription items increased from \$3 to \$5 on 1 January 2013. The surveyors asked adults to consider their experience over the past 12 months (July 2013–June 2014); this means that the 2014/15 survey results refer to the time after subsidised prescription costs increased.

Seven percent of adults reported not collecting a prescription due to cost. This percentage had not changed significantly over the last four years.

Rates of being unable to collect a prescription item due to cost in the past 12 months varied by sex, age, ethnic group and neighbourhood deprivation, as follows.[‡]

- More women than men had not collected a prescription due to cost at some point in the past 12 months (the rates were 8.1% and 4.8% respectively).
- Adults aged 25–44 years were more likely not to have collected a prescription due to cost (over 8%) than those aged 65 years and older (under 5%).
- Seventeen percent of Pacific adults and 15% of Māori adults had not collected a prescription due to cost. Pacific adults were 2.8 times as likely as non-Pacific adults and Māori adults were 2.6 times as likely as non-Māori adults not to have collected a prescription due to cost, after adjusting for age and sex differences. In contrast, only 5% of Asian adults were unable to fill a prescription due to cost at some point in the past 12 months.
- One in seven adults (14%) living in the most socioeconomically deprived areas had been unable to fill a prescription due to cost. Adults living in the most deprived areas were 6.4 times as likely as adults living in the least deprived areas to have been unable to collect a prescription due to cost, after adjusting for age, sex and ethnic differences.

[‡] Results are available in the online tables accompanying this report.

Older adults are more likely than younger adults to report confidence and trust in their GP

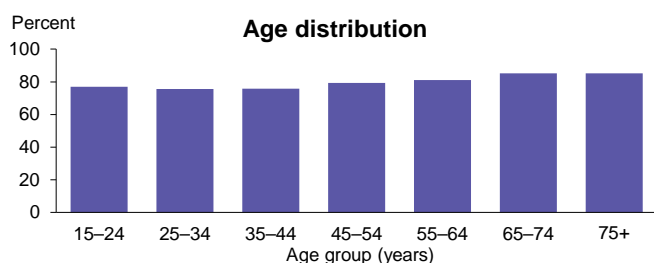
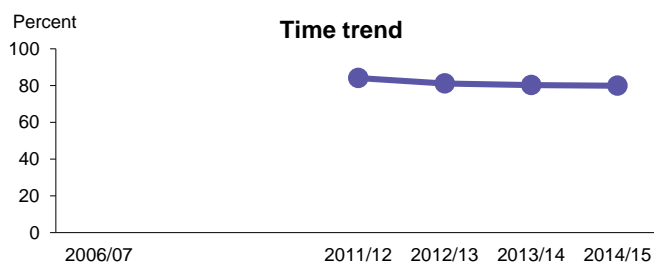
Box 27: Adults who definitely had confidence and trust in the GP they last visited (of those who had visited a GP in the past 3 months), 2014/15

The prevalence was **80.0%**
which is an estimated
1,406,000 adults

Adjusted rate ratio

Men vs women	1.0
Māori vs non-Māori	0.9 *
Pacific vs non-Pacific	1.0
Asian vs non-Asian	1.0
Most vs least deprived	1.0

* There is a statistically significant difference between the two groups.



Patient experiences of medical care are reflected in the confidence and trust they have in their GP. Being treated with dignity and respect, having privacy protected and being given clear explanations of conditions and treatment are important elements of the patient experience.

The surveyors asked adults who had visited a GP in the past three months, 'Did you have confidence and trust in the GP you saw? Yes, definitely / Yes, to some extent / No, not at all'. In this report, having 'confidence and trust' means definitely having confidence and trust in the GP visited.

Eight out of ten adults (80%) who had visited a GP in the previous three months had confidence and trust in their GP. However, confidence and trust in GPs fell slightly from 2011/12, when the rate was 84%.

Adults aged 65 years and over (85%) were more likely to have confidence and trust in the GP they last visited than those aged 25–44 years (76%).

There was little or no difference in adults' confidence and trust in GPs by sex, ethnicity or by level of neighbourhood deprivation. Māori adults (74%) had slightly lower confidence and trust in GPs than non-Māori adults.[†]

The following were other patient GP experience questions included in the NZHS.

- 'Thinking about your last visit to a GP, how good was the doctor at explaining your health conditions and treatments in a way that you could understand?'
- 'How good was the doctor at involving you in decisions about your care, such as discussing different treatment options?'

Most adults reported that their GP was very good or good at explaining their health conditions and treatments (92%), and at involving them in decisions about their care (90%).[‡]

[†] Results for Māori and Pacific adults are provided in Tables 4 and 5 at the beginning of this section.

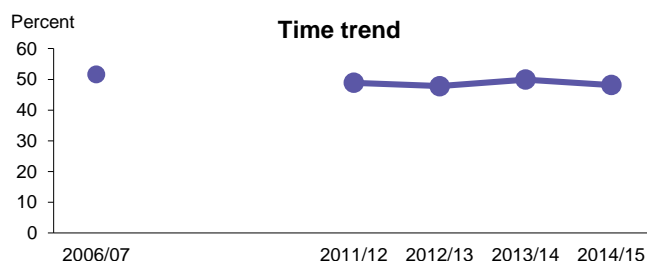
[‡] Results are available in the online tables accompanying this report.

Oral health

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

Box 28: Adults (with natural teeth) who had visited a dental health care worker in the past 12 months, 2014/15

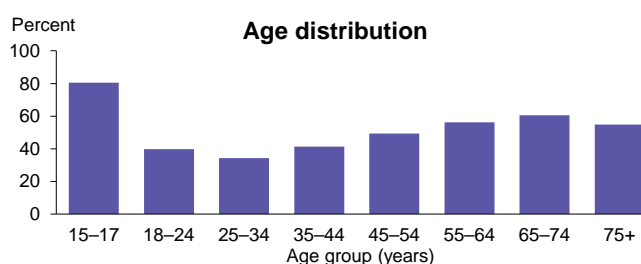
The prevalence was **48.1%**
which is an estimated
1,631,000 adults



Adjusted rate ratio

Men vs women	0.9 *
Māori vs non-Māori	0.8 *
Pacific vs non-Pacific	0.6 *
Asian vs non-Asian	0.7 *
Most vs least deprived	0.7 *

* There is a statistically significant difference between the two groups.



Most adults are required to pay for the full cost of their dental health services. However, a limited range of publicly funded oral health services is available. These services include dental treatment required due to an accident or injury, dental treatment for people with medical conditions and/or disabilities that prevent them from normally accessing community-based dental care, and emergency dental treatment for eligible low-income adults. Young adults up to their 18th birthday are entitled to free basic oral health services provided through contracted dental providers in the community (see page 62). The Ministry of Health and the New Zealand Dental Association recommend regular dental checks to keep teeth and gums healthy.

Forty-eight percent of all adults with natural teeth had visited a dental health care worker[§] in the past 12 months. Visits to a dental health care worker in the past 12 months, by adults with natural teeth, varied by sex, age, ethnic group and neighbourhood deprivation, as follows.[‡]

- Men were slightly less likely than women to have visited a dental health care worker in the past 12 months (the rates are 45% and 51% respectively).
- Adults aged 18–44 years were the least likely of all age groups to have visited a dental health care worker: less than half of them had done so.
- Relatively low rates of Pacific (31%), Asian (34%) and Māori (38%) adults had visited a dental health care worker. These rates remained lower than those for non-Pacific, non-Asian and non-Māori adults respectively, after adjusting for age and sex differences. In contrast, over half (53%) of European/Other adults had visited a dental health care worker.
- Only 37% of adults living in the most socioeconomically deprived areas had visited a dental health care worker in the past 12 months, compared with 59% of adults in the least deprived areas.

[§] The term 'dental health care worker' refers to dentists and other dental health care professionals, such as dental therapists and dental hygienists, as well as dental specialists, such as orthodontists.

[‡] Results are available in the online tables accompanying this report.

At least one in ten Pacific and Māori adults has had a tooth extracted in the past 12 months due to poor oral health

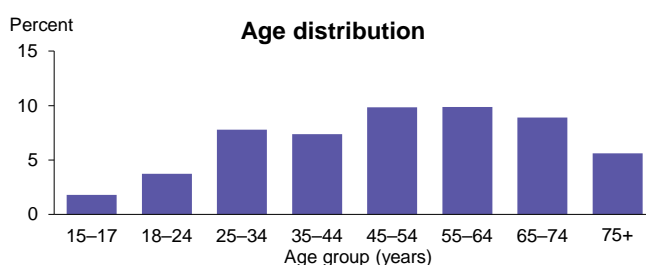
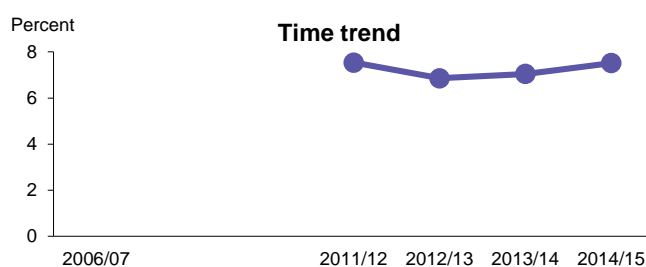
Box 29: Adults who had one or more of their teeth removed in the past 12 months, due to decay, infection or disease, 2014/15

The prevalence was **7.5%**
which is an estimated
274,000 adults

Adjusted rate ratio

Men vs women	1.2 *
Māori vs non-Māori	1.6 *
Pacific vs non-Pacific	2.0 *
Asian vs non-Asian	0.7 *
Most vs least deprived	1.9 *

* There is a statistically significant difference between the two groups.



Removal of a tooth as a consequence of tooth decay or an abscess, infection or gum disease is often the result of not seeking preventive or treatment services early. Tooth loss affects quality of life, and is often an indicator of general poor health.

The survey asked if people had had a tooth removed in the past 12 months because of tooth decay, an abscess, infection or gum disease. Note that this excludes teeth lost for other reasons, such as injury, a crowded mouth or orthodontics.

Eight percent of adults had had one or more teeth removed in the past 12 months.

