

New South Wales Population Health Survey

2010 Report
on
Adult Health



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CENTRE FOR EPIDEMIOLOGY AND RESEARCH

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Foreword

I am pleased to present the *2010 Report on Adult Health*, from the continuous New South Wales Population Health Survey, which provides information on health behaviours, health status, and health services, for adults aged 16 years and over.

Since 1997, the NSW Health Survey Program has been interviewing state residents using computer assisted telephone interview (CATI). Reports on adult health were produced in 1997 and 1998, and have been produced annually since 2002. The program is one of the main mechanisms through which the NSW Department of Health reports key health indicators in the *NSW State Plan*, the *NSW State Health Plan*, the *National Preventive Health Strategy*, and *Two Ways Together*.

The 2010 report shows the adult population is increasingly adopting healthy behaviours. Significant decreases are reported for current and daily smoking and consuming more than 2 standard drinks on a day when consuming alcohol. Significant increases are reported for consuming 2 or more serves of fruit a day, adequate physical activity, and influenza and pneumococcal immunisation in adults aged 65 years and over. However, the proportion of adults consuming 5 or more serves of vegetables a day remains low at 9.5 per cent.

The report also highlights worrying trends in health status, which coincide with key indicators in the *National Preventive Health Strategy*: the proportion of overweight or obese adults has increased significantly from 41.8 per cent in 1997 to 54.3 per cent in 2010; over the same period, self-reported diabetes or high blood glucose increased significantly from 4.7 per cent to 7.4 per cent; and positive self-rated health, a powerful predictor of morbidity and mortality, decreased significantly from 85.0 per cent to 80.4 per cent.

Since 1997, there has been a significant increase in the use of health services, including emergency department presentations, hospital admissions, general practice visits, public dental service attendances, and community health centre attendances. At the same time, the proportion of people experiencing difficulties getting health care has increased from 9.9 per cent to 18.1 per cent.

There is a wealth of other information in the survey dataset. This report, and other reports from the NSW Health Survey Program, can be accessed through the program's website at www.health.nsw.gov.au/publichealth/surveys/index.asp. Also, a broad range of population health indicators will be made available from Health Statistics New South Wales at www.healthstats.doh.health.nsw.gov.au.

Unit record data for all surveys conducted by the NSW Health Survey Program are available to authorised users of the Health Outcomes Information Statistical Toolkit (HOIST) under the terms of their confidentiality and security agreement. Those who do not have access to HOIST can lodge a data request with the Chief Health Officer.

Comments on the New South Wales Population Health Survey are welcome.

I thank all the individuals and organisations who contributed their time and expertise to assist in the development and conduct of the Survey in 2010.



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July 2011

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Executive summary

Introduction

In 2010, the NSW Department of Health completed the ninth year of the New South Wales Population Health Survey, a continuous survey of the health of people of New South Wales using computer assisted telephone interviewing (CATI). Prior to the introduction of the continuous survey in 2002, the Centre for Epidemiology and Research conducted adult health surveys in 1997 and 1998, an older people's health survey in 1999, and a child health survey in 2001.

The target population for the continuous survey is all state residents living in households with private telephones. In 2010, the target sample was approximately 1,500 people in each of the 8 area health services which existed at that time (a total sample of 12,000). Interviews were carried out continuously between February and December. Households were sampled using list-assisted random digit dialling. When a household was contacted, one person was randomly selected for interview.

The content of the survey was developed by the NSW Health Survey Program in consultation with key stakeholders, area health services, other government departments, and a range of experts within the Department. The survey included: questions used in previous surveys, new questions developed specifically for 2010, and questions developed specifically for some area health services. All new questions not previously used were submitted to NSW Health's Population and Health Services Research Ethics Committee for approval prior to use. New questions were also field-tested prior to inclusion in the survey. The instrument was translated into 5 languages: Arabic, Chinese, Greek, Italian and Vietnamese.

The survey data have been weighted to account for probabilities of selection, as well as post-stratification, to match the survey sample to the state population. Results are reported by age group, sex, quintile of socioeconomic disadvantage, geographical local health district, and trend.

This report contains information on 10,245 residents of New South Wales aged 16 years and over.

Health behaviours

In 2010, the New South Wales Population Health Survey collected information on a range of health behaviours including: alcohol and cannabis, cancer screening (breast and cervical), immunisation (influenza and pneumococcal), nutrition, physical activity, tobacco smoking (including passive smoking), and sun protection.

These health behaviour data confirm that healthy lifestyle messages are being heard; people are consuming less alcohol, being immunised against influenza and pneumococcal disease, eating a healthier diet (including more fruit), being more physically active, and smoking less. However, some indicators of health behaviour call for more action: for example, the proportion of adults consuming the recommended level of vegetables remains low and more than half the adult population consumed soft drink, cordial, or sport drink in the last week.

Alcohol consumption

In 2010, 29.9 per cent of adults aged 16 years and over consumed more than 2 standard drinks on a day when consuming alcohol. The proportion was significantly higher in males (40.2 per cent) compared with females (19.9 per cent). The proportion was significantly higher in the least disadvantaged quintile (33.8 per cent), and significantly lower in the most disadvantaged quintile (23.5 per cent), compared with the overall adult population. The proportion was significantly higher in rural-regional health districts (32.0 per cent) compared with metropolitan health districts (28.8 per cent). Since 2002, there has been a significant decrease in the proportion of adults aged 16 years and over who consumed more than 2 standard drinks on a day when consuming alcohol (32.1 per cent to 29.9 per cent). The decrease has been significant in rural-regional health districts.

Cannabis consumption

In 2010, 4.3 per cent of adults aged 16-34 years currently smoked cannabis. The proportion was significantly higher in males (6.2 per cent) compared with females (2.3 per cent). Since 2007, there has been no significant change in the proportion of adults aged 16-34 years who currently smoked cannabis.

Breast cancer screening

In 2010, 76.4 per cent of females aged 50-69 years had a screening mammogram within the last 2 years. The proportion was significantly higher in the first or least disadvantaged quintile (83.3 per cent), and significantly lower in the fifth or most disadvantaged quintile (70.5 per cent), compared with the overall female population aged 50-69 years. Since 1997, there has been no significant change in the proportion of females aged 50-69 years who had a screening mammogram within the last 2 years.

Cervical cancer screening

In 2010, 68.0 per cent of females aged 20-69 years had a Pap test within the last 2 years. The proportion was significantly higher in the second least disadvantaged quintile (73.6 per cent) compared with the overall female population aged 20-69 years. The proportion was significantly higher in rural-regional health districts (72.1 per cent) compared with metropolitan health districts (66.5 per cent). Since 1998, there has been a significant decrease in the proportion of females aged 20-69 years who had a Pap test within the last 2 years (77.3 per cent to 68.0 per cent). The decrease has been significant in metropolitan and rural-regional health districts. Since 2008, there has been a significant decrease in the proportion of females aged 20-69 years who had a Pap test within the last 2 years (73.9 per cent to 68.0 per cent). The decrease has been significant in metropolitan and rural-regional health districts.

Hysterectomy

In 2010, 11.3 per cent of females aged 20-69 ever had a hysterectomy. Overall, the proportion increased with age. The proportion was significantly lower in the first or least disadvantaged quintile (8.6 per cent), and significantly higher in the fourth quintile (15.3 per cent), compared with the overall female population aged 20-69 years. The proportion was significantly higher in rural-regional health districts (15.3 per cent) compared with metropolitan health districts (9.6 per cent). Since 1997, there has been a significant decrease in the proportion of females aged 20-69 years who ever had a hysterectomy (13.3 per cent to 11.3 per cent). The decrease has been significant in metropolitan health districts.

Influenza immunisation

In 2010, 72.7 per cent of adults aged 65 years and over had been immunised against influenza in the last 12 months. Since 1997, there has been a significant increase in the proportion of adults aged 65 years and over who had been immunised against influenza in the last 12 months (57.1 per cent to 72.7 per cent). The increase has been significant in males and females, and in metropolitan and rural-regional health districts.

Pneumococcal immunisation

In 2010, 54.8 per cent of adults aged 65 years and over had been immunised against pneumococcal disease in the last 5 years. The proportion was significantly lower in males (51.2 per cent) compared with females (57.6 per cent). Since 2002, there has been a significant increase in the proportion of adults aged 65 years and over who had been immunised against pneumococcal disease in the last 5 years (38.6 per cent to 54.8 per cent). The increase has been significant in males and females, and in metropolitan and rural-regional health districts.

Fruit consumption

In 2010, 56.4 per cent of adults aged 16 years and over consumed 2 or more serves of fruit a day. The proportion was significantly lower proportion in males (53.1 per cent) compared with females (59.5 per cent). The proportion was significantly higher in the first or least disadvantaged quintile (61.0 per cent), and significantly lower in the fourth quintile (53.7 per cent), compared with the overall adult population. Since 1997, there has been a significant increase in the proportion of adults aged 16 years and over who consumed 2 or more serves of fruit a day (46.1 per cent to 56.4 per cent). The increase has been significant in males and females, and in metropolitan and rural-regional health districts.

Vegetable consumption

In 2010, 9.5 per cent of adults aged 16 years and over consumed 5 or more serves of vegetables a day. The proportion was significantly lower in males (6.9 per cent) compared with females (12.0 per cent). The proportion was significantly higher in rural-regional health districts (12.6 per cent) compared with metropolitan health districts (8.2 per cent). Since 1997, there has been no significant change in the proportion of adults aged 16 years and over who consumed 5 or more serves of vegetables a day; however, there has been a significant increase in females (9.7 per cent to 12.0 per cent) and in rural-regional health districts (10.6 per cent to 12.6 per cent).

Physical activity

In 2010, 55.2 per cent of adults aged 16 years and over undertook adequate levels of physical activity. The proportion was significantly higher in males (60.0 per cent) compared with females (50.7 per cent). The proportion was significantly higher in the first or least disadvantaged quintile (62.6 per cent), and significantly lower in the fifth or most disadvantaged quintile (49.4 per cent), compared with the overall adult population.

Since 1998, there has been a significant increase in the proportion of adults aged 16 years and over who undertook adequate levels of physical activity (47.9 per cent to 55.2 per cent). The increase has been significant in males and females, and in metropolitan and rural-regional health districts.

Current smoking

In 2010, 15.8 per cent of adults aged 16 years and over were current (daily or occasional) smokers. The proportion was significantly higher in males (18.1 per cent) compared with females (13.5 per cent). The proportion was significantly higher in the fifth or most disadvantaged quintile (19.7 per cent) and fourth quintile (18.4 per cent), and significantly lower in the first or least disadvantaged quintile (12.0 per cent) and second quintile (13.4 per cent), compared with the overall adult population. The proportion was significantly higher in rural-regional health districts (18.2 per cent) compared with metropolitan health districts (14.7 per cent). Since 1997, there has been a significant decrease in the proportion of adults aged 16 years and over who were current smokers (24.0 per cent to 15.8 per cent). The decrease has been significant in males and females, and in rural-regional and metropolitan health districts.

Daily smoking

In 2010, 11.7 per cent of adults aged 16 years and over were daily smokers. The proportion was significantly higher in males (13.8 per cent) compared with females (9.8 per cent). The proportion was significantly higher in the fifth or most disadvantaged quintile (16.0 per cent) and fourth quintile (14.9 per cent), and significantly lower in the first or least disadvantaged quintile (6.2 per cent) and second quintile (10.0 per cent), compared with the overall adult population. The proportion was significantly higher in rural-regional health districts (14.8 per cent) compared with metropolitan health districts (10.5 per cent). Since 1997, there has been a significant decrease in the proportion of adults aged 16 years and over who were daily smokers (19.1 per cent to 11.7 per cent). The decrease has been significant in males and females, and in rural-regional and metropolitan health districts.

Passive smoking

In 2010, 92.6 per cent of adults aged 16 years and over lived in homes that were smoke-free, and 86.0 per cent of adults aged 16 years and over with cars did not allow smoking in their car.

Sun protection

In 2010, when out in the sun for more than 15 minutes last summer, 46.7 of adults aged 16 years and over always wore sunglasses, 28.1 always applied a broad-spectrum sunscreen with an SPF of 15 or more to exposed skin, 26.5 per cent always wore a broad brimmed hat or cap with a back flap, 22.7 per cent always sought shade, and 20.0 always deliberately dressed in clothing to protect themselves from the sun.

In 2010, 58.4 per cent of adults aged 16 years and over never got sunburnt last summer, 18.9 per cent got sunburnt once, 14.3 per cent got sunburnt twice, 5.7 per cent got sunburnt 3 or 4 times, and 2.7 per cent got sunburnt 5 or more times.

In 2010, among adults aged 16 years and over who were outside locally, 69.1 per cent found it easy to find shade at public parks, 48.3 per cent found it easy to find shade at sporting areas, and 41.7 per cent found it easy to find shade at public pools.

Health status

In 2010, the New South Wales Population Health Survey collected information from adults on a range of health status indicators including: health-related quality of life (self-rated health), asthma, diabetes or high blood glucose, mental health (psychological distress), oral health, population weight status, and hearing and vision.

This report shows a significant decrease in the proportion of adults who rated their health positively, a significant increase in diabetes or high blood glucose, and a significant increase in overweight and obesity. For most indicators of health status in this report, inequalities have been found among population subgroups: that is, by age, sex, socioeconomic status, and geographical location. For example, a significantly lower proportion of adults in the fifth or most disadvantaged quintile rated their health positively, adult males had significantly higher prevalence of diabetes and overweight and obesity than adult females, and a significantly higher proportion of adults in the fifth or most disadvantaged quintile were obese.

Self-rated health

In 2010, 80.4 per cent of adults aged 16 years and over rated their health positively (that is, as excellent, very good, or good). The proportion was significantly higher in males (82.3 per cent) compared with females (78.5 per cent). The proportion was significantly higher in the first or least disadvantaged quintile (84.9 per cent), and significantly lower in the fifth or most disadvantaged quintile (77.6 per cent), compared with the overall adult population. Since 1997, there has been a significant decrease in the proportion of adults aged

16 years and over who rated their health positively (85.0 per cent to 80.4 per cent). The decrease has been significant in males and females, and in rural-regional and metropolitan health districts.

Current asthma

In 2010, 11.3 per cent of adults aged 16 years and over had current asthma; that is, doctor diagnosed asthma with recent symptoms or treatment. The proportion was significantly lower in males (9.3 per cent) compared with females (13.3 per cent). The proportion was significantly lower in the first or least disadvantaged quintile (8.8 per cent) compared with the overall adult population. The proportion was significantly higher in rural-regional health districts (13.2 per cent) compared with metropolitan health districts (10.6 per cent). Since 1997, there has been no significant change in the proportion of adults aged 16 years and over who had current asthma.

Written asthma action plan

In 2010, 34.0 per cent of adults aged 16 years and over with current asthma have a written asthma action plan; that is, written instructions of what to do if their asthma is worse or out of control. There was no significant difference between males and females. Since 2009, there has been no significant change in the proportion of adults aged 16 years and over with current asthma who have a written asthma action plan.

Diabetes or high blood glucose

In 2010, 7.4 per cent of adults aged 16 years and over had ever been told by a doctor or hospital they had diabetes or high blood glucose. The proportion was significantly higher in males (8.3 per cent) compared with females (6.6 per cent). The proportion was significantly lower in the first or least disadvantaged quintile (5.2 per cent) and second quintile (6.0 per cent), and significantly higher in the third quintile (9.2 per cent), compared with the overall adult population. Since 1997, there has been a significant increase in the proportion of adults aged 16 years and over who had ever been told by a doctor or hospital they had diabetes or high blood glucose (4.7 per cent to 7.4 per cent). The increase has been significant in males and females, and in rural-regional and metropolitan health districts.

High or very high psychological distress

In 2010, 11.0 per cent of adults aged 16 years and over experienced high or very high levels of psychological distress in the last 4 weeks. The proportion was significantly lower in males (9.6 per cent) compared with females (12.4 per cent). The proportion was significantly lower in the first or least disadvantaged quintile (8.6 per cent), and significantly higher in the fifth or most disadvantaged quintile (13.1 per cent), compared with the overall adult population. Since 1997, there has been no significant change in the proportion of adults aged 16 years and over who experienced high or very high levels of psychological distress in the last 4 weeks.

Visited a dental professional in the last 12 months

In 2010, 58.6 per cent of adults aged 16 years and over visited a dental professional less than 12 months ago. The proportion was significantly lower in males (55.0 per cent) compared with females (62.0 per cent). The proportion was significantly higher in the first or least disadvantaged quintile (68.6 per cent), and significantly lower in the fifth or most disadvantaged quintile (53.5 per cent) and fourth quintile (53.1 per cent), compared with the overall adult population. The proportion was significantly lower in rural-regional health districts (53.0 per cent) compared with metropolitan health districts (61.0 per cent). Since 2002, there has been a significant increase in the proportion of adults aged 16 years and over who visited a dental professional less than 12 months ago (55.8 per cent to 58.6 per cent). The increase has been significant in females and in metropolitan health districts.

Has private health insurance for dental expenses

In 2010, 51.2 per cent of adults aged 16 years and over had private health insurance for dental expenses. The proportion was significantly higher in the first or least disadvantaged quintile (69.8 per cent) and second quintile (59.5 per cent), and significantly lower in the fifth or most disadvantaged quintile (35.6 per cent) and fourth quintile (40.2 per cent), compared with the overall adult population. The proportion was significantly lower in rural-regional health districts (41.8 per cent) compared with metropolitan health districts (55.4 per cent). Since 2009, there has been no significant change in the proportion of adults aged 16 years and over who had private health insurance for dental expenses.

Overweight

In 2010, 33.3 per cent of adults aged 16 years and over were overweight: that is, had a BMI between 25 to 30 calculated from self-reported height and weight. The proportion was significantly higher in males (39.9 per cent) compared with females (26.9 per cent). Since 1997, there has been a significant increase in the proportion of adults who were overweight (30.6 per cent to 33.3 per cent). The increase has been significant in females, and in metropolitan health districts.

Obese

In 2010, 21.0 per cent of adults aged 16 years and over were obese: that is, had a BMI of 30 or over calculated from self-reported height and weight. The proportion was significantly lower in the first or least disadvantaged quintile (13.2 per cent), and significantly higher in the fifth or most disadvantaged quintile (24.2 per cent) and fourth quintile (24.8 per cent), compared with the overall adult population. The proportion was significantly higher in rural-regional health districts (25.0 per cent) compared with metropolitan health districts (19.1 per cent). Since 1997, there has been a significant increase in the proportion of adults who were obese (11.2 per cent to 21.0 per cent). The increase has been significant in males and females, and in rural-regional and metropolitan health districts.

Overweight or obese

In 2010, 54.3 per cent of adults were overweight or obese: that is, had a BMI of 25 or over calculated from self-reported height and weight. The proportion was significantly higher in males (60.7 per cent) compared with females (48.0 per cent). The proportion was significantly lower in the first or least disadvantaged quintile (47.3 per cent), and significantly higher proportion in the third quintile (58.5 per cent), compared with the overall adult population. The proportion was significantly higher in rural-regional health districts (58.8 per cent) compared with metropolitan health districts (52.2 per cent). Since 1997, there has been a significant increase in the proportion of adults who were overweight or obese (41.8 per cent to 54.3 per cent). The increase has been significant in males and females, and in rural-regional and metropolitan health districts.

Hearing and vision

In 2010, 13.2 per cent of adults aged 16 years and over had their hearing tested less than 1 year ago, 8.5 per cent 1 year ago to less than 2 years ago, 11.1 per cent 2 years ago to less than 5 years ago, 32.8 per cent 5 or more years ago, and 34.4 per cent have never had their hearing tested. As far as they could tell, 80.5 per cent had normal hearing in both ears (77.1 per cent males; 83.7 per cent females).

In 2010, 47.0 per cent of adults aged 16 years and over had their eyesight tested less than 1 year ago, 22.3 per cent 1 year ago to less than 2 years ago, 12.9 per cent 2 years ago to less than 5 years ago, 11.6 per cent 5 or more years ago, and 6.1 per cent have never had their eyesight tested. As far as they knew, 39.9 per cent had normal vision in both eyes (43.6 per cent males; 36.3 per cent females), and 47.7 per cent had normal vision with glasses (43.9 per cent males; 51.4 per cent females).

Health services

In 2010, the New South Wales Population Health Survey collected information on: private health insurance, difficulties getting health care, emergency department presentations, hospital admissions, general practice visits, public dental service attendances, and community health centre attendances. Information was also collected on the rating of care received for each of these services.

Trends for these health service indicators include: increases in emergency department presentations, hospital admissions, general practice visits, public dental service attendances, and community health centre attendances. While there has been no significant change in positive ratings of hospital care and community health centre care, there has been a significant increase in positive ratings of general practice care and public dental care. However, there has been a significant decrease in positive rating of emergency department care and a significant increase in difficulty getting health care. There has also been a significant increase in private health insurance coverage. The survey indicated that, among rural-regional health districts, there were significantly higher proportions of emergency department presentations and hospital admissions, significantly higher proportions of positive rating of emergency department care; significantly higher proportions of difficulties getting health care, and significantly lower proportions of private health insurance.

Private health insurance

In 2010, 58.1 per cent of adults aged 16 years and over were covered by private health insurance. The proportion was significantly higher in the first or least disadvantaged quintile (78.5 per cent) and second quintile (66.2 per cent), and significantly lower in the fifth or most disadvantaged quintile (39.6 per cent) and fourth quintile (47.0 per cent), compared with the overall adult population. The proportion was significantly higher in metropolitan health districts (61.8 per cent) compared with rural-regional health districts (49.7 per cent). Since 1997, there has been a significant increase in the proportion of adults aged 16 years and over who were covered by private health insurance (42.0 per cent to 58.1 per cent). The increase has been significant in males and females, and in rural-regional and metropolitan health districts.

Difficulties getting health care

In 2010, 18.1 per cent of adults aged 16 years and over experienced difficulties getting health care. The proportion was significantly lower in males (15.3 per cent) compared with females (20.7 per cent). The

proportion was significantly lower in the first or least disadvantaged quintile (11.8 per cent), and significantly higher in the fourth quintile (26.0 per cent), compared with the overall adult population. The proportion was significantly higher in rural-regional health districts (28.3 per cent) compared with metropolitan health districts (13.7 per cent). Since 1997, there has been a significant increase in the proportion of adults who experienced difficulties getting health care (9.9 per cent to 18.1 per cent). The increase has been significant in males and females, and in rural-regional and metropolitan health districts.

Among those who experienced difficulties getting health care, the main difficulties were: waiting time for an appointment with a general practitioner (48.6 per cent), difficulty in accessing specialists (17.6 per cent), shortage of general practitioners in area (14.7 per cent), quality of treatment (11.5 per cent), shortage of health services (11.1 per cent), transport issues (10.3 per cent), cost of health services (8.1 per cent), waiting time in emergency departments (7.1 per cent), waiting time for dental services (4.9 per cent), difficulty getting after hours general practitioner appointment (2.5 per cent), waiting time for elective surgery (1.6 per cent), and no bulk billing (1.4 per cent). Respondents could mention more than 1 type of difficulty.

Emergency department presentations

In 2010, 19.2 per cent of adults aged 16 years and over presented to an emergency department on 1 or more occasions in the last 12 months. The proportion was significantly lower in the first or least disadvantaged quintile (13.8 per cent) and second quintile (16.3 per cent), and significantly higher in the fifth or most disadvantaged quintile (22.1 per cent) and fourth quintile (25.7 per cent), compared with the overall adult population. The proportion was significantly higher in rural-regional health districts (25.5 per cent) compared with metropolitan health districts (16.5 per cent). Since 1997, there has been a significant increase in the proportion of adults aged 16 years and over who presented to an emergency department on 1 or more occasions in the last 12 months (13.9 per cent to 19.2 per cent). The increase has been significant in males and females, and in rural-regional and metropolitan health districts.

Rating of emergency department care

In 2010, 75.7 per cent of adults aged 16 years and over gave a positive rating to the emergency department care they received (that is, as excellent, very good, or good). The proportion was significantly higher in rural-regional health districts (80.5 per cent) compared with metropolitan health districts (72.8 per cent). Since 1997, there has been a significant decrease in the proportion of adults aged 16 years and over who gave a positive rating to the emergency department care they received (80.1 per cent to 75.7 per cent). The decrease has been significant in females.

Hospital admissions

In 2010, 16.1 per cent of adults aged 16 years and over were admitted to hospital on 1 or more occasions in the last 12 months. The proportion was significantly higher in the fourth quintile (18.3 per cent), and significantly lower in the second quintile (14.0 per cent), compared with the overall adult population. The proportion was significantly higher in rural-regional health districts (18.1 per cent) compared with metropolitan health districts (15.3 per cent). Since 1997, there has been a significant increase in the proportion of adults aged 16 years and over who were admitted to hospital on 1 or more occasions in the last 12 months (13.0 per cent to 16.1 per cent). The increase has been significant in males and females, and in metropolitan health districts.

Rating of hospital care

In 2010, 87.8 per cent of adults aged 16 years and over gave a positive rating to the hospital care they received (that is, as excellent, very good, or good). The proportion was significantly higher in the first or least disadvantaged quintile (93.6 per cent) compared with the overall adult population. Since 1997, there has been no significant change in the proportion of adults aged 16 years and over who gave a positive rating to the hospital care they received.

General practice visits

In 2010, 96.3 per cent of adults aged 16 years and over visited a general practice in the last 12 months. The proportion was significantly lower in males (95.1 per cent) compared with females (97.4 per cent). The proportion was significantly lower in rural-regional health districts (95.0 per cent) compared with metropolitan health districts (96.9 per cent). Since 1997, there has been a significant increase in the proportion of adults aged 16 years and over who visited a general practice in the last 12 months (87.8 per cent to 96.3 per cent). The increase has been significant in males and females, and in rural-regional and metropolitan health districts.

Rating of general practice care

In 2010, 94.7 per cent of adults aged 16 years and over gave a positive rating to the general practice care they received (that is, as excellent, very good, or good). The proportion was significantly higher in the first or least disadvantaged quintile (96.1 per cent) compared with the overall adult population. Since 2007, there has been a significant increase in the proportion of adults aged 16 years and over who gave a positive rating

to the general practice care they received (93.3 per cent to 94.7 per cent). The increase has been significant in females, and in rural-regional and metropolitan health districts.

Public dental service attendances

In 2010, 6.6 per cent of adults aged 16 years and over attended a public dental service in the last 12 months. The proportion was significantly lower in the first or least disadvantaged quintile (3.3 per cent) and second quintile (4.2 per cent), and significantly higher in the fifth or most disadvantaged quintile (9.8 per cent), compared with the overall adult population. Since 2002, there has been a significant increase in the proportion of adults aged 16 years and over who attended a public dental service in the last 12 months (4.6 per cent to 6.6 per cent). The increase has been significant in males and females, and in rural-regional and metropolitan health districts.

Rating of public dental care

In 2010, 89.9 per cent of adults aged 16 years and over gave a positive rating to the public dental care they received (that is, as excellent, very good, or good). The proportion was significantly higher in the first or least disadvantaged quintile (95.4 per cent) and fourth quintile (93.9 per cent) compared with the overall adult population. Since 2002, there has been a significant increase in the proportion of adults aged 16 years and over who gave a positive rating to the public dental care they received (81.6 per cent to 89.9 per cent). The increase has been significant in males, and in metropolitan health districts.

Community health centre attendances

In 2010, 9.3 per cent of adults aged 16 years and over attended a community health centre on 1 or more occasions in the last 12 months. The proportion was significantly lower in males (7.6 per cent) compared with females (10.9 per cent). The proportion was significantly lower in the first or least disadvantaged quintile (7.0 per cent) compared with the overall adult population. The proportion was significantly higher in rural-regional health districts (11.9 per cent) compared with metropolitan health districts (8.2 per cent). Since 2002, there has been a significant increase in the proportion of adults who attended a community health centre in the last 12 months (6.9 per cent to 9.3 per cent). The increase has been significant in males and females, and in rural-regional and metropolitan health districts.

Rating of community health centre care

In 2010, 91.9 per cent of adults aged 16 years and over gave a positive rating to the community health centre care they received (that is, as excellent, very good, or good). The proportion was significantly higher in the fourth quintile (97.7 per cent) compared with the overall adult population. Since 2002, there has been no significant change in the proportion of adults who gave a positive rating to the community health centre care they received.

WARNING: Estimates subject to date.
Please check HealthStats NSW for latest estimates.

Summary of key indicators, NSW, 2010

Topic	Indicator	Males % (95% CI)	Females % (95% CI)	Metropolitan % (95% CI)	Rural-regional % (95% CI)	All % (95% CI)	
Health behaviours	More than 2 standard drinks on a day when consuming alcohol.	40.2 (37.8-42.6)	19.9 (18.4-21.5)	28.8 (26.9-30.7)	32.0 (29.9-34.1)	29.9 (28.4-31.3)	
	Current cannabis smoking (16 to 34 years)	6.2 (3.6-8.7)	2.3 (1.1-3.6)	4.4 (2.6-6.1)	4.1 (1.9-6.3)	4.3 (2.8-5.7)	
	Screening mammogram in the last 2 years (50 to 69 years)		76.4 (74.0-78.8)	75.5 (72.3-78.8)	77.8 (74.5-81.2)	76.4 (74.0-78.8)	
	Pap test in the last 2 years (20 to 69 years)		68.0 (65.5-70.6)	66.5 (63.1-69.8)	72.1 (68.7-75.5)	68.0 (65.5-70.6)	
	Hysterectomy (20 to 69 years)		11.3 (10.2-12.3)	9.6 (8.4-10.9)	15.3 (13.5-17.2)	11.3 (10.2-12.3)	
	Vaccinated against influenza in the last 12 months (65 years and over)	72.2 (69.4-75.0)	73.2 (71.1-75.3)	72.4 (70.0-74.8)	73.3 (71.0-75.7)	72.7 (71.0-74.5)	
	Vaccinated against pneumococcal disease in the last 5 years (65 years and over)	51.2 (47.9-54.5)	57.6 (55.2-60.1)	53.7 (51.0-56.4)	56.5 (53.7-59.4)	54.8 (52.8-56.8)	
	Two or more serves of fruit a day	53.1 (50.8-55.5)	59.5 (57.7-61.3)	57.1 (55.1-59.0)	54.9 (52.8-57.0)	56.4 (54.9-57.9)	
	Five or more serves of vegetables a day	6.9 (5.9-8.0)	12.0 (10.9-13.0)	8.2 (7.2-9.1)	12.6 (11.3-13.9)	9.5 (8.7-10.3)	
	Adequate physical activity	60.0 (57.6-62.3)	50.7 (48.8-52.5)	56.0 (54.0-57.9)	53.5 (51.4-55.6)	55.2 (53.7-56.7)	
	Current smoking	18.1 (16.2-20.0)	13.5 (12.3-14.7)	14.7 (13.2-16.2)	18.2 (16.5-19.9)	15.8 (14.6-16.9)	
	Daily smoking	13.8 (12.1-15.4)	9.8 (8.8-10.8)	10.5 (9.3-11.6)	14.8 (13.2-16.3)	11.7 (10.8-12.7)	
	Health status	Excellent, very good, or good self-rated health status	82.3 (80.6-84.1)	78.5 (77.0-80.0)	80.3 (78.8-81.9)	80.3 (78.7-81.8)	80.4 (79.2-81.5)
Current asthma		9.3 (7.9-10.7)	13.3 (12.0-14.6)	10.6 (9.3-11.8)	13.2 (11.8-14.7)	11.3 (10.4-12.3)	
Written asthma action plan		30.0 (22.7-37.4)	36.6 (31.3-41.9)	33.5 (27.5-39.4)	35.0 (29.1-41.0)	34.0 (29.6-38.3)	
Diabetes or high blood glucose		8.3 (7.3-9.3)	6.6 (5.9-7.4)	7.1 (6.4-7.9)	8.2 (7.3-9.1)	7.4 (6.8-8.1)	
High or very high psychological distress		9.6 (8.1-11.0)	12.4 (11.1-13.7)	10.9 (9.6-12.1)	11.4 (10.1-12.8)	11.0 (10.0-12.0)	
Visited a dental professional in the last 12 months		55.0 (52.6-57.4)	62.0 (60.2-63.8)	61.0 (59.1-62.9)	53.0 (50.9-55.0)	58.6 (57.1-60.1)	
Has private health insurance for dental expenses		50.5 (48.1-52.9)	51.8 (50.0-53.6)	55.4 (53.4-57.3)	41.8 (39.7-43.8)	51.2 (49.7-52.7)	
Overweight		39.9 (37.6-42.2)	26.9 (25.2-28.5)	33.1 (31.2-34.9)	33.8 (31.8-35.8)	33.3 (31.9-34.8)	
Obese		20.8 (19.0-22.6)	21.1 (19.7-22.5)	19.1 (17.7-20.6)	25.0 (23.2-26.8)	21.0 (19.8-22.1)	
Overweight or obese		60.7 (58.3-63.0)	48.0 (46.1-49.9)	52.2 (50.3-54.2)	58.8 (56.8-60.9)	54.3 (52.8-55.8)	
Health services		Private health insurance	57.3 (54.9-59.7)	58.8 (57.0-60.6)	61.8 (59.8-63.7)	49.7 (47.7-51.8)	58.1 (56.6-59.5)
		Difficulties getting health care when needing it	15.3 (13.6-17.0)	20.7 (19.3-22.2)	13.7 (12.4-15.1)	28.3 (26.4-30.2)	18.1 (17.0-19.2)
		Emergency department presentation in the last 12 months	20.5 (18.5-22.5)	18.1 (16.6-19.6)	16.5 (14.9-18.0)	25.5 (23.5-27.4)	19.2 (18.0-20.5)
	Emergency department care rated as excellent, very good or good	77.9 (73.2-82.6)	73.6 (68.8-78.3)	72.8 (67.9-77.6)	80.5 (76.3-84.7)	75.7 (72.4-79.1)	
	Hospital admission in the last 12 months	15.0 (13.4-16.7)	17.1 (15.7-18.6)	15.3 (13.8-16.7)	18.1 (16.6-19.6)	16.1 (15.1-17.2)	
	Hospital care rated as excellent, very good or good	89.6 (85.1-94.1)	86.4 (82.5-90.4)	86.4 (82.3-90.6)	90.3 (87.0-93.5)	87.8 (84.9-90.8)	
	Visited a general practice in the last 12 months	95.1 (94.0-96.2)	97.4 (96.8-98.0)	96.9 (96.2-97.6)	95.0 (93.9-96.2)	96.3 (95.7-96.9)	
	General practice care rated as excellent, very good or good	94.4 (93.2-95.6)	95.0 (94.0-95.9)	94.5 (93.6-95.5)	95.2 (94.3-96.0)	94.7 (93.9-95.4)	
	Public dental service attendance in the last 12 months	6.0 (4.9-7.1)	7.1 (6.0-8.2)	6.2 (5.2-7.2)	7.6 (6.4-8.8)	6.6 (5.8-7.4)	
	Public dental service care rated as excellent, very good, or good	92.4 (88.6-96.2)	88.0 (83.3-92.8)	90.8 (86.8-94.7)	88.0 (82.7-93.3)	89.9 (86.7-93.1)	
	Community health centre attendance in the last 12 months	7.6 (6.3-9.0)	10.9 (9.6-12.2)	8.2 (7.0-9.4)	11.9 (10.5-13.4)	9.3 (8.4-10.3)	
	Community health centre care rated as excellent, very good, or good	92.1 (87.9-96.3)	91.8 (88.4-95.1)	90.1 (86.2-94.1)	94.6 (92.0-97.2)	91.9 (89.3-94.5)	

Note: Indicators include adults 16 years and over unless specified.

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Methods

Introduction

The New South Wales Population Health Survey is a continuous survey of the health of the people of New South Wales using computer assisted telephone interviewing (CATI). The main aims of the survey are to: provide information on population health; support the planning, implementation and evaluation of health programs and services.

This section describes the methods used in this 2010 report on adult health, which reports the health of NSW residents aged 16 years and over.

Survey instrument

The survey instrument for 2010 included question modules on demographics, health behaviours, health status, and health services. Most of the survey questions have been used in previous surveys. All questions not previously used were submitted to the NSW Population and Health Services Research Ethics Committee for approval prior to use. New questions were also field tested before inclusion. The instrument was translated into 5 languages: Arabic, Chinese, Greek, Italian and Vietnamese.

Survey sample

The target population for the continuous survey is all state residents living in households with private telephones. In 2010, the target sample was approximately 1,500 people in each of the 8 area health services which existed at that time (a total sample of 12,000). The survey results were analysed and reported for the 15 geographical local health districts which came into existence in January 2011.

The sampling frame was developed as follows. Records from the Australia on Disk electronic white pages (phone book) were geo-coded using MapInfo mapping software.[1,2] The geo-coded telephone numbers were assigned to statistical local areas and area health services. The proportion of numbers for each telephone prefix was calculated by area health service. All prefixes were expanded with suffixes ranging from 0000 to 9999. The resulting list was then matched back to the electronic phone book. All numbers that matched numbers in the electronic phone book were flagged and the number was assigned to the relevant geo-coded area health service. Unlisted numbers were assigned to the area health service containing the greatest proportion of numbers with that prefix. Numbers were then filtered to eliminate continuous nonlisted blocks of greater than 10 numbers. The remaining numbers were then checked against the business numbers in the electronic phone book to eliminate business numbers. Finally, numbers were stratified by area health service and randomly selected by area health service. Households were contacted using random digit dialling. One person from the household was randomly selected for inclusion in the survey.

Interviews

In 2010, interviews were carried out continuously between February and December. An 1800 freecall contact number was provided to potential respondents, so they could verify the authenticity of the survey and ask any questions regarding the survey. Trained interviewers at the Health Survey Program CATI facility carried out interviews. Up to 7 calls were made to establish initial contact with a household, and up to 5 calls were made in order to contact a selected respondent.