The proportion of adults who had a tooth removed in the past 12 months varied by sex, age, ethnic group and neighbourhood deprivation, as follows.[‡]

- Men (8%) were slightly more likely to have had a tooth removed than women (7%) in the past 12 months.
- Only 3.2% of adults aged 15–24 years had had any teeth removed in the past 12 months; this figure was much lower than for older age groups.
- Pacific adults (13%) were twice as likely and Māori adults (10%) were 1.6 times as likely to have had any teeth removed in the past 12 months as non-Pacific adults and non-Māori adults respectively, after adjusting for age and sex differences.
- One in eleven adults (9%) living in the most deprived areas had had teeth removed in the past 12 months, compared with one in twenty adults (5%) in the least deprived areas. Adults living in the most deprived areas were 1.9 times as likely to have had a tooth removed as those living in the least deprived areas, after adjusting for age, sex and ethnic differences.

Furthermore, 7% of adults had had all their teeth removed in their lifetime.[‡] Older people were much more likely to have had all their teeth removed than younger age groups: less than 1% of adults aged under 45 years had all their teeth removed, compared with 21% of adults aged 65–74 years and 40% of adults aged over 75 years.

[‡] Results are available in the online tables accompanying this report.

The majority of adults living in deprived areas only visit dental health care workers for dental problems, or never visit

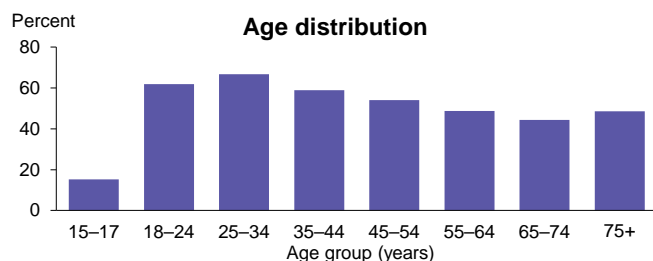
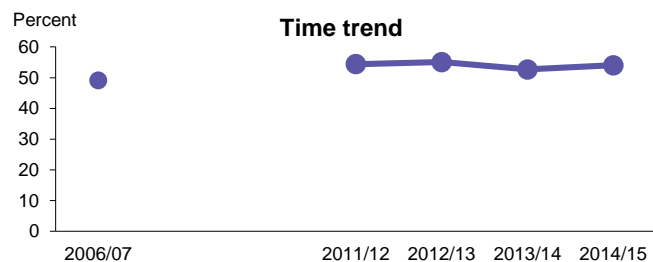
Box 30: Adults (with natural teeth) who never visit a dental health care worker, or only visit when they have dental problems, 2014/15

The prevalence was **54.1%**
which is an estimated
1,832,000 adults

Adjusted rate ratio

Men vs women	1.1 *
Māori vs non-Māori	1.4 *
Pacific vs non-Pacific	1.5 *
Asian vs non-Asian	1.2 *
Most vs least deprived	2.0 *

* There is a statistically significant difference between the two groups.



Through regular dental check-ups, dental health care workers^s can detect early signs of oral disease and provide timely treatment and/or preventive measures.

Over half of adults with natural teeth (54%) reported never having visited a dental health care worker, or only visiting for toothache or other dental problems.

People under 18 years in New Zealand have access to free basic dental services. The survey found that young adults aged 15–17 years were least likely to report only visiting dental health care workers for dental problems, or never visiting (the rate was 15%).[‡] In contrast, 62% of those aged 18–24 years reported having visited dental health care workers only for dental problems.

The percentage of adults (with natural teeth) visiting dental health care workers only for dental problems, or never visiting, varied by sex, age, ethnic group and area deprivation, as follows.[‡]

- Men (56%) were more likely to only visit for dental problems compared with women (52%).
- The majority of Pacific (80%), Māori (70%) and Asian (67%) adults only visited dental health care workers for dental problems. The rates were significantly higher for Pacific, Māori and Asian adults, after adjusting for age and sex differences.
- After adjusting for age, sex and ethnic differences, adults living in the most socioeconomically deprived areas were twice as likely to never have visited a dental health care worker, or only to have visited for dental problems, as adults in the least deprived areas.

For Māori and Pacific adults, and adults living in the most deprived neighbourhoods, poorer access to oral health services, in the form of only visiting dental health care workers for dental health problems, was mirrored by poorer oral health outcomes: a higher prevalence of tooth extractions in the past year (see page 39).

^s The term 'dental health care worker' refers to dentists and other dental health care workers, such as dental therapists and dental hygienists, as well as dental health specialists, such as orthodontists.

[‡] Results are available in the online tables accompanying this report.

The health of New Zealand children

This section includes information on:

- key survey results for children (Table 6)
- key survey results for Māori children (Table 7)
- key survey results for Pacific children (Table 8)
- health status, health behaviours and risk factors
- health conditions
- access to health care
- oral health.

Table 6: Key survey results for children (aged 0–14 years)

Indicator	Percent 2014/15	Percent 2011/12	Percent 2006/07	Change since 2011/12	Change since 2006/07
Health status, health behaviours and risk factors					
Good or better parent-rated health	98.0	97.8	97.6	=	=
Solid food before four months (4 months–4 years)	9.1	8.9	15.8	=	▼
Breakfast at home all week (2–14 years)	86.8	87.4	87.7	=	=
Usually watched 2+ hours of television each day (2–14 years)	44.8	53.0	.	▼	.
Obesity (2–14 years)	10.8	10.7	8.4	=	▲
Physical punishment in past 4 weeks	5.9	7.4	10.4	▼	▼
Health conditions					
Asthma (medicated) (2–14 years)	15.1	14.0	14.9	=	=
Emotional or behavioural problems (diagnosed) (2–14 years)	4.0	3.3	1.8	=	▲
Access to health care					
GP visit in the past 12 months	76.3	73.9	79.2	▲	▼
Practice nurse visit in the past 12 months	25.2	26.4	22.8	=	=
After-hours visit in the past 12 months	24.3	21.5	.	▲	.
Experienced any unmet need for primary health care in the past 12 months	21.5	19.6	.	=	.
Unable to get appointment at usual medical centre within 24 hours	14.2	13.5	.	=	.
Unmet need for GP due to cost	6.1	4.7	.	=	.
Unmet need for after-hours due to cost	3.3	4.5	.	▼	.
Unfilled prescription due to cost	5.2	6.6	.	=	.
Definite confidence and trust in GP	78.0	82.8	.	▼	.
Oral health					
Dental health care worker visit in the past 12 months (1–14 years)	84.2	78.6	75.7	▲	▲
Teeth removed due to decay in the past 12 months (1–14 years)	3.4	3.9	.	=	.
Key: ▲ Statistically significant increase ¹ = No statistically significant change ▼ Statistically significant decrease ¹ . Data not available					
¹ The significance (p-values) of differences between years is based on age-standardised rates.					

Table 7: Key survey results for Māori children

Indicator	Percent 2014/15	Percent 2011/12	Percent 2006/07	Change since 2011/12	Change since 2006/07
Health status, health behaviours and risk factors					
Good or better parent-rated health	97.2	96.7	97.5	=	=
Solid food before four months (4 months–4 years)	12.4	15.3	21.7	=	▼
Breakfast at home all week (2–14 years)	80.7	82.4	83.7	=	=
Usually watched 2+ hours of television each day (2–14 years)	54.5	62.2	.	▼	.
Obesity (2–14 years)	14.8	16.7	11.8	=	▲
Physical punishment in past 4 weeks	8.8	9.8	13.9	=	▼
Health conditions					
Asthma (medicated) (2–14 years)	18.6	18.8	20.3	=	=
Emotional or behavioural problems (diagnosed) (2–14 years)	4.8	3.3	1.9	=	▲
Access to health care					
GP visit in the past 12 months	75.0	73.5	80.1	=	▼
Practice nurse visit in the past 12 months	25.5	24.2	24.6	=	=
After-hours visit in the past 12 months	21.4	20.7	.	=	.
Experienced any unmet need for primary health care in the past 12 months	27.3	27.0	.	=	.
Unable to get appointment at usual medical centre within 24 hours	17.4	17.1	.	=	.
Unmet need for GP due to cost	8.3	7.7	.	=	.
Unmet need for after-hours due to cost	5.0	8.4	.	▼	.
Unfilled prescription due to cost	9.2	12.1	.	=	.
Definite confidence and trust in GP	71.9	77.8	.	=	.
Oral health					
Dental health care worker visit in the past 12 months (1–14 years)	81.7	75.9	74.1	▲	▲
Teeth removed due to decay in the past 12 months (1–14 years)	5.1	5.5	.	=	.
Key: ▲ Statistically significant increase ¹ = No statistically significant change ▼ Statistically significant decrease ¹ . Data not available					
1 The significance (p-values) of differences between years is based on age-standardised rates.					

Table 8: Key survey results for Pacific children

Indicator	Percent 2014/15	Percent 2011/12	Percent 2006/07	Change since 2011/12	Change since 2006/07
Health status, health behaviours and risk factors					
Good or better parent-rated health	98.1	98.0	97.9	=	=
Solid food before four months (4 months–4 years)	4.7	13.2	20.7	▼	▼
Breakfast at home all week (2–14 years)	77.8	81.5	79.4	=	=
Usually watched 2+ hours of television each day (2–14 years)	50.5	58.6	.	▼	.
Obesity (2–14 years)	29.7	25.0	23.1	=	▲
Physical punishment in past 4 weeks	9.7	9.8	16.8	=	▼
Health conditions					
Asthma (medicated) (2–14 years)	15.4	13.8	14.8	=	=
Emotional or behavioural problems (diagnosed) (2–14 years)	2.3	1.7	0.4	=	=
Access to health care					
GP visit in the past 12 months	76.8	78.0	83.4	=	▼
Practice nurse visit in the past 12 months	18.7	18.1	18.9	=	=
After-hours visit in the past 12 months	24.6	21.1	.	=	.
Experienced any unmet need for primary health care in the past 12 months	27.0	26.1	.	=	.
Unable to get appointment at usual medical centre within 24 hours	14.2	15.6	.	=	.
Unmet need for GP due to cost	6.9	6.5	.	=	.
Unmet need for after-hours due to cost	4.9	7.8	.	=	.
Unfilled prescription due to cost	14.1	11.1	.	=	.
Definite confidence and trust in GP	76.4	78.9	.	=	.
Oral health					
Dental health care worker visit in the past 12 months (1–14 years)	79.8	72.8	69.2	▲	▲
Teeth removed due to decay in the past 12 months (1–14 years)	5.3	5.8	.	=	.
Key: ▲ Statistically significant increase ¹ = No statistically significant change ▼ Statistically significant decrease ¹ . Data not available					
¹ The significance (p-values) of differences between years is based on age-standardised rates.					