Definition of local health district, metropolitan, and rural-regional

Respondents were allocated to a local health district (LHD) by postcode. Where a respondent's postcode crossed LHD boundaries, an LHD concordance was used to randomly allocate the respondent to 1 of the LHDs crossing the postcode. The concordance was constructed using the 2010 G-NAF (Geocoded National Address File) and QuickLocate Geocoding SDK.[3] For the small number of respondents did not provide their postcode, other information on suburb, local government area, and area health service were used to allocate the respondent to an LHD. Respondents have all been allocated to 1 of the 15 geographical LHDs, or to the Albury Local Government Area.

In this report, the term metropolitan means the respondent lived in 1 of the 8 geographical LHDs designated greater metropolitan: Central Coast, Illawarra Shoalhaven, Nepean Blue Mountains, Northern Sydney, South Eastern Sydney, South Western Sydney, Sydney, and Western Sydney. The term rural-regional means the respondent lived in 1 of the 7 geographical LHDs designated rural or regional: Far West, Hunter New England, Mid North Coast, Murrumbidgee, Northern NSW, Southern NSW, and Western NSW.

Indices of remoteness and disadvantage

The Accessibility-Remoteness Index of Australia Plus (ARIA+) is the standard Australian Bureau of Statistics (ABS) endorsed measure of remoteness.[4] It is derived using the road distances from populated localities to the nearest service centres across Australia. For each locality, the accessibility to services is expressed as a continuous measure from 0 (high accessibility) to 15 (high remoteness) and grouped into 5 categories: major cities, inner regional, outer regional, remote, and very remote.

The Socio-Economic Indexes for Areas (SEIFA) describe the socioeconomic aspects of geographical areas in Australia, using a number of underlying variables such as family and household characteristics, personal educational qualifications, and occupation.[5] The SEIFA index used to provide breakdowns of the New South Wales Population Health Survey data in 2010 is the Index of Relative Socio-Economic Disadvantage. This index is calculated on attributes such as low income and educational attainment, high unemployment, and people working in unskilled occupations. The SEIFA index values are grouped into 5 quintiles, with quintile 1 being the least disadvantaged and quintile 5 being the most disadvantaged.

Both the ARIA+ and SEIFA indexes were assigned on respondents' postcode of residence. To enable socioeconomic comparisons, prevalence estimates for each SEIFA quintile were calculated for most health indicators in this report.

Data analysis

For analysis, the survey sample was weighted to adjust for differences in the probabilities of selection among respondents. These differences were due to the varying number of people living in each household, the number of residential telephone connections for the household, and the varying sampling fraction in each health area.

Post-stratification weights were used to reduce the effect of differing non-response rates among males and females and different age groups on the survey estimates. These weights were adjusted for differences between the age and sex structure of the survey sample and the Australian Bureau of Statistics 2010 mid-year population estimates (excluding residents of institutions) for each area health service. This enables calculation of prevalence estimates for the state population rather than for the respondents selected. Further information on the methods and weighting process is provided elsewhere.[6-7]

Call and interview data were manipulated and analysed using SAS version 9.2.[8] The SURVEYFREQ procedure in SAS was used to analyse the data and calculate point estimates and 95 per cent confidence intervals for the estimates. The SURVEYFREQ procedure calculates standard errors adjusted for the design effect factor or DEFF (the variance for a non-random sample divided by the variance for a simple random sample). It uses the Taylor expansion method to estimate sampling errors of estimators based on the stratified random sample.[8]

The 95 per cent confidence interval provides a range of values that should contain the actual value 95 per cent of the time. The width of the confidence interval relates to the differing sample size for each indicator. In general, a wider confidence interval reflects less certainty in the estimate for that indicator. If confidence intervals do not overlap then the observed estimates are significantly different. If confidence intervals overlap slightly the observed estimates may be significantly different but further testing needs to be done to establish that significance. For a pairwise comparison of subgroup estimates, the *P* value for a two-tailed test was calculated using the t-test for differences in means from independent samples and a modified form of t-test, which accounts for the dependence of the estimates, to test for differences between sub-group estimates and total estimates.[8]

The indicators in this report are presented in graphical form (in the PDF and HTML versions) and in graphical and tabular form (in the HTML version). For each indicator, where data are available, the report includes bar charts of the indicator by age group, socioeconomic status, and local health district, and a line chart of trend by sex. In most cases, trend data are presented from the base year; that is, from the first year data were collected for that indicator. In the HTML version, the table below the chart presents further information, including a link to a downloadable CSV file, which contains an estimate of the number of people in the

population corresponding to the prevalence estimates for the indicator. Both the PDF and HTML versions can be obtained from the New South Wales Population Health Survey website at www.health.nsw.gov.au/publichealth/surveys/index.asp.

In this report, separate statistics for Albury are not presented because of their small sample size. Respondents in Albury have been included in the analysis for the total population of NSW. Caution needs to be taken when interpreting estimates for Far West LHD, due to the small sample size. Results for any group with less than 30 respondents are treated as less reliable and have been suppressed from this report with the label 'n/a' displayed in related graphs.

In the online HTML version of the report, the bottom of each table contains links to downloadable CSV files which contain the population estimates and trends for that indicator.

References

1. Australia on Disk [software]. Sydney: Australia on Disk, 2004.
2. MapInfo [software]. Troy, NY: MapInfo Corporation, 1997.
3. QuickLocate 3 Geocoding SDK [software]. Greenwich, NSW: MapData Services, 2011. Further information available from www.mapds.com.au (accessed 28 April 2011).
4. Australian Bureau of Statistics. *ASGC Remoteness Classification: Purpose and Use*. Census Paper No. 03/01. Commonwealth of Australia, 2003.
5. Australian Bureau of Statistics. *1996 Census of Population and Housing: Socio-Economic Indexes for Areas*, Information Paper, Catalogue no. 2039.0. Canberra: ABS, 1998.
6. Barr M, Baker D, Goringe M, and Fritsche L. *NSW Population Health Survey: Description of Methods*. Available online at www.health.nsw.gov.au/resources/publichealth/surveys/health_survey_method.asp (accessed 2 March 2011).
7. Steel D. *NSW Population Health Survey: Review of the Weighting Procedures*. Available online at www.health.nsw.gov.au/pubs/2006/review_weighting.html (accessed 2 March 2011).
8. SAS Institute. *The SAS System for Windows version 9.2*. Cary, NC: SAS Institute Inc., 2009. Further information available from www.sas.com (accessed 2 March 2011).

WARNING: Estimates may be outdated.
Please check HealthStats NSW for latest estimates.

Sample representativeness and characteristics

In 2010, a total of 12,439 interviews were completed, including 10,245 adults aged 16 years or over, with at least 1,195 adults interviewed from each stratum (area health service). However, when the sample was allocated to the new LHDs, there were uneven samples ranging from 438 to 1,211 for 14 LHDs and 107 for the Far West. Caution needs to be taken when interpreting estimates for Far West LHD, due to the small sample size. The overall participation rate was 57.2 per cent (the number of completed interviews divided by the sum of the number of completed interviews and the number of refusals).

In 2010, adult males were under-represented in the survey, making up 40.3 per cent of the sample, compared with 49.5 per cent of the overall residential population of New South Wales. Conversely, females were over-represented, making up 59.7 per cent of the sample, compared with 50.5 per cent of the overall residential population of New South Wales. Males aged 54 years or younger and females aged 44 years and under were under-represented in the sample, while males aged 55 years or over and females aged 45 years and over were over-represented in the sample.[1] Comparisons of the distribution of the survey sample and that of the overall residential population are shown in the table "Survey sample size and NSW population by age group and sex". After weighting, the age and sex distribution of the weighted survey sample reflected that of the overall residential population of New South Wales.

Aboriginal people comprised 2.3 per cent of the weighted sample, which is similar to their representation in the overall residential population of New South Wales (2.2 per cent),[2] and people born in Australia comprised 76.3 per cent of the sample, which is slightly higher than their representation in the overall residential population of New South Wales (69.0 per cent).[3]

Of the interviews completed with adults aged 16 years and over, 94.4 per cent were conducted in English, 2.5 per cent were completed in Chinese, 1.3 per cent were completed in Vietnamese, 1.1 per cent were completed in Arabic, 0.5 per cent were completed in Greek, and 0.2 per cent were completed in Italian.

Of the interviews completed with adults aged 16 years and over, 57.5 per cent were with married respondents, 5.0 per cent were with widowed respondents, 2.4 per cent were with separated respondents who were not divorced, 5.5 per cent were with divorced respondents, and 29.6 per cent of respondents had never been married.

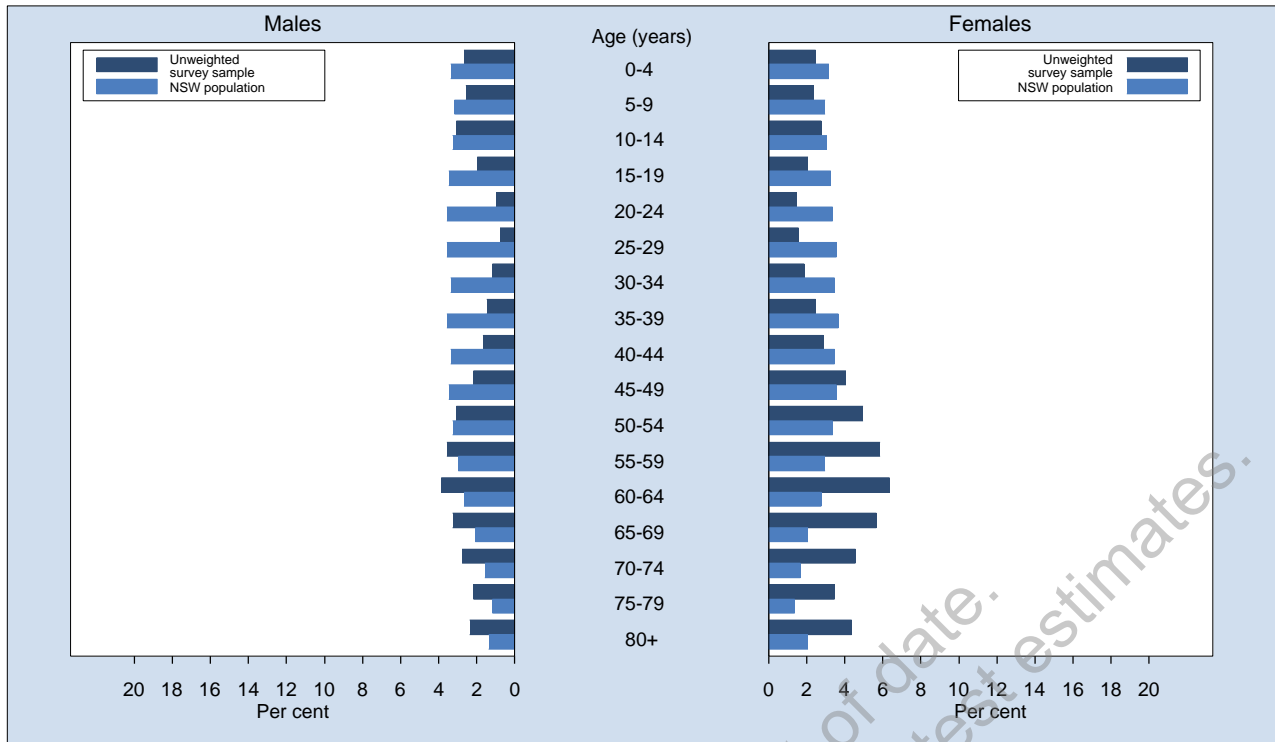
Of the interviews completed with adults aged 16 years and over, 41.3 per cent were with respondents with an income of more than \$80,000 a year, 13.8 per cent were with respondents with an income of \$60,001 to \$80,000 a year, 13.9 per cent were with respondents with an income of \$40,001 to \$60,000 a year, 16.8 per cent were with respondents with an income of \$20,001 to \$40,000 a year, and 14.2 per cent were with respondents with an income of less than \$20,000 a year.

When the ARIA+ remoteness measure was applied to the sample, 65.6 per cent of adults lived in major cities, 22.3 per cent were classified as inner regional, 11.3 per cent were classified as outer regional, 0.8 per cent were classified as remote, and 0.1 per cent were classified as very remote.

References

1. ABS estimated residential population for mid-year 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.
2. Australian Bureau of Statistics. *Population Characteristics: Aboriginal and Torres Strait Islander Australians, New South Wales, 2006*. Catalogue No. 4713.1.55.001. Canberra: Australian Bureau of Statistics, 2010. For further information visit www.abs.gov.au.
3. Australian Bureau of Statistics. *2006 Census QuickStats: New South Wales*. Canberra: ABS, 2007. For further information visit www.abs.gov.au.

Age distribution of unweighted survey sample versus NSW population by sex, NSW, 2010



Note: Graph compares the survey sample with the Australian Bureau of Statistics 2010 mid-year population estimates (excluding residents of institutions)
Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

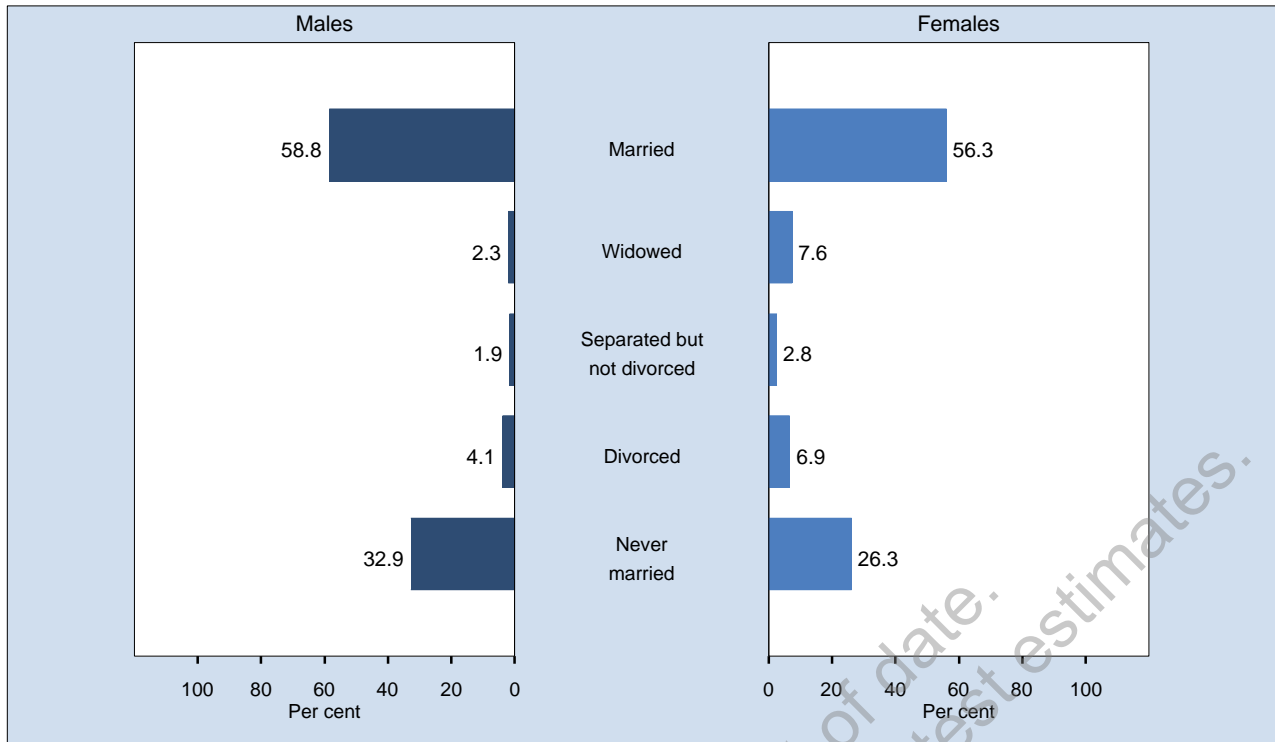
Survey sample size and NSW population by age group and sex, NSW, 2010

Age Group	Survey sample (unweighted)						NSW population June 2010					
	Males		Females		Persons		Males		Females		Persons	
	n	%	n	%	n	%	n	%	n	%	n	%
0-4	339	2.7	308	2.5	647	5.2	227486	3.3	215743	3.1	443229	6.4
5-9	322	2.6	300	2.4	622	5.1	225251	3.2	214500	3.1	439751	6.3
10-14	385	3.1	347	2.8	732	5.9	231133	3.3	220936	3.2	452069	6.5
15-19	253	2.0	258	2.1	511	4.1	246251	3.6	230934	3.3	477185	6.9
20-24	127	1.0	181	1.5	308	2.5	251428	3.6	240849	3.5	492277	7.1
25-29	104	0.8	204	1.6	308	2.5	250128	3.6	248476	3.6	498604	7.2
30-34	155	1.2	234	1.9	389	3.1	240117	3.5	244547	3.5	484664	7.0
35-39	189	1.5	314	2.5	503	4.0	253731	3.7	260734	3.8	514465	7.4
40-44	215	1.7	359	2.9	574	4.6	240025	3.5	244507	3.5	484532	7.0
45-49	279	2.2	507	4.1	786	6.3	248104	3.6	254456	3.7	502560	7.2
50-54	382	3.1	622	5.0	1004	8.1	225394	3.3	230392	3.3	455787	6.6
55-59	445	3.6	731	5.9	1176	9.5	204823	3.0	208175	3.0	412998	6.0
60-64	487	3.9	791	6.4	1278	10.3	182910	2.6	183718	2.6	366628	5.3
65-69	412	3.3	714	5.7	1126	9.1	133778	1.9	138580	2.0	272358	3.9
70-74	346	2.8	575	4.6	921	7.4	105383	1.5	114822	1.7	220206	3.2
75-79	274	2.2	436	3.5	710	5.7	83382	1.2	98172	1.4	181555	2.6
80+	295	2.4	549	4.4	844	6.8	92224	1.3	142158	2.1	234382	3.4
All	5009	40.3	7430	59.7	12439	100	3441549	49.6	3491699	50.4	6933247	100

Note: Table compares the survey sample with the Australian Bureau of Statistics 2010 mid-year population estimates (excluding residents of institutions)

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

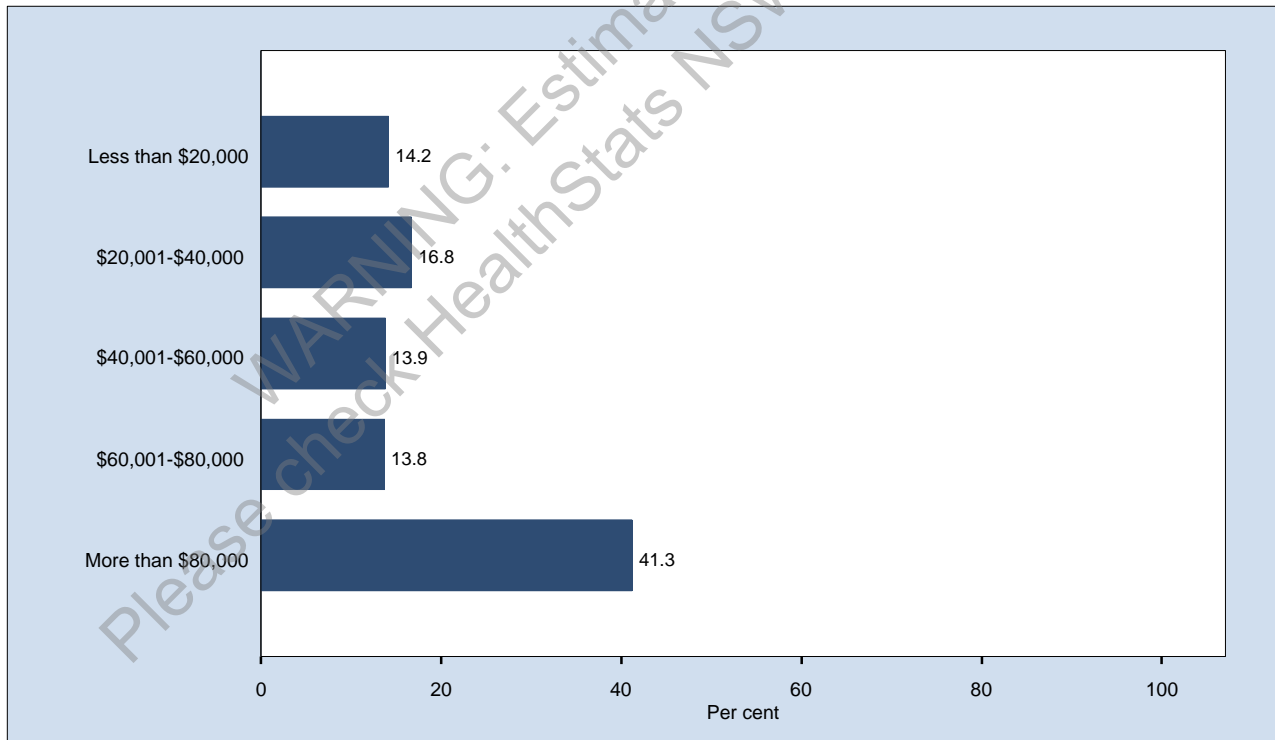
Formal marital status, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 10,189 respondents in NSW. For this indicator 56 (0.55%) were not stated (Don't know or Refused) in NSW. The question used was: What is your current formal marital status?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

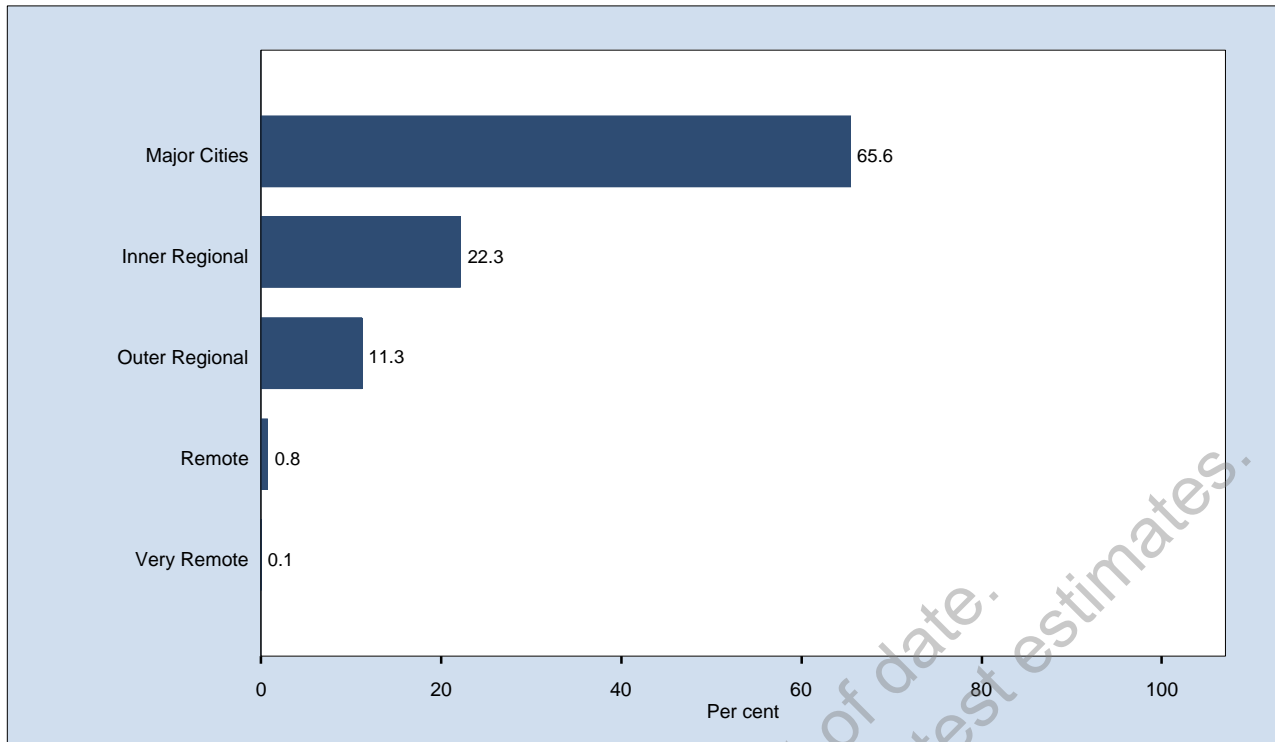
Household income, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 8,169 respondents in NSW. For this indicator 2,076 (20.26%) were not stated (Don't know or Refused) in NSW. The question used was: Before tax is taken out, which of the following ranges best describes your household's approximate income from all sources over the last 12 months?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Accessibility-Remoteness Index of Australia Plus (ARIA+), adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 10,143 respondents in NSW. For this indicator 102 (1.00%) were not stated (Don't know or Refused) in NSW. The Accessibility-Remoteness Index of Australia Plus (ARIA+) is the standard Australian Bureau of Statistics endorsed measure of remoteness. It is derived using the road distances from populated localities to the nearest service centres across Australia. ARIA+ is grouped into 5 categories: major cities, inner regional, outer regional, remote, and very remote, using postcodes from survey respondents.

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

WARNING: Estimates out of date.
Please check HealthStats NSW for latest estimates.

Health behaviours

- Overview of health behaviours
- Alcohol and cannabis
- Cancer screening (breast cancer and cervical cancer)
- Immunisation (influenza and pneumococcal)
- Nutrition
- Physical activity
- Tobacco smoking
- Sun protection
- Trends in health behaviours

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Please check HealthStats NSW for latest estimates.

Overview of health behaviours

A healthy lifestyle reduces preventable morbidity and premature mortality; however, an unhealthy lifestyle, including harmful drinking, illicit drug use, low fruit and vegetable consumption, inadequate physical activity, and smoking tobacco, contributes to nearly one-third of the disease burden in high income countries.[1]

At the national and state levels, there have been a number of strategies, plans, programs, and initiatives to promote healthy lifestyles. The *National Preventive Health Strategy* aims to reduce alcohol consumption, reduce daily smoking, and halt and reverse the rise in overweight and obesity.[2] These targets are also included in the NSW State Plan and *NSW State Health Plan*.^[3-4] Both *BreastScreen NSW* and the *NSW Cervical Screening Program* are important secondary interventions for the early detection and treatment of breast and cervical cancer.^[5-6] The *NSW Immunisation Program* provides the community with protection against vaccine preventable diseases by targeting specific population groups: infants, children, adolescents, healthcare workers, and older people.^[7] The *Living Life Well* initiative aims to assist people make healthy lifestyle changes, including limiting alcohol consumption, eating better, being active, quitting smoking, maintaining a healthy weight, and managing stress.^[8]

The continuous monitoring and reporting of health behaviours through the NSW Population Health Survey provides an information base to support the planning, implementation, and evaluation of health services. In particular, comparisons between age groups, sexes, socioeconomic quintiles, and geographical location support policy development and targeted interventions for those with the poorest health.

This section of the *2010 Report on Adult Health* includes the following indicators for health behaviours: alcohol and cannabis, cancer screening (breast cancer and cervical cancer), immunisation (influenza and pneumococcal), nutrition, physical activity, tobacco smoking, and sun protection.

These survey data confirm that healthy lifestyle messages are being heard and people are consuming less alcohol, being immunised against vaccine preventable diseases, eating a healthier diet (including more fruit), being more physically active, and smoking less. However, some indicators of health behaviour call for more action: for example, the proportion of adults consuming the recommended level of vegetables remains low and more than half the adult population consumed soft drink, cordial, or sport drink in the last week.

References

1. World Health Organization. *Global Health Risks: Mortality and burden of disease attributable to selected major risks*. Geneva: World Health Organization 2009. Available online at www.who.int/healthinfo/global_burden_disease/GlobalHealthRisks_report_full.pdf (accessed 2 May 2011).
2. National Preventive Health Strategy. *Australia: The healthiest country by 2020*. Canberra: Commonwealth of Australia, 2009. Available online at www.health.gov.au/internet/preventativehealth/publishing.nsf/Content/nphs-overview (accessed 2 May 2011).
3. NSW Government. *NSW State Plan 2010*. Sydney: NSW Government, 2010. Available online at www.stateplan.nsw.gov.au (accessed 2 May 2011).
4. NSW Department of Health. *A New Direction for NSW: State Health Plan*. Sydney: NSW Department of Health, 2007. Available online at www.health.nsw.gov.au/pubs/2007/state_health_plan.html (accessed 2 May 2011).
5. The *BreastScreen NSW* website at www.bsnsn.org.au (accessed 2 May 2011).
6. The *NSW Cervical Screening Program* website at www.csp.nsw.gov.au (accessed 2 May 2011).
7. NSW Department of Health. *NSW Immunisation Program*. Sydney: NSW Department of Health, 2011. Available online at www.health.nsw.gov.au/publichealth/immunisation/index.asp (accessed 2 May 2011).
8. NSW Government. *Living Life Well*. Sydney: NSW Government, 2011. Available online at www.livelifewell.nsw.gov.au (accessed 2 May 2011).

Alcohol and cannabis

Introduction

Excessive alcohol consumption has adverse health consequences and contributes to aggressive behaviour, family disruption, and reduced productivity. While higher levels of consumption are associated with higher levels of harm, high rates of harm have been found among low-to-moderate drinkers on the occasions they drink to intoxication.[1]

In February 2009, the *2001 Australian Alcohol Guidelines* were replaced with the *Australian Guidelines to Reduce Health Risks from Drinking Alcohol*,[2-3] which are based on modelling of the lifetime risk of harm from drinking. To assist monitoring lifetime risk of harm, as defined by Guideline 1 of the 2009 Guidelines, this report provides information on the proportion of adults who consume more than 2 standard drinks on a day when they consume alcohol. The *State Plan* target is to reduce total risk drinking to below 25 per cent of the adult population by 2012.[4]

The regular consumption of cannabis (marijuana) may contribute to physical and mental health problems.[5] Using cannabis, and selling or giving it to another person, is illegal in Australia.[5] To assist with monitoring the use of cannabis, the Survey collects information about cannabis consumption in adults aged 16-34 years. The *State Plan* target is to keep illicit drug use in the community below 15 per cent of the population.[4]

Results

Alcohol consumption

In 2010, 32.1 per cent of adults aged 16 years and over did not consume alcohol, 38.0 per cent consumed 1-2 standard drinks on a day when drinking alcohol, 18.9 per cent consumed 3-4 standard drinks on a day when drinking alcohol, 6.5 per cent consumed 5-6 standard drinks on a day when drinking alcohol, and 4.4 per cent consumed 7 or more standard drinks on a day when drinking alcohol.

Consumed more than 2 standard drinks on a day when consuming alcohol

In 2010, 29.9 per cent of adults aged 16 years and over consumed more than 2 standard drinks on a day when consuming alcohol.

- A significantly higher proportion of males (40.2 per cent) consumed more than 2 standard drinks a day, compared with females (19.9 per cent).
- Among males, the proportion decreased with age (from 53.3 per cent among those 16-24 years to 14.4 per cent in those 75 years and over).
- Among females, the proportion decreased with age (from 42.5 per cent among those 16-24 years to 2.0 per cent in those 75 years and over).
- The proportion was significantly higher in the least disadvantaged quintile (33.8 per cent), and significantly lower in the most disadvantaged quintile (23.5 per cent), compared with the overall adult population.
- The proportion was significantly higher in rural-regional health districts (32.0 per cent), compared with metropolitan health districts (28.8 per cent).
- The proportion was significantly higher in Illawarra Shoalhaven (40.1 per cent) and Murrumbidgee (37.5 per cent), and significantly lower in South Western Sydney (23.2 per cent) and Western Sydney (22.7 per cent), compared with the overall adult population.

Since 2002, there has been a significant decrease in the proportion of adults aged 16 years and over who consumed more than 2 standard drinks on a day when consuming alcohol (32.1 per cent to 29.9 per cent). The decrease has been significant in rural-regional health districts.

Cannabis consumption

In 2010, 4.3 per cent of adults aged 16-34 years currently smoked cannabis.

- A significantly higher proportion of males (6.2 per cent) currently smoked cannabis, compared with females (2.3 per cent).
- Among males, there was no significant difference by age group.
- Among females, a significantly lower proportion of those aged 25-34 years (1.2 per cent) currently smoked cannabis, compared with the overall adult female population aged 16-34 years.
- There was no significant difference among quintiles of disadvantage, compared with the overall adult population.
- There was no significant difference between metropolitan and rural-regional health districts.
- A significantly lower proportion of adults in Southern NSW (1.1 per cent) currently smoked cannabis, compared with the overall adult population.

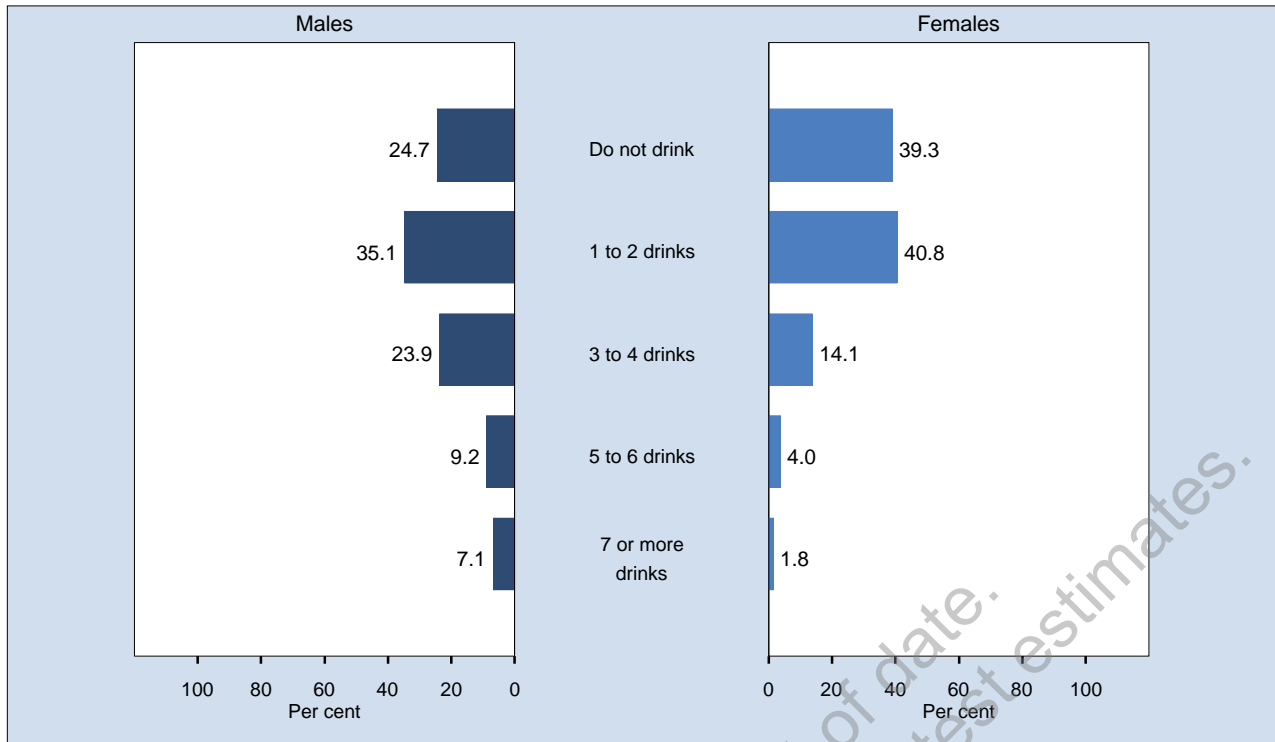
Since 2007, there has been no significant change in the proportion of adults aged 16-34 years who currently smoked cannabis.

References

1. Ministerial Council on Drug Strategy. *National Alcohol Strategy 2006-2011*, formerly known as *National Alcohol Strategy 2006-2009*. Canberra: Australian Government Department of Health and Aged Care, 2009.
2. Australian Government Department of Health and Aged Care. *2001 Australian Alcohol Guidelines*. Canberra: Australian Government Department of Health and Aged Care, 2006.
3. Australian Government Department of Health and Aged Care. *Australian Guidelines to Reduce Health Risks from Drinking Alcohol*. Canberra: Australian Government Department of Health and Aged Care, 2009.
4. NSW Government. *NSW State Plan Performance Report: November 2010*. Sydney: NSW Government, 2010.
5. NSW Department of Health. *Drug Facts: Marijuana*. Sydney: NSW Department of Health, 2008.

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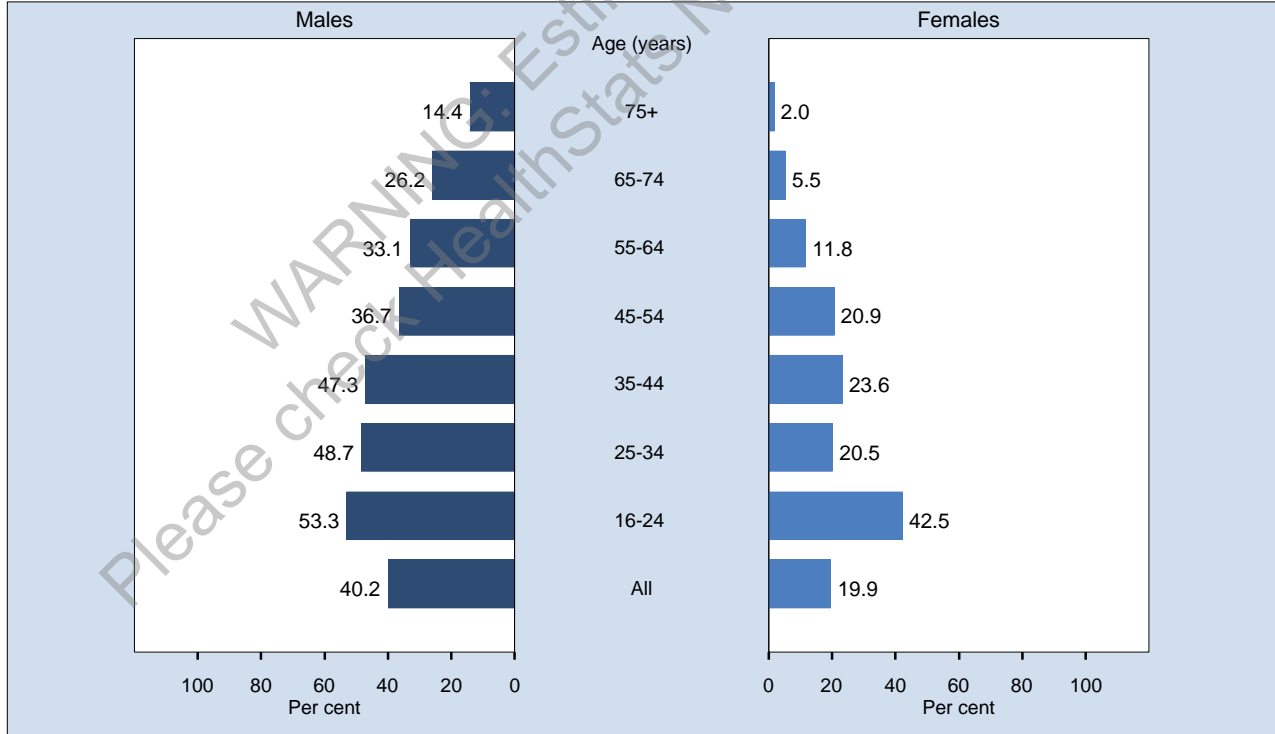
Alcohol consumption, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 10,151 respondents in NSW. For this indicator 94 (0.92%) were not stated (Don't know or Refused) in NSW. The question used was: On a day when you drink alcohol, how many standard drinks do you usually have? A standard drink is equal to 1 midday of full-strength beer, 1 schooner of light beer, 1 small glass of wine, or 1 pub-sized nip of spirits.