Health status, health behaviours and risk factors

Almost all parents consider their children to be in good health

Box 31: Children with excellent, very good or good health, as rated by their parent, 2014/15

The prevalence was **98.0%**
which is an estimated
894,000 children

Time trend

Year	Percent
2006/07	98.0
2011/12	98.0
2012/13	98.0
2013/14	98.0
2014/15	98.0

Age distribution

Age group (years)	Percent
0-4	98.0
5-9	98.0
10-14	98.0

Adjusted rate ratio

Boys vs girls	1.0
Māori vs non-Māori	1.0
Pacific vs non-Pacific	1.0
Asian vs non-Asian	1.0
Most vs least deprived	1.0

* There is a statistically significant difference between the two groups.

Surveyors asked the parents of all children participating in the survey whether they considered their child’s health to be ‘excellent, very good, good, fair or poor’. In this report, ‘good health’ means good, very good or excellent health, as reported by a parent.

The majority of parents (98%) rated their child’s health as good. There has been no change in parent-rated child health status since 2006/07 (when it was 98%).

Parent-rated child health status was similar for all age groups. Parent-rated child health status did not differ by ethnic group or neighbourhood deprivation, unlike adult self-rated health (see page 11).

One in eleven infants is given solid food before four months of age

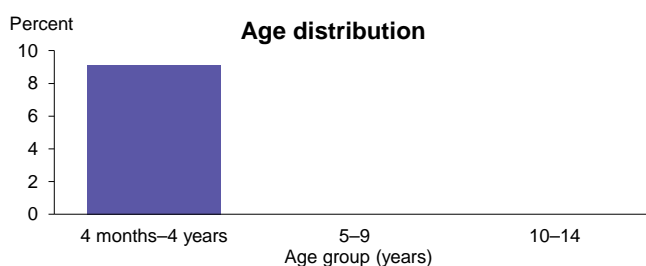
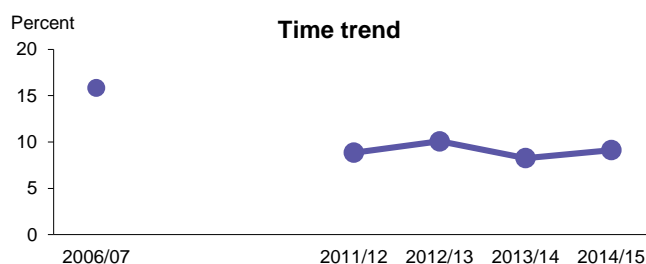
Box 32: Children aged four months to four years who were given solid foods before four months of age, 2014/15

The prevalence was **9.1%**
which is an estimated
28,000 children

Adjusted rate ratio

Boys vs girls	0.9
Māori vs non-Māori	1.6 *
Pacific vs non-Pacific	0.5 *
Asian vs non-Asian	0.6
Most vs least deprived	2.0

* There is a statistically significant difference between the two groups.



The Ministry of Health nutrition guidelines for infants and toddlers changed in 2008 to recommend exclusive breastfeeding until around the age of six months, when the Ministry recommends introducing solid food. Before 2008 the Ministry of Health recommended exclusive breastfeeding until around four to six months of age, and the introduction of solid food at around the same age. Introducing solid food before four months of age may be associated with an increased risk of a number of health conditions, such as eczema, asthma, food allergies, respiratory disease and gut infections. Introducing solid food later than six months of age may be associated with an increased risk of iron deficiency, malnutrition and delays in oral motor development.

The surveyors asked parents of children aged four months to four years at what age their child was first given solid food.

One in eleven children (9%) was given solid foods before four months of age, down from 16% in 2006/07.

One in eight Māori children (12%) was given solid food before four months of age, representing an improvement on 2006/07 (when the rate was 22%).[†] After adjusting for age and sex differences, Māori children were 1.6 times as likely to have been given solid food before four months of age as non-Māori children. In contrast, one in twenty Pacific children (5%) was introduced to solid foods before four months of age. Pacific children were half as likely to have been given solid foods before four months of age as non-Pacific children, after adjusting for age and sex differences.

Over half (54%) of children had been introduced to solid foods before six months of age.[‡] Asian children were less likely to have been given solid foods before six months of age (43%) than non-Asian children.

[†] Results for Māori and Pacific children are provided in Tables 7 and 8 at the beginning of this section.

[‡] Results are available in the online tables accompanying this report.

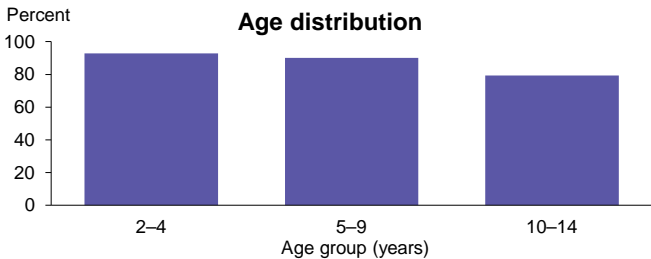
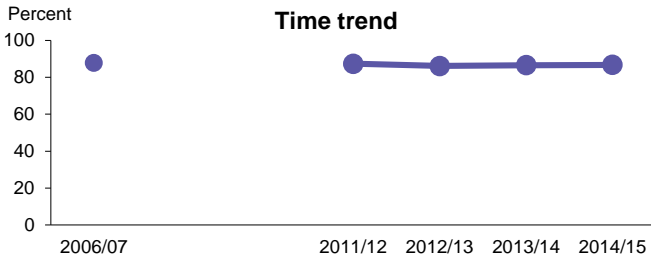
Older children are less likely than younger children to eat breakfast at home every day

Box 33: Children aged 2–14 years who ate breakfast at home every day in the past week, 2014/15

The prevalence was **86.8%**
which is an estimated
687,000 children

Adjusted rate ratio	
Boys vs girls	1.0 *
Māori vs non-Māori	0.9 *
Pacific vs non-Pacific	0.9 *
Asian vs non-Asian	1.1 *
Most vs least deprived	0.8 *

* There is a statistically significant difference between the two groups.



Eating breakfast at home every day is an indicator of a nutritious diet and healthy eating behaviours. The surveyors asked parents of children aged 2–14 years about their child’s consumption of breakfast at home in the past week.

This indicator focuses only on breakfast at home. Some children may be participating in breakfast in school programmes.

The majority of children aged 2–14 years (87%) had eaten breakfast at home every day in the past week.

Children aged 10–14 years were less likely to have eaten breakfast at home every day than those under 10 years (the rates were 79% for 10–14 years, 90% for 5–9 years and 93% for 2–4 years).

After adjusting for age and sex differences, Māori and Pacific children were less likely to eat breakfast at home each day than non-Māori and non-Pacific children respectively. In contrast, Asian children were more likely to eat breakfast at home every day than non-Asian children, after adjusting for age and sex differences. About nine out of ten Asian children (92%) ate breakfast at home every day.

Children living in the most socioeconomically deprived areas were less likely to eat breakfast at home every day than children living in the least deprived areas, after adjusting for age, sex and ethnic differences.

The equivalent statistics, for children who ate breakfast at home less than five days in the past week, showed bigger ethnic and neighbourhood deprivation disparities.‡ In particular, children living in the most deprived neighbourhoods were three times more likely to have eaten breakfast at home on less than five days in the past week than children living in the least deprived neighbourhoods, after adjusting for age, sex and ethnic differences.

‡ Results are available in the online tables accompanying this report.

The proportion of children watching two or more hours of television each day is trending down

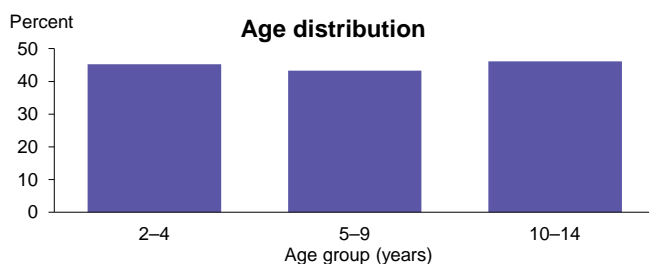
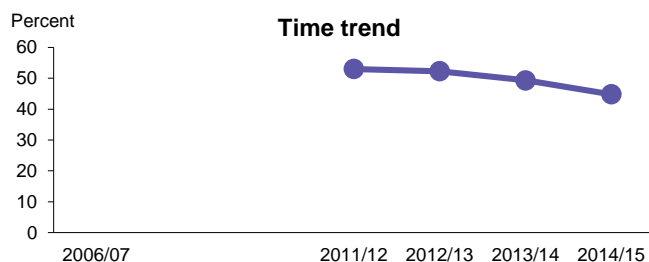
Box 34: Children aged 2–14 years who watched two or more hours of television each day, 2014/15

The prevalence was **44.8%**
which is an estimated
355,000 children

Adjusted rate ratio

Boys vs girls	1.0
Māori vs non-Māori	1.3 *
Pacific vs non-Pacific	1.1 *
Asian vs non-Asian	0.9
Most vs least deprived	1.5 *

* There is a statistically significant difference between the two groups.



Watching television is a sedentary behaviour. It takes up time that could be spent being physically active. New Zealand's physical activity guidelines recommend that young people (those aged 5–18 years) spend no more than two hours in front of television, computers and games consoles per day (out of school time).

This indicator focuses only on the percentage of children aged 2–14 years who watch two or more hours of television per day (averaged over a week). The survey did not ask about other screen time – for example, use of computer games or social media sites – so these results are likely to underestimate total screen time.

Forty-five percent of children usually watched two or more hours of television each day, down from 53% in 2011/12.[‡]

Māori children (54%) and Pacific children (50%) were more likely to watch two or more hours of television each day than non-Māori and non-Pacific children respectively, after adjusting for age and sex differences.[†]

Children living in the most socioeconomically deprived areas were more likely to watch two or more hours of television each day than children living in the least deprived areas (the rates were 53% and 41% respectively).[‡] After adjusting for age, sex and ethnic differences, children in the most deprived areas were 1.5 times as likely to watch two or more hours of television as children in the least deprived areas.