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

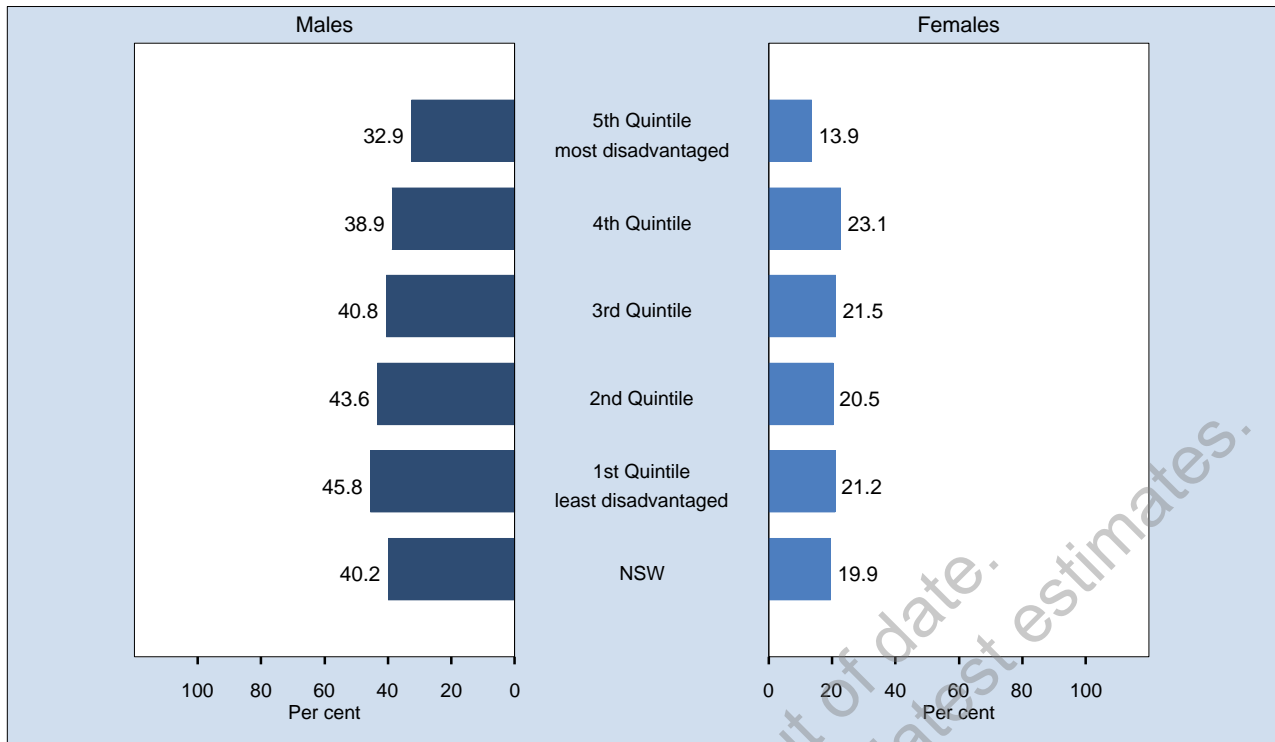
More than 2 standard drinks on a day when consuming alcohol, by age, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 10,151 respondents in NSW. For this indicator 94 (0.92%) were not stated (Don't know or Refused) in NSW. The indicator includes those who drink more than 2 standard drinks on a day when they drink alcohol. The questions used to define the indicators were: How often do you usually drink alcohol? On a day when you drink alcohol, how many standard drinks do you usually have? A standard drink is equal to 1 midday of full-strength beer, 1 schooner of light beer, 1 small glass of wine, or 1 pub-sized nip of spirits.

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

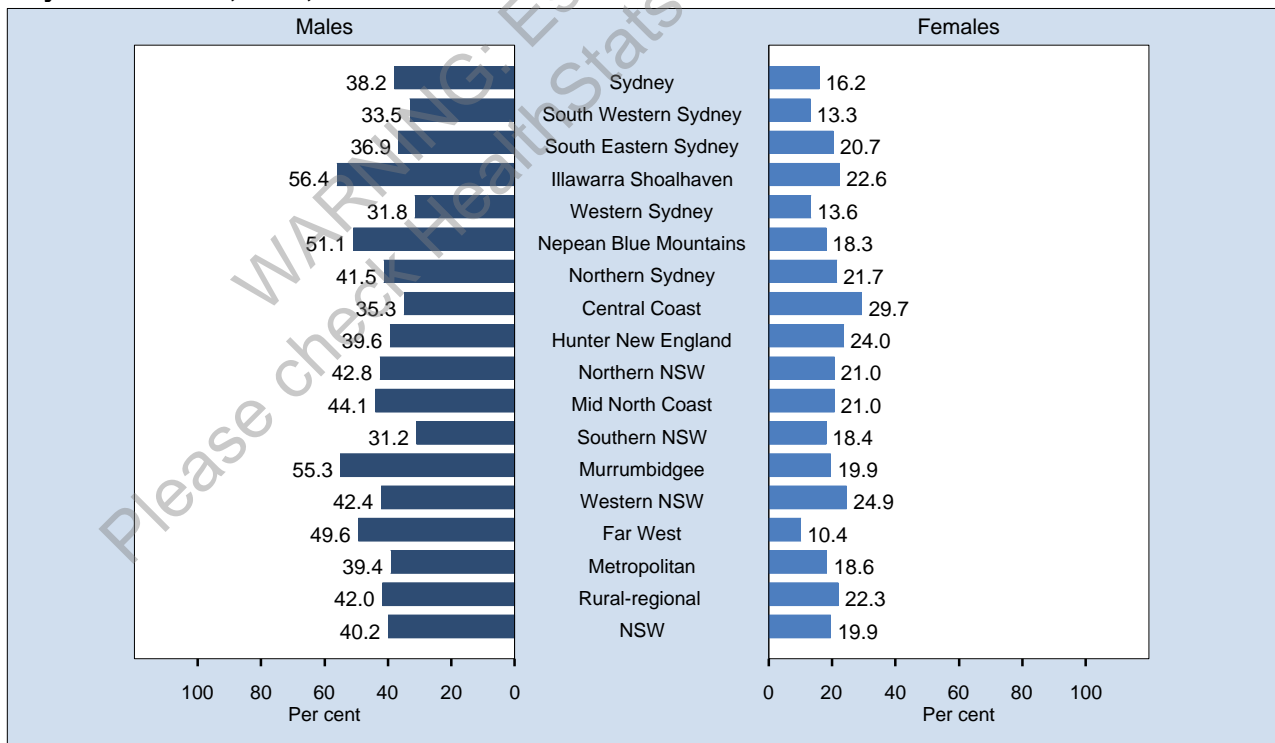
More than 2 standard drinks on a day when consuming alcohol. by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 10,151 respondents in NSW. For this indicator 94 (0.92%) were not stated (Don't know or Refused) in NSW. The indicator includes those who drink more than 2 standard drinks on a day when they drink alcohol. The questions used to define the indicators were: How often do you usually drink alcohol? On a day when you drink alcohol, how many standard drinks do you usually have? A standard drink is equal to 1 middy of full-strength beer, 1 schooner of light beer, 1 small glass of wine, or 1 pub-sized nip of spirits.

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

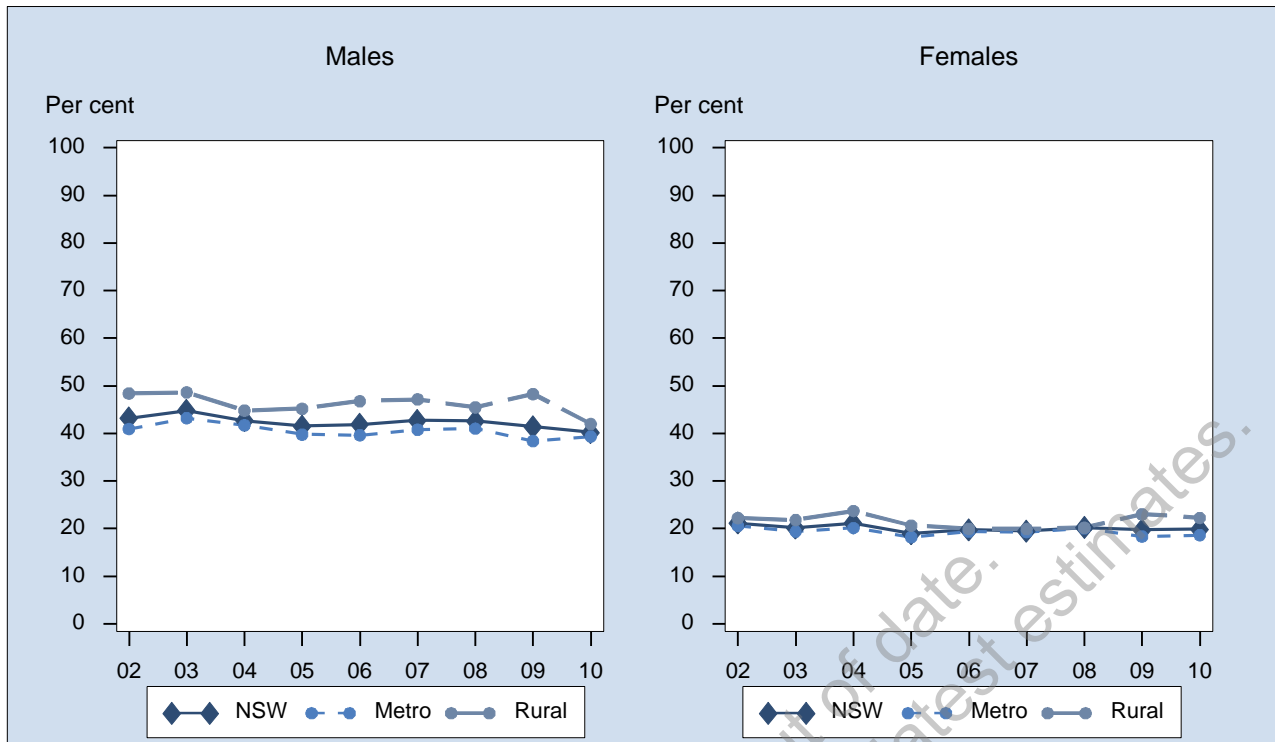
More than 2 standard drinks on a day when consuming alcohol. by local health district, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 10,151 respondents in NSW. For this indicator 94 (0.92%) were not stated (Don't know or Refused) in NSW. The indicator includes those who drink more than 2 standard drinks on a day when they drink alcohol. The questions used to define the indicators were: How often do you usually drink alcohol? On a day when you drink alcohol, how many standard drinks do you usually have? A standard drink is equal to 1 middy of full-strength beer, 1 schooner of light beer, 1 small glass of wine, or 1 pub-sized nip of spirits. NSW total includes the 15 LHDs and Albany (Victoria in-reach).

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

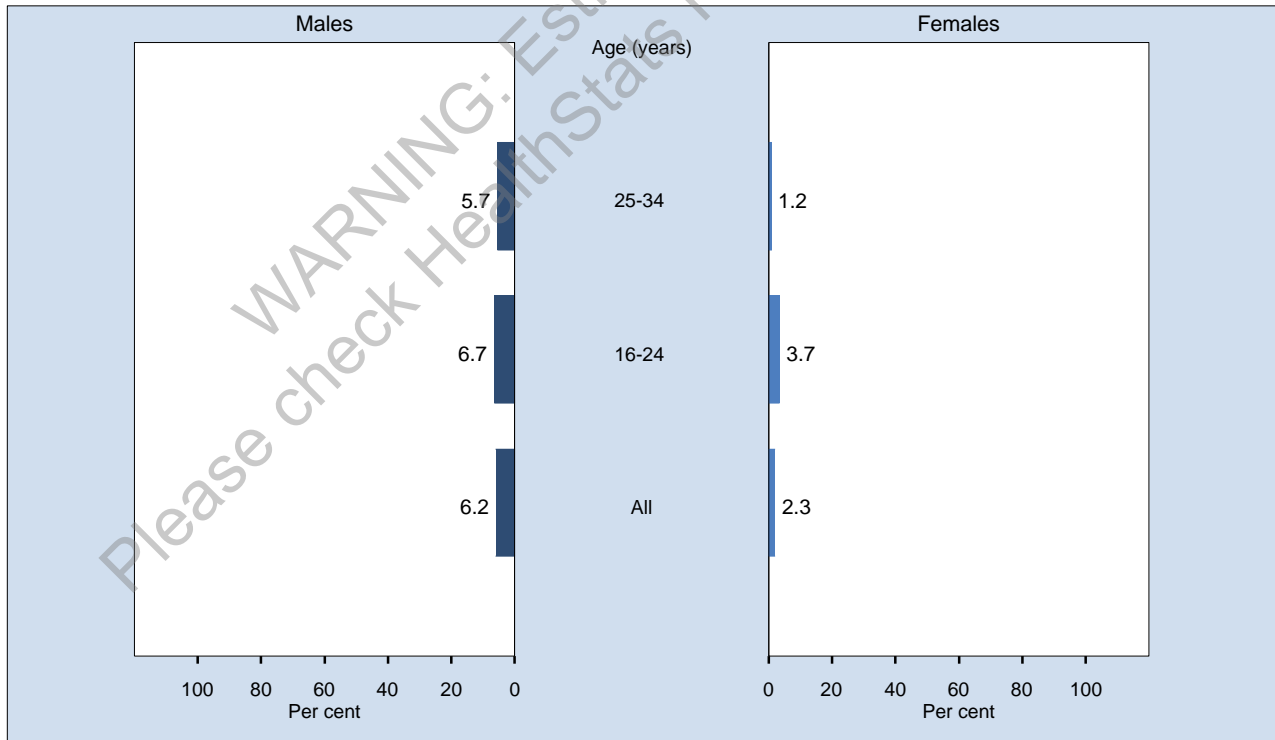
More than 2 standard drinks on a day when consuming alcohol. by year, adults aged 16 years and over, NSW, 2002-2010



Note: Estimates are based on the following numbers of respondents for NSW: 2002 (12,536), 2003 (12,958), 2004 (9,713), 2005 (11,410), 2006 (7,908), 2007 (7,387), 2008 (8,466), 2009 (10,638), 2010 (10,151). The indicator includes those who drink more than 2 standard drinks on a day when they drink alcohol. The questions used to define the indicators were: How often do you usually drink alcohol? On a day when you drink alcohol, how many standard drinks do you usually have? A standard drink is equal to 1 middy of full-strength beer, 1 schooner of light beer, 1 small glass of wine, or 1 pub-sized nip of spirits.

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Current cannabis smoking by age, adults aged 16 to 34 years, NSW, 2010



Note: Estimates are based on 1,318 respondents in NSW. For this indicator 5 (0.38%) were not stated (Don't know or Refused) in NSW. The indicator includes those who smoked cannabis daily or occasionally. The question used to define the indicator was: Which of the following best describes your marijuana or hashish smoking status: smoke daily, smoke occasionally, do not smoke now, but I used to, I have tried it a few times but never smoked regularly, or I have never smoked?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

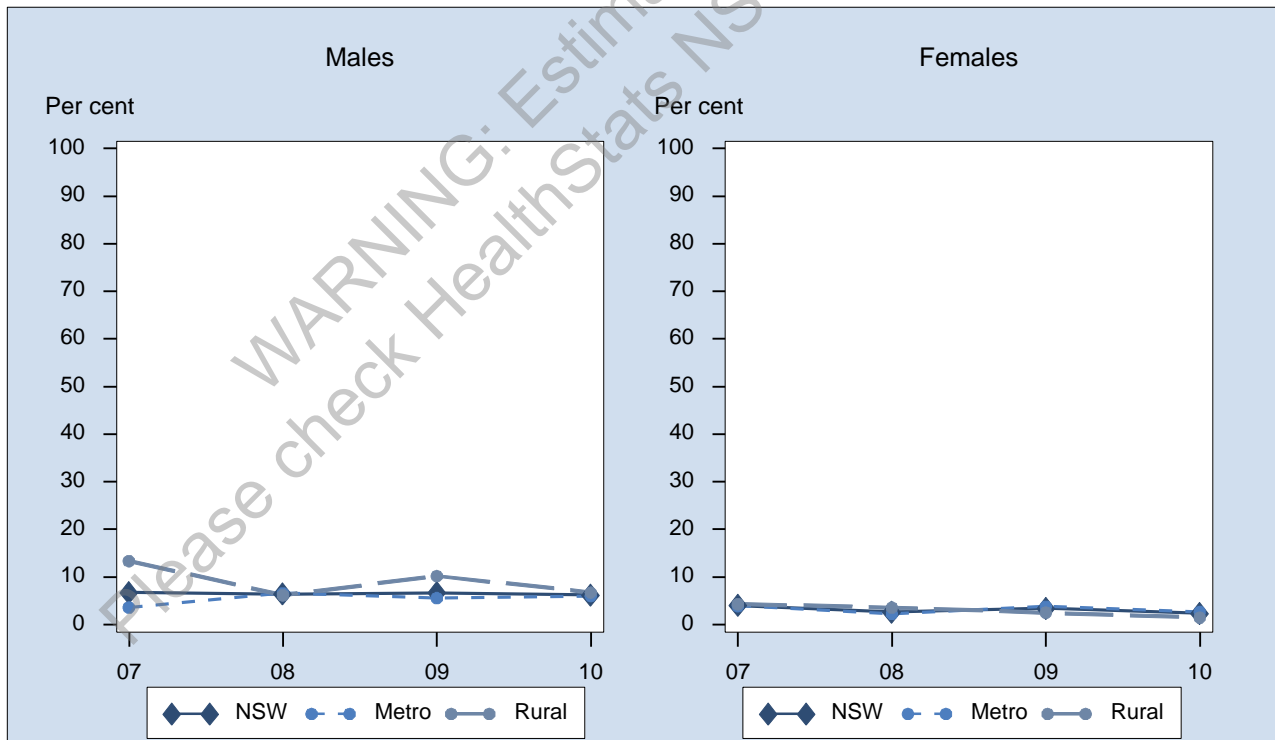
Current cannabis smoking by socioeconomic disadvantage, adults aged 16 to 34 years, NSW, 2010



Note: Estimates are based on 1,318 respondents in NSW. For this indicator 5 (0.38%) were not stated (Don't know or Refused) in NSW. The indicator includes those who smoked cannabis daily or occasionally. The question used to define the indicator was: Which of the following best describes your marijuana or hashish smoking status: smoke daily, smoke occasionally, do not smoke now, but I used to, I have tried it a few times but never smoked regularly, or I have never smoked?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Current cannabis smoking by year, adults aged 16 to 34 years, NSW, 2007-2010



Note: Estimates are based on the following numbers of respondents for NSW: 2007 (530), 2008 (1,386), 2009 (1,593), 2010 (1,318). The indicator includes those who smoked cannabis daily or occasionally. The question used to define the indicator was: Which of the following best describes your marijuana or hashish smoking status: smoke daily, smoke occasionally, do not smoke now, but I used to, I have tried it a few times but never smoked regularly, or I have never smoked?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Cancer screening: breast and cervical

Introduction

As the NSW population grows and ages, increasing numbers of people are living with a diagnosis of cancer. The challenges are finding better ways of preventing cancer, diagnosing cancer earlier, and delivering better treatment services for cancer. The *NSW Cancer Plan 2011-2015* outlines the NSW Government's commitment to reducing the effects cancer. One of the plan's principal objectives is increasing participation rates in breast and cervical screening programs.[1]

BreastScreen NSW provides free 2-yearly screening mammograms for females aged 50-69 years of age; however, all females over 40 years of age are eligible to attend BreastScreen NSW.[2] A screening mammogram differs from a diagnostic mammogram in that screening is conducted on females who have no history of breast cancer and no breast problems or symptoms at the time the mammogram is taken.

As cervical cancer is largely preventable with screening, females aged 20-69 who have ever had sex, and who have not had a hysterectomy, are recommended to have a Pap test every 2 years.[3]

The NSW Population Health Survey collects self-reported data on breast and cervical cancer screening to complement the data collected through screening registries. The most complete sources of data for breast and cervical cancer screening are the BreastScreen Register and Pap Test Register managed by the Cancer Institute NSW.[2,3]

Results

Breast cancer screening

To establish the proportion of females who had a screening mammogram, females who had a breast problem, or had breast cancer in the past, were excluded from the analysis.

In 2010, 76.4 per cent of females aged 50-69 years had a screening mammogram within the last 2 years.

- A significantly higher proportion of females aged 60-64 years (82.7 per cent) and 65-69 years (80.6 per cent), and a significantly lower proportion of females aged 50-54 years (66.9 per cent), had a screening mammogram within the last 2 years, compared with the overall female population aged 50-69 years.
- A significantly higher proportion of females in the first or least disadvantaged quintile (83.3 per cent), and a significantly lower proportion of females in the fifth or most disadvantaged quintile (70.5 per cent), had a screening mammogram within the last 2 years, compared with the overall female population aged 50-69 years.
- There was no significant difference between metropolitan and rural-regional health districts.
- A significantly lower proportion of females in South Western Sydney (65.5 per cent), and a significantly higher proportion of females in South Eastern Sydney (83.7 per cent), Murrumbidgee (84.8 per cent), and Western NSW (82.8 per cent), had a screening mammogram within the last 2 years, compared with the overall female population aged 50-69 years.

Since 1997, there has been no significant change in the proportion of females aged 50-69 years who had a screening mammogram within the last 2 years.

Cervical cancer screening

To establish the proportion of females who had a Pap test, females who ever had a hysterectomy were excluded from the analysis.

In 2010, 68.0 per cent of females aged 20-69 years had a Pap test within the last 2 years.

- A significantly lower proportion of females aged 20-24 years (40.7 per cent), and a significantly higher proportion of females aged 35-39 years (75.5 per cent) and 45-49 years (78.7 per cent), had a Pap test within the last 2 years, compared with the overall female population aged 20-69 years.
- A significantly higher proportion of females in the second least disadvantaged quintile (73.6 per cent) had a Pap test within the last 2 years, compared with the overall female population aged 20-69 years.
- A significantly higher proportion of females in rural-regional health districts (72.1 per cent) than

metropolitan health districts (66.5 per cent) had a Pap test within the last 2 years.

- A significantly higher proportion of females in Illawarra Shoalhaven (78.1 per cent) and Western NSW (76.3 per cent), and a significantly lower proportion of females in South Western Sydney (59.1 per cent), had a Pap test within the last 2 years, compared with the overall proportion of females aged 20-69 years.

Since 1998, there has been a significant decrease in the proportion of females aged 20-69 years who had a Pap test within the last 2 years (77.3 per cent to 68.0 per cent). The decrease has been significant in metropolitan and rural-regional health districts. Since 2008, there has been a significant decrease in the proportion of females aged 20-69 years who had a Pap test within the last 2 years (73.9 per cent to 68.0 per cent). The decrease has been significant in metropolitan and rural-regional health districts.

Hysterectomy

In 2010, 11.3 per cent of females aged 20-69 ever had a hysterectomy.

- Overall, the proportion of females who ever had a hysterectomy increased with age.
- A significantly lower proportion of females in the first or least disadvantaged quintile (8.6 per cent), and a significantly higher proportion of females in the fourth quintile (15.3 per cent), ever had a hysterectomy, compared with the overall female population aged 20-69 years.
- A significantly higher proportion of females in rural-regional health districts (15.3 per cent) than metropolitan health districts (9.6 per cent) ever had a hysterectomy.
- A significantly higher proportion of females in Central Coast (17.7 per cent), Hunter New England (15.6 per cent), and Murrumbidgee (17.6 per cent), and a significantly lower proportion of females in Northern Sydney (8.1 per cent), ever had a hysterectomy, compared with the overall female population aged 20-69 years.

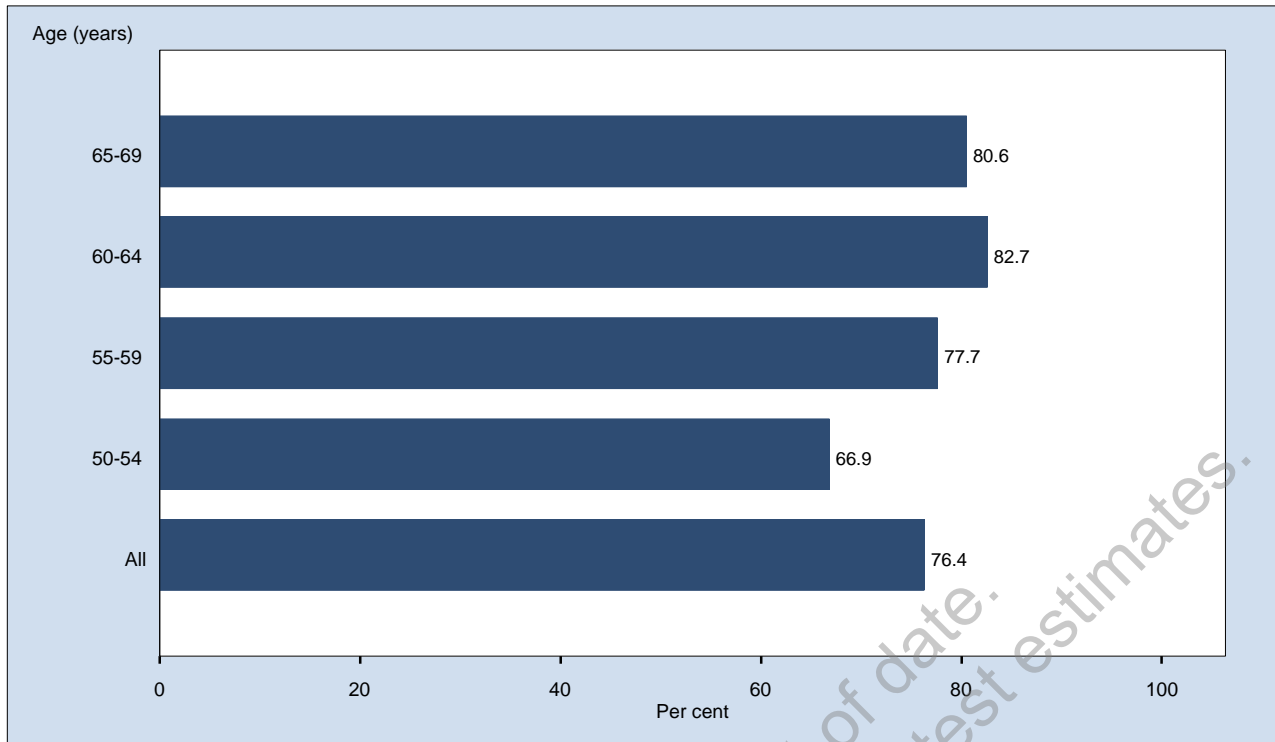
Since 1997, there has been a significant decrease in the proportion of females aged 20-69 years who ever had a hysterectomy (13.3 per cent to 11.3 per cent). The decrease has been significant in metropolitan health districts.

References

1. Cancer Institute NSW. *NSW Cancer Plan 2011-2015*. Sydney: Cancer Institute NSW, 2010.
2. The BreastScreen NSW website at www.bsnsw.org.au (accessed 4 March 2011).
3. The NSW Cervical Screening Program website at www.csp.nsw.gov.au (accessed 4 March 2011).

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Please check HealthStats NSW for latest estimates.

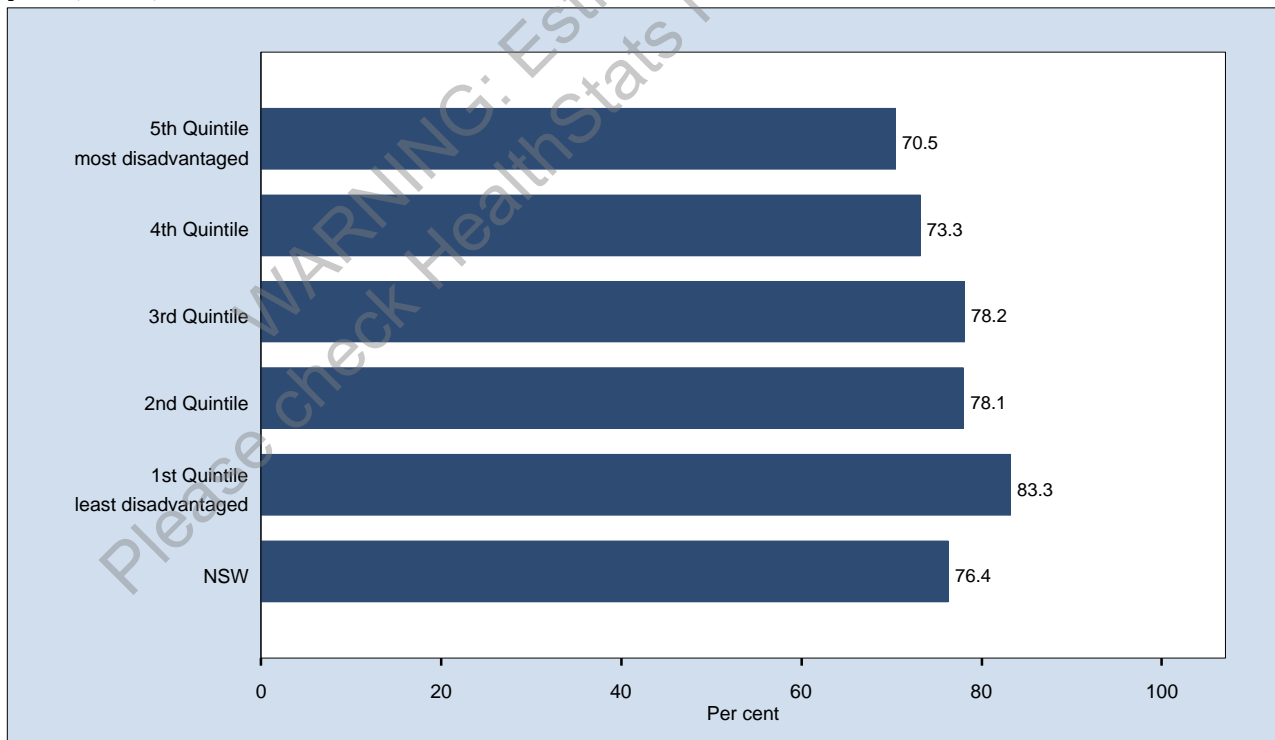
Screening mammogram in the last 2 years by age, females aged 50 to 69 years, NSW, 2010



Note: Estimates are based on 1,750 respondents in NSW. For this indicator 8 (0.46%) were not stated (Don't know or Refused) in NSW. The indicator includes those who had a screening mammogram in the last 2 years. This excludes women who had a mammogram for a breast problem or had breast cancer in the past. The questions used to define the indicator were: Have you ever had a mammogram? When did you last have a mammogram? Can you tell me all the reasons why you had your last mammogram?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

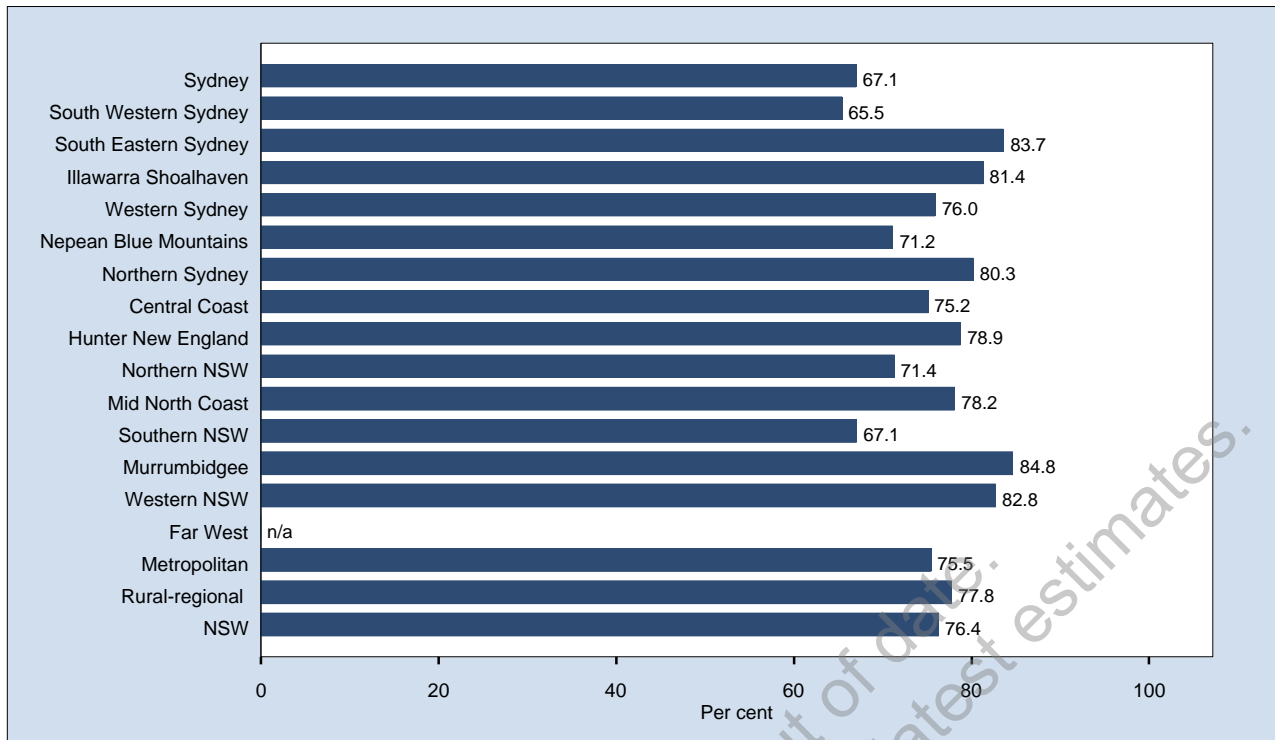
Screening mammogram in the last 2 years by socioeconomic disadvantage, females aged 50 to 69 years, NSW, 2010



Note: Estimates are based on 1,750 respondents in NSW. For this indicator 8 (0.46%) were not stated (Don't know or Refused) in NSW. The indicator includes those who had a screening mammogram in the last 2 years. This excludes women who had a mammogram for a breast problem or had breast cancer in the past. The questions used to define the indicator were: Have you ever had a mammogram? When did you last have a mammogram? Can you tell me all the reasons why you had your last mammogram?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

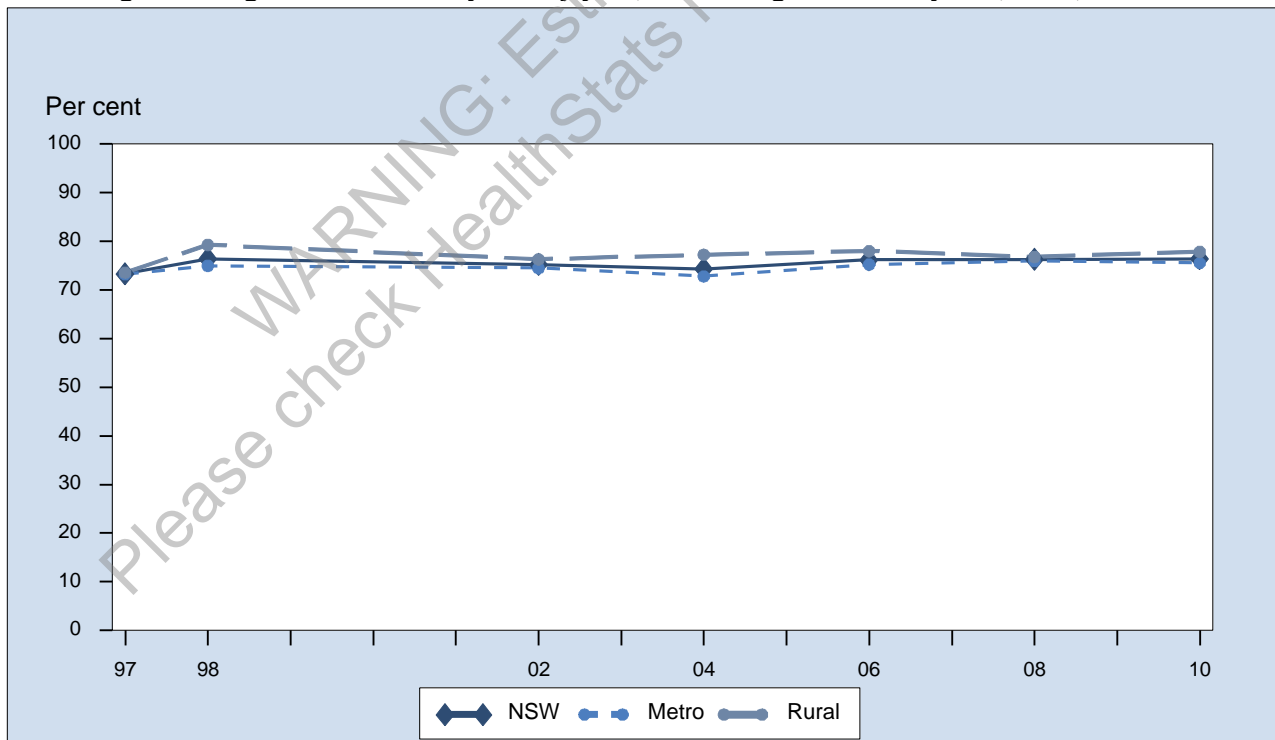
Screening mammogram in the last 2 years by local health district, females aged 50 to 69 years, NSW, 2010



Note: Estimates are based on 1,750 respondents in NSW. For this indicator 8 (0.46%) were not stated (Don't know or Refused) in NSW. The indicator includes those who had a screening mammogram in the last 2 years. This excludes women who had a mammogram for a breast problem or had breast cancer in the past. The questions used to define the indicator were: Have you ever had a mammogram? When did you last have a mammogram? Can you tell me all the reasons why you had your last mammogram? NSW total includes the 15 LHDs and Albury (Victoria in-reach).