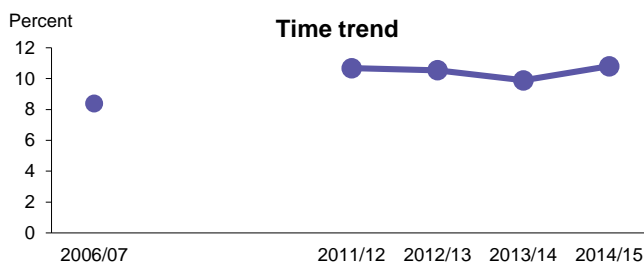
[‡] Results are available in the online tables accompanying this report.

[†] Results for Māori and Pacific children are provided in Tables 7 and 8 at the beginning of this section.

Neighbourhood deprivation is strongly linked with child obesity

Box 35: Children aged 2–14 years who are obese, with a BMI equivalent to an adult BMI of 30 (or greater), 2014/15

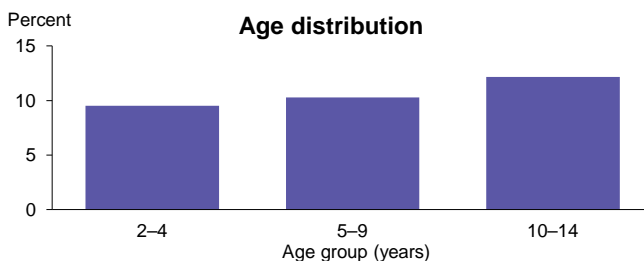
The prevalence was **10.8%**
which is an estimated
85,000 children



Adjusted rate ratio

Boys vs girls	0.9
Māori vs non-Māori	1.6 *
Pacific vs non-Pacific	3.6 *
Asian vs non-Asian	0.6 *
Most vs least deprived	5.0 *

* There is a statistically significant difference between the two groups.



A healthy body size is important for good health and wellbeing. Overweight and obese children are more likely to be obese when they are adults. In addition, they are more likely to have abnormal cholesterol and blood pressure levels at a younger age than children who are within a normal weight range. Being overweight or obese in childhood is also associated with social and mental health problems, including low self-esteem.

This report uses the revised International Obesity Task Force (IOTF) BMI reference values to classify overweight and obesity in children and adolescents aged 2–14 years (Cole and Lobstein 2012). The IOTF cut-off points are sex- and age-specific, and are designed to coincide with the World Health Organization's adult BMI cut-off points at the age of 18 years. Surveyors measured respondents' height and weight, from which BMI is calculated. Height and weight were measured for 92% of children aged 2–14 years.

One in nine children aged 2–14 years (11%) was obese. The child obesity rate has not changed significantly since 2011/12 (when it was also 11%), although it has increased since 2006/07 (when it was 8%).[‡]

Thirty percent of Pacific children and 15% of Māori children were obese.[†] After adjusting for age and sex differences, Pacific and Māori children were more likely to be obese than non-Pacific and non-Māori children respectively.

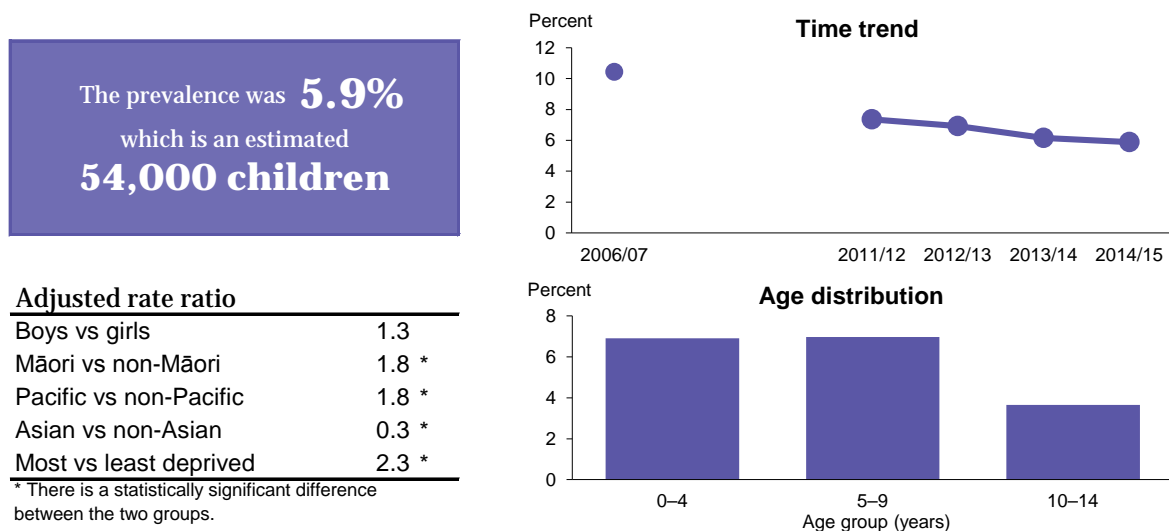
One in five children living in the most socioeconomically deprived areas (21.1%) was obese compared with two in a hundred children living in the least deprived areas (2.1%). The childhood obesity rate was five times higher in children living in the most deprived areas than it was for children living in the least deprived areas, after adjusting for age, sex and ethnic differences. This link between obesity and neighbourhood deprivation was far stronger for children than for adults (see page 19).

[‡] Results are available in the online tables accompanying this report.

[†] Results for Māori and Pacific children are provided in Tables 7 and 8 at the beginning of this section.

Child physical punishment rates are declining

Box 36: Children who received physical punishment in the past 4 weeks, 2014/15



Physical punishment is a predictor of a wide range of negative developmental outcomes, including increased child aggression, antisocial behaviour, poorer cognitive development, poorer quality of parent–child relationships and mental health problems (such as depression) (Smith 2006). It is important to support parents to use more positive methods of parenting. In 2007 the law was changed in New Zealand, making it illegal to physically punish children. The surveyors asked parents/caregivers if they had physically punished (such as smacked) their child in the past four weeks for misbehaviour.

The percentage of children who had received physical punishment in the past four weeks fell from 10% in 2006/07 to 6% in 2014/15.

The percentage of children receiving physical punishment in the past four weeks varied by age, ethnic group and neighbourhood deprivation, as follows.‡

- Young children were more likely to have been physically punished than older children. Seven percent of children aged 0–9 years were physically punished compared with 3.7% of children aged 10–14 years.
- One in ten Pacific children (10%) and 9% of Māori children had been physically punished in the past four weeks. Māori and Pacific children were 1.8 times as likely to have been physically punished as non-Māori and non-Pacific children respectively, after adjusting for age and sex differences. In contrast, only 2.4% of Asian children had been physically punished.
- Children living in the most socioeconomically deprived areas were more likely to have been physically punished (9.7%) than those in the least deprived areas (2.9%).

According to the Youth 2012 survey, 14% of school children (Year 9–15 students, majority aged 13–17 years) reported that they were hit or physically harmed in the past 12 months in their home by an adult (Clark et al 2013). Older children were less likely to be physically harmed by an adult than younger children. The Youth 2012 survey found no significant change since 2001 in the percentage of children who witnessed an adult physically hurting a child in their own home in the past 12 months (16% in 2001 and 14% in 2012). The child-reported rates of violence in the Youth 2012 survey were higher than those reported by parents in the NZHS despite the younger age group in NZHS. (Note: The surveys used different violence definitions.)

‡ Results are available in the online tables accompanying this report.

Health conditions

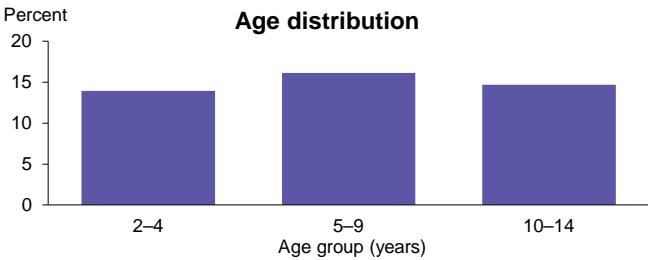
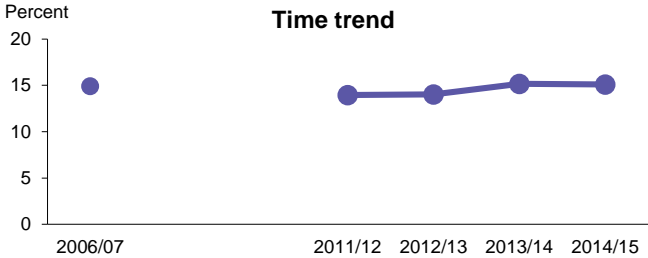
Māori children are more likely to be taking medication for asthma

Box 37: Children aged 2–14 years diagnosed with asthma and currently taking medication for this condition, 2014/15

The prevalence was **15.1%** which is an estimated **120,000 children**

Adjusted rate ratio	
Boys vs girls	1.2
Māori vs non-Māori	1.4 *
Pacific vs non-Pacific	1.0
Asian vs non-Asian	0.9
Most vs least deprived	1.4

* There is a statistically significant difference between the two groups.



This asthma (medicated) indicator focuses on children aged 2–14 years who have been told by a doctor that they have asthma and who currently take medication to treat it. They may be taking medication daily to prevent symptoms or only when needed to relieve symptoms.

Around 120,000 children aged 2–14 years (15%) had asthma (medicated); this prevalence is similar to previous years.

About one in five Māori children (19%) had asthma (medicated).[†] After adjusting for age and sex differences, Māori children were 1.4 times as likely to have asthma (medicated) as non-Māori children.

Asthma (medicated) was more common in children than in adults (the rates were 15% and 11% respectively). For more information on asthma in adults, see page 24.

[†] Results for Māori and Pacific children are provided in Tables 7 and 8 at the beginning of this section.

Boys are more likely to have been diagnosed with emotional or behavioural problems than girls

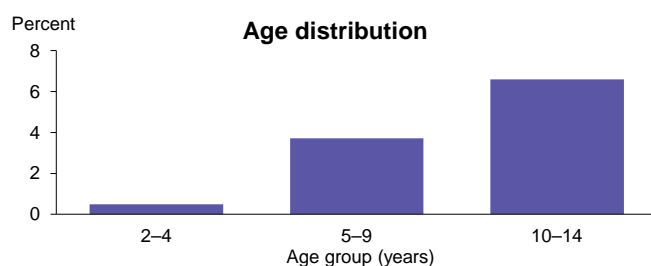
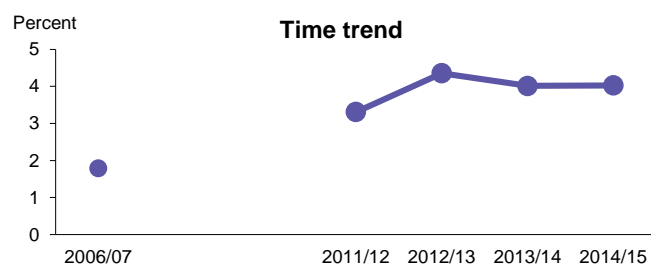
Box 38: Children aged 2–14 years diagnosed with emotional and/or behavioural problems (depression, anxiety disorder, ADD and/or ADHD), 2014/15

The prevalence was **4.0%**
which is an estimated
32,000 children

Adjusted rate ratio

Boys vs girls	1.6 *
Māori vs non-Māori	1.3
Pacific vs non-Pacific	0.6
Asian vs non-Asian	0.5 *
Most vs least deprived	3.4 *

* There is a statistically significant difference between the two groups.



In this report, ‘emotional and/or behavioural problems’ refers to depression, an anxiety disorder, attention deficit disorder (ADD) and/or attention deficit and hyperactivity disorder (ADHD). Surveyors recorded children as having been diagnosed with emotional and/or behavioural problems if their parents indicated that they had been told by a doctor at some time in their child’s life that the child had one of the above conditions.

Around 32,000 children (4%) aged 2–14 years had been diagnosed with emotional and/or behavioural problems at some time in their life, up from 1.8% in 2006/07.

The percentage of children with emotional and/or behavioural problems varied by sex, age, ethnic group and neighbourhood deprivation, as follows.‡

- Boys were 1.6 times as likely to have ever been diagnosed with emotional and/or behavioural problems as girls, after adjusting for age differences.
- The percentage of children with emotional and/or behavioural problems increased with age, from 0.5% of those aged 2–4 years to 6.6% of those aged 10–14 years.
- After adjusting for age and sex differences, Asian children were half as likely to have been diagnosed with emotional and/or behavioural problems as non-Asian children.
- Children living in the most socioeconomically deprived areas were more likely to have been diagnosed with emotional and/or behavioural problems than those in the least deprived areas, after adjusting for age, sex and ethnic differences. The same pattern was found for adults with mood and/or anxiety disorders (see page 27).

The most common types of emotional and behavioural problems were anxiety disorder (2.6%), followed by ADD/ADHD (1.9%) and depression (1.1%).‡ Boys were more likely to have ADD/ADHD than girls (the rates were 2.9% and 0.8% respectively).

The NZHS online data tables include statistics on autism spectrum disorder (ASD, including Asperger’s syndrome), which is a pervasive developmental disorder typified by emotional and behavioural problems. About one in a hundred children (1.2%) had ASD.‡

‡ Results are available in the online tables accompanying this report.

Access to health care

Three in four children have visited a GP in the past 12 months

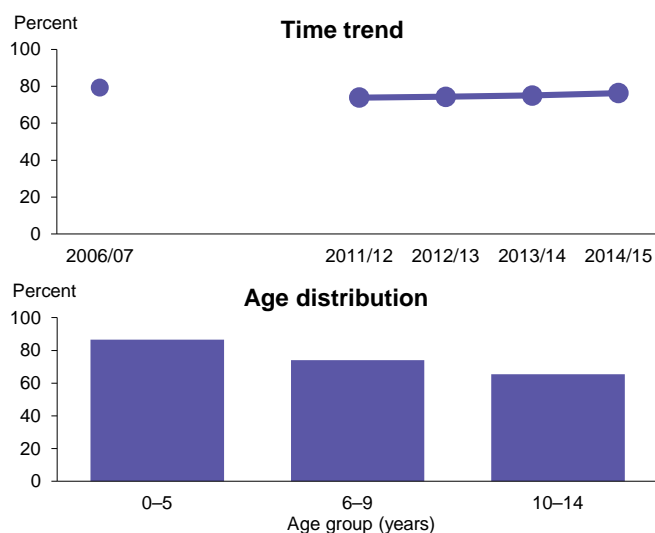
Box 39: Children who had visited a GP in the past 12 months, 2014/15

The prevalence was **76.3%**
which is an estimated
697,000 children

Adjusted rate ratio

Boys vs girls	1.0
Māori vs non-Māori	1.0
Pacific vs non-Pacific	1.0
Asian vs non-Asian	1.0
Most vs least deprived	1.0

* There is a statistically significant difference between the two groups.



As at July 2015, 98% of children (0.4 million) aged under 15 years were enrolled with a primary health organisation funded by their local DHB to provide general practice and other primary care services. The Ministry of Health provides additional funding to encourage free GP consultations for children under six years of age (Zero Fees for Under 6s initiative started in January 2008). Note that in July 2015, after the 2014/15 NZHS results had been collected, this initiative was extended to Zero Fees for Under 13s. As at July 2015, 99% of children aged 0–5 years and 97% of children aged 6–12 years were enrolled at a general practice that has committed to providing free visits for children during the daytime.

This indicator reports on the percentage of children aged 0–14 years who had visited a GP at their usual medical centre, or somewhere else, in the past 12 months. For age group analyses, children aged 0–5 years have been grouped together, to reflect the higher level of subsidies in place for this age group.

Seventy-six percent of children had visited a GP in the past 12 months. Children younger than six years were more likely to have visited a GP in the past 12 months than older children (the rates were 87% for 0–5 years, 74% for 6–9 years and 65% for 10–14 years).

There was little or no variation in the percentage of children who visited a GP by sex, ethnic group or neighbourhood deprivation level.

On average, children visited a GP 2.7 times in the past 12 months. The younger the child, the more visits they made: on average, children aged 0–5 years made 3.9 visits, compared with 1.8 visits for children aged 10–14 years.[‡]

A greater percentage of children received their last GP visit (anywhere) free in 2014/15 (57%) than in 2011/12 (42%).[‡] For most children under six years (96%), their last visit to a GP was free.

[‡] Results are available in the online tables accompanying this report.

Children under six years are most likely to have visited a practice nurse in the past 12 months

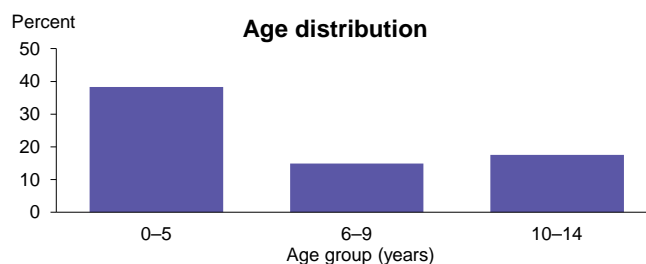
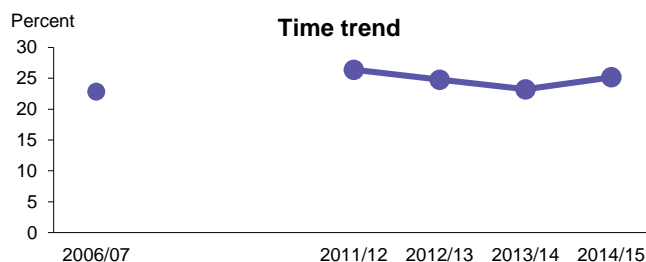
Box 40: Children who had visited a practice nurse in the past 12 months without seeing a GP at the same visit, 2014/15

The prevalence was **25.2%**
which is an estimated
230,000 children

Adjusted rate ratio

Boys vs girls	0.9
Māori vs non-Māori	1.0
Pacific vs non-Pacific	0.7 *
Asian vs non-Asian	0.8 *
Most vs least deprived	0.8

* There is a statistically significant difference between the two groups.



Practice nurses work within a general practice setting, providing a comprehensive range of primary health care services. They are a key part of the general practice team. Practice nurses focus on health promotion, disease prevention, wellness, first-point-of-contact care and disease management across the lifespan. They run screening and preventative programmes, such as immunisations, and have an important role in care coordination for patients and their families. As with GP visits, the Ministry of Health provides additional funding to encourage free practice nurse consultations for children under six years of age (Zero Fees for Under 6s initiative).

One in four children (25%) had visited a practice nurse during the past 12 months without seeing a GP at the same visit.

Children younger than six years were much more likely than older children to have visited a practice nurse without seeing a GP at the same visit in the past 12 months (the rates were 38% for 0–5 years, 15% for 6–9 years and 18% for 10–14 years).

About one in five Pacific (19%) and Asian (22%) children had visited a practice nurse in the past 12 months without seeing a GP at the same visit.[‡] Pacific and Asian children were less likely to visit a practice nurse than non-Pacific and non-Asian children respectively, after adjusting for age and sex differences. There were no other significant differences by sex, age or ethnic group.

On average, children had visited a practice nurse without seeing a GP at the same visit 0.5 times in the past 12 months. The younger the child, the more visits they made: on average, children aged 0–5 years made 0.7 visits, compared with 0.3 visits for children aged 10–14 years.[‡]

For most children (83%) who visited a practice nurse without seeing a GP at the same visit in 2014/15, their last visit was free. This proportion increased to 96% for children under six years.[‡]

[‡] Results are available in the online tables accompanying this report.

Use of an after-hours medical centre is highest in children under six years

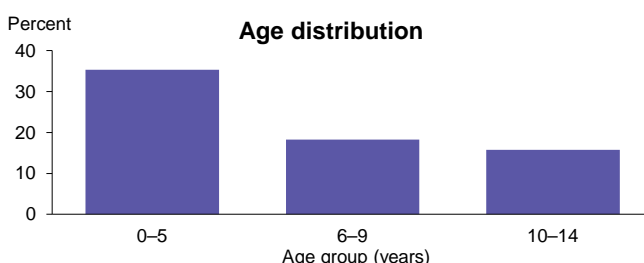
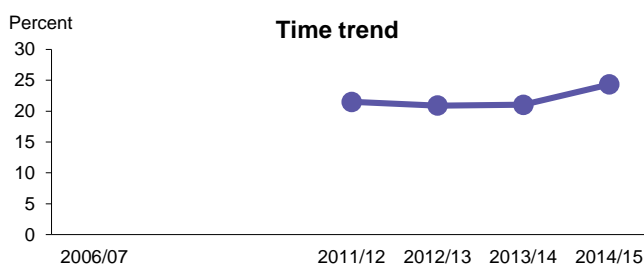
Box 41: Children who had visited an after-hours medical centre in the past 12 months, 2014/15

The prevalence was **24.3%**
which is an estimated
222,000 children

Adjusted rate ratio

Boys vs girls	1.2 *
Māori vs non-Māori	0.8 *
Pacific vs non-Pacific	1.0
Asian vs non-Asian	1.1
Most vs least deprived	1.0

* There is a statistically significant difference between the two groups.