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

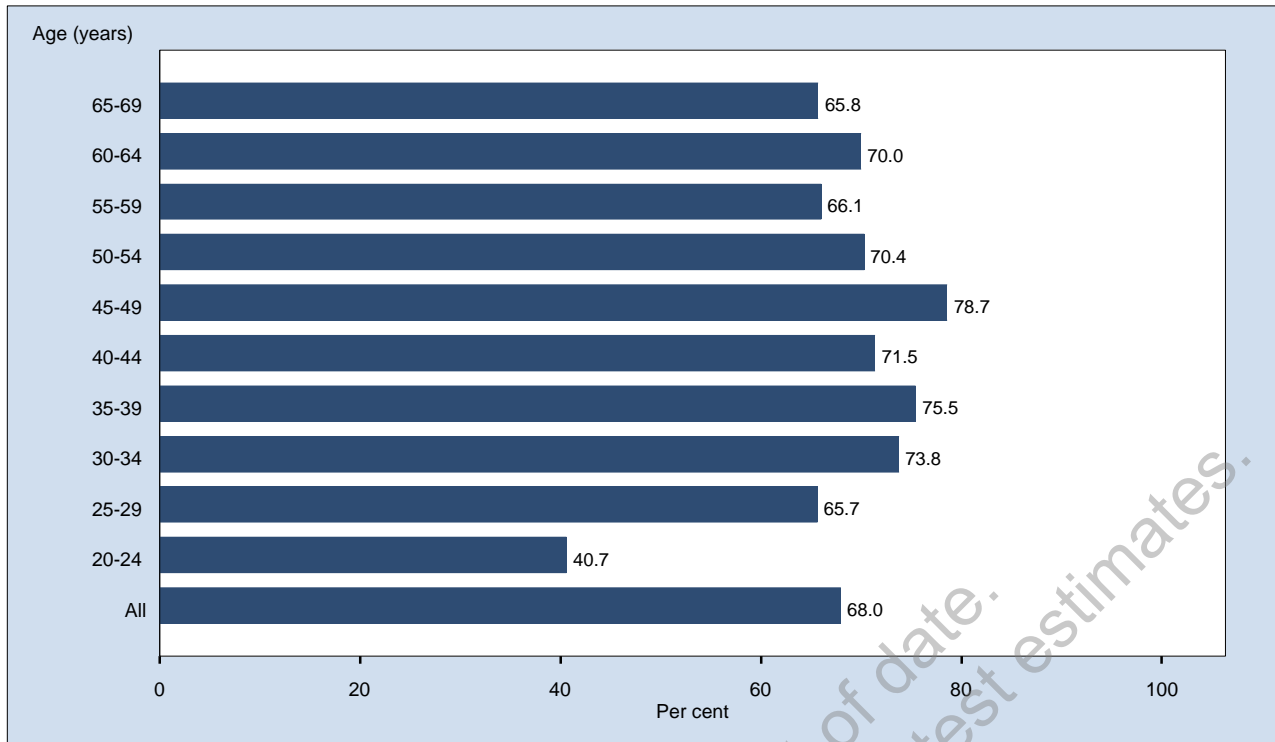
Screening mammogram in the last 2 years by year, females aged 50 to 69 years, NSW, 1997-2010



Note: Estimates are based on the following numbers of respondents for NSW: 1997 (2,221), 1998 (2,297), 2002 (2,201), 2004 (1,739), 2006 (1,515), 2008 (1,755), 2010 (1,750). The indicator includes those who had a screening mammogram in the last 2 years. This excludes women who had a mammogram for a breast problem or had breast cancer in the past. The questions used to define the indicator were: Have you ever had a mammogram? When did you last have a mammogram? Can you tell me all the reasons why you had your last mammogram?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

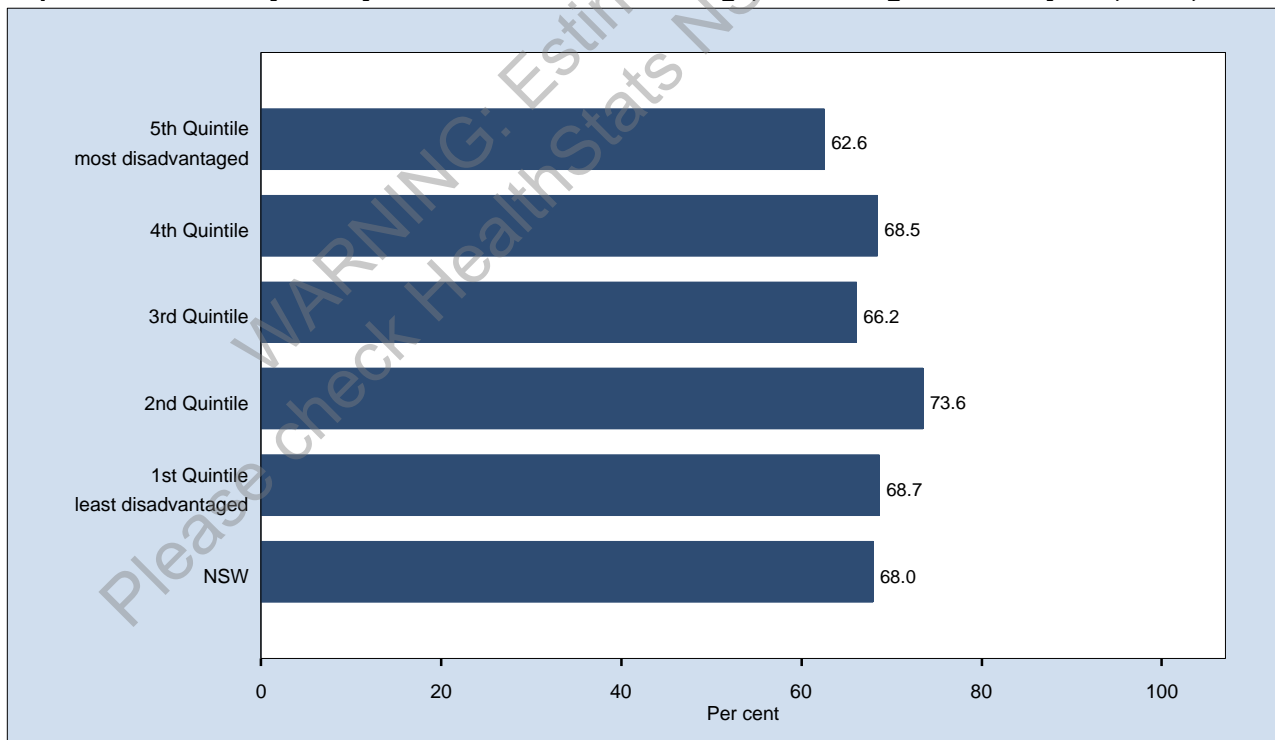
Pap test in the last 2 years by age, females aged 20 to 69 years, NSW, 2010



Note: Estimates are based on 2,878 respondents in NSW. For this indicator 11 (0.38%) were not stated (Don't know or Refused) in NSW. The indicator includes those who have had a Pap test in the last 2 years and have not had a hysterectomy. The questions used to define the indicator were: A Pap test is a routine test carried out by a doctor. It is recommended for all women for early detection of cancer of the cervix. Have you ever had a Pap test? When did you last have a Pap test? Have you ever had a hysterectomy?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

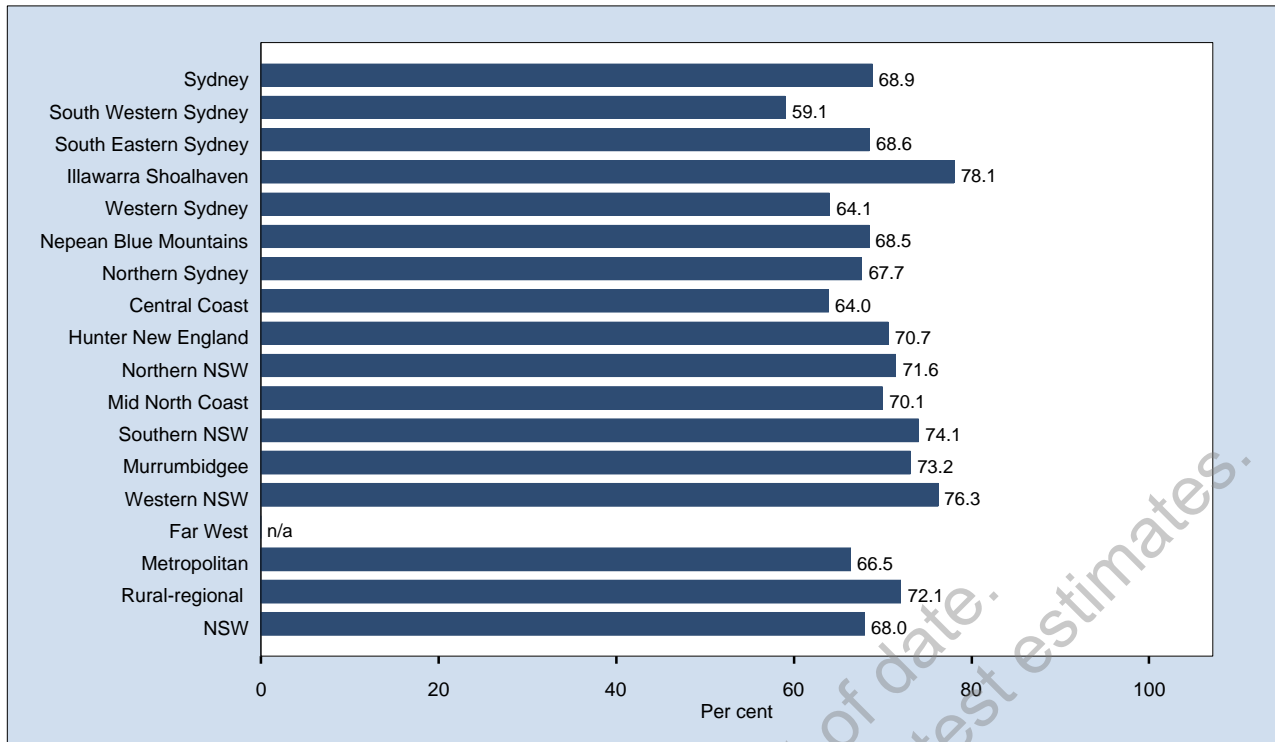
Pap test in the last 2 years by socioeconomic disadvantage, females aged 20 to 69 years, NSW, 2010



Note: Estimates are based on 2,878 respondents in NSW. For this indicator 11 (0.38%) were not stated (Don't know or Refused) in NSW. The indicator includes those who have had a Pap test in the last 2 years and have not had a hysterectomy. The questions used to define the indicator were: A Pap test is a routine test carried out by a doctor. It is recommended for all women for early detection of cancer of the cervix. Have you ever had a Pap test? When did you last have a Pap test? Have you ever had a hysterectomy?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

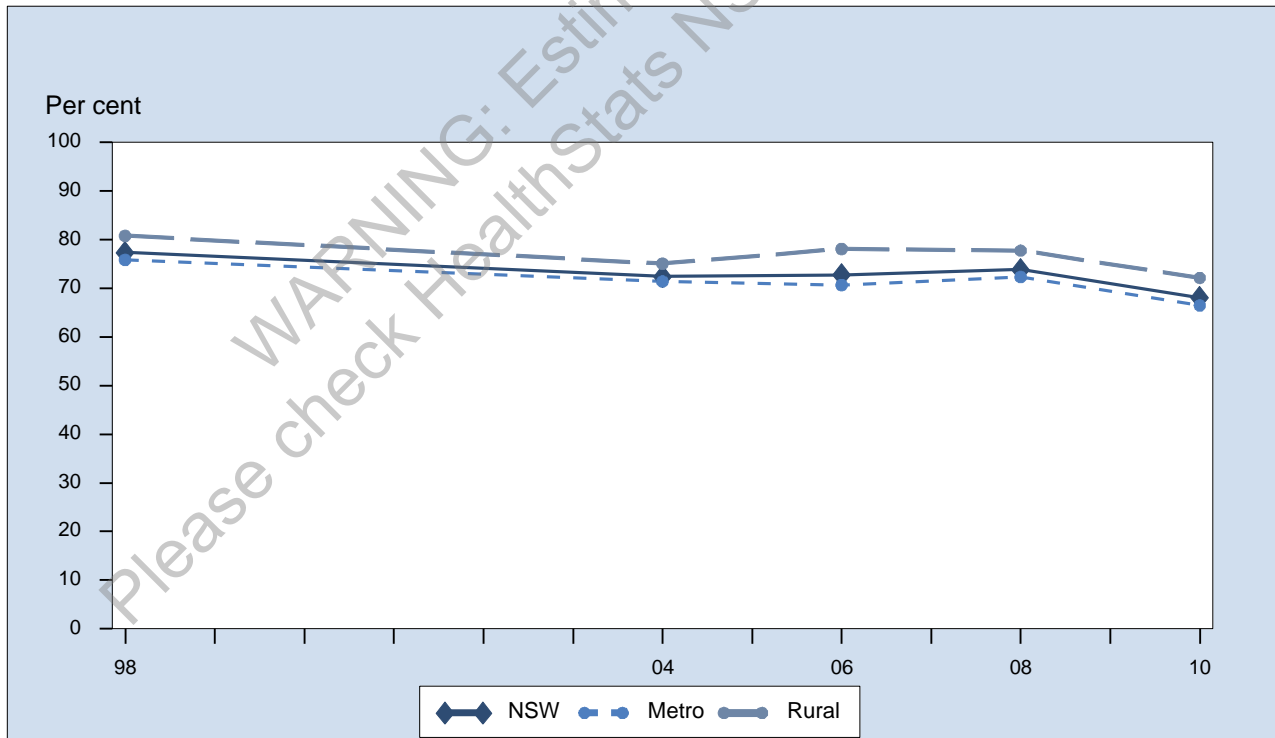
Pap test in the last 2 years by local health district, females aged 20 to 69 years, NSW, 2010



Note: Estimates are based on 2,878 respondents in NSW. For this indicator 11 (0.38%) were not stated (Don't know or Refused) in NSW. The indicator includes those who have had a Pap test in the last 2 years and have not had a hysterectomy. The questions used to define the indicator were: A Pap test is a routine test carried out by a doctor. It is recommended for all women for early detection of cancer of the cervix. Have you ever had a Pap test? When did you last have a Pap test? Have you ever had a hysterectomy? NSW total includes the 15 LHDs and Albury (Victoria in-reach).

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

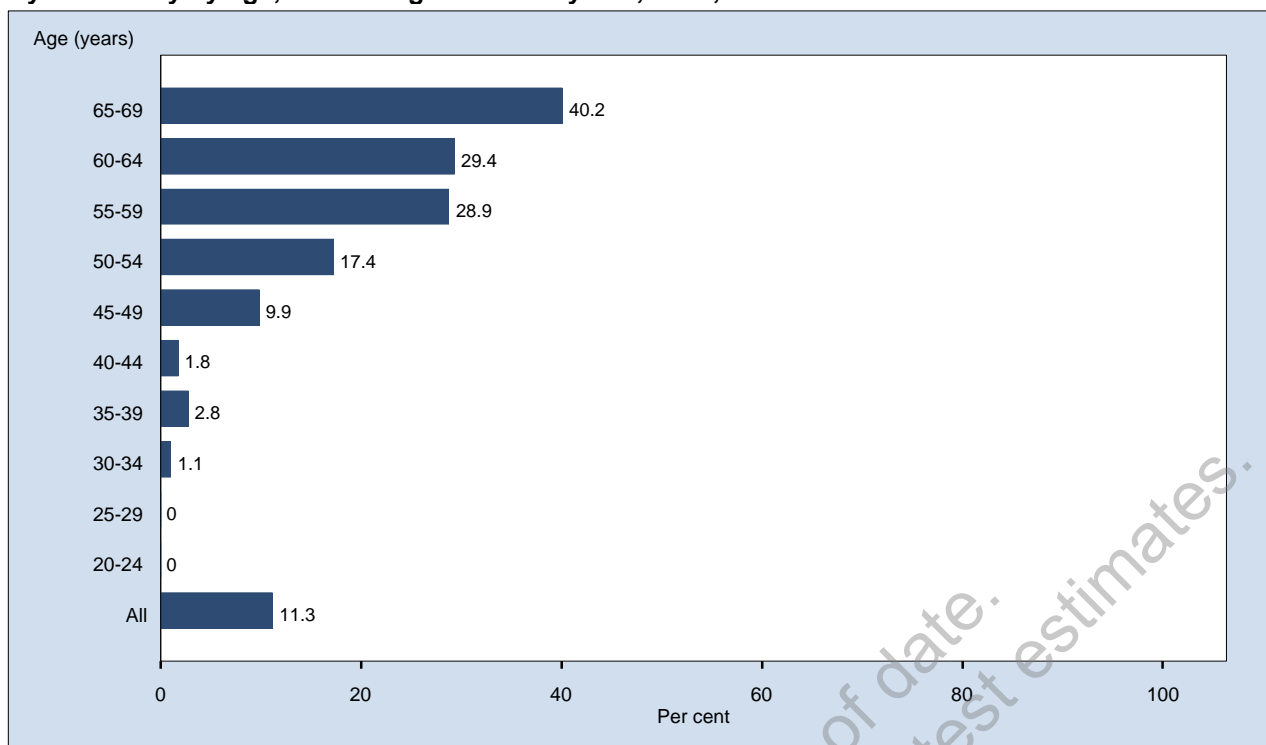
Pap test in the last 2 years by year, females aged 20 to 69 years, NSW, 1998-2010



Note: Estimates are based on the following numbers of respondents for NSW: 1998 (6,881), 2004 (3,526), 2006 (2,815), 2008 (3,096), 2010 (2,878). The indicator includes those who have had a Pap test in the last 2 years and have not had a hysterectomy. The questions used to define the indicator were: A Pap test is a routine test carried out by a doctor. It is recommended for all women for early detection of cancer of the cervix. Have you ever had a Pap test? When did you last have a Pap test? Have you ever had a hysterectomy?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

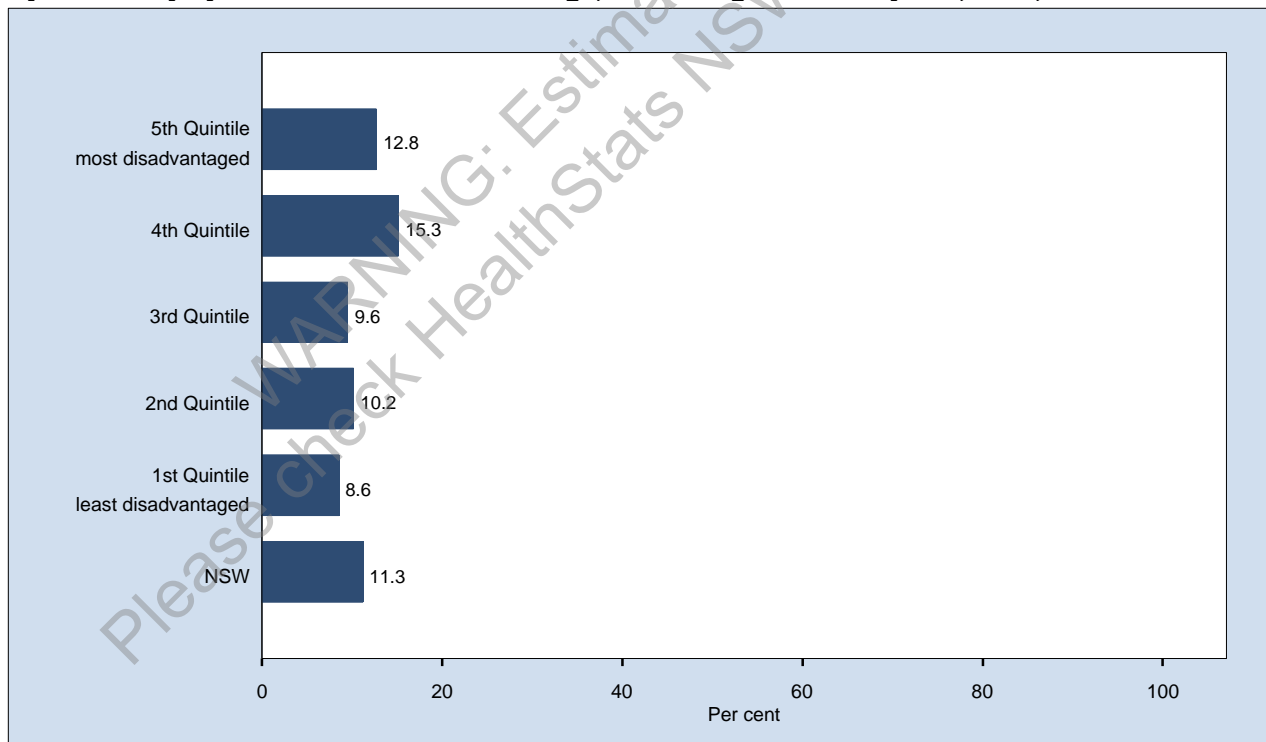
Hysterectomy by age, females aged 20 to 69 years, NSW, 2010



Note: Estimates are based on 3,333 respondents in NSW. For this indicator 14 (0.42%) were not stated (Don't know or Refused) in NSW. The indicator includes those who have ever had a hysterectomy. The question used to define the indicator was: Have you ever had a hysterectomy?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

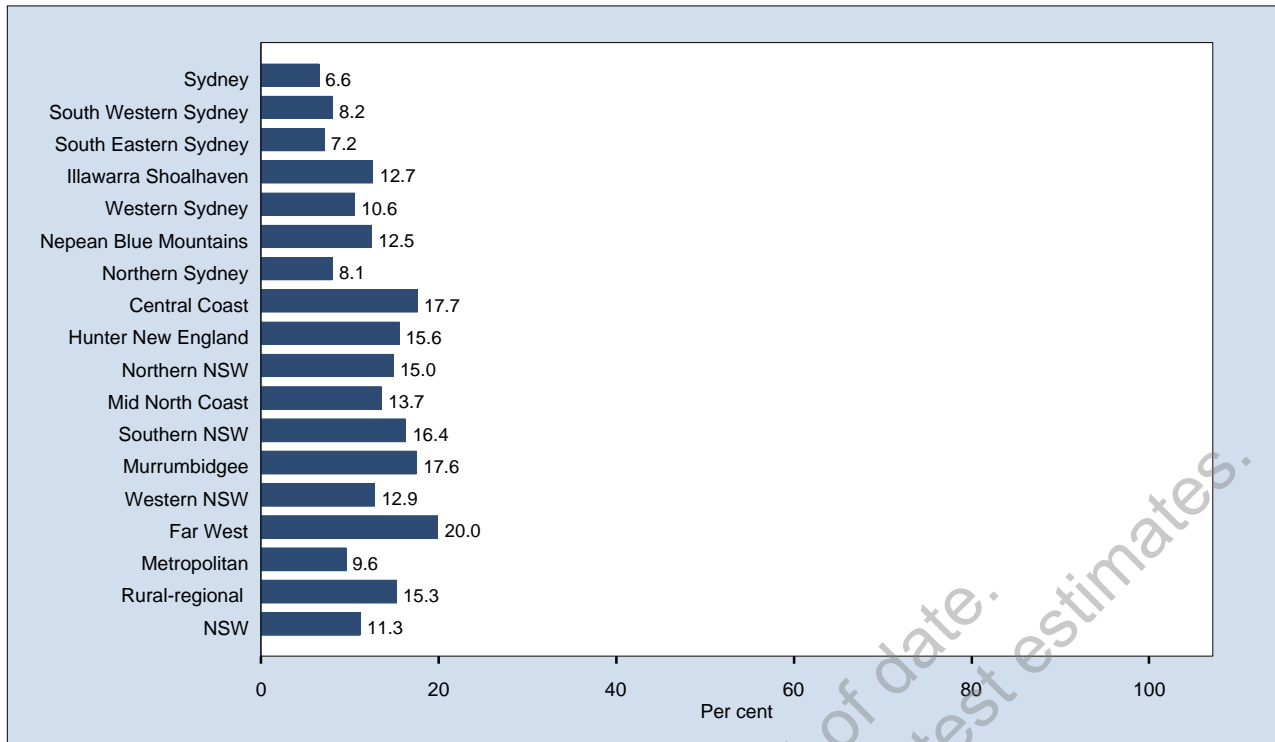
Hysterectomy by socioeconomic disadvantage, females aged 20 to 69 years, NSW, 2010



Note: Estimates are based on 3,333 respondents in NSW. For this indicator 14 (0.42%) were not stated (Don't know or Refused) in NSW. The indicator includes those who have ever had a hysterectomy. The question used to define the indicator was: Have you ever had a hysterectomy?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

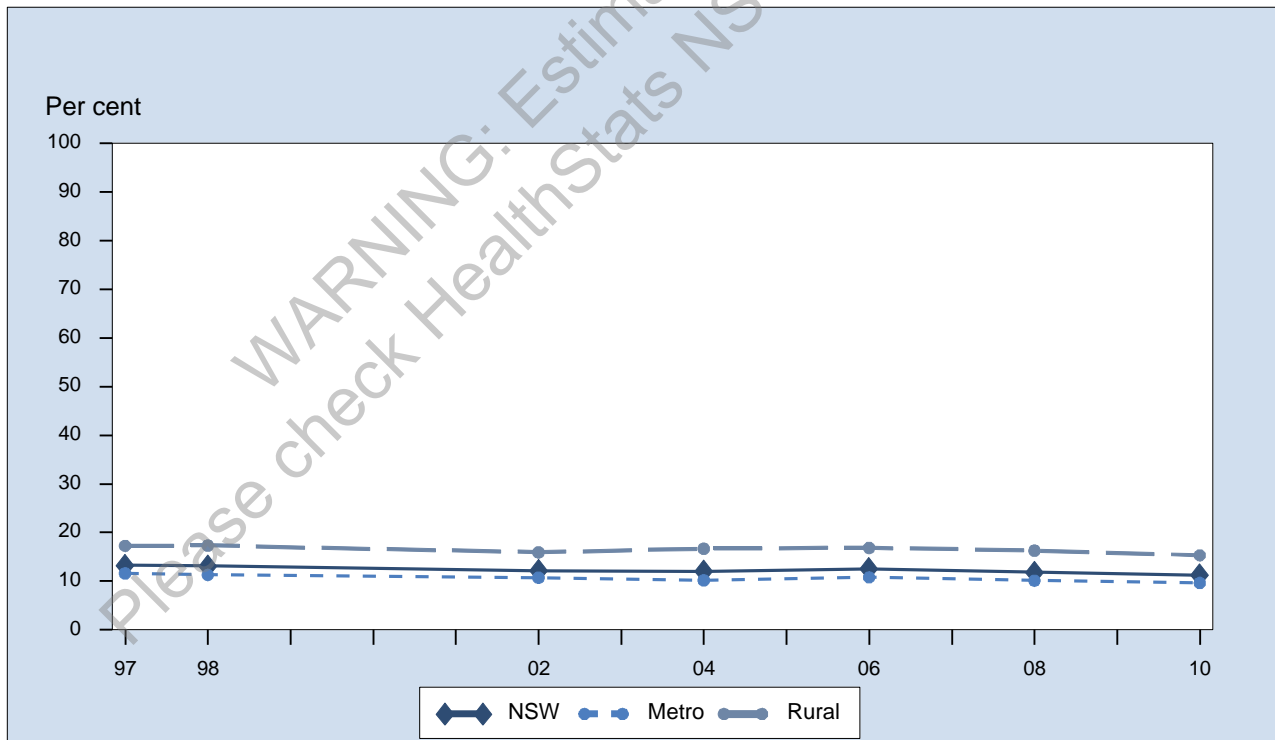
Hysterectomy by local health district, females aged 20 to 69 years, NSW, 2010



Note: Estimates are based on 3,333 respondents in NSW. For this indicator 14 (0.42%) were not stated (Don't know or Refused) in NSW. The indicator includes those who have ever had a hysterectomy. The question used to define the indicator was: Have you ever had a hysterectomy? NSW total includes the 15 LHDs and Albury (Victoria in-reach).

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Hysterectomy by year, females aged 20 to 69 years, NSW, 1997-2010



Note: Estimates are based on the following numbers of respondents for NSW: 1997 (8,240), 1998 (8,273), 2002 (5,575), 2004 (4,360), 2006 (3,503), 2008 (3,758), 2010 (3,333). The indicator includes those who have ever had a hysterectomy. The question used to define the indicator was: Have you ever had a hysterectomy?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Immunisation

Introduction

Because influenza immunisation significantly reduces morbidity and preventable mortality, it is recommended and funded for all people aged 65 years and over, Aboriginal and Torres Strait Islander people aged 15 years and over, pregnant women, and people aged 6 months or over with conditions predisposing to severe influenza.[1]

Pneumococcal disease is a major cause of pneumonia, meningitis, and bacteraemia without focus. The 23-valent pneumococcal polysaccharide vaccine is recommended and funded for all people aged 65 years and over, and for Aboriginal and Torres Strait Islander people aged 50 years and over or those 15-49 years who have underlying chronic illnesses that place them at increased risk.[1]

Results

Influenza immunisation

In 2010, 72.7 per cent of adults aged 65 years and over had been immunised against influenza in the last 12 months.

- There was no significant difference between males and females.
- A significantly lower proportion of adults aged 65-69 years (59.8 per cent), and a significantly higher proportion of adults aged 70-74 years (75.9 per cent), 75-79 years (78.2 per cent), and 80 years and over (81.1 per cent), had been immunised against influenza in the last 12 months, compared with the overall adult population aged 65 years and over.
- There was no significant difference among quintiles of disadvantage, compared with the overall adult population aged 65 years and over.
- There was no significant difference between metropolitan and rural-regional health districts.
- A significantly higher proportion of adults in Hunter New England (79.7 per cent), and a significantly lower proportion of adults in Far West (55.6 per cent), had been immunised against influenza in the last 12 months, compared with the overall adult population aged 65 years and over.

Since 1997, there has been a significant increase in the proportion of adults aged 65 years and over who had been immunised against influenza in the last 12 months (57.1 per cent to 72.7 per cent). The increase has been significant in males and females, and in metropolitan and rural-regional health districts.

Pneumococcal immunisation

In 2010, 54.8 per cent of adults aged 65 years and over had been immunised against pneumococcal disease in the last 5 years.

- A significantly lower proportion of males (51.2 per cent) had been immunised against pneumococcal disease, compared with females (57.6 per cent).
- Among males, a significantly lower proportion of those aged 65-69 years (28.7 per cent), and a significantly higher proportion of those aged 70-74 years (58.2 per cent), 75-79 years (64.3 per cent), and 80 years and over (65.3 per cent), had been immunised against pneumococcal disease in the last 5 years, compared with the overall male population aged 65 years and over.
- Among females, a significantly lower proportion of those aged 65-69 years (41.7 per cent), and a significantly higher proportion of those aged 75-79 years (67.0 per cent) and 80 years and over (66.9 per cent), had been immunised against pneumococcal disease in the last 5 years, compared with the overall female population aged 65 years and over.
- There was no significant difference among quintiles of disadvantage, compared with the overall adult population aged 65 years and over.
- There was no significant difference between metropolitan and rural-regional health districts.
- A significantly higher proportion of adults in Central Coast (64.9 per cent), and a significantly lower proportion of adults in Nepean Blue Mountains (44.3 per cent) and Far West (29.9 per cent), had been immunised against pneumococcal disease in the last 5 years, compared with the overall adult population aged 65 years and over.

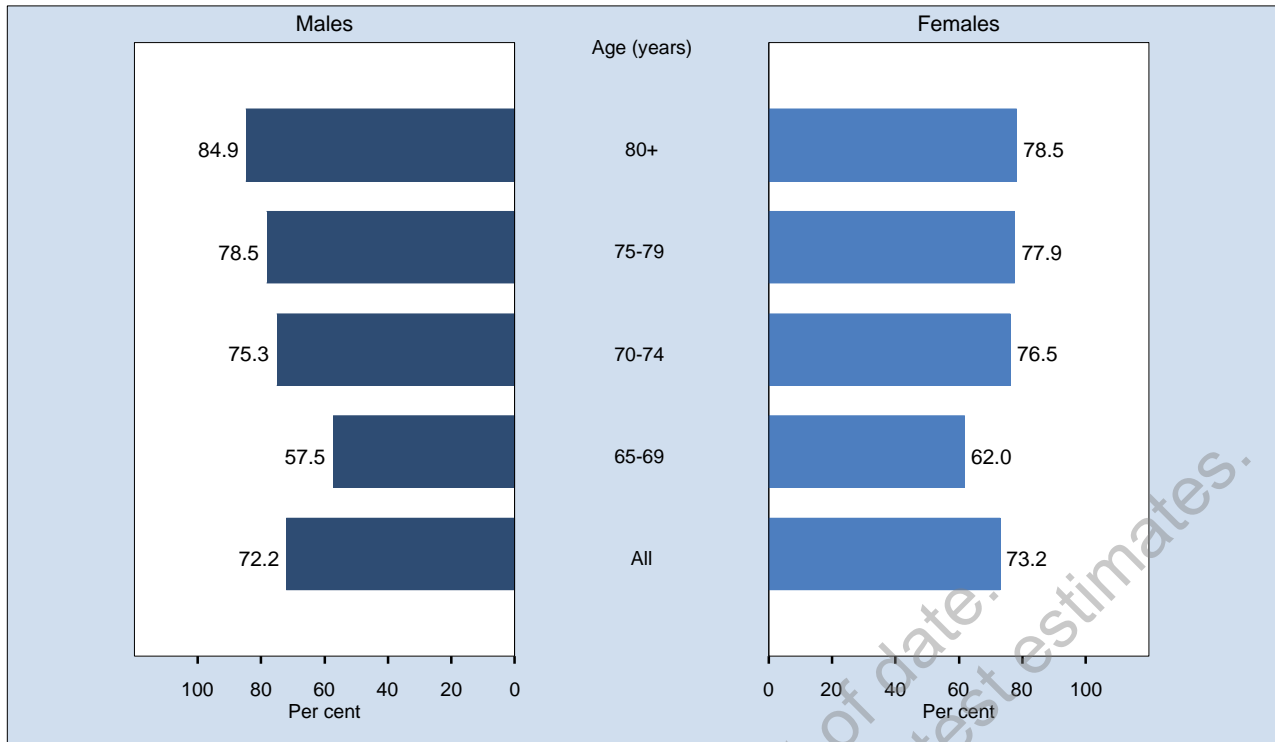
Since 2002, there has been a significant increase in the proportion of adults aged 65 years and over who had been immunised against pneumococcal disease in the last 5 years (38.6 per cent to 54.8 per cent). The increase has been significant in males and females, and in metropolitan and rural-regional health districts.

References

1. National Health and Medical Research Council. *The Australian Immunisation Handbook, 9th Edition*, Canberra: National Health and Medical Research Council, 2010.

WARNING: Estimates out of date.
Please check HealthStats NSW for latest estimates.