After-hours medical centres provide primary health care outside usual business hours. Their cost of care is higher than it is for services during usual business hours, particularly for people who are not enrolled with a primary health organisation. On 1 July 2012, the Ministry of Health introduced funding to encourage free access to after-hours services for children under six.

About 222,000 children (24%) had visited an after-hours medical centre in the past 12 months.

Children aged under six years were more likely than older children to have visited an after-hours medical centre in the past 12 months (the rates were 35% for 0–5 years, 18% for 6–9 years and 16% for 10–14 years). The rate of after-hours visits for under sixes, in the previous three years of the NZHS, was much lower at 21%.‡

Māori children were less likely to have visited an after-hours medical centre in the past 12 months (21%) than non-Māori children.†

The last after-hours visit was free for 55% of those children who had visited an after-hours medical centre in the past 12 months.‡ Children under six years were the age group most likely to have had their last after-hours visit free; the rate was 81%, up from 38% in the 2011/12 NZHS.

‡ Results are available in the online tables accompanying this report.

† Results for Māori and Pacific children are provided in Tables 7 and 8 at the beginning of this section.

At least a quarter of children living in the most deprived areas have an unmet need for primary health care

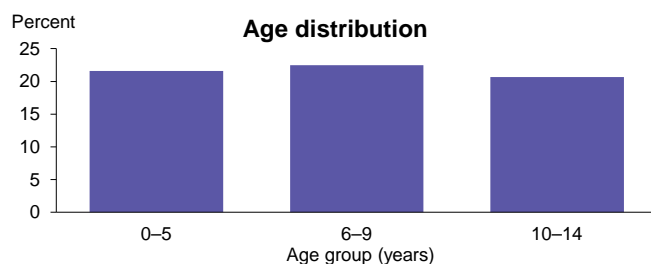
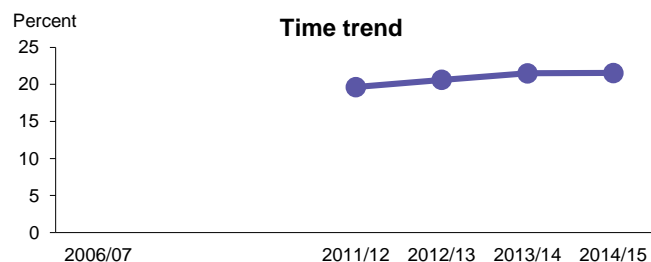
Box 42: Children who have experienced one or more types of unmet need for primary health care, at any point in the past 12 months, 2014/15

The prevalence was **21.5%**
which is an estimated
197,000 children

Adjusted rate ratio

Boys vs girls	1.0
Māori vs non-Māori	1.4 *
Pacific vs non-Pacific	1.3 *
Asian vs non-Asian	0.8 *
Most vs least deprived	1.4 *

* There is a statistically significant difference between the two groups.



Even though access to primary health care services is free almost everywhere in New Zealand, some children experience unmet need for primary health care. To reduce the effect of cost for accessing primary health care services, the Zero Fees for Under 6s initiative supports practices to provide free primary health care to children under six years at any time.

This indicator investigates whether children had experienced any of these six barriers to accessing primary health care services in the past 12 months: unmet need for a GP due to cost; unmet need for after-hours services due to cost; unmet need for a GP due to lack of transport; unmet need for after-hours services due to lack of transport; unmet need for a GP due to lack of childcare for other children; and inability to get an appointment at their usual medical centre within 24 hours.

Twenty-two percent of children experienced one or more types of unmet need for primary care at some point in the past 12 months. This unmet need was due to:

- inability to get an appointment within 24 hours (14.2%)
- the cost of GP services (6.1%)
- the cost of after-hours services (3.3%)
- lack of transport to a GP (2.9%)
- lack of child care (2.6%)
- lack of transport to an after-hours service (1.0%).[‡]

Rates of unmet need for primary health care varied by ethnicity and deprivation as follows.[‡]

- Māori children were 1.4 times and Pacific children were 1.3 times more likely not to have accessed primary health when they needed it than non-Māori and non-Pacific children respectively, after adjusting for age and sex differences. In contrast, Asian children were less likely to have an unmet need for primary health care than non-Asian children.
- Children living in the most socioeconomically deprived areas had higher rates of unmet need for primary health care (26%) than those in the least deprived areas (18%).

[‡] Results are available in the online tables accompanying this report.

One in seven children has been unable to get an appointment at their usual medical centre within 24 hours at some time in the past 12 months

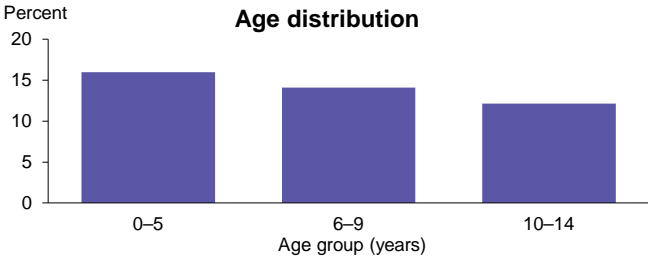
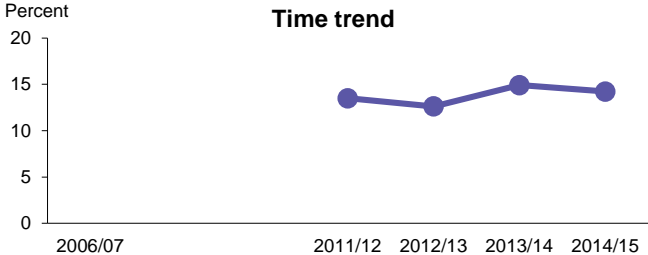
Box 43: Children who were unable to get an appointment at their usual medical centre within 24 hours, at any point in the past 12 months, 2014/15

The prevalence was **14.2%**
which is an estimated
127,000 children

Adjusted rate ratio

Boys vs girls	1.0
Māori vs non-Māori	1.3 *
Pacific vs non-Pacific	1.0
Asian vs non-Asian	0.9
Most vs least deprived	1.2

* There is a statistically significant difference between the two groups.



Timely access to care when it is needed is an important dimension of quality of care.

The surveyors asked parents whether there had been a time in the past 12 months when they wanted their child to see a GP, nurse or other health care worker at their usual medical centre within the next 24 hours, but this had not been possible. The parents of about one in seven children (14%) said ‘yes’.

Parents of Māori children (17%) were more likely to have been unable to get an appointment for their child at their usual medical centre within 24 hours than parents of non-Māori children.[†] After adjusting for age and sex differences, parents of Māori children were 1.3 times more likely to have experienced this barrier than parents of non-Māori children.

[†] Results for Māori and Pacific children are provided in Tables 7 and 8 at the beginning of this section.

One in eleven children aged 10–14 years has been unable to visit a GP due to cost at some time in the past 12 months

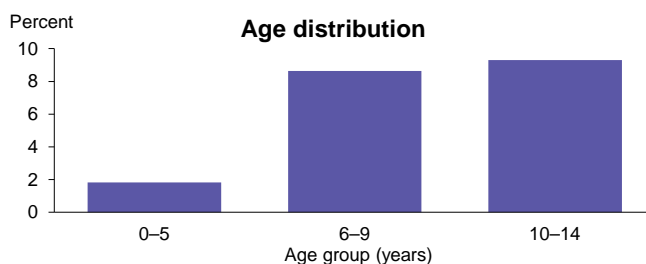
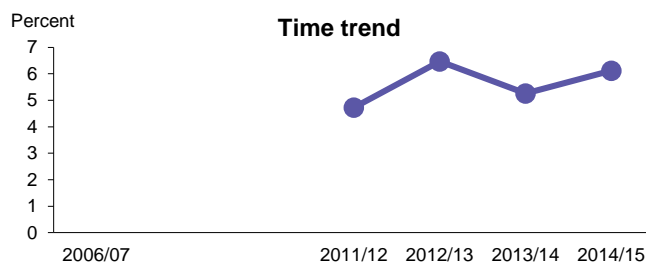
Box 44: Children who did not visit a GP because of cost, at any point in the past 12 months, 2014/15

The prevalence was **6.1%**
which is an estimated
56,000 children

Adjusted rate ratio

Boys vs girls	1.0
Māori vs non-Māori	1.6 *
Pacific vs non-Pacific	1.2
Asian vs non-Asian	0.6
Most vs least deprived	2.0

* There is a statistically significant difference between the two groups.



This indicator focuses on whether there had been an occasion in the past 12 months when children had a medical problem, but their parents did not take them to visit a GP because of cost.

Around 56,000 children (6%) had been unable to visit a GP due to cost at some point in the past 12 months.

Very few children younger than six years (1.8%) had an unmet need for GP services due to cost; this finding reflects higher subsidies for children in this age group. In contrast, one in eleven children aged 10–14 years (9%) had not visited a GP due to cost when they had a medical problem.[‡]

One in twelve Māori children (8%) had been unable to visit a GP due to cost in the past 12 months.[†] Māori children were 1.6 times more likely than non-Māori children to have been unable to visit a GP due to cost, after adjusting for age and sex differences.

[‡] Results are available in the online tables accompanying this report.

[†] Results for Māori and Pacific children are provided in Tables 7 and 8 at the beginning of this section.

Unmet need for after-hours services due to cost, at some time in the past 12 months, is steadily declining

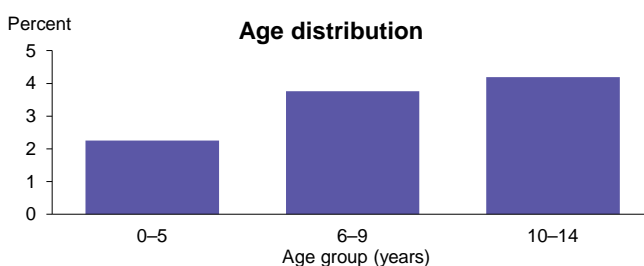
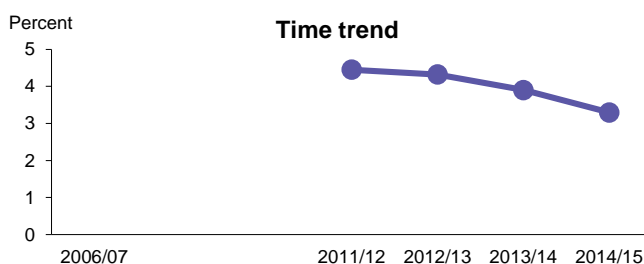
Box 45: Children who did not visit an after-hours medical centre due to cost, at any point in the past 12 months, 2014/15

The prevalence was **3.3%**
which is an estimated
30,000 children

Adjusted rate ratio

Boys vs girls	1.1
Māori vs non-Māori	1.8 *
Pacific vs non-Pacific	1.6
Asian vs non-Asian	0.4 *
Most vs least deprived	3.0 *

* There is a statistically significant difference between the two groups.



The Zero Fees for Children Under 6s scheme includes free after-hours access to GP services, and has been expanded to include under 13s from July 2015. Most children (99% of those aged 0–5 years and 96% of those aged 6–12 years) have access to free after-hours visits within a reasonable travel time (60 minutes) based on DHB reported coverage.

This indicator focuses on whether there had been an occasion in the past 12 months when a child had a medical problem outside regular office hours, but their parents did not take them to visit an after-hours medical centre because of cost.

Around 30,000 children had not visited an after-hours medical centre due to cost at some time in the past 12 months. The rate of 3.3% was down from 4.3% in 2011/12.

Unmet need for after-hours services due to cost was higher in the most socioeconomically deprived areas (5.8%) than in the least deprived areas (2.2%).[‡]

Unmet need for after-hours services was much less common in children compared with adults (for whom the rate was 5.8%; see page 35 for more information).

[‡] Results are available in the online tables accompanying this report.

Pacific children are five times more likely than non-Pacific children to have missed out on a prescription due to cost at some time in the past 12 months

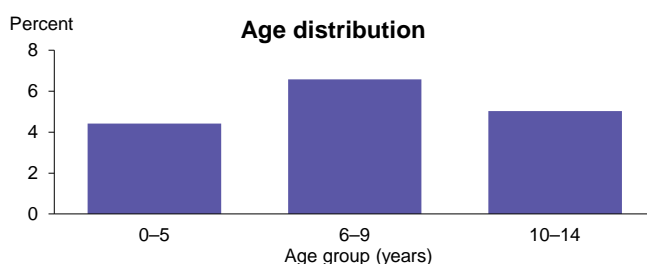
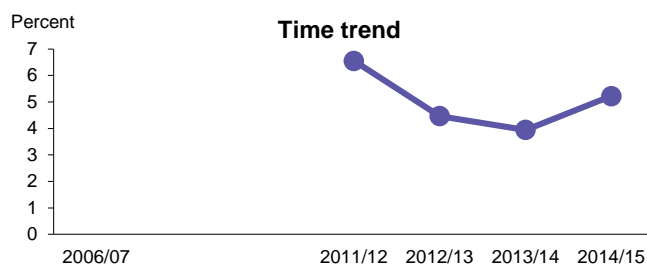
Box 46: Children who had a prescription item that was not collected due to cost, at any point in the past 12 months, 2014/15

The prevalence was **5.2%**
which is an estimated
48,000 children

Adjusted rate ratio

Boys vs girls	1.2
Māori vs non-Māori	2.4 *
Pacific vs non-Pacific	3.6 *
Asian vs non-Asian	0.4 *
Most vs least deprived	5.2 *

* There is a statistically significant difference between the two groups.



Most prescription medicines are subsidised in New Zealand so people pay a relatively small amount for each medication. The co-payment applies to the first 20 prescriptions per family per year. The co-payment for subsidised prescription items increased from \$3 to \$5 on 1 January 2013 for those aged six years and over. Prescriptions for children aged under six years are free.

The surveyors asked parents whether there had been a time in the past 12 months (July 2013–June 2014) when they had been given a prescription for their child but had not collected one or more items because of cost. The 2014/15 survey results were collected after subsidised prescription costs had increased.

One in twenty children (5%) had a prescription item that was not collected due to cost, which was not significantly different to previous years.[‡]

Parents of Pacific and Māori children were more likely than parents of non-Pacific and non-Māori children not to have collected a prescription for their child.[‡] This disparity remained after adjusting for age and sex differences. However, Asian children were less likely than non-Asian children to have had an uncollected prescription.

Parents of about one in eight children living in the most socioeconomically deprived areas (11.7%) had not collected a prescription for their child due to cost, compared with 2.0% living in the least deprived areas. Parents of children living in the most deprived areas were 5.2 times as likely as those in the least deprived areas to have not collected a prescription due to cost at some time in the past 12 months, after adjusting for age, sex and ethnic differences.

Cost prevented a smaller percentage of parents of children (5%) than of adults (7%, see page 36) from collecting prescriptions.

[‡] Results are available in the online tables accompanying this report.

Parents' confidence and trust in their child's GP is falling

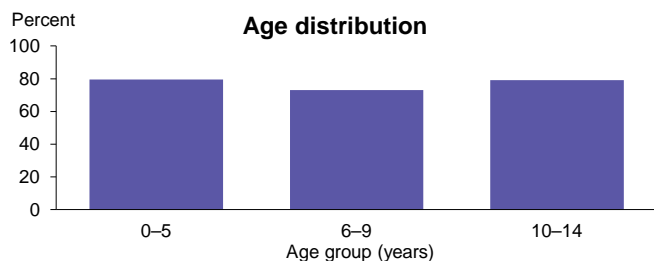
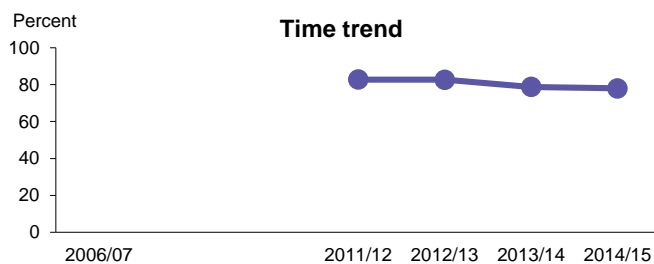
Box 47: Parents who definitely had confidence and trust in the GP their child last visited (of those who had visited a GP in the past 3 months), 2014/15

The prevalence was **78.0%**
which is an estimated
296,000 children

Adjusted rate ratio

Boys vs girls	1.0
Māori vs non-Māori	0.9 *
Pacific vs non-Pacific	1.0
Asian vs non-Asian	1.0
Most vs least deprived	0.9

* There is a statistically significant difference between the two groups.



As outlined in the adult section, patient experiences of medical care are reflected in the confidence and trust they have in their GP. Being treated with dignity and respect, having privacy protected, and being given a clear explanation of conditions and treatment are important elements of the patient experience.

The surveyors asked parents of children who had visited a GP in the past three months, 'Did you have confidence and trust in the GP [child's name] saw? Yes, definitely / Yes, to some extent / No, not at all'. In this report, having 'confidence and trust' means definitely having confidence and trust in the GP last visited.

Parents' confidence and trust in the GP that their child last visited was 78%; this represents a decline since 2011/12 (when the rate was 83%).[‡]

Seventy-two percent of parents of Māori children had confidence and trust in the GP that their child last visited.[†] Parents of Māori children were less likely to have confidence and trust in their GPs compared with parents of non-Māori, after adjusting for age and sex differences.

There was little or no difference in parents' confidence and trust in their GP by sex or level of neighbourhood deprivation.

The following was another patient GP experience question included in the NZHS.

- 'Thinking about [Name's] last visit to a GP, how good was the doctor at explaining [Name's] health conditions and treatments in a way that you could understand?'

Nine out of ten parents (90%) said that their child's GP was very good or good at explaining their child's health conditions and treatments.[‡] Again, parents of Māori children were less likely to report that their child's GP was very good or good at providing such explanations, compared with parents of non-Māori, after adjusting for age and sex differences.

[‡] Results are available in the online tables accompanying this report.

[†] Results for Māori and Pacific children are provided in Tables 7 and 8 at the beginning of this section.

Oral health

More children are visiting dental health care workers

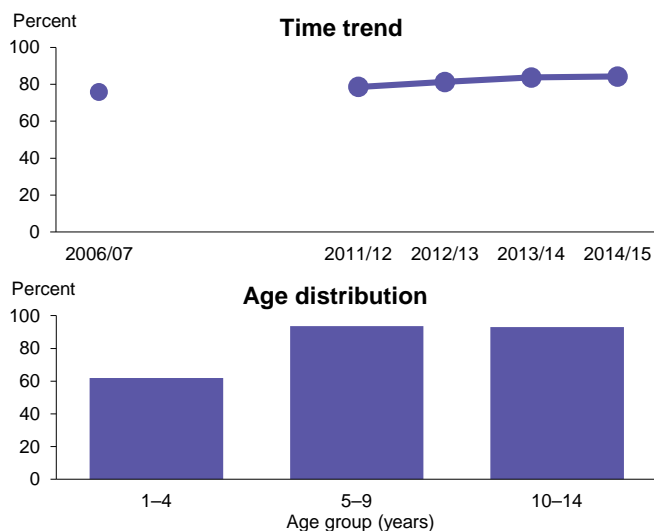
Box 48: Children aged 1–14 years who had visited a dental health care worker in the past 12 months, 2014/15

The prevalence was **84.2%**
which is an estimated
719,000 children

Adjusted rate ratio

Boys vs girls	1.0
Māori vs non-Māori	1.0
Pacific vs non-Pacific	1.0
Asian vs non-Asian	0.9 *
Most vs least deprived	1.0

* There is a statistically significant difference between the two groups.



If children have regular dental visits, a dental health care worker[§] is more likely to detect oral health problems early. Dental health care workers can also apply timely preventive measures and treatments to maintain and improve oral health.

New Zealand publicly funds basic oral health services for children from birth up until their 18th birthday. The majority of dental services for children up to school year 8 (age 12–13 years) is provided by dental therapists within the Community Oral Health Service provided by DHBs. Publicly funded dental services for adolescents from school year 9 up to their 18th birthday are mainly provided by dentists contracted by DHBs under the nationally standardised Combined Dental Agreement.