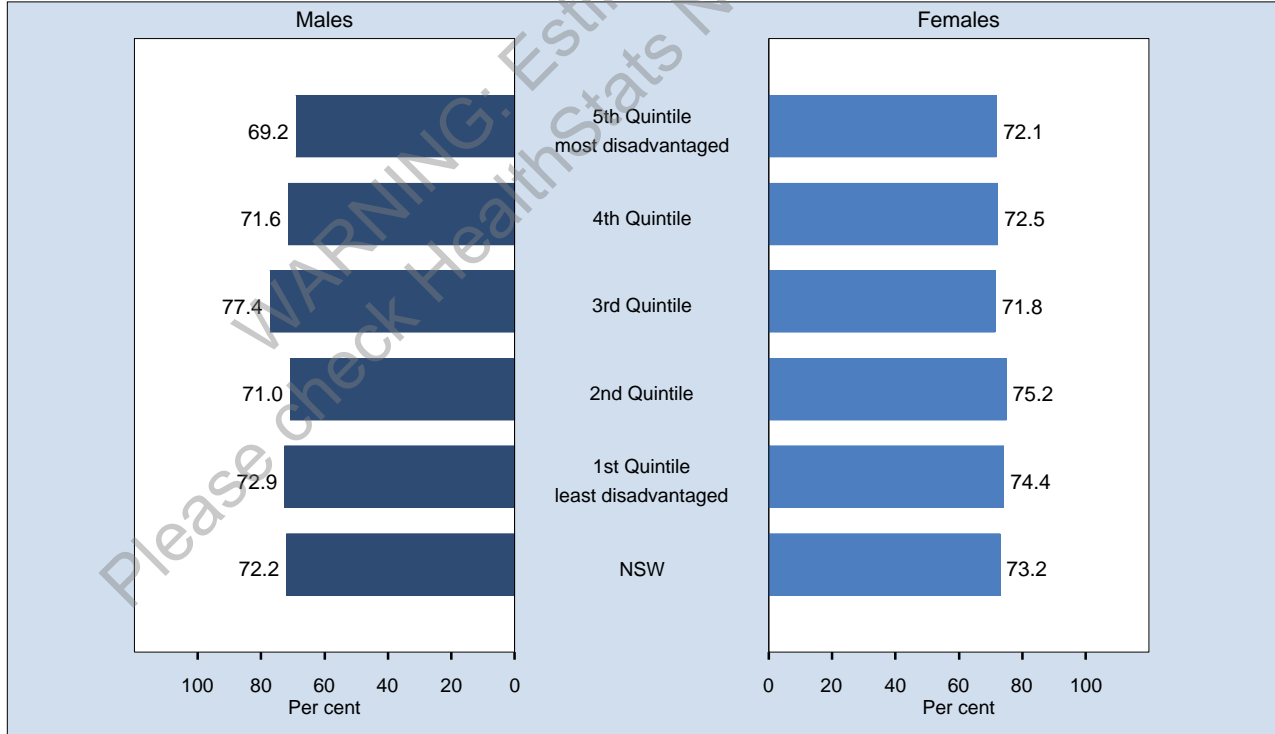
Vaccinated against influenza in the last 12 months by age, adults aged 65 years and over, NSW, 2010



Note: Estimates are based on 3,568 respondents in NSW. For this indicator 33 (0.92%) were not stated (Don't know or Refused) in NSW. The indicator includes those aged 65 years and over who were vaccinated or immunised against influenza in the last 12 months. The question used to define the indicator was: Were you vaccinated or immunised against flu in the last 12 months?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

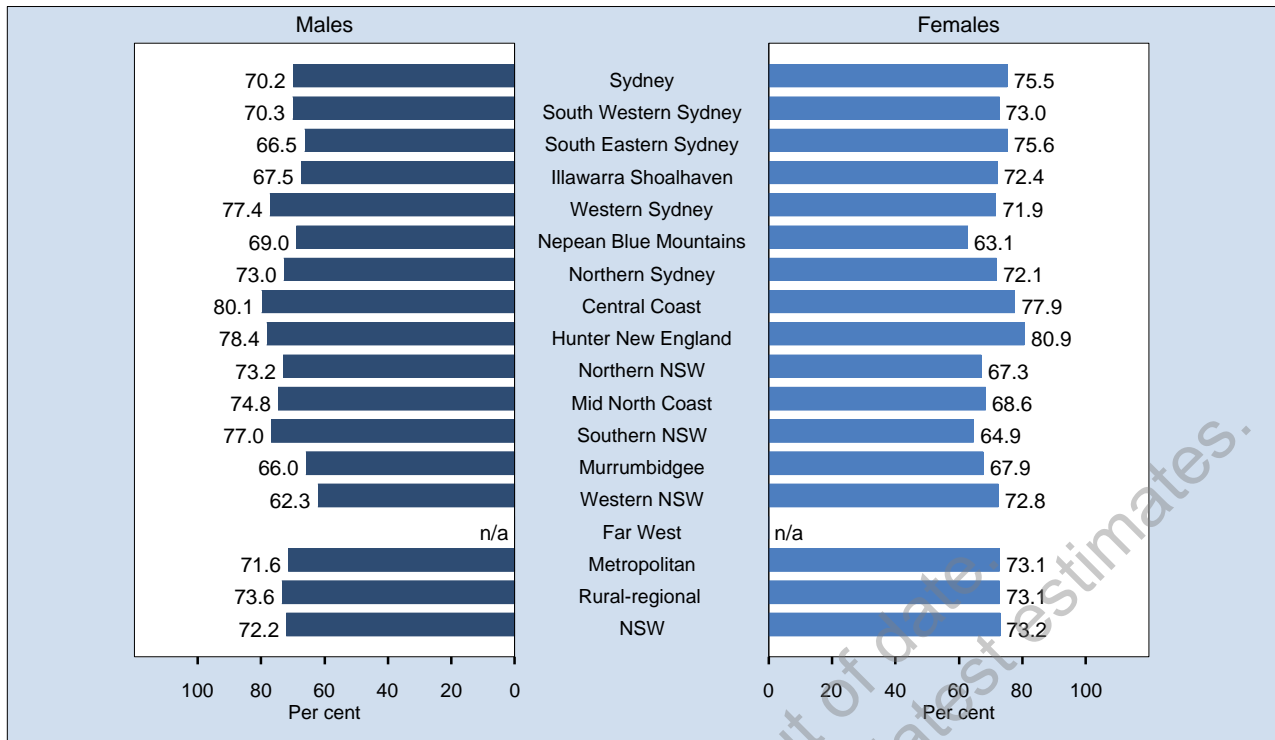
Vaccinated against influenza in the last 12 months by socioeconomic disadvantage, adults aged 65 years and over, NSW, 2010



Note: Estimates are based on 3,568 respondents in NSW. For this indicator 33 (0.92%) were not stated (Don't know or Refused) in NSW. The indicator includes those aged 65 years and over who were vaccinated or immunised against influenza in the last 12 months. The question used to define the indicator was: Were you vaccinated or immunised against flu in the last 12 months?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

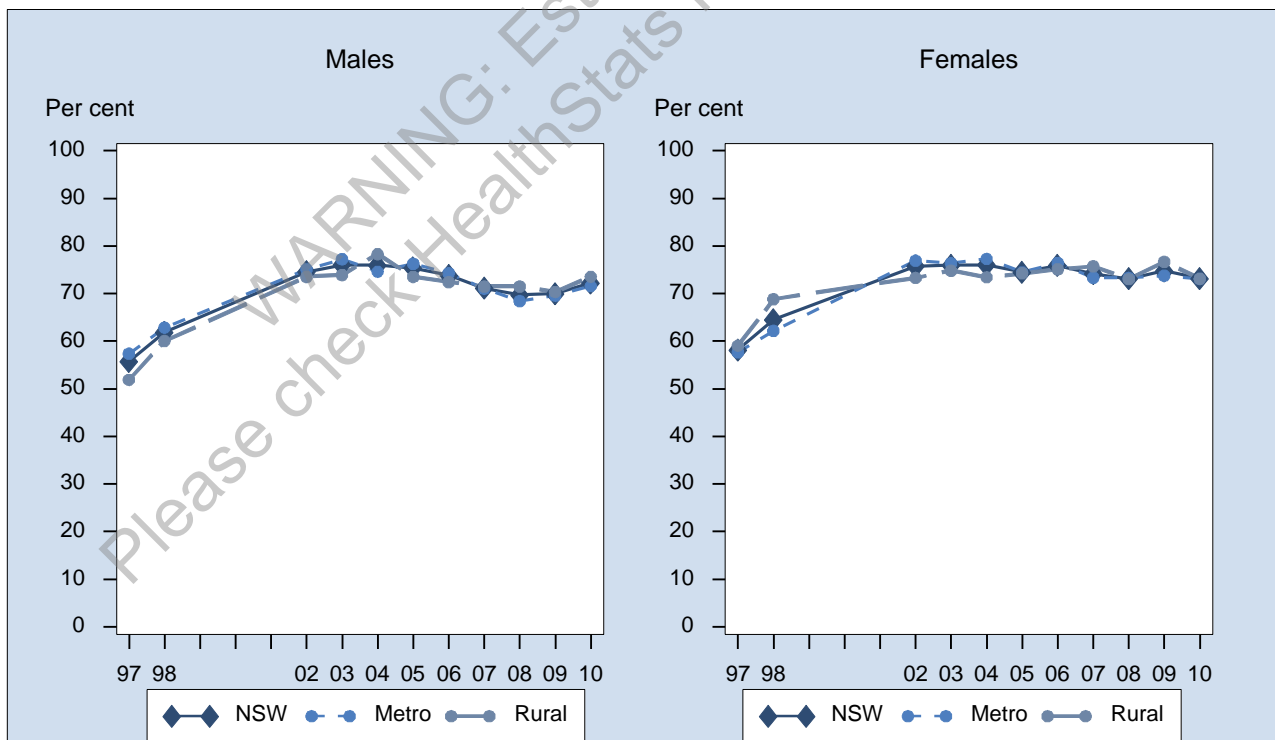
Vaccinated against influenza in the last 12 months by local health district, adults aged 65 years and over, NSW, 2010



Note: Estimates are based on 3,568 respondents in NSW. For this indicator 33 (0.92%) were not stated (Don't know or Refused) in NSW. The indicator includes those aged 65 years and over who were vaccinated or immunised against influenza in the last 12 months. The question used to define the indicator was: Were you vaccinated or immunised against flu in the last 12 months? NSW total includes the 15 LHDs and Albury (Victoria in-reach).

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

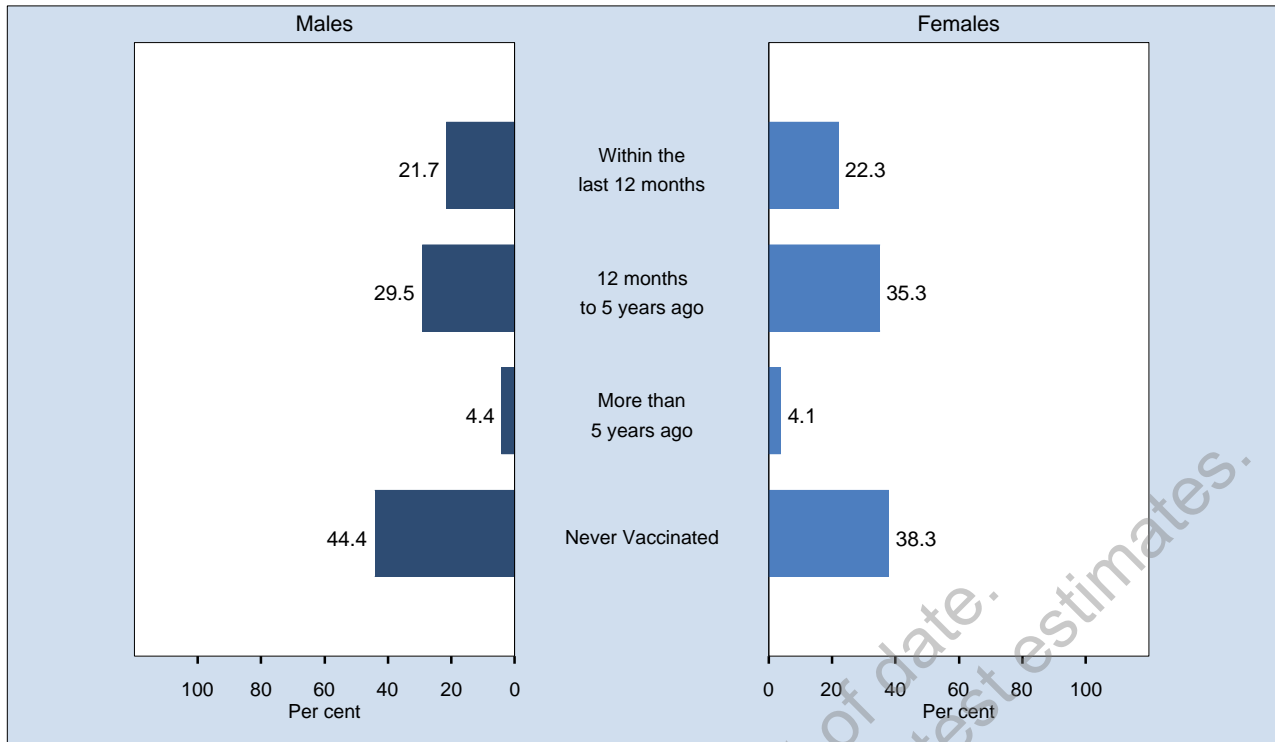
Vaccinated against influenza in the last 12 months by year, adults aged 65 years and over, NSW, 1997-2010



Note: Estimates are based on the following numbers of respondents for NSW: 1997 (3,278), 1998 (3,394), 2002 (3,416), 2003 (3,573), 2004 (2,701), 2005 (3,380), 2006 (2,382), 2007 (2,340), 2008 (2,730), 2009 (3,546), 2010 (3,568). The indicator includes those aged 65 years and over who were vaccinated or immunised against influenza in the last 12 months. The question used to define the indicator was: Were you vaccinated or immunised against flu in the last 12 months?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

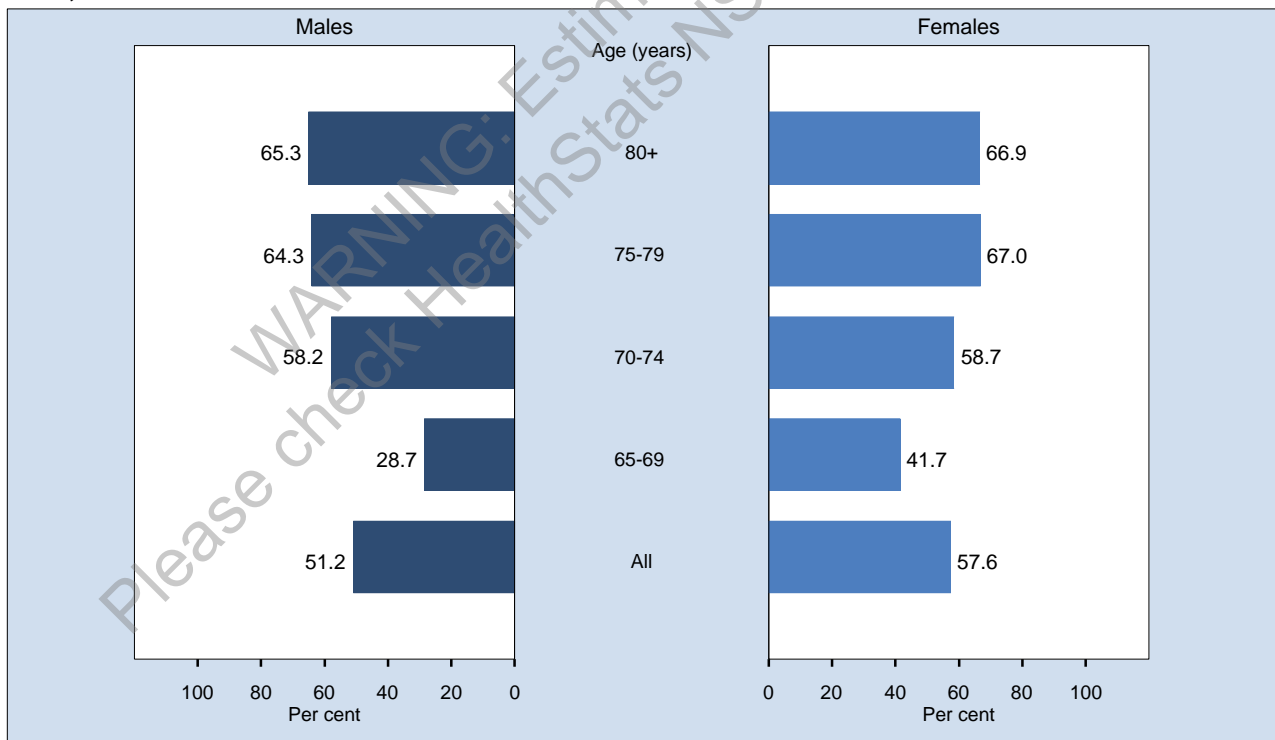
Last pneumococcal disease vaccination, adults aged 65 years and over, NSW, 2010



Note: Estimates are based on 3,342 respondents in NSW. For this indicator 259 (7.19%) were not stated (Don't know or Refused) in NSW. The question used was: When were you last vaccinated or immunised against pneumonia?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Vaccinated against pneumococcal disease in the last 5 years by age, adults aged 65 years and over, NSW, 2010



Note: Estimates are based on 3,342 respondents in NSW. For this indicator 259 (7.19%) were not stated (Don't know or Refused) in NSW. The indicator includes those aged 65 years and over who have been immunised against pneumococcal disease in the last 5 years. The question used to define the indicator was: When were you last vaccinated or immunised against pneumonia?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

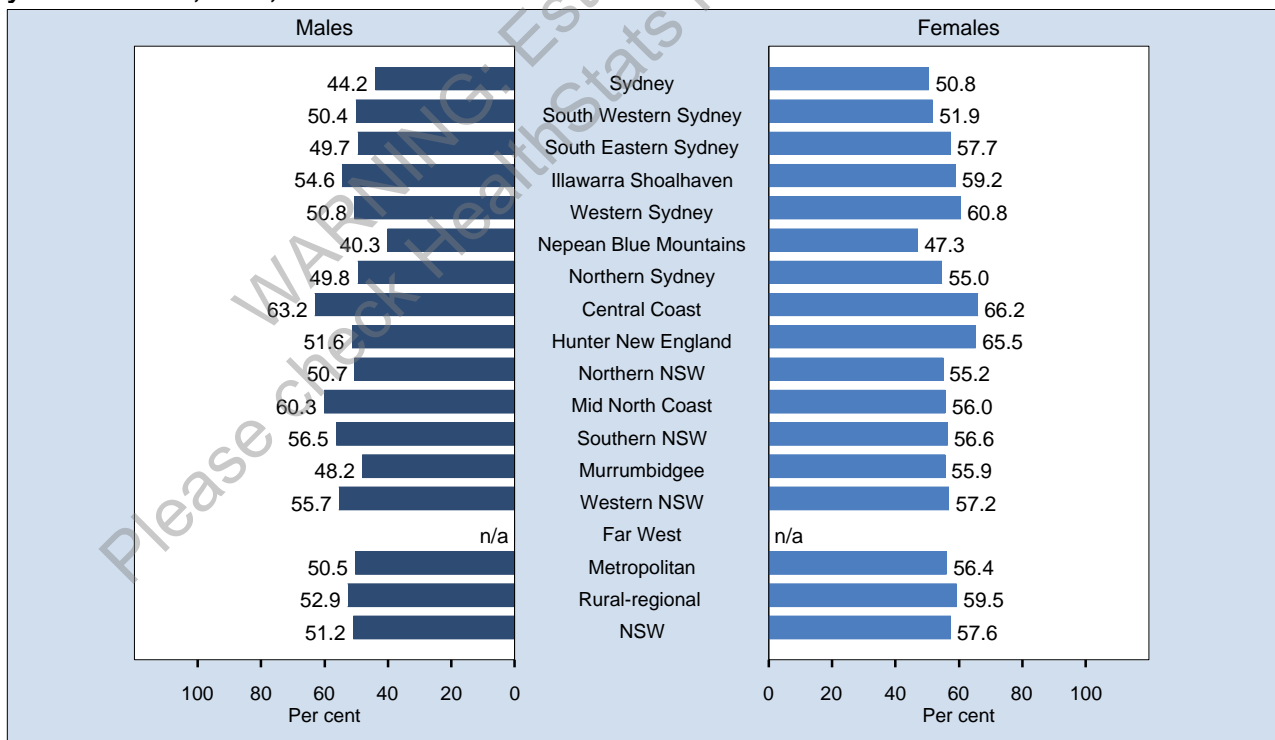
Vaccinated against pneumococcal disease in the last 5 years by socioeconomic disadvantage, adults aged 65 years and over, NSW, 2010



Note: Estimates are based on 3,342 respondents in NSW. For this indicator 259 (7.19%) were not stated (Don't know or Refused) in NSW. The indicator includes those aged 65 years and over who have been immunised against pneumococcal disease in the last 5 years. The question used to define the indicator was: When were you last vaccinated or immunised against pneumonia?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

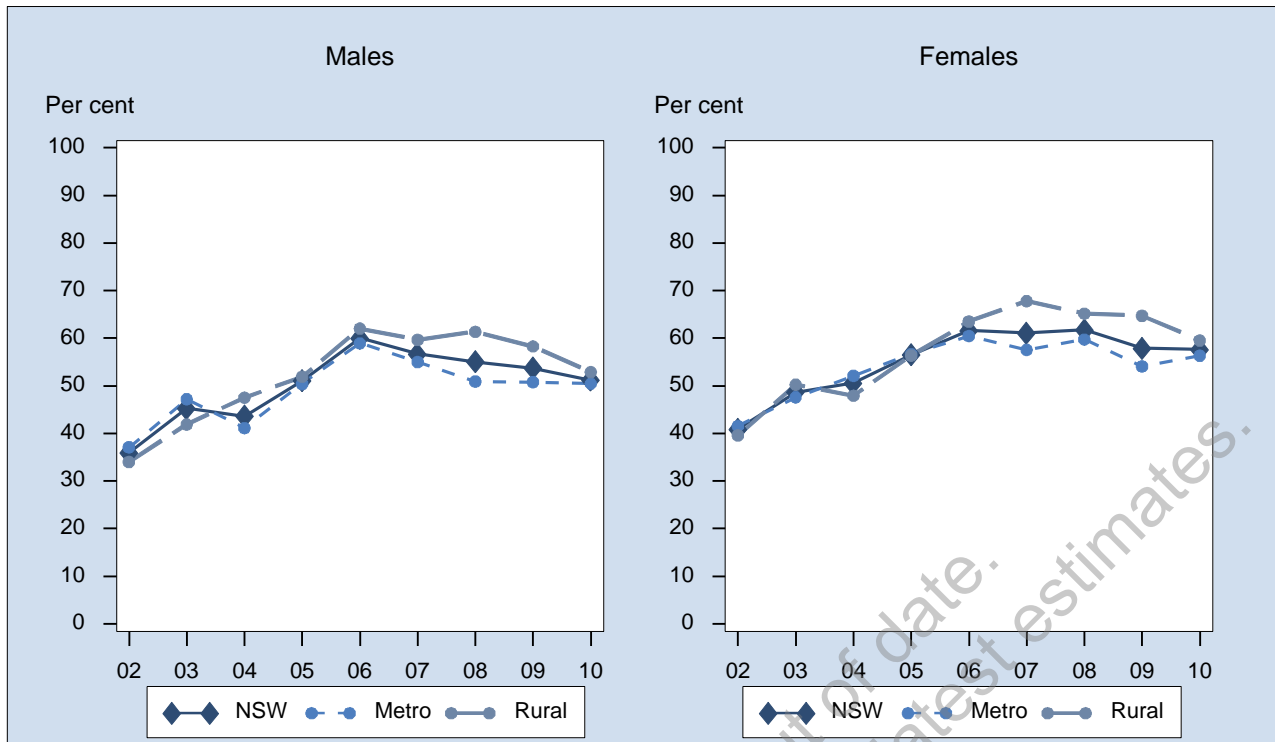
Vaccinated against pneumococcal disease in the last 5 years by local health district, adults aged 65 years and over, NSW, 2010



Note: Estimates are based on 3,342 respondents in NSW. For this indicator 259 (7.19%) were not stated (Don't know or Refused) in NSW. The indicator includes those aged 65 years and over who have been immunised against pneumococcal disease in the last 5 years. The question used to define the indicator was: When were you last vaccinated or immunised against pneumonia? NSW total includes the 15 LHDs and Albury (Victoria in-reach).

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Vaccinated against pneumococcal disease in the last 5 years by year, adults aged 65 years and over, NSW, 2002-2010



Note: Estimates are based on the following numbers of respondents for NSW: 2002 (3,324), 2003 (3,497), 2004 (2,614), 2005 (3,303), 2006 (2,315), 2007 (2,234), 2008 (2,588), 2009 (3,324), 2010 (3,342). The indicator includes those aged 65 years and over who have been immunised against pneumococcal disease in the last 5 years. The question used to define the indicator was: When were you last vaccinated or immunised against pneumonia?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

WARNING: Estimates are for date. Please check HealthStats NSW for latest estimates.

Nutrition

Introduction

The New South Wales Population Health Survey includes a dietary questionnaire on usual consumption of fruit, vegetables, breads, cereals, red meat, and usual consumption of foods high in fat, salt, and sugar.[1] Several of these questions were validated using the 1995 National Nutrition Survey and the Tasmanian Dietary Key Indicators Study. The validated questions were found to be reliable for relative ranking of intake between respondents but not for measuring a respondent's number of serves; however, they are still useful for ongoing comparative monitoring.[2]

The Dietary Guidelines for Australian Adults, which are based on the best available scientific evidence, stress the importance of eating plenty of fruit and vegetables.[3] The *Go for 2 & 5* fruit and vegetable campaign website provides information on why adults should eat at least 2 serves of fruit and 5 serves of vegetables each day, to maintain good health, and to help maintain a healthy weight.[4]

The Dietary Guidelines recommends serves of cereals (including breads, rice, pasta, and noodles) based on age, sex, and individual circumstances. For ease of respondent recall, the National Food and Nutrition Monitoring and Surveillance Project recommends breaking the cereals category into sub-categories: that is, collecting the frequency of consuming breads, cooked cereals, and breakfast cereals.[3] Thus the National Food and Nutrition Monitoring and Surveillance Project recommends comparing those who consume bread daily or more; rice, pasta, noodles, or other cooked cereals daily or more; and breakfast cereals 2 or more times a week, with those who do not.

The Dietary Guidelines also recommends adults limit their saturated fat, moderate their total fat intake, and choose foods that are low in salt, without making any specific recommendations. However the National Food and Nutrition Monitoring and Surveillance Project recommends monitoring the percentage of the population that rarely or never eats fried potatoes, rarely or never eats salty snacks, and consumes processed meat products less than 3 times a week.[3] These recommendations are reflected in this report.

Results

Fruit consumption

In 2010, 5.9 per cent of adults aged 16 years and over consumed no fruit a day, 9.6 per cent consumed less than 1 serve a day, 28.1 per cent consumed 1 serve a day, 34.4 per cent consumed 2 serves a day, 14.1 per cent consumed 3 serves a day, and 7.8 per cent consumed more than 3 serves a day. Therefore, 56.4 per cent of adults consumed 2 or more serves of fruit a day.

- A significantly lower proportion of males (53.1 per cent) consumed 2 or more serves of fruit a day, compared with females (59.5 per cent).
- Among males, a significantly higher proportion of those aged 65-74 years (58.4 per cent) and 75 years and over (62.0 per cent), and a significantly lower proportion of those aged 45-54 years (48.8 per cent), consumed 2 or more serves of fruit a day, compared with the overall adult male population.
- Among females, a significantly higher proportion of those aged 55-64 years (65.0 per cent), 65-74 years (67.0 per cent), and 75 years and over (65.3 per cent), and a significantly lower proportion of those aged 25-34 years (51.0 per cent), consumed 2 or more serves of fruit a day, compared with the overall adult female population.
- A significantly higher proportion of adults in the first or least disadvantaged quintile (61.0 per cent), and a significantly lower proportion of adults in the fourth quintile (53.7 per cent), consumed 2 or more serves of fruit a day, compared with the overall adult population.
- There was no significant difference between metropolitan and rural-regional health districts.
- A significantly lower proportion of adults in Murrumbidgee (48.8 per cent) and Western NSW (51.0 per cent) consumed 2 or more serves of fruit a day, compared with the overall adult population.

Since 1997, there has been a significant increase in the proportion of adults aged 16 years and over who consumed 2 or more serves of fruit a day (46.1 per cent to 56.4 per cent). The increase has been significant in males and females, and in metropolitan and rural-regional health districts.

Vegetable consumption

In 2010, 0.9 per cent of adults aged 16 years and over consumed no vegetables a day, 5.2 per cent consumed less than 1 serve a day, 24.3 per cent consumed 1 serve a day, 26.6 per cent consumed 2 serves a day, 20.6 per cent consumed 3 serves a day, 12.8 per cent consumed 4 serves a day, 7.0 per cent consumed 5 serves a day, and 2.5 per cent consumed more than 5 serves a day. Therefore, only 9.5 per cent of adults consumed 5 or more serves of vegetables a day.

- A significantly lower proportion of males (6.9 per cent) consumed 5 or more serves of vegetables a day, compared with females (12.0 per cent).
- Among males, a significantly higher proportion of those aged 55-64 years (9.2 per cent) and 65-74 years (13.0 per cent), and a significantly lower proportion of those aged 25-34 years (3.3 per cent), consumed 5 or more serves of vegetables a day, compared with the overall adult male population.
- Among females, a significantly higher proportion of those aged 55-64 years (16.7 per cent) and 65-74 years (17.9 per cent), and a significantly lower proportion of those aged 25-34 years (8.3 per cent), consumed 5 or more serves of vegetables a day, compared with the overall adult female population.
- There was no significant difference among quintiles of disadvantage, compared with the overall adult population.
- A significantly higher proportion of adults in rural-regional health districts (12.6 per cent) consumed 5 or more serves of vegetables a day, compared with metropolitan health districts (8.2 per cent).
- A significantly higher proportion of adults in Hunter New England (12.2 per cent), Northern NSW (13.4 per cent), Mid North Coast (13.9 per cent), and Southern NSW (14.3 per cent), and a significantly lower proportion of adults in Western Sydney (6.4 per cent) and Northern Sydney (7.5 per cent), consumed 5 or more serves of vegetables a day, compared with the overall adult population.

Since 1997, there has been no significant change in the proportion of adults aged 16 years and over who consumed 5 or more serves of vegetables a day; however, there has been a significant increase in females (9.7 per cent to 12.0 per cent) and in rural-regional health districts (10.6 per cent to 12.6 per cent).

Red meat consumption

In 2010, 5.8 per cent of adults aged 16 years and over rarely or never consumed red meat (beef, lamb, liver, and kidney but not pork or ham), 4.0 per cent consumed red meat less than once a week, 10.3 per cent consumed red meat once a week, 22.1 per cent consumed red meat twice a week, 26.6 per cent consumed red meat 3 times a week, 15.2 per cent consumed red meat 4 times a week, 6.2 per cent consumed red meat 5 times a week, and 9.9 per cent consumed red meat more than 5 times a week.

Bread consumption

In 2010, 4.9 per cent of adults aged 16 years and over rarely or never consumed bread, 22.6 per cent consumed bread less than once a day, 48.0 per cent once a day, 19.9 per cent consumed bread twice a day, 3.7 per cent consumed bread 3 times a day, 0.4 per cent consumed bread 4 times a day, 0.1 per cent consumed bread 5 times a day, and 0.3 per cent consumed bread more than 5 times a day. Therefore, 72.5 per cent of adults consumed bread 1 or times a day.

Pasta, rice, noodles, or other cooked cereal consumption

In 2010, 6.9 per cent of adults aged 16 years and over rarely or never consumed pasta, rice, noodles, or other cooked cereals; 22.2 per cent consumed pasta, rice, noodles, or other cooked cereals less than 2 times a week; 39.5 per cent consumed consumed pasta, rice, noodles, or other cooked cereals 2-3 times a week; 14.9 per cent consumed pasta, rice, noodles, or other cooked cereals 4-6 times a week; 11.7 per cent consumed pasta, rice, noodles, or other cooked cereals 7 times a week; and 4.7 per cent consumed pasta, rice, noodles, or other cooked cereals more than 7 times a week. Therefore, 16.4 per cent of adults consumed pasta, rice, noodles, or other cooked cereals 7 or more times a week.

Breakfast cereal consumption

In 2010, 26.5 per cent of adults aged 16 years and over rarely or never consumed breakfast cereal, 7.5 per cent consumed breakfast cereal less than 2 times a week, 14.6 per cent consumed breakfast cereal 2-3 times a week, 7.4 per cent consumed breakfast cereal 4-6 times a week, 43.4 per cent consumed breakfast cereal 7 times a week, and 0.6 per cent consumed breakfast cereal more than 7 times a week. Therefore, 66.1 per cent of adults consumed breakfast cereals 2 or more times a week.

Fried potato consumption

In 2010, 29.3 per cent of adults aged 16 years and over rarely or never consumed fried potatoes (hot chips, french fries, wedges, or fried potatoes), 29.5 per cent consumed fried potatoes less than once a week, 25.2 per cent consumed fried potatoes once a week, 9.5 per cent consumed fried potatoes twice a week, 3.6 per cent consumed fried potatoes 3 times a week, 1.1 per cent consumed fried potatoes 4 times a week, 0.6 per cent consumed fried potatoes 5 times a week, and 1.2 per cent consumed fried potatoes more than 5 times a week.

Salty snack consumption

In 2010, 44.9 per cent of adults aged 16 years and over rarely or never consumed potato crisps or other salty snacks (such as Twisties or corn chips), 23.1 per cent consumed potato crisps or other salty snacks less than once a week, 16.9 per cent consumed potato crisps or other salty snacks once a week, 7.4 per cent consumed potato crisps or other salty snacks twice a week, 3.0 per cent consumed potato crisps or other salty snacks 3 times a week, 1.3 per cent consumed potato crisps or other salty snacks 4 times a week, 0.8 per cent consumed potato crisps or other salty snacks 5 times a week, and 2.7 per cent consumed potato crisps or other salty snacks more than 5 times a week.

Processed meat consumption

In 2010, 22.3 per cent of adults aged 16 years and over rarely or never consumed processed meat products (sausages, frankfurts, devon, salami, meat pies, bacon, or ham), 15.1 per cent consumed processed meat products less than once a week, 24.1 per cent consumed processed meat products once a week, 17.4 per cent consumed processed meat products twice a week, 9.4 per cent consumed processed meat products 3 times a week, 3.9 per cent consumed processed meat products 4 times a week, 1.8 per cent consumed processed meat products 5 times a week, and 6.0 per cent consumed processed meat products more than 5 times a week. Therefore, 78.9 per cent of adults consumed processed meat products less than 3 times a week.

Takeway food consumption

In 2010, 39.0 per cent of adults aged 16 years and over rarely or never consumed takeway foods (such as burgers, pizza, chicken or chips from takeaway places), 31.9 per cent consumed takeway foods less than once a week, 18.3 per cent consumed takeway foods once a week, and 10.8 per cent consumed takeway foods twice a week or more.

Type of milk usually consumed

In 2010, 5.2 per cent of adults aged 16 years and over did not consume milk, 44.9 usually consumed whole milk, 32.9 per cent usually consumed low or reduced fat milk, and 16.7 per cent usually consumed skim milk.

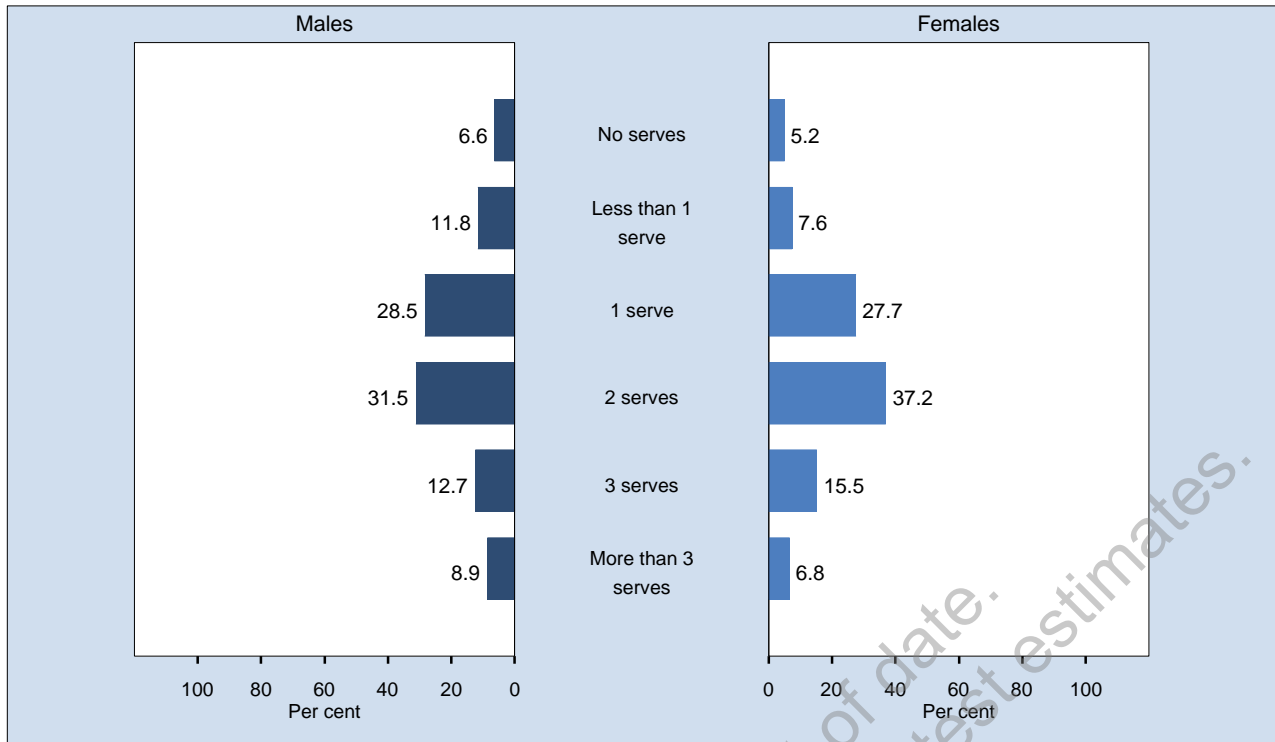
Soft drink, cordial, or sports drink consumption

In 2010, 49.6 per cent of adults aged 16 years and over did not consume soft drinks or cordials or sports drinks, 5.6 per cent consumed 1 cup a week, 6.7 per cent consumed 2 cups a week, 8.4 per cent consumed 3-5 cups a week, 15.1 per cent consumed 6-10 cups a week, and 14.5 per cent consumed 11 or more cups a week.

References

1. Marks G, Webb K, Rutishauser I, and Riley M for the National Food and Nutrition Monitoring and Surveillance Project. *Monitoring food habits in the Australian population using short questions*. Canberra: Australian Food and Nutrition Monitoring Unit and Commonwealth Department of Health and Aged Care, 2001.
2. Rutishauser IHE, Webb K, Abraham B, Allsop R. *Evaluation of short dietary questions from the 1995 National Nutrition Survey*. Canberra: Australian Food and Nutrition Monitoring Unit, Commonwealth Department of Health and Aged Care, 2001.
3. National Health and Medical Research Council. *Dietary Guidelines for Australian Adults*. Canberra: NHMRC, 2003.
4. *Go for 2 & 5* fruit and vegetable campaign website at www.gofor2and5.com.au (accessed 4 March 2011).

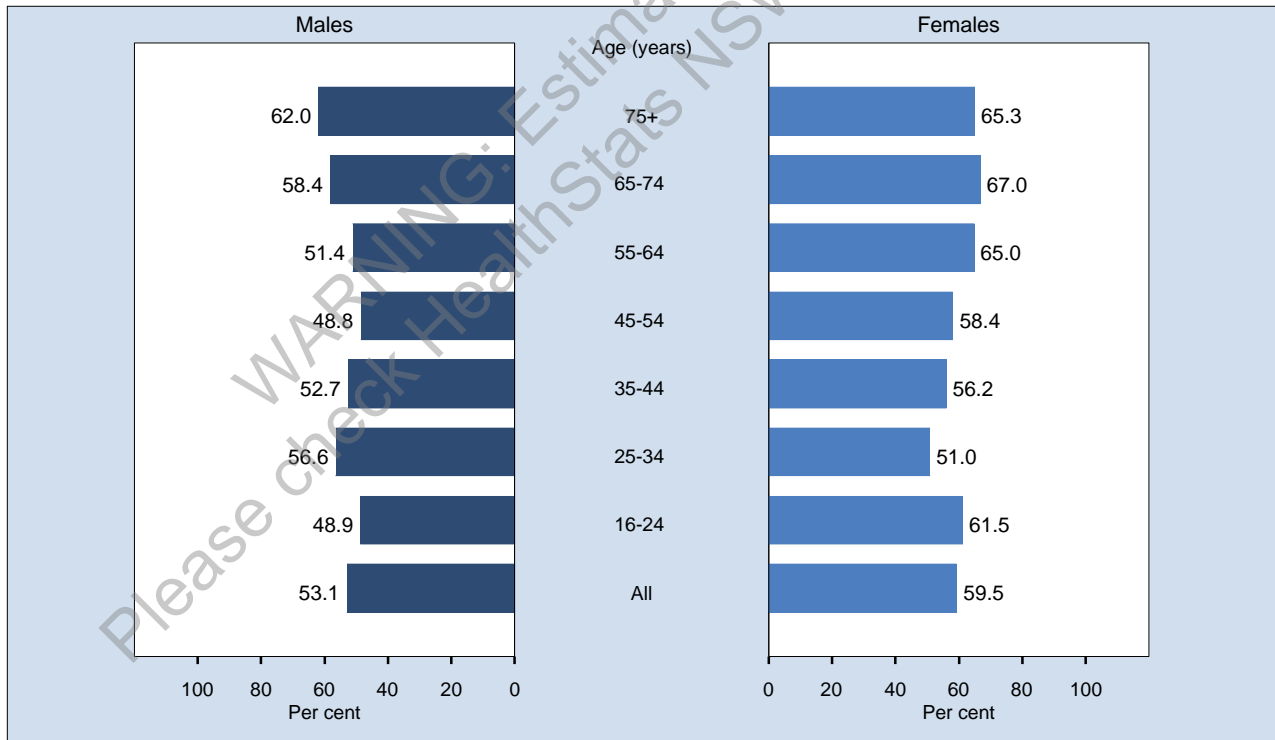
Daily number of serves of fruit, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 10,094 respondents in NSW. For this indicator 151 (1.47%) were not stated (Don't know or Refused) in NSW. The question used was: How many serves of fruit do you usually eat each day? One serve is equivalent to 1 medium piece or 2 small pieces of fruit.

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

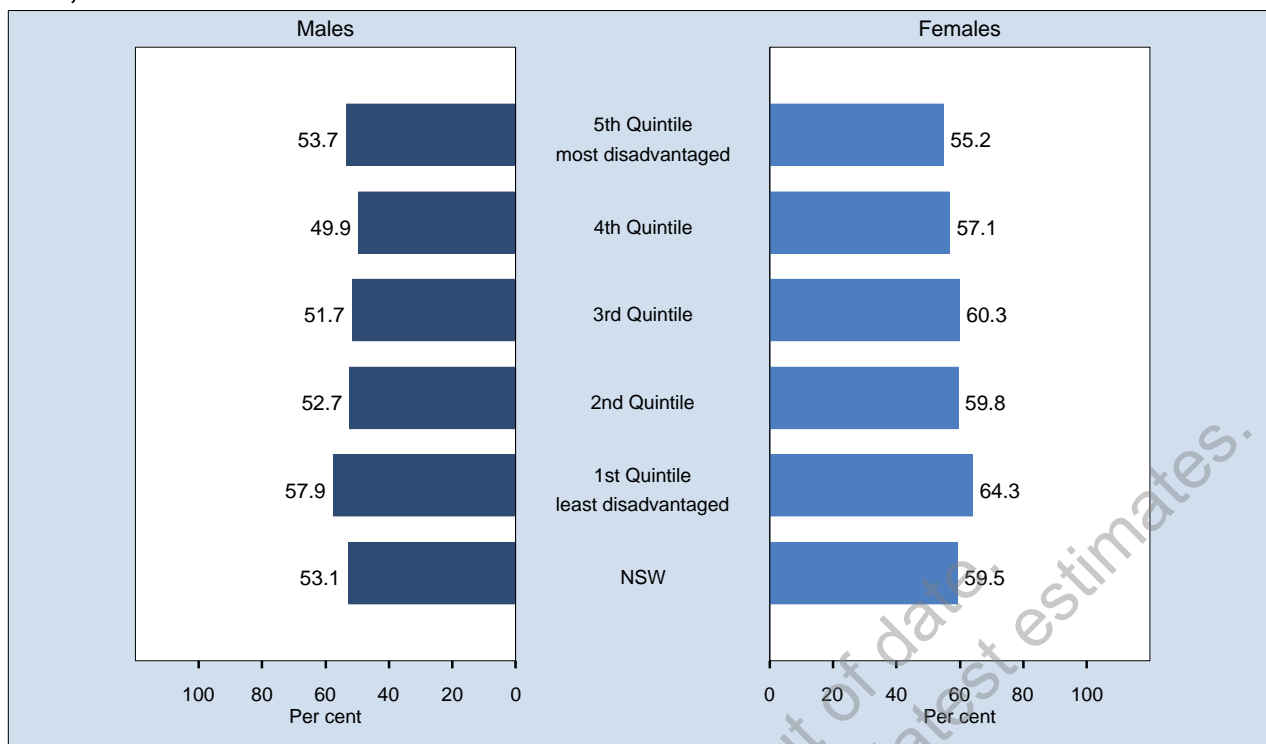
Two or more serves of fruit a day by age, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 10,094 respondents in NSW. For this indicator 151 (1.47%) were not stated (Don't know or Refused) in NSW. The indicator includes those who consumed 2 or more serves of fruit a day. The recommended fruit intake is at least 2 serves a day for persons aged 19 years and over, depending on their overall diet. For simplification, this recommendation is applied to 16-18 year olds. One serve is equivalent to 1 medium piece or 2 small pieces of fruit. The question used to define the indicator was: How many serves of fruit do you usually eat each day?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

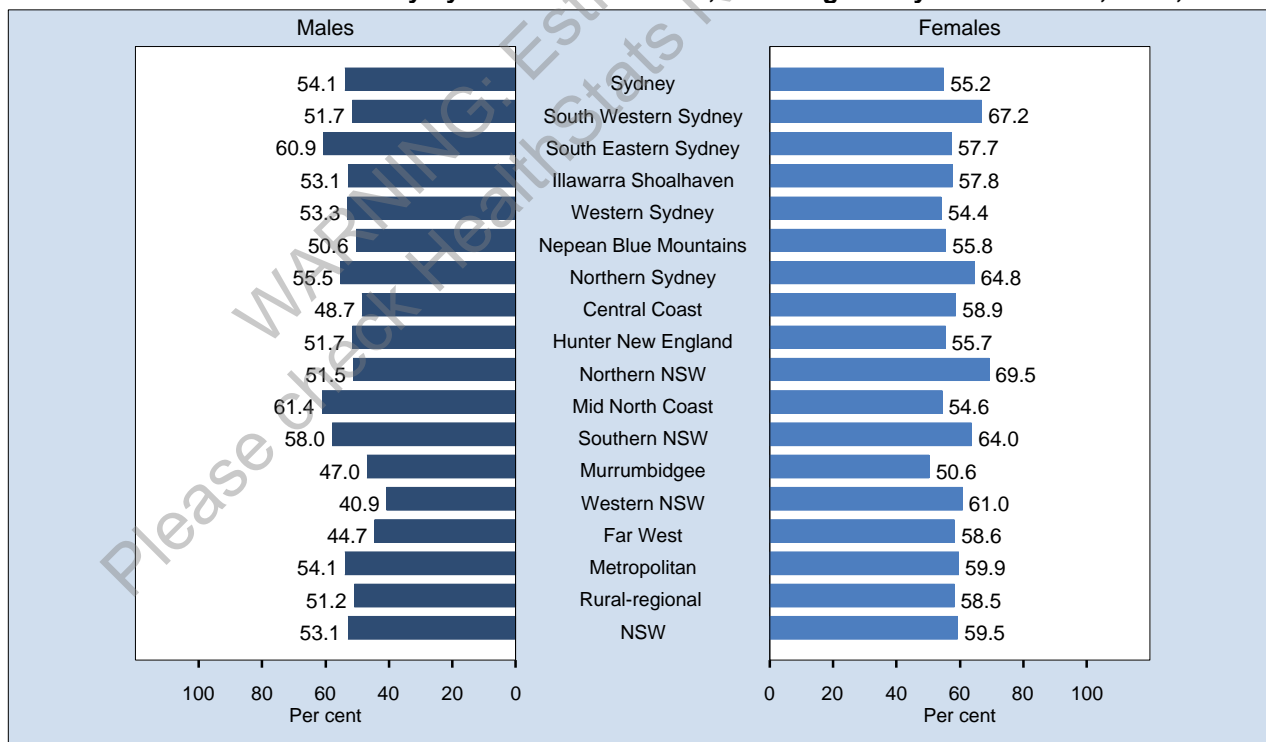
Two or more serves of fruit a day by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 10,094 respondents in NSW. For this indicator 151 (1.47%) were not stated (Don't know or Refused) in NSW. The indicator includes those who consumed 2 or more serves of fruit a day. The recommended fruit intake is at least 2 serves a day for persons aged 19 years and over, depending on their overall diet. For simplification, this recommendation is applied to 16-18 year olds. One serve is equivalent to 1 medium piece or 2 small pieces of fruit. The question used to define the indicator was: How many serves of fruit do you usually eat each day?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

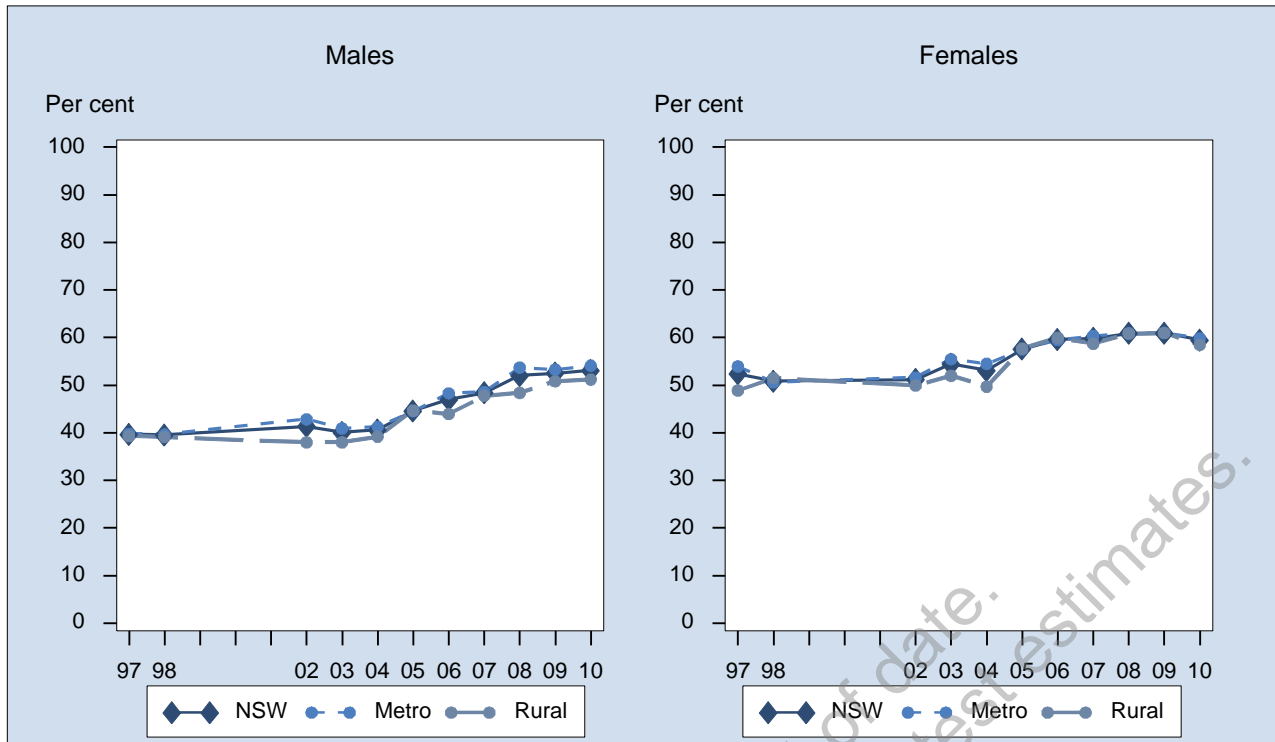
Two or more serves of fruit a day by local health district, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 10,094 respondents in NSW. For this indicator 151 (1.47%) were not stated (Don't know or Refused) in NSW. The indicator includes those who consumed 2 or more serves of fruit a day. The recommended fruit intake is at least 2 serves a day for persons aged 19 years and over, depending on their overall diet. For simplification, this recommendation is applied to 16-18 year olds. One serve is equivalent to 1 medium piece or 2 small pieces of fruit. The question used to define the indicator was: How many serves of fruit do you usually eat each day? NSW total includes the 15 LHDs and Albury (Victoria in-reach).

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

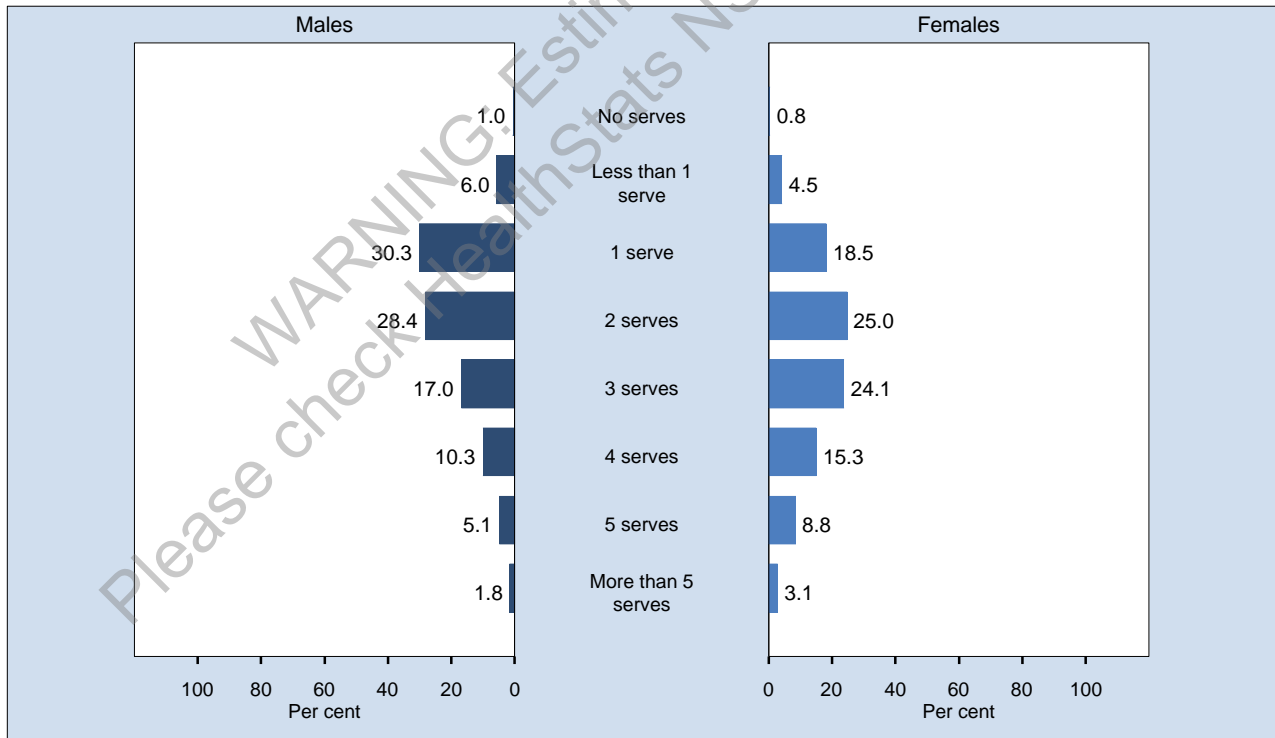
Two or more serves of fruit a day by year, adults aged 16 years and over, NSW, 1997-2010



Note: Estimates are based on the following numbers of respondents for NSW: 1997 (17,481), 1998 (17,393), 2002 (12,533), 2003 (12,945), 2004 (9,726), 2005 (11,426), 2006 (7,887), 2007 (7,332), 2008 (8,472), 2009 (10,614), 2010 (10,094). The indicator includes those who consumed 2 or more serves of fruit a day. The recommended fruit intake is at least 2 serves a day for persons aged 19 years and over, depending on their overall diet. For simplification, this recommendation is applied to 16-18 year olds. One serve is equivalent to 1 medium piece or 2 small pieces of fruit. The question used to define the indicator was: How many serves of fruit do you usually eat each day?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

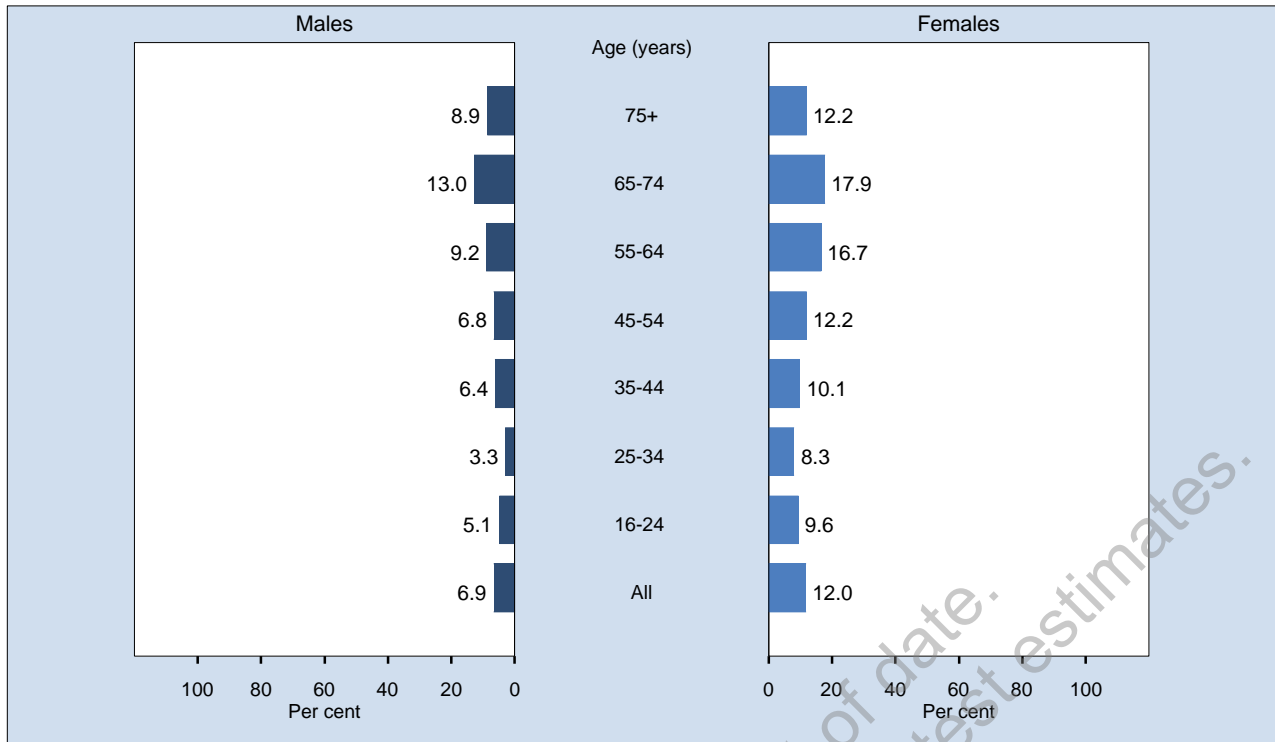
Daily number of serves of vegetables, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 9,952 respondents in NSW. For this indicator 293 (2.86%) were not stated (Don't know or Refused) in NSW. The question used was: How many serves of vegetables do you usually eat each day? One serve is equivalent to 1/2 cup of cooked vegetables or 1 cup of salad vegetables.

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

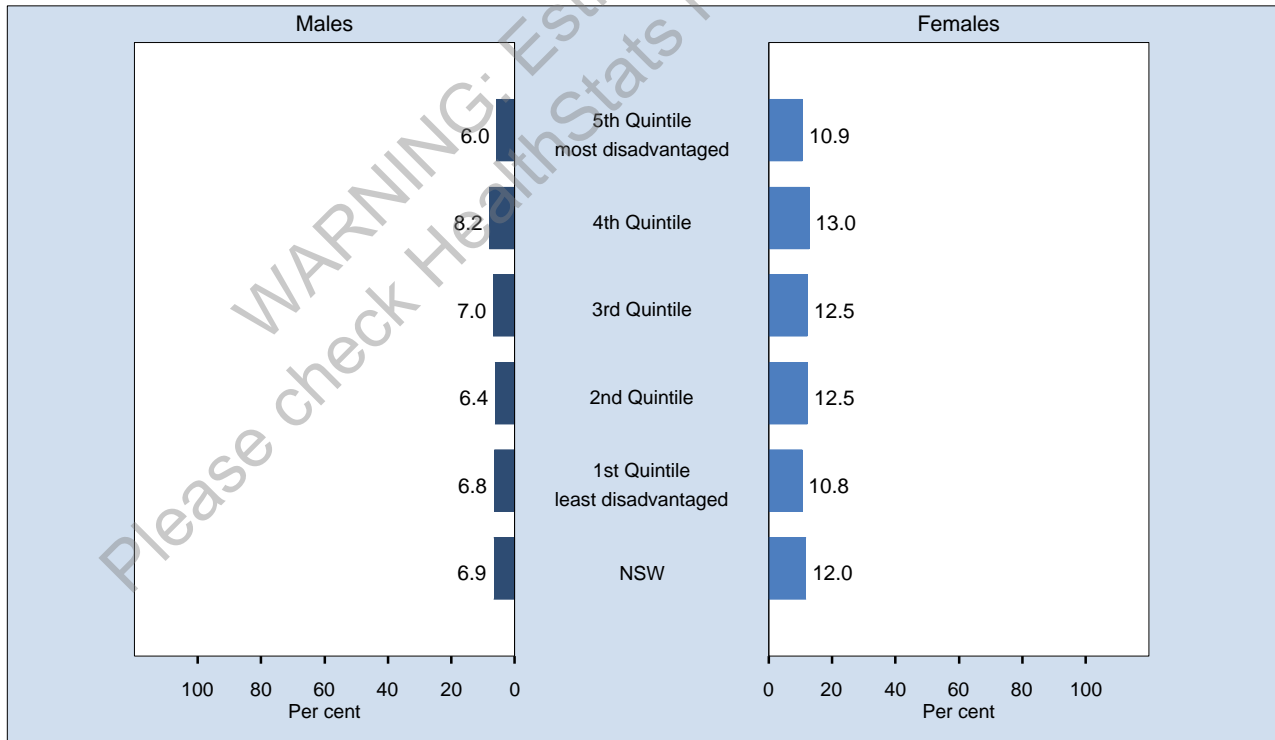
Five or more serves of vegetables a day by age, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 9,952 respondents in NSW. For this indicator 293 (2.86%) were not stated (Don't know or Refused) in NSW. The indicator includes those who consumed 5 or more serves of vegetables a day. The recommended vegetable intake is at least 5 serves a day for persons aged 16 years and over, depending on their overall diet. One serve is equivalent to 1/2 cup of cooked vegetables or 1 cup of salad vegetables. The question used to define the indicator was: How many serves of vegetables do you usually eat each day?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

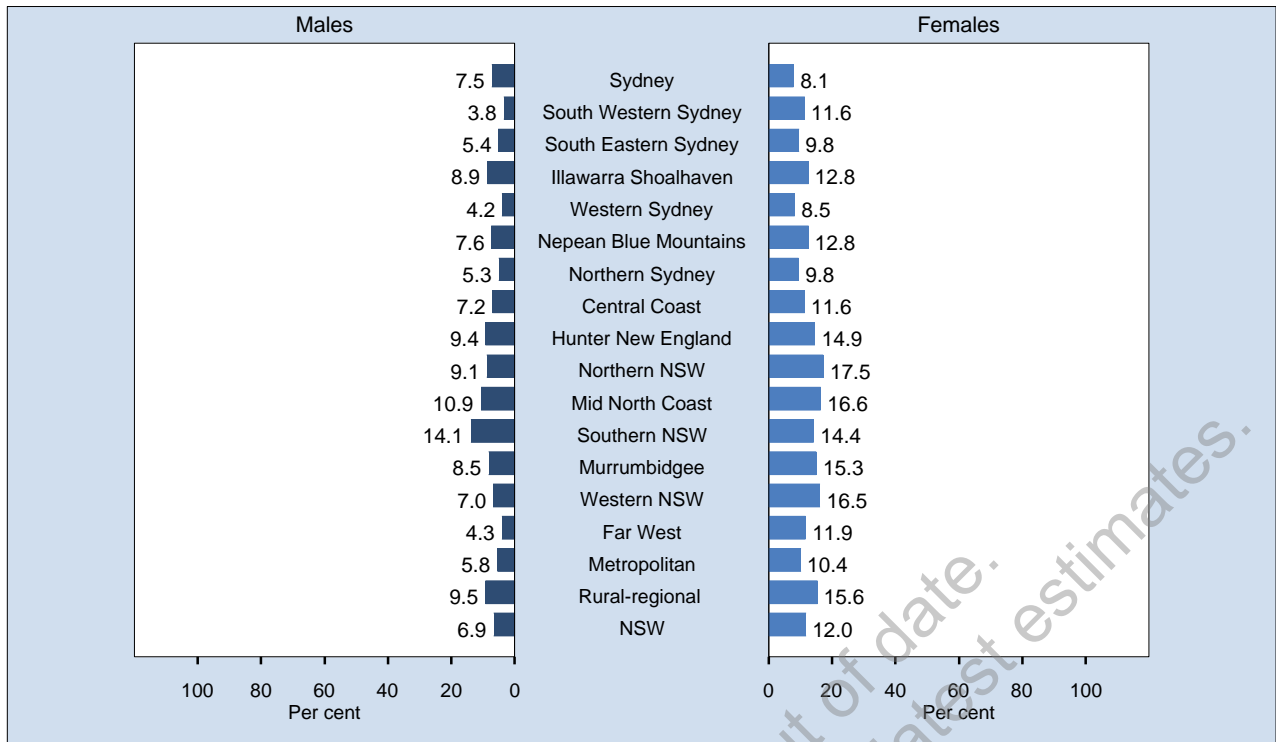
Five or more serves of vegetables a day by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 9,952 respondents in NSW. For this indicator 293 (2.86%) were not stated (Don't know or Refused) in NSW. The indicator includes those who consumed 5 or more serves of vegetables a day. The recommended vegetable intake is at least 5 serves a day for persons aged 16 years and over, depending on their overall diet. One serve is equivalent to 1/2 cup of cooked vegetables or 1 cup of salad vegetables. The question used to define the indicator was: How many serves of vegetables do you usually eat each day?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

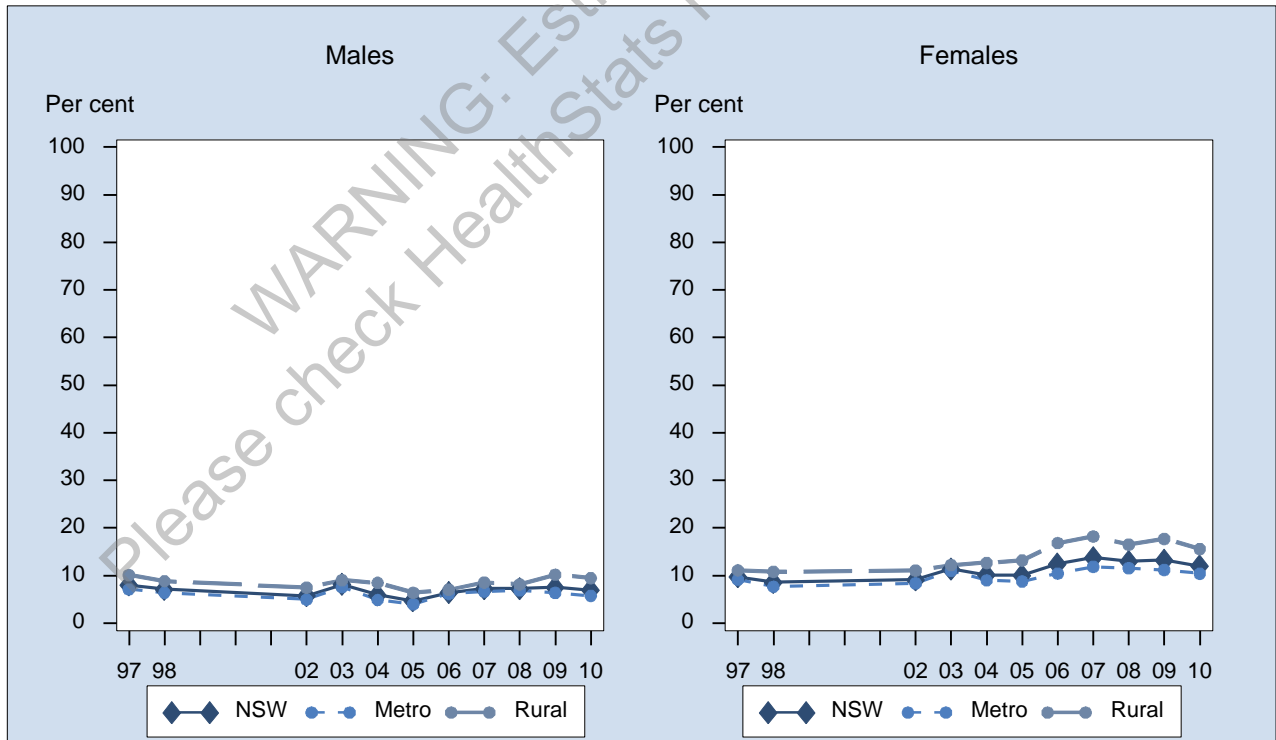
Five or more serves of vegetables a day by local health district, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 9,952 respondents in NSW. For this indicator 293 (2.86%) were not stated (Don't know or Refused) in NSW. The indicator includes those who consumed 5 or more serves of vegetables a day. The recommended vegetable intake is at least 5 serves a day for persons aged 16 years and over, depending on their overall diet. One serve is equivalent to 1/2 cup of cooked vegetables or 1 cup of salad vegetables. The question used to define the indicator was: How many serves of vegetables do you usually eat each day? NSW total includes the 15 LHDs and Albury (Victoria in-reach).

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

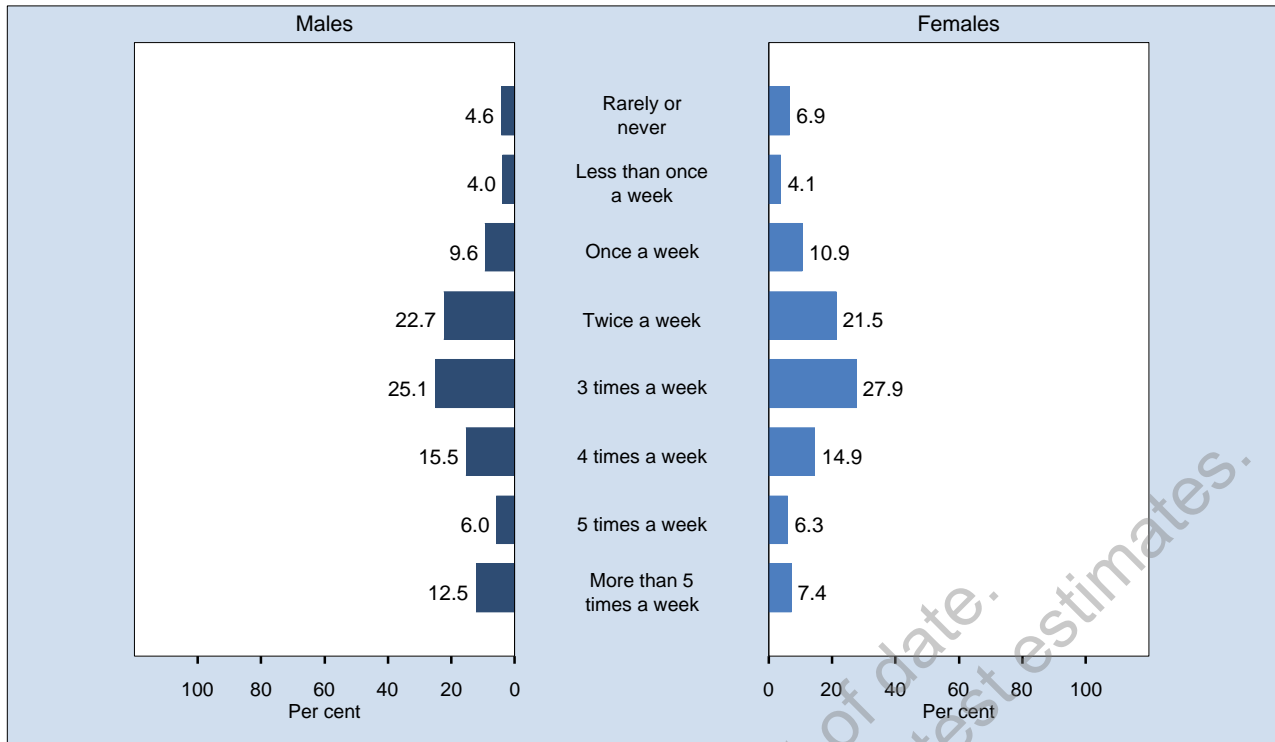
Five or more serves of vegetables a day by year, adults aged 16 years and over, NSW, 1997-2010



Note: Estimates are based on the following numbers of respondents for NSW: 1997 (17,455), 1998 (17,365), 2002 (12,485), 2003 (12,881), 2004 (9,681), 2005 (11,416), 2006 (7,849), 2007 (7,300), 2008 (8,419), 2009 (10,475), 2010 (9,952). The indicator includes those who consumed 5 or more serves of vegetables a day. The recommended vegetable intake is at least 5 serves a day for persons aged 16 years and over, depending on their overall diet. One serve is equivalent to 1/2 cup of cooked vegetables or 1 cup of salad vegetables. The question used to define the indicator was: How many serves of vegetables do you usually eat each day?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

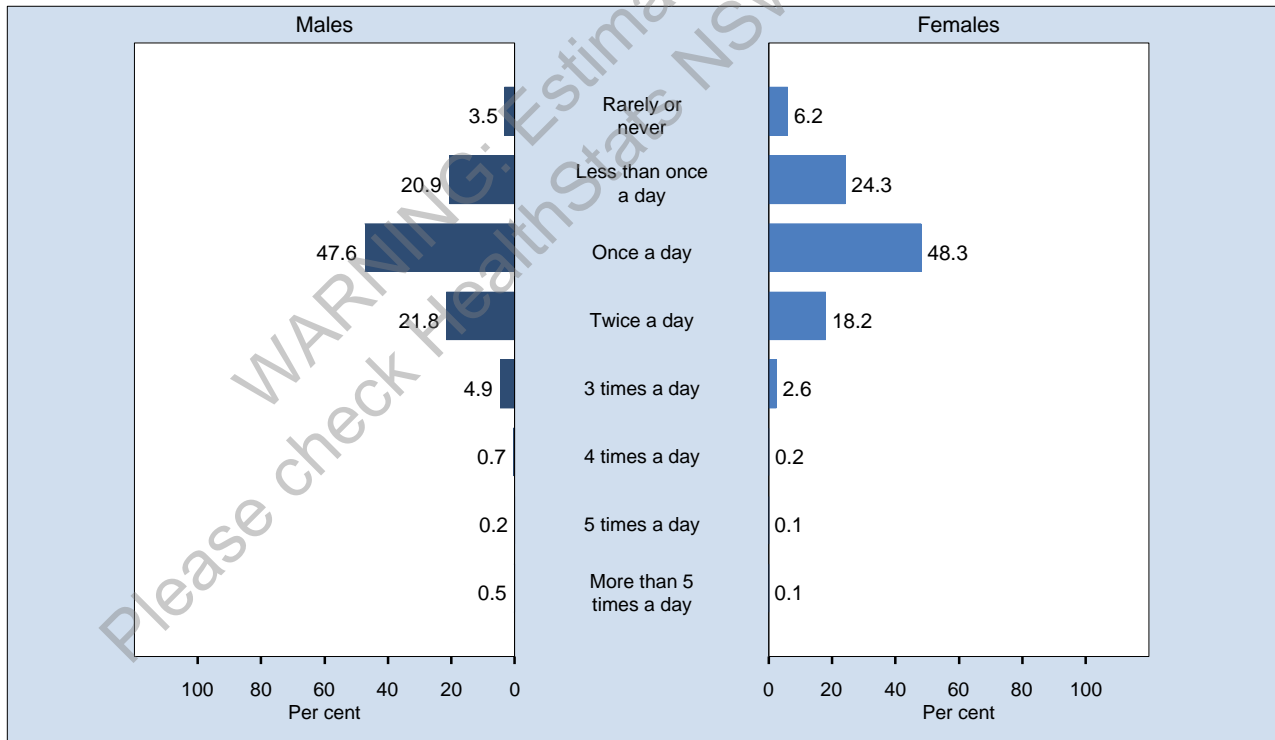
Frequency of consuming red meat, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 7,420 respondents in NSW. For this indicator 43 (0.58%) were not stated (Don't know or Refused) in NSW. The question used was: How often do you eat red meat such as beef, lamb, liver, and kidney but not pork or ham?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