Eighty-four percent of children visited a dental health care worker in the past 12 months in 2014/15, up from 76% in 2006/07.

Since 2006/07, rates of visiting dental health care workers have improved for all the population groups discussed in this report (girls and boys, the three age groups and the four ethnic groups).[‡]

Children aged 1–4 years were much less likely to have visited a dental health care worker in the past 12 months (62%) than children of school age.

Asian children were less likely to have visited a dental health care worker in the past 12 months than non-Asian children, after adjusting for age and sex differences. There were few or no other differences in rates of visiting a dental health care worker by sex, ethnic group or level of neighbourhood deprivation.

[§] The term 'dental health care worker' refers to dentists and other dental health care workers, such as dental therapists and dental hygienists, as well as dental health specialists, such as orthodontists.

[‡] Refer to online tables accompanying this report for more detailed results.

Around 29,000 children had teeth extracted due to decay in the past 12 months

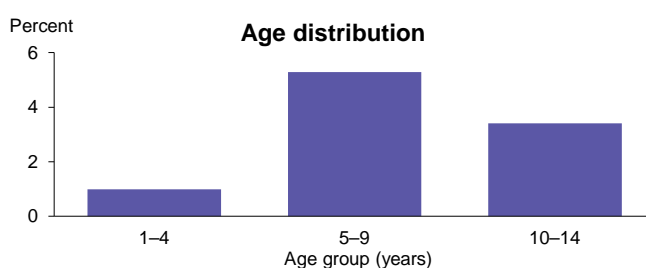
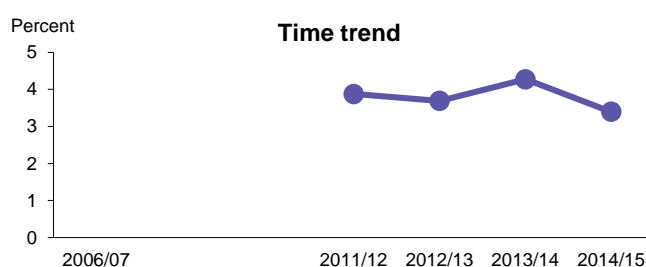
Box 49: Children aged 1–14 years who had one or more of their teeth removed in the past 12 months, due to decay, infection or disease, 2014/15

The prevalence was **3.4%**
which is an estimated
29,000 children

Adjusted rate ratio

Boys vs girls	1.2
Māori vs non-Māori	1.9 *
Pacific vs non-Pacific	1.8 *
Asian vs non-Asian	0.6
Most vs least deprived	2.0

* There is a statistically significant difference between the two groups.



Tooth decay is the most common disease of childhood, and one of the three leading causes of potentially avoidable hospitalisations among children in New Zealand. When a child presents with irreversible tooth decay, the aim is to provide care and treatment to enable the child to be free of pain, infection and disease. Sometimes this aim is best achieved by filling or extracting the tooth.

The surveyors asked parents of children aged 1–14 years if their children had had one or more teeth (primary or permanent) removed due to decay, abscess or infection in the last 12 months. Note that this excludes teeth lost for other reasons such as injury, crowded mouth or orthodontics.

Parents of around 29,000 children (3%) reported that their child had had one or more teeth removed due to decay, abscess or infection in the past 12 months.

One in twenty children (5%) aged 5–9 years had had a tooth removed the past 12 months, compared with only 1% of those aged 1–4 years.

One in twenty Māori and Pacific children (5%) had had teeth removed in the past 12 months.[†] After adjusting for age and sex differences, Māori and Pacific children were nearly twice as likely to have had a tooth extracted in the past 12 months as non-Māori and non-Pacific children respectively.

[†] Results for Māori and Pacific children are provided in Tables 7 and 8 at the beginning of this section.

References

- Atkinson J, Salmond C, Crampton P. 2014. *NZDep2013 Index of Deprivation*. Wellington: Department of Public Health, University of Otago.
- Clark TC, Fleming T, Bullen P, et al. 2013. *Youth'12 Overview: The health and wellbeing of New Zealand secondary school students in 2012*. Auckland: The University of Auckland.
- Cole T, Lobstein T. 2012. Extended international (IOTF) body mass index cut-offs for thinness, overweight and obesity. *Pediatric Obesity* 7(4): 284–94.
- Hayes L, Barry G. 2002. Sampling variability of the Kunst-Mackenbach relative index of inequality. *Journal of Epidemiology and Community Health* 56: 762–5.
- IHME. 2015. GBD Compare. Seattle, WA: Institute for Health Metrics and Evaluation, University of Washington. URL: <http://vizhub.healthdata.org/gbd-compare> (accessed 12 October 2015).
- Kessler R, Barker P, Colpe L, et al. 2003. Screening for serious mental illness in the general population. *Archives of General Psychiatry* 60(2): 184–9.
- Ministry of Health. 2014. *Mortality and Demographic Data 2011*. Wellington: Ministry of Health.
- Ministry of Health. 2015. *Eating and Activity Guidelines for New Zealand Adults*. Wellington: Ministry of Health.
- Smith A. 2006. The state of research on the effects of physical punishment. *Social Policy Journal of New Zealand* (27): 114–27.
- Statistics New Zealand. 2015. *Alcohol Available for Consumption: Year ended December 2014*. Wellington: Statistics New Zealand.
- University of Otago and Ministry of Health. 2011. *A Focus on Nutrition: Key findings of the 2008/09 New Zealand Adult Nutrition Survey*. Wellington: Ministry of Health.
- WHO. 2014. *Global Status Report on Alcohol and Health 2014*. Geneva: World Health Organization.

Appendix 1: Definitions and statistical methods

This section gives some key information to aid interpretation of the survey results. For more details about the survey methodology, see the *Methodology Report 2014/15: New Zealand Health Survey* and *Indicator Interpretation Guide 2014/15: New Zealand Health Survey*.

Adjusted rate ratios

This report uses adjusted rate ratios to compare different population groups. That is, it uses the ratio of the prevalence estimates of the two groups.

Rate ratios are used for the following comparisons:

- males and females
- Māori and non-Māori (for the total population, males and females)
- Pacific and non-Pacific (for the total population, males and females)
- Asian and non-Asian (for the total population, males and females)
- people living in the most and the least socioeconomically deprived areas.

In keeping with the use of total response ethnicity to present prevalences by ethnic group, ethnic comparisons are presented such that Māori are compared with non-Māori, Pacific with non-Pacific and Asian with non-Asian groups. For this purpose, all respondents who identified as Māori are included in the Māori group; all other respondents are included in the non-Māori group. Similar groups are formed for Pacific and Asian ethnic comparisons as well.

Rate ratios can be interpreted in the following way.

- A value of 1 shows that there is no difference in prevalence between the group of interest (eg, men) and the reference group (eg, women).
- A value higher than 1 shows that the prevalence is higher for the group of interest than for the reference group.
- A value lower than 1 shows that the prevalence is lower for the group of interest than for the reference group.

The rate ratios presented are adjusted for differences in demographic factors between the groups being compared that may be influencing (confounding) the comparison.

- The sex comparison is adjusted for age differences.
- The ethnic comparisons are adjusted for age and sex differences.
- The neighbourhood deprivation comparison is adjusted for age, sex and ethnic differences.

Adjusting for potentially confounding factors makes comparisons more accurate and meaningful, as the adjustment removes the effect of these confounding factors.

Neighbourhood deprivation

Neighbourhood deprivation refers to the New Zealand Index of Deprivation 2013 (NZDep2013), which measures the level of socioeconomic deprivation for each neighbourhood (meshblock) according to a combination of the following 2013 Census variables: income, benefit receipt, transport (access to car), household crowding, home ownership, employment status, qualifications, support (sole-parent families) and access to a telephone (Atkinson et al 2014).

In the neighbourhood deprivation comparisons, the rate ratio refers to the **relative index of inequality** (Hayes and Barry 2002). This measure is used instead of simply comparing the most deprived quintile with the least deprived quintile, and is calculated by first using data from all quintiles to calculate a line of best fit (regression line), adjusted for age, sex and ethnic differences. The points on the regression line corresponding to the most and least deprived areas are used to calculate the rate ratio that is presented in the reports. This method has the advantage of using data from all the NZDep2013 quintiles to give an overall test for trend (gradient) by neighbourhood deprivation, rather than only using the data from quintiles 1 and 5.

Results are representative of the total adult or child population

All results presented in this report are weighted so that they are representative of the total population of either adults (15 years and above) or children (0–14 years). For some child indicators, the age group is a sub-set of the 0–14 years age group.

Percentages refer to unadjusted values

Any percentage given in the text refers to the **unadjusted prevalence**; that is, the percentage of people affected in the population group of interest.

Total response ethnicity

This report uses total response ethnicity to define ethnic groups. Total response ethnicity classifies a person in all the ethnic groups they identify with. This means that people can appear in more than one ethnic group.

Statistical significance

Statistical significance is measured at the 5% significance level (that is, a *p*-value less than 0.05). If needed, a statistical test (a *t*-test) is carried out to confirm that the finding was statistically significant. Due to the large number of results included in this report, some results identified as significant could be chance findings.

Time trends

The prevalence estimates used in this report reflect the actual (unadjusted) percentage of the population affected in each time period. However, the significance (*p*-values) of differences between years has been adjusted for differences in the age structures of the underlying populations over time.

Survey results show associations, not cause-and-effect relationships

This survey presents a snapshot of the health of New Zealand adults and children at one point in time. The survey can be used to look at associations between different factors, such as health status and neighbourhood deprivation. However, we cannot conclude that the survey results show cause-and-effect relationships between these factors, in part because we do not know which factor occurred first.

For example, if the survey finds that a particular condition is more common in people living in deprived areas, an association has been identified. This association does not necessarily mean the condition is caused by living in deprived areas.

Reliability of survey results

The survey results are likely to underestimate or overestimate some indicators due to the nature of self-reported information.

For example, many of the survey results assume that respondents can accurately recall previous events (such as a diagnosis by a doctor). Also, many indicators in this report are about **diagnosed** conditions, and not everyone with a particular condition will have had it diagnosed by a doctor. People may also over-report good behaviours or under-report risk behaviours based on what they consider to be socially desirable. The amount of error will vary by indicator, depending on a number of factors (including the age of the respondent).

Indicators about body size (such as obesity) are based on height and weight measurements taken by the surveyors, rather than self-reported information. These results are more reliable than self-reported information would have been.