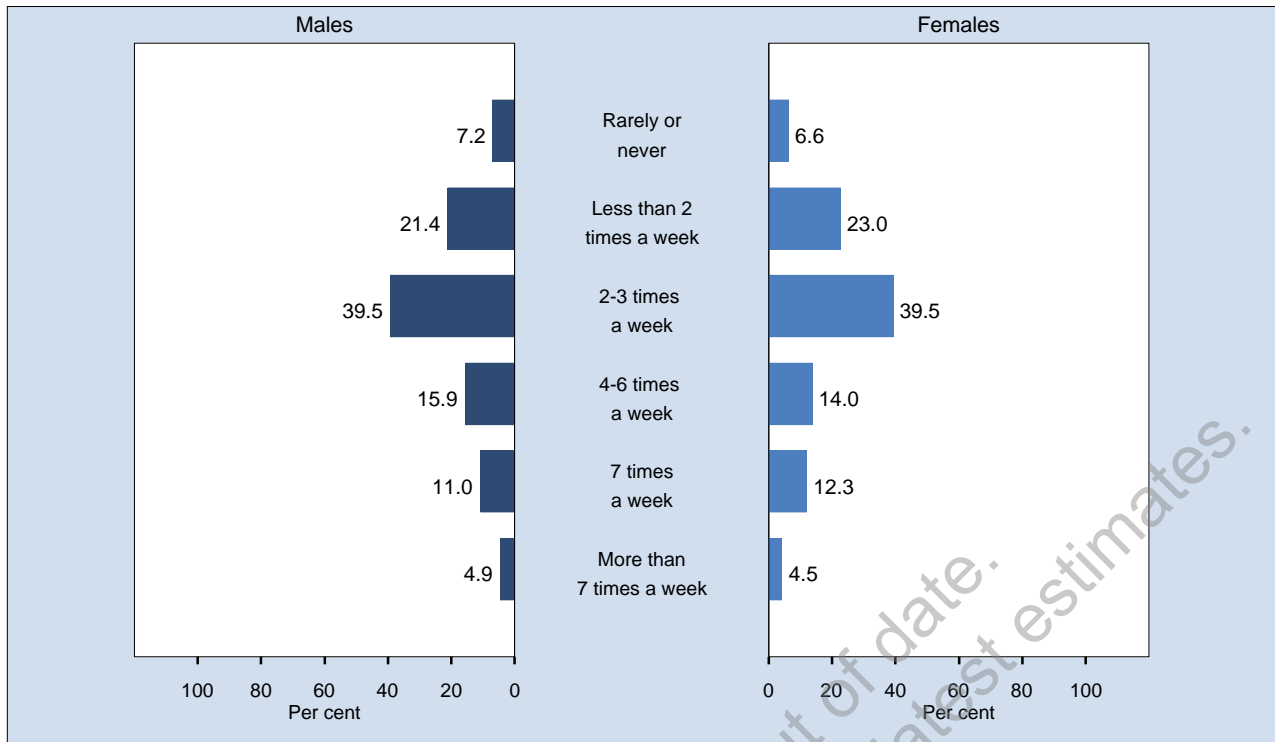
Frequency of consuming bread, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 7,417 respondents in NSW. For this indicator 37 (0.50%) were not stated (Don't know or Refused) in NSW. The question used was: How often do you usually eat bread?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

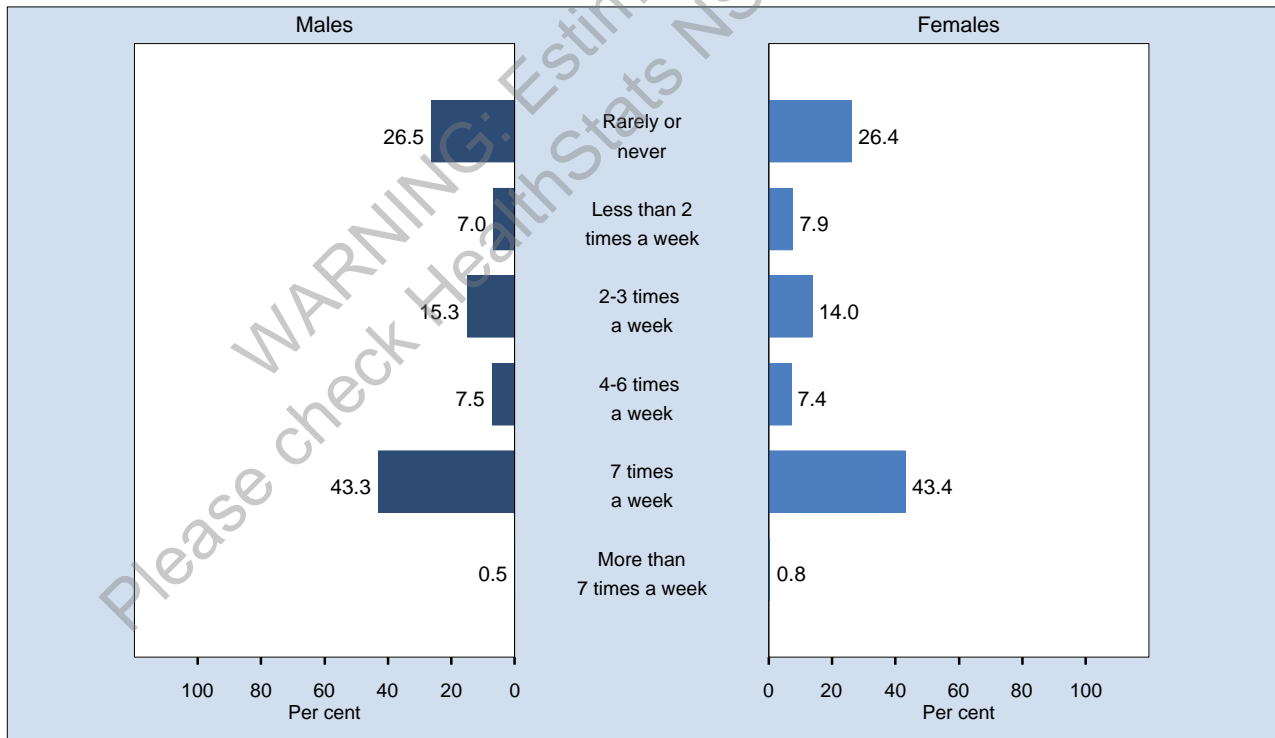
Frequency of consuming pasta, rice, noodles, or other cooked cereal, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 7,403 respondents in NSW. For this indicator 51 (0.68%) were not stated (Don't know or Refused) in NSW. The question used was: How often do you eat pasta, rice, noodles or other cooked cereals?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

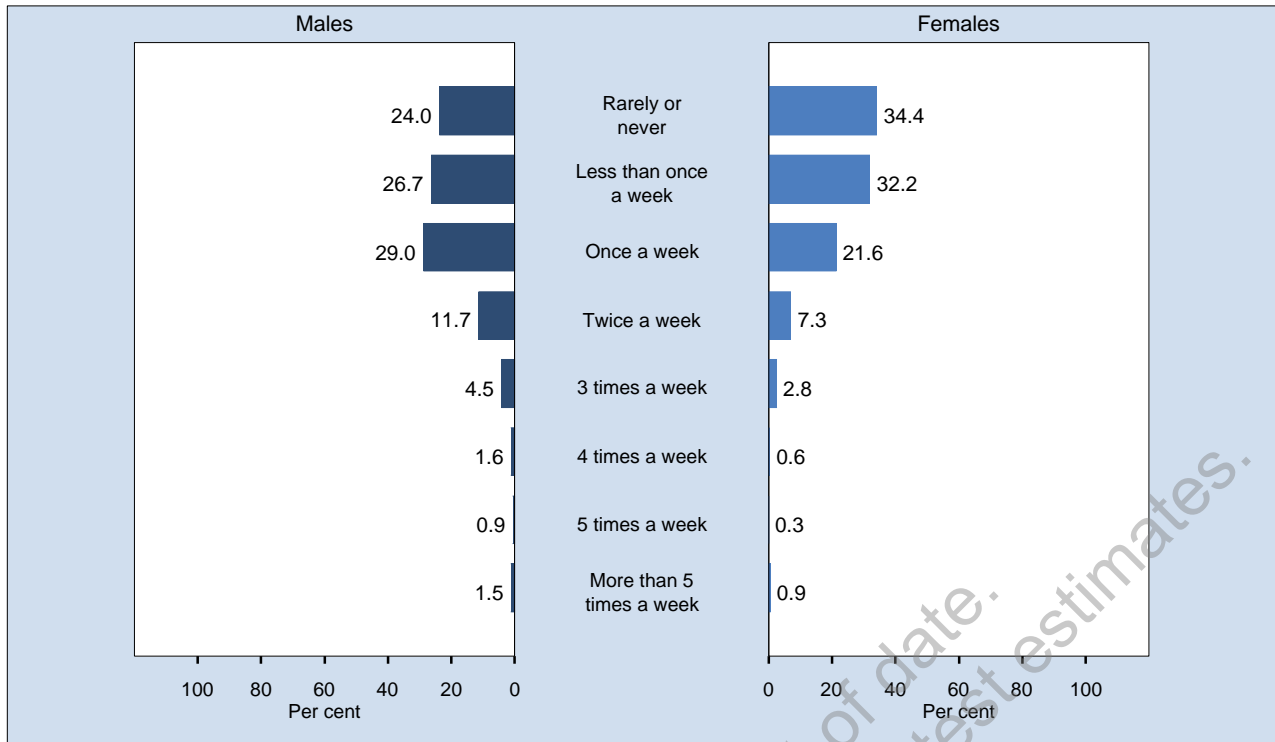
Frequency of consuming breakfast cereal, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 7,424 respondents in NSW. For this indicator 30 (0.40%) were not stated (Don't know or Refused) in NSW. The question used was: How often do you eat breakfast cereal?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

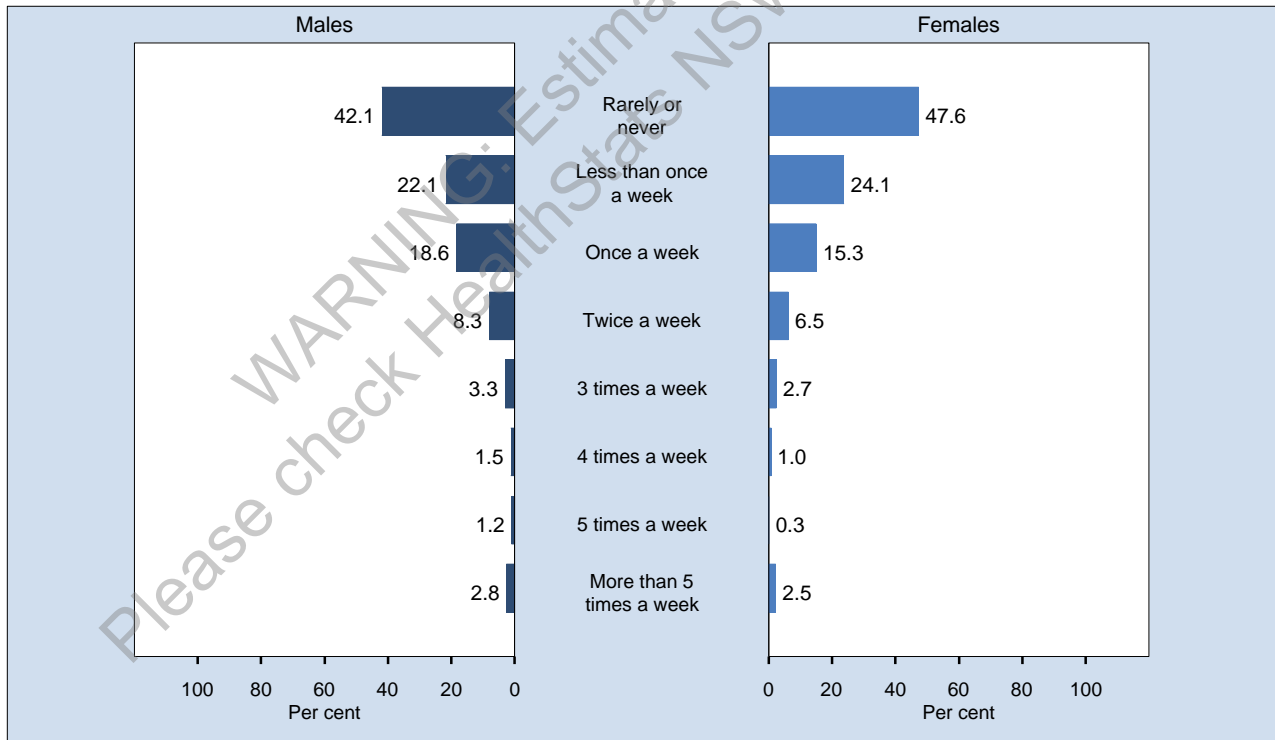
Frequency of consuming hot fried potatoes, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 7,423 respondents in NSW. For this indicator 31 (0.42%) were not stated (Don't know or Refused) in NSW. The question used was: How often do you eat hot chips, french fries, wedges or fried potatoes?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

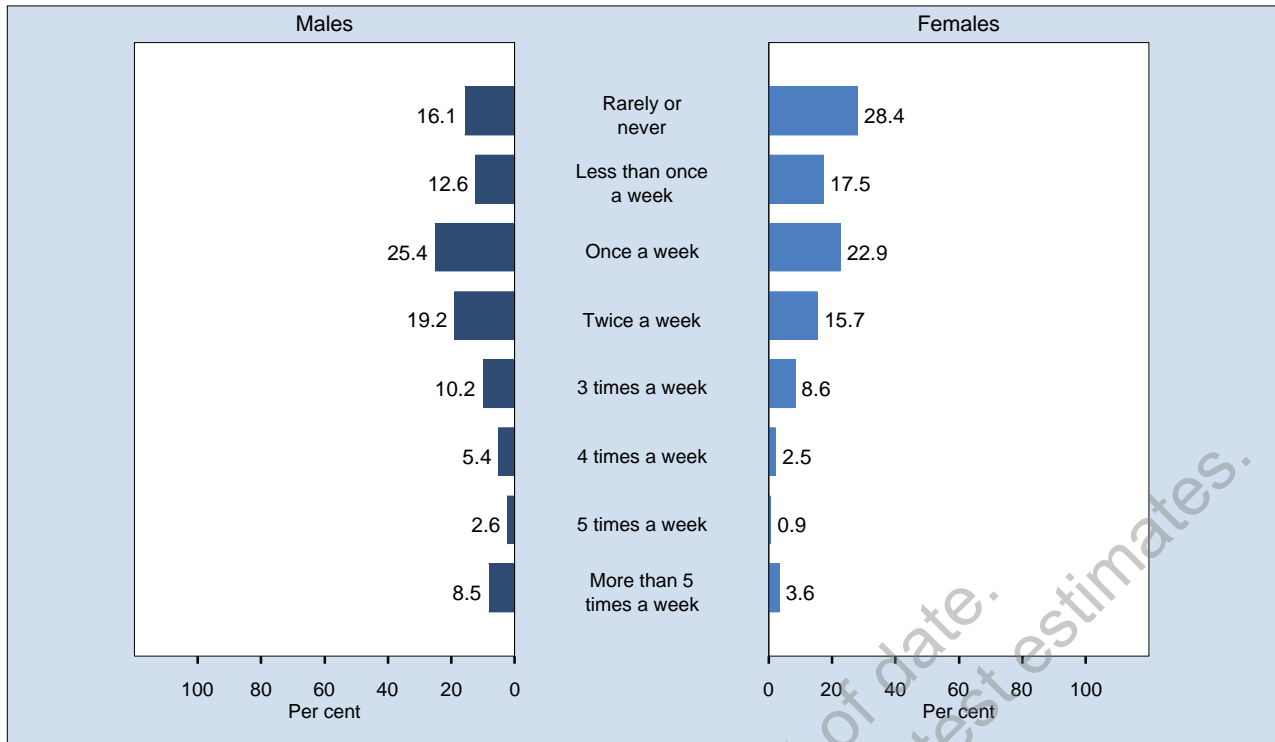
Frequency of consuming potato crisps or salty snacks, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 7,424 respondents in NSW. For this indicator 30 (0.40%) were not stated (Don't know or Refused) in NSW. The question used was: How often do you eat potato crisps or other salty snacks such as Twisties or corn chips?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

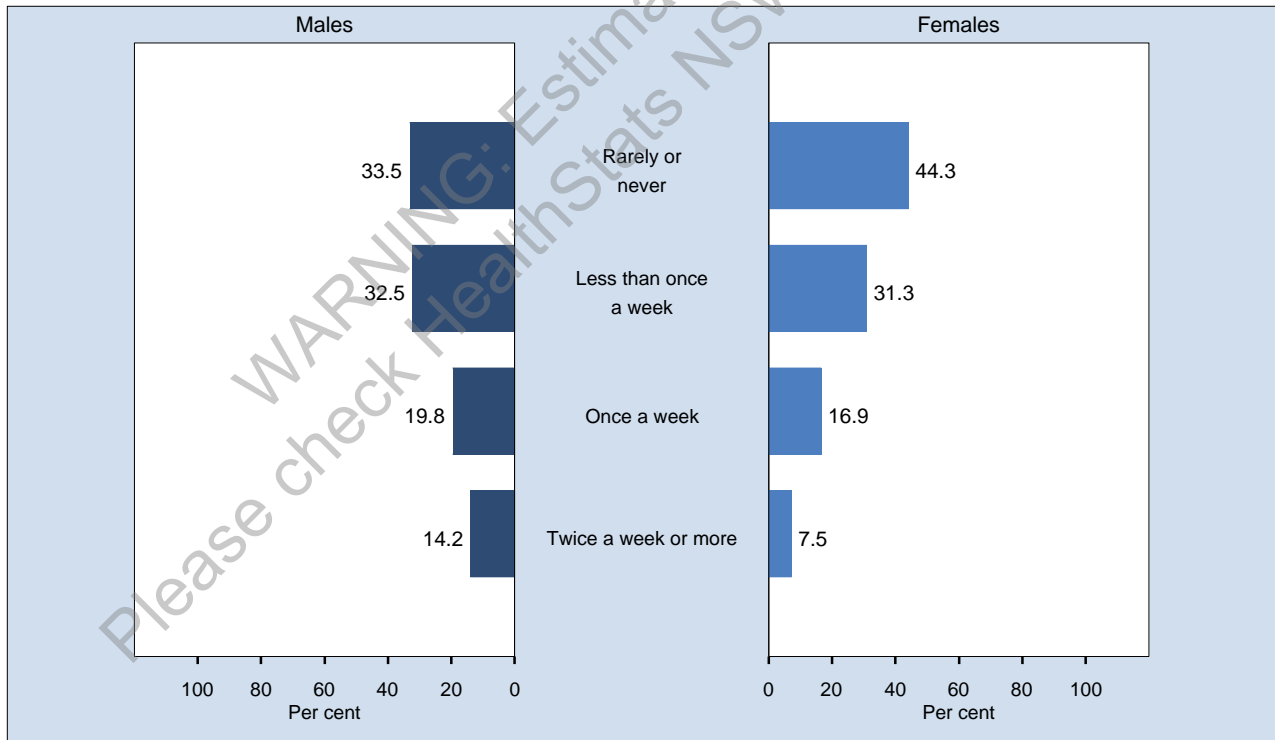
Frequency of consuming processed meat products, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 7,408 respondents in NSW. For this indicator 46 (0.62%) were not stated (Don't know or Refused) in NSW. The question used was: How often do you eat processed meat products such as sausages, frankfurts, devon, salami, meat pies, bacon or ham?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

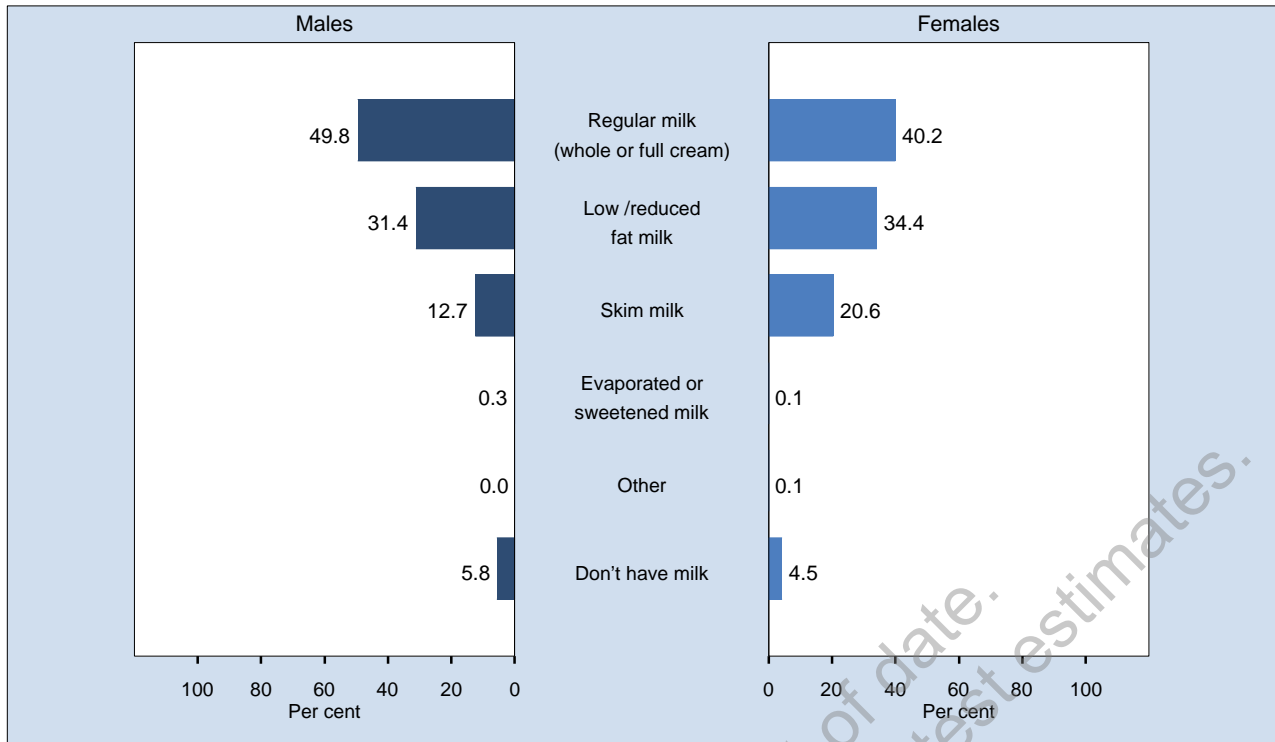
Frequency of consuming takeaway food, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 7,443 respondents in NSW. For this indicator 20 (0.27%) were not stated (Don't know or Refused) in NSW. The question used was: How often did you have meals or snacks such as burgers, pizza, chicken or chips from places like McDonalds, Hungry Jacks, Pizza Hut, KFC, Red Rooster, or local take-away places?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

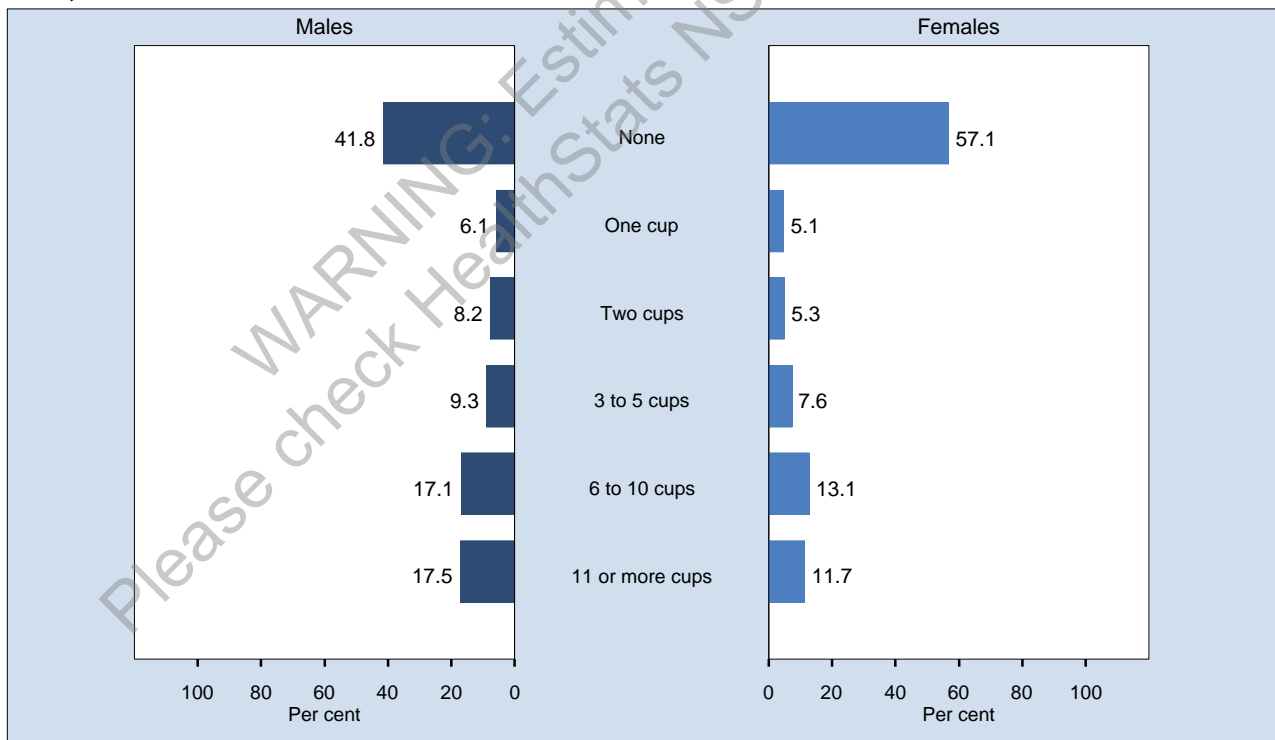
Type of milk usually consumed, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 10,204 respondents in NSW. For this indicator 41 (0.40%) were not stated (Don't know or Refused) in NSW. The question used was: What type of milk do you usually have?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Cups of soft drinks or cordials or sports drinks consumed a week, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 7,422 respondents in NSW. For this indicator 41 (0.55%) were not stated (Don't know or Refused) in NSW. The question used was: How many cups of soft drink, cordials or sports drink, such as lemonade or Gatorade, do you usually drink in a day?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Physical activity

Introduction

To maintain good health, the *National Physical Activity Guidelines for Australians, Choose Health: Be Active. A physical activity guide for older Australians*, and *Recommendations on physical activity for health for older Australians* all recommend at least 30 minutes of moderate activity on most and preferably all days of the week.[1-3]

In the New South Wales Population Health Survey, adequate physical activity is calculated from questions asked in the Active Australia Survey,[4] and is defined as undertaking physical activity for a total of at least 150 minutes per week over 5 separate occasions. The total minutes are calculated by adding minutes in the last week spent walking continuously for at least 10 minutes, minutes doing moderate physical activity, and minutes doing vigorous physical activity multiplied by 2.

Active transport includes non-motorised transport such as walking and cycling. It also includes public transport, which generally includes walking or cycling as part of the journey.[5-6] An employed adult's usual transport to work provides some indication of the extent to which they build physical activity into their daily routine, and the extent to which active transport may contribute to physical activity.

Results

Adequate physical activity

In 2010, 55.2 per cent of adults aged 16 years and over undertook adequate levels of physical activity.

- A significantly higher proportion of males (60.0 per cent) undertook adequate levels of physical activity, compared with females (50.7 per cent).
- Among males, a significantly higher proportion of those aged 16-24 years (71.3 per cent), and a significantly lower proportion of those aged 55-64 years (54.6 per cent) and 75 years and over (42.3 per cent), undertook adequate levels of physical activity, compared with the overall adult male population.
- Among females, a significantly higher proportion of those aged 16-24 years (65.4 per cent), and a significantly lower proportion of those aged 65-74 years (41.3 per cent) and 75 years and over (28.7 per cent), undertook adequate levels of physical activity, compared with the overall adult female population.
- A significantly higher proportion of adults in the first or least disadvantaged quintile (62.6 per cent), and a significantly lower proportion of adults in the fifth or most disadvantaged quintile (49.4 per cent), undertook adequate levels of physical activity, compared with the overall adult population.
- There was no significant difference between metropolitan and rural-regional health districts.
- A significantly lower proportion of adults in South Western Sydney (49.2 per cent), Western Sydney (47.2 per cent), and Western NSW (50.3 per cent), and a significantly higher proportion of adults in South Eastern Sydney (60.3 per cent), Illawarra Shoalhaven (63.1 per cent), and Northern Sydney (61.6 per cent), undertook adequate levels of physical activity, compared with the overall adult population.

Since 1998, there has been a significant increase in the proportion of adults aged 16 years and over who undertook adequate levels of physical activity (47.9 per cent to 55.2 per cent). The increase has been significant in males and females, and in metropolitan and rural-regional health districts.

Usual transport to work

In 2010, among adults aged 16 years and over who were employed, the usual form of transport to work was: car as driver (72.6 per cent), train (9.3 per cent), work at home (8.0 per cent), walk only (5.8 per cent), bus (5.5 per cent), car as passenger (3.9 per cent), walk part of the way (1.9 per cent), bicycle (1.6 per cent), motorbike or motor scooter (0.5 per cent), truck (0.4 per cent), ferry (0.4 per cent), taxi (0.2 per cent), and tram including light rail (0.0 per cent). Respondents could mention more than 1 response.

References

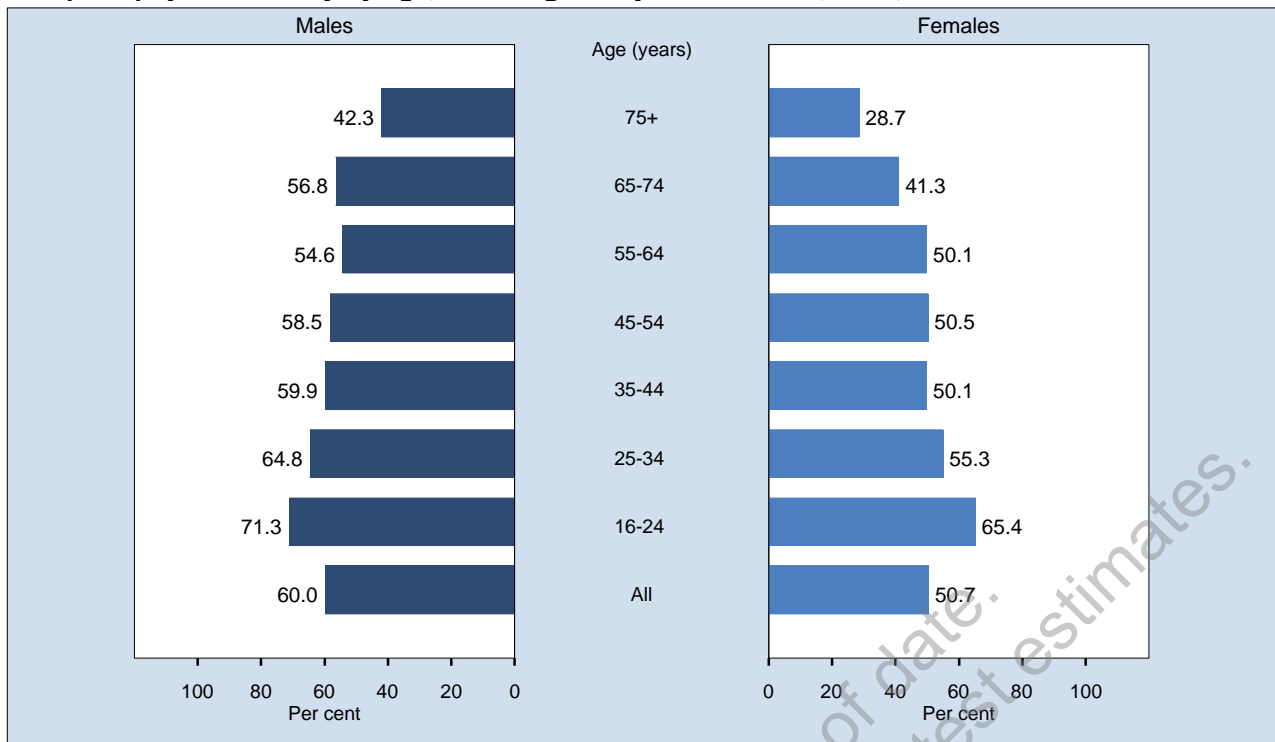
1. Australian Government Department of Health and Aged Care. *National Physical Activity Guidelines for Australians*. Canberra: Australian Government Department of Health and Aged Care, 2005.
2. Commonwealth of Australia and the Repatriation Commission in collaboration with Australian Sports

Federation Limited. *Choose Health: Be Active. A physical activity guide for older Australians*. Canberra: Commonwealth of Australia and the Repatriation Commission, 2008.

3. Australian Government Department of Health and Ageing. *Recommendations on physical activity for health for older Australians*. Canberra: Australian Government Department of Health and Ageing, 2010.
4. Australian Institute of Health and Welfare. *The Active Australia Survey: A guide and manual for implementation, analysis and reporting*. Canberra: AIHW, 2003.
5. Planning Institute of Australia. Health Spaces and Place Website: Active Transport. Canberra: Planning Institute of Australia, 2010.
6. Victorian Government. Go For Your Life Website: Active Transport. Melbourne: Victorian Government, 2008.

WARNING: Estimates out of date.
Please check HealthStats NSW for latest estimates.

Adequate physical activity by age, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 9,467 respondents in NSW. For this indicator 386 (3.92%) were not stated (Don't know or Refused) in NSW. The indicator includes those who did adequate physical activity. Adequate physical activity is a total of 150 minutes a week on 5 separate occasions. The total minutes were calculated by adding minutes in the last week spent walking continuously for at least 10 minutes, minutes doing moderate physical activity, plus 2 x minutes doing vigorous physical activity. The questions used to define the indicator were: In the last week, how many times have you walked continuously for at least 10 minutes for recreation or exercise or to get to or from places? What do you estimate was the total time you spent walking in this way in the last week? In the last week, how many times did you do any vigorous physical activity that made you breathe harder or puff and pant? What do you estimate was the total time you spent doing this vigorous physical activity in the last week? In the last week, how many times did you do any other more moderate physical activity that you have not already mentioned?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

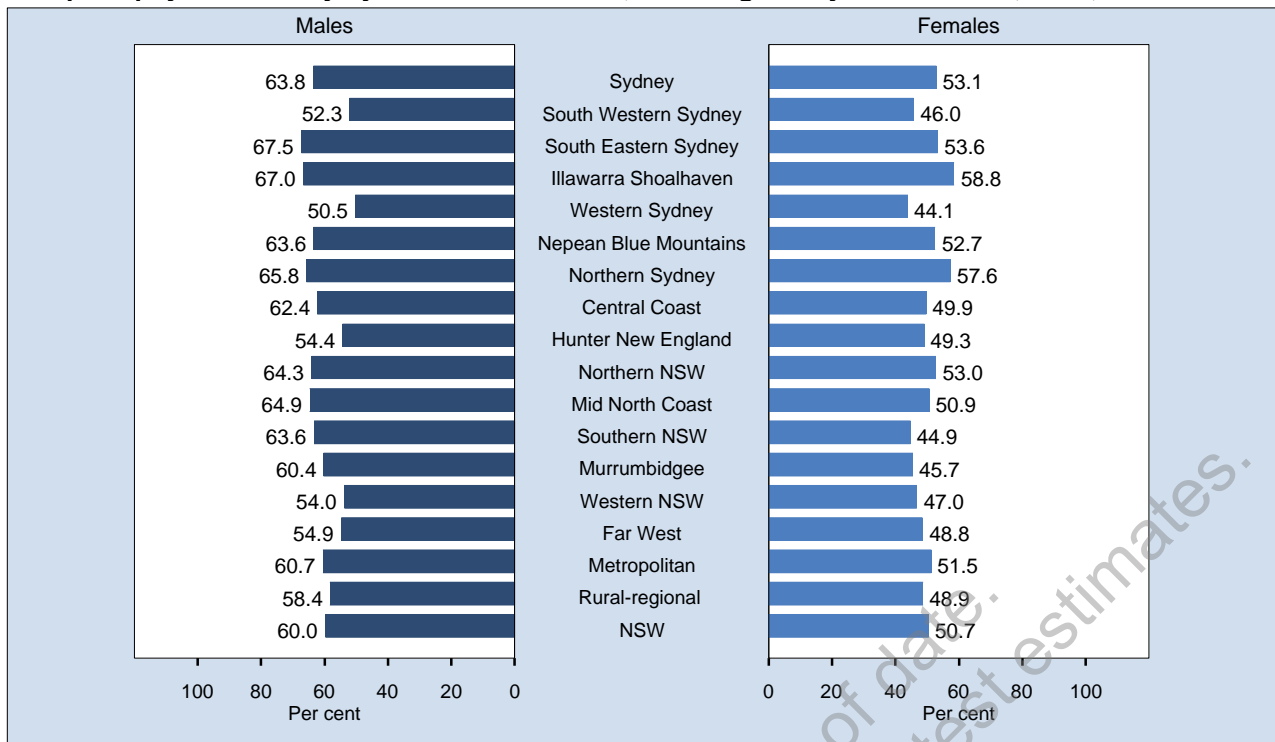
Adequate physical activity by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 9,467 respondents in NSW. For this indicator 386 (3.92%) were not stated (Don't know or Refused) in NSW. The indicator includes those who did adequate physical activity. Adequate physical activity is a total of 150 minutes a week on 5 separate occasions. The total minutes were calculated by adding minutes in the last week spent walking continuously for at least 10 minutes, minutes doing moderate physical activity, plus 2 x minutes doing vigorous physical activity. The questions used to define the indicator were: In the last week, how many times have you walked continuously for at least 10 minutes for recreation or exercise or to get to or from places? What do you estimate was the total time you spent walking in this way in the last week? In the last week, how many times did you do any vigorous physical activity that made you breathe harder or puff and pant? What do you estimate was the total time you spent doing this vigorous physical activity in the last week? In the last week, how many times did you do any other more moderate physical activity that you have not already mentioned?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

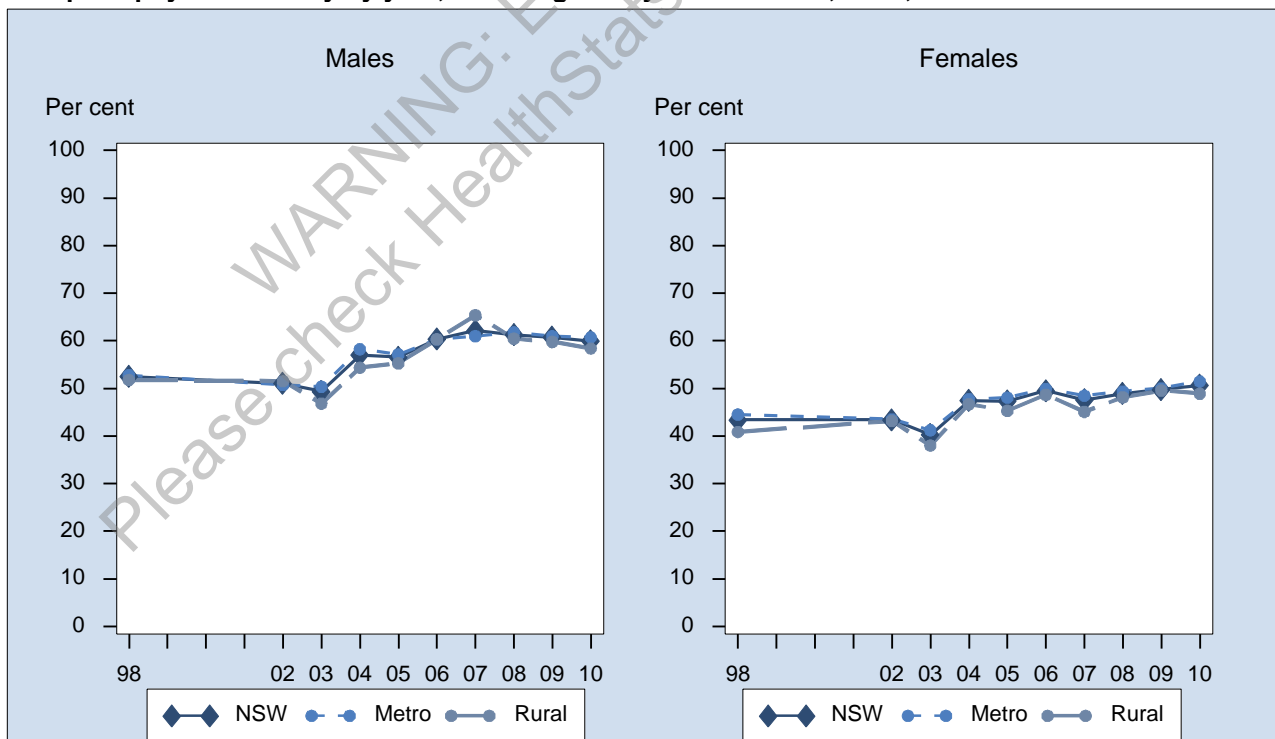
Adequate physical activity by local health district, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 9,467 respondents in NSW. For this indicator 386 (3.92%) were not stated (Don't know or Refused) in NSW. The indicator includes those who did adequate physical activity. Adequate physical activity is a total of 150 minutes a week on 5 separate occasions. The total minutes were calculated by adding minutes in the last week spent walking continuously for at least 10 minutes, minutes doing moderate physical activity, plus 2 x minutes doing vigorous physical activity. The questions used to define the indicator were: In the last week, how many times have you walked continuously for at least 10 minutes for recreation or exercise or to get to or from places? What do you estimate was the total time you spent walking in this way in the last week? In the last week, how many times did you do any vigorous physical activity that made you breathe harder or puff and pant? What do you estimate was the total time you spent doing this vigorous physical activity in the last week? In the last week, how many times did you do any other more moderate physical activity that you have not already mentioned? NSW total includes the 15 LHDs and Albury (Victoria in-reach).

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

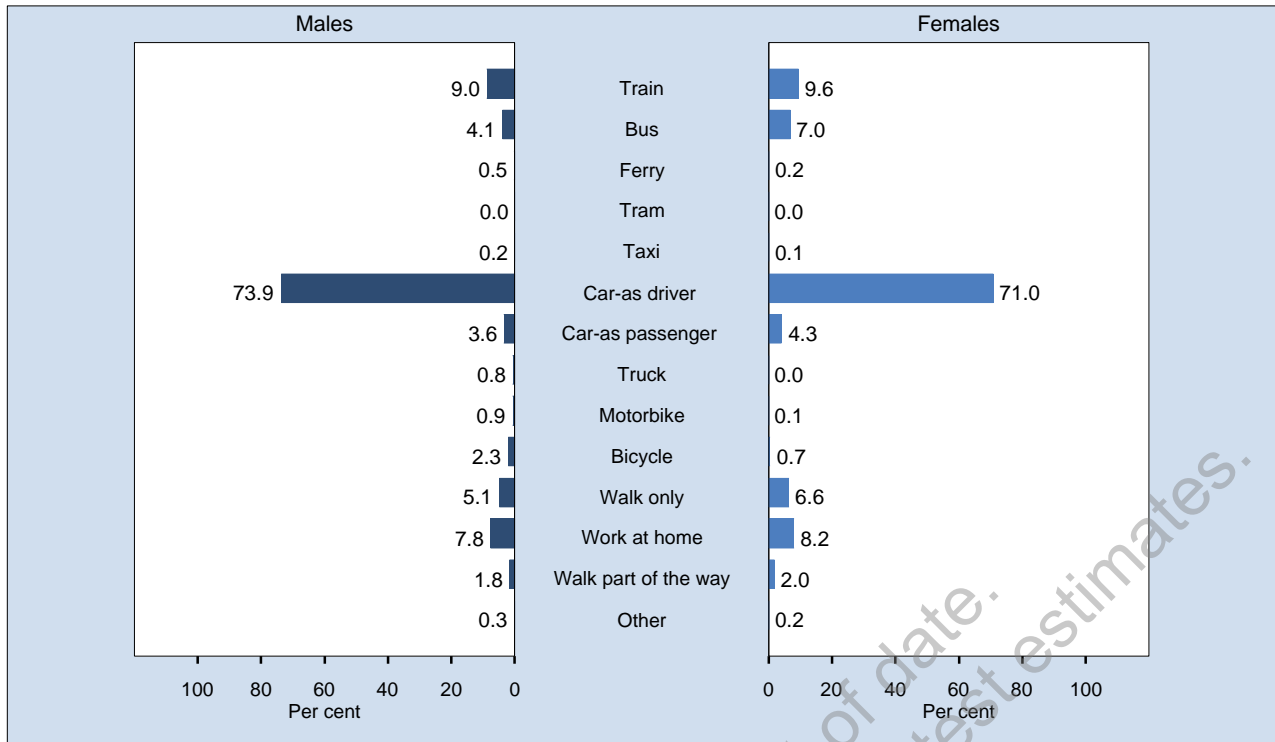
Adequate physical activity by year, adults aged 16 years and over, NSW, 1998-2010



Note: Estimates are based on the following numbers of respondents for NSW: 1998 (17,462), 2002 (12,621), 2003 (13,005), 2004 (9,785), 2005 (11,402), 2006 (7,575), 2007 (5,116), 2008 (8,006), 2009 (9,984), 2010 (9,467). The indicator includes those who did adequate physical activity. Adequate physical activity is a total of 150 minutes a week on 5 separate occasions. The total minutes were calculated by adding minutes in the last week spent walking continuously for at least 10 minutes, minutes doing moderate physical activity, plus 2 x minutes doing vigorous physical activity. The questions used to define the indicator were: In the last week, how many times have you walked continuously for at least 10 minutes for recreation or exercise or to get to or from places? What do you estimate was the total time you spent walking in this way in the last week? In the last week, how many times did you do any vigorous physical activity that made you breathe harder or puff and pant? What do you estimate was the total time you spent doing this vigorous physical activity in the last week? In the last week, how many times did you do any other more moderate physical activity that you have not already mentioned?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Usual transport to work, adults aged 16 years and over who were employed, NSW, 2010



Note: Estimates are based on 4,800 respondents in NSW. For this indicator 44 (0.91%) were not stated (Don't know or Refused) in NSW. The questions used were: In the last week, which of the following best describes your employment status? How do you usually get to work? Respondents could mention more than 1 response. Percentages may total more than 100%.

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

WARNING: Estimates out of date. Please check HealthStats NSW for latest estimates.

Smoking

Introduction

Tobacco smoking is a leading cause of preventable mortality and morbidity. Smokers are less healthy than non-smokers, have longer illnesses, are more likely to be absent from work, and use more medical services: both outpatient and inpatient. While the relationship between tobacco smoking, lung cancer, respiratory disease, and cardiovascular disease has long been evidenced, a number of other disease categories are now known to be associated with smoking.[1]

Exposure to environmental tobacco smoke (passive smoking) is a significant cause of preventable mortality and morbidity. Most of the evidence of harm caused by passive smoking is based on studies in the home environment; however, passive smoking is harmful wherever it takes place.[2]

Results

Smoking status

In 2010, 11.7 per cent of adults aged 16 years and over smoked daily, 4.0 per cent smoked occasionally, 24.7 per cent did not smoke now but used to smoke, 11.2 per cent tried smoking a few times but never smoked regularly, and 48.3 per cent never smoked.

Current smoking

In 2010, 15.8 per cent of adults aged 16 years and over were current (daily or occasional) smokers.

- A significantly higher proportion of males (18.1 per cent) were current smokers, compared with females (13.5 per cent).
- Among males, a significantly higher proportion of those aged 25-34 years (28.1 per cent), and a significantly lower proportion of those aged 65-74 years (7.0 per cent) and 75 years and over (3.6 per cent), were current smokers, compared with the overall adult male population.
- Among females, a significantly higher proportion of those aged 45-54 years (18.8 per cent), and a significantly lower proportion of those aged 65-74 years (7.5 per cent) and 75 years and over (3.5 per cent), were current smokers, compared with the overall adult female population.
- A significantly higher proportion of adults in the fifth or most disadvantaged quintile (19.7 per cent) and fourth quintile (18.4 per cent), and a significantly lower proportion of adults in the first or least disadvantaged quintile (12.0 per cent) and second quintile (13.4 per cent), were current smokers, compared with the overall adult population.
- A significantly higher proportion of adults in rural-regional health districts (18.2 per cent) were current smokers, compared with metropolitan health districts (14.7 per cent).
- A significantly higher proportion of adults in Murrumbidgee (21.8 per cent) and Western NSW (19.6 per cent), and a significantly lower proportion of adults in South Eastern Sydney (12.5 per cent) and Northern Sydney (10.2 per cent), were current smokers, compared with the overall adult population.

Since 1997, there has been a significant decrease in the proportion of adults aged 16 years and over who were current smokers (24.0 per cent to 15.8 per cent). The decrease has been significant in males and females, and in rural-regional and metropolitan health districts.

Daily smoking

In 2010, 11.7 per cent of adults aged 16 years and over were daily smokers.

- A significantly higher proportion of males (13.8 per cent) were daily smokers, compared with females (9.8 per cent).
- Among males, a significantly higher proportion of those aged 25-34 years (19.8 per cent) and 45-54 years (17.4 per cent), and a significantly lower proportion of those aged 65-74 years (6.4 per cent) and 75 years and over (3.1 per cent), were daily smokers, compared with the overall adult male population.
- Among females, a significantly higher proportion of those aged 45-54 years (15.9 per cent), and a significantly lower proportion of those aged 65-74 years (5.8 per cent) and 75 years and over (3.0 per cent), were daily smokers, compared with the overall adult female population.

- A significantly higher proportion of adults in the fifth or most disadvantaged quintile (16.0 per cent) and fourth quintile (14.9 per cent), and a significantly lower proportion of adults in the first or least disadvantaged quintile (6.2 per cent) and second quintile (10.0 per cent), were daily smokers, compared with the overall adult population.
- A significantly higher proportion of adults in rural-regional health districts (14.8 per cent) were daily smokers, compared with metropolitan health districts (10.5 per cent).
- A significantly higher proportion of adults in Hunter New England (15.0 per cent), Northern NSW (15.4 per cent), and Murrumbidgee (17.6 per cent), and a significantly lower proportion of adults in Northern Sydney (4.8 per cent), were daily smokers, compared with the overall adult population.

Since 1997, there has been a significant decrease in the proportion of adults aged 16 years and over who were daily smokers (19.1 per cent to 11.7 per cent). The decrease has been significant in males and females, and in rural-regional and metropolitan health districts.

Exposure to tobacco smoke in home

In 2010, 92.6 per cent of adults aged 16 years and over lived in homes that were smoke-free, 2.9 per cent lived in homes where people occasionally smoked in the home, and 4.5 per cent lived in homes where people frequently smoked in the home.

Exposure to tobacco smoke in car

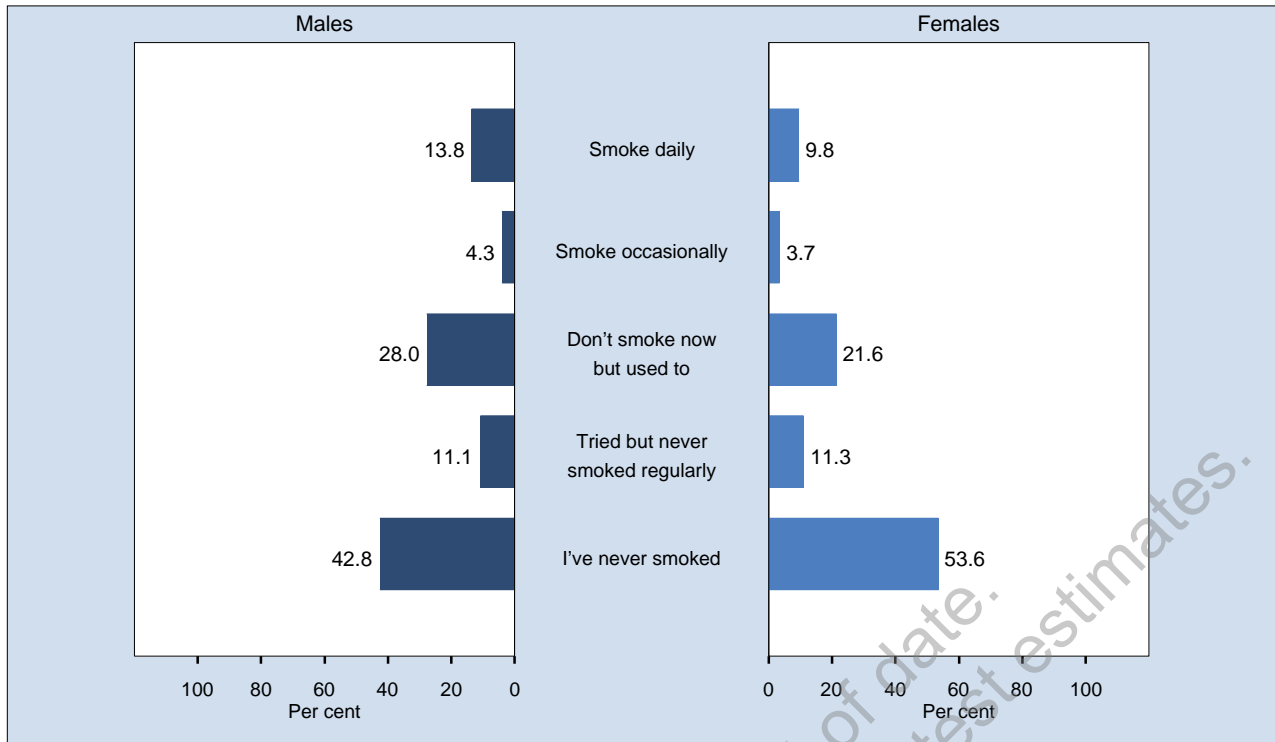
In 2010, 86.0 per cent of adults aged 16 years and over with cars did not allow smoking in their car, 8.4 per cent of adults with cars allowed smoking in their car, and 5.6 per cent of adults did not have a car.

References

1. United States Department of Health and Human Services. *The Health Consequences of Smoking: A Report of the Surgeon General*. Atlanta: United States Department of Health and Human Services, Centers for Disease Control and Prevention, Office on Smoking and Health, 2004.
2. Commonwealth Department of Health and Ageing and the National Drug Strategy. *Environmental Tobacco Smoke in Australia*. Canberra: Commonwealth Department of Health and Ageing, 2002.

WARNING: Estimates out of date. Please check HealthStats website for latest estimates.

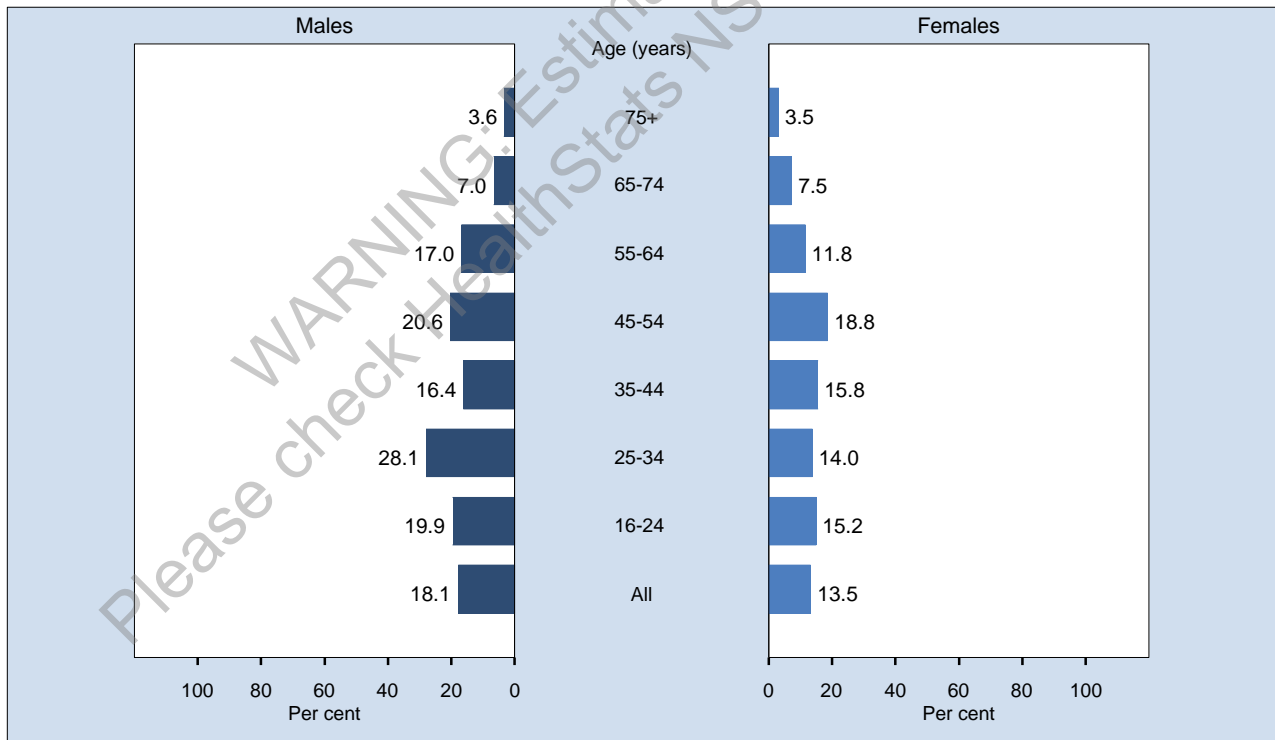
Smoking status, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 10,238 respondents in NSW. For this indicator 7 (0.07%) were not stated (Don't know or Refused) in NSW. The question used was: Which of the following best describes your smoking status: smoke daily, smoke occasionally, do not smoke now but used to, have tried it a few times but never smoked regularly, and never smoked?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Current smoking by age, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 10,238 respondents in NSW. For this indicator 7 (0.07%) were not stated (Don't know or Refused) in NSW. The indicator includes those who smoked daily or occasionally. The question used to define the indicator was: Which of the following best describes your smoking status: smoke daily, smoke occasionally, do not smoke now but I used to, I have tried it a few times but never smoked regularly, or I have never smoked?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

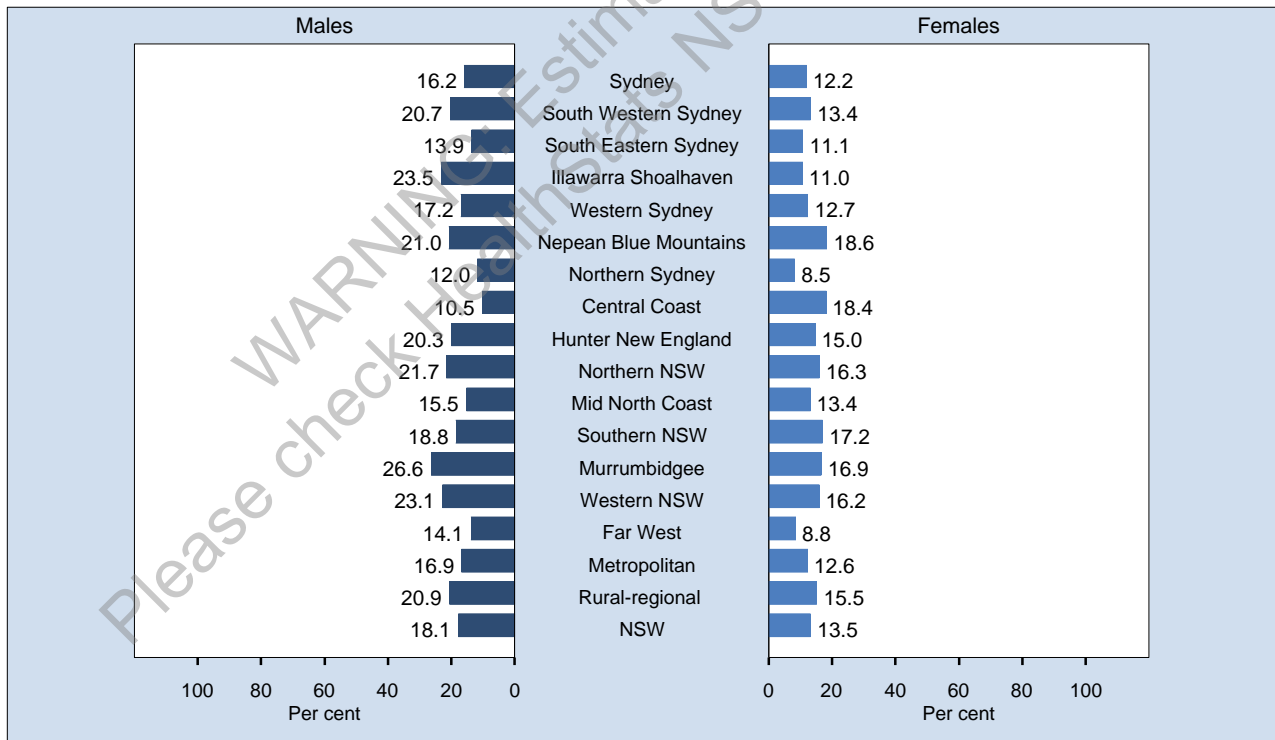
Current smoking by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 10,238 respondents in NSW. For this indicator 7 (0.07%) were not stated (Don't know or Refused) in NSW. The indicator includes those who smoked daily or occasionally. The question used to define the indicator was: Which of the following best describes your smoking status: smoke daily, smoke occasionally, do not smoke now but I used to, I have tried it a few times but never smoked regularly, or I have never smoked?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

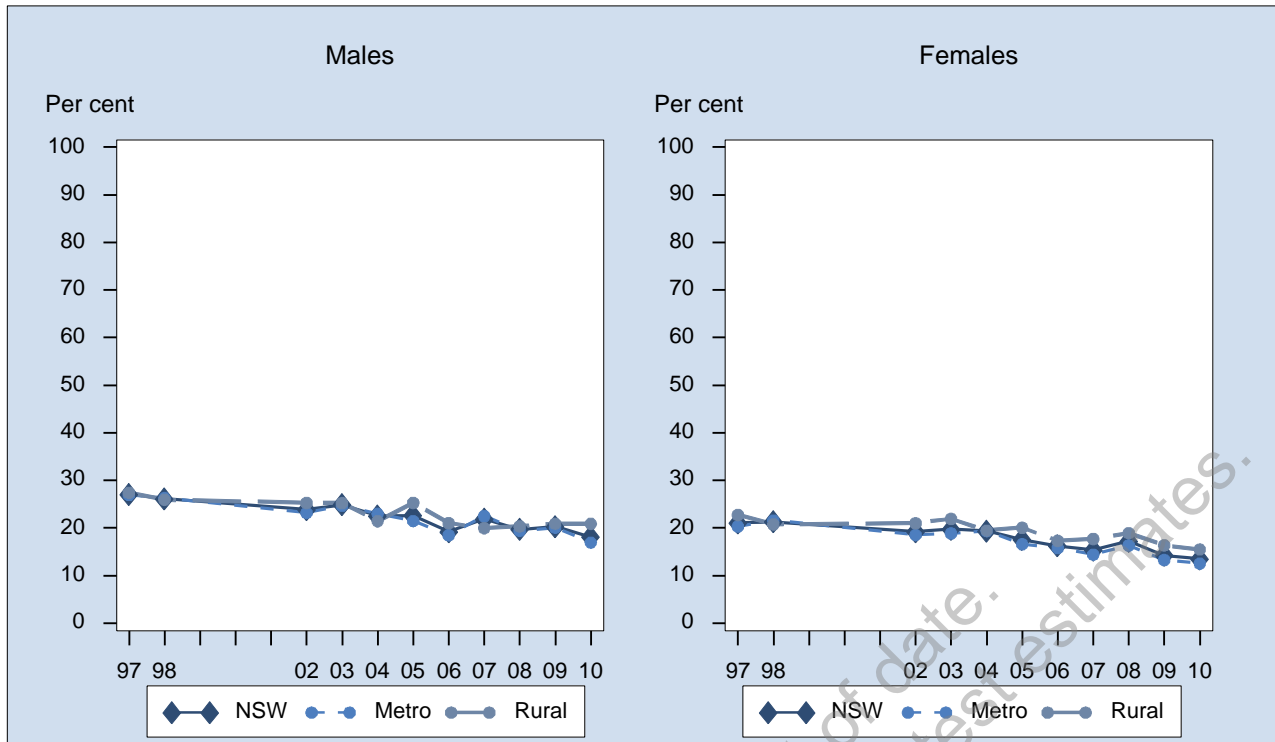
Current smoking by local health district, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 10,238 respondents in NSW. For this indicator 7 (0.07%) were not stated (Don't know or Refused) in NSW. The indicator includes those who smoked daily or occasionally. The question used to define the indicator was: Which of the following best describes your smoking status: smoke daily, smoke occasionally, do not smoke now but I used to, I have tried it a few times but never smoked regularly, or I have never smoked? NSW total includes the 15 LHDs and Albury (Victoria in-reach).

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

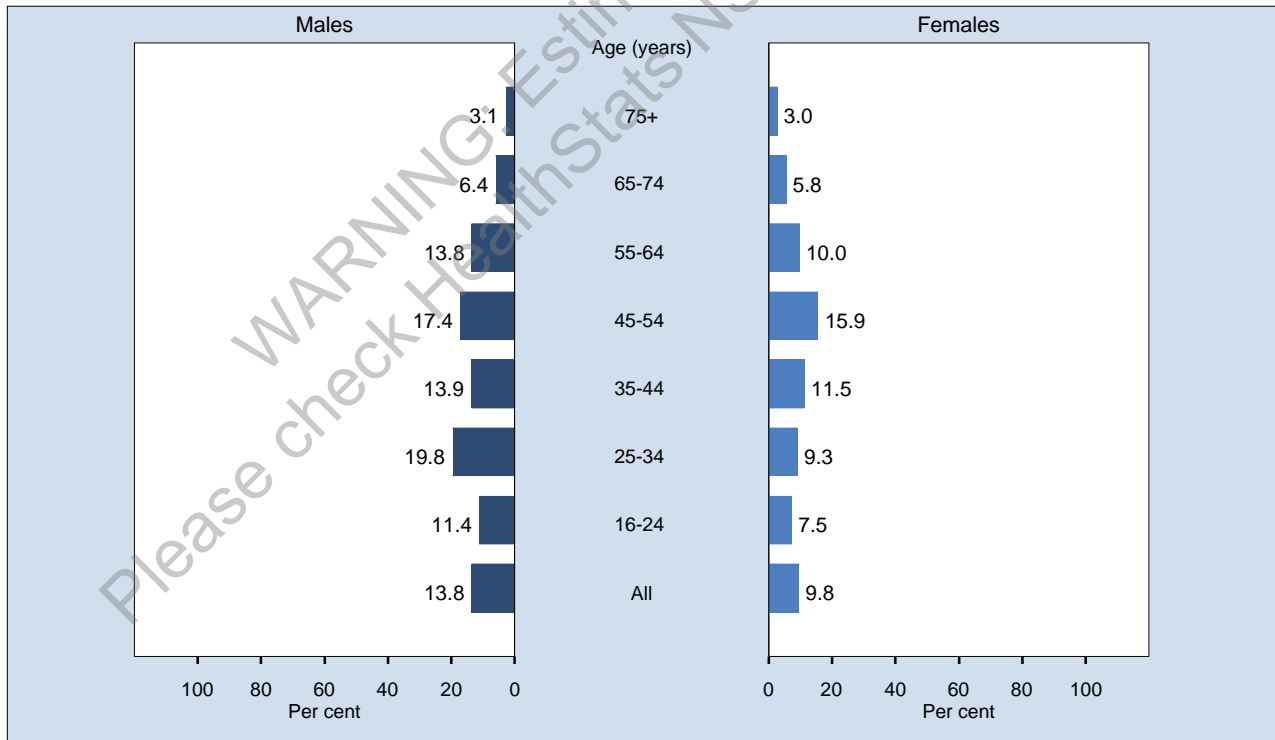
Current smoking by year, adults aged 16 years and over, NSW, 1997-2010



Note: Estimates are based on the following numbers of respondents for NSW: 1997 (17,496), 1998 (17,457), 2002 (12,616), 2003 (13,002), 2004 (9,781), 2005 (11,490), 2006 (7,957), 2007 (7,510), 2008 (8,755), 2009 (10,703), 2010 (10,238). The indicator includes those who smoked daily or occasionally. The question used to define the indicator was: Which of the following best describes your smoking status: smoke daily, smoke occasionally, do not smoke now but I used to, I have tried it a few times but never smoked regularly, or I have never smoked?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Daily smoking by age, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 10,238 respondents in NSW. For this indicator 7 (0.07%) were not stated (Don't know or Refused) in NSW. The indicator includes those who smoked daily. The question used to define the indicator was: Which of the following best describes your smoking status: smoke daily, smoke occasionally, do not smoke now but I used to, I have tried it a few times but never smoked regularly, or I have never smoked?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

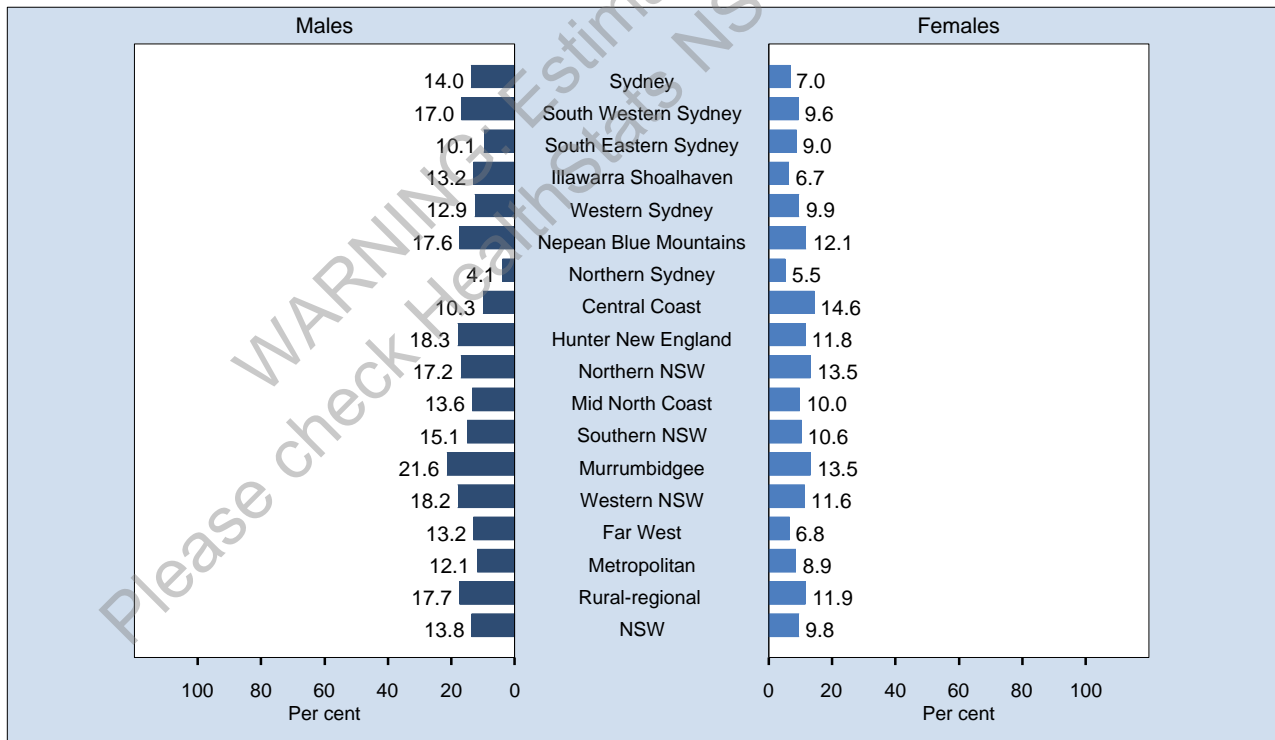
Daily smoking by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 10,238 respondents in NSW. For this indicator 7 (0.07%) were not stated (Don't know or Refused) in NSW. The indicator includes those who smoked daily. The question used to define the indicator was: Which of the following best describes your smoking status: smoke daily, smoke occasionally, do not smoke now but I used to, I have tried it a few times but never smoked regularly, or I have never smoked?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

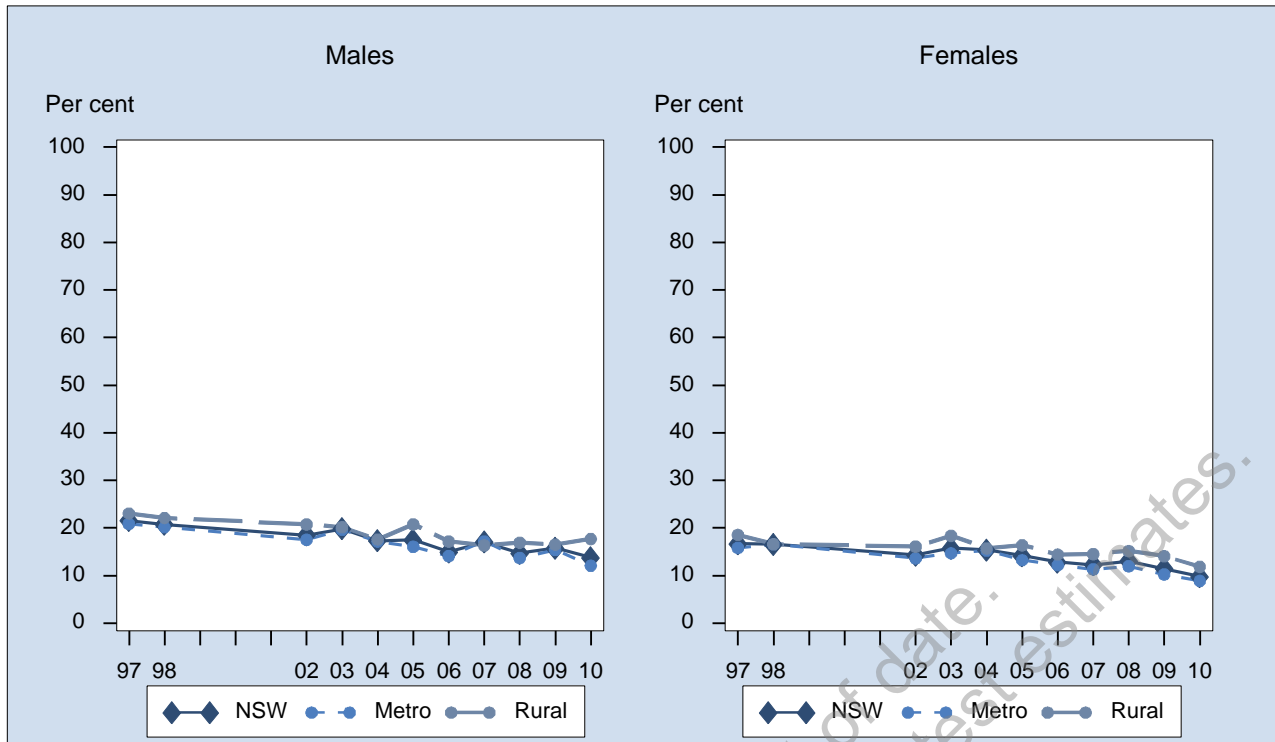
Daily smoking by local health district, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 10,238 respondents in NSW. For this indicator 7 (0.07%) were not stated (Don't know or Refused) in NSW. The indicator includes those who smoked daily. The question used to define the indicator was: Which of the following best describes your smoking status: smoke daily, smoke occasionally, do not smoke now but I used to, I have tried it a few times but never smoked regularly, or I have never smoked? NSW total includes the 15 LHDs and Albury (Victoria in-reach).

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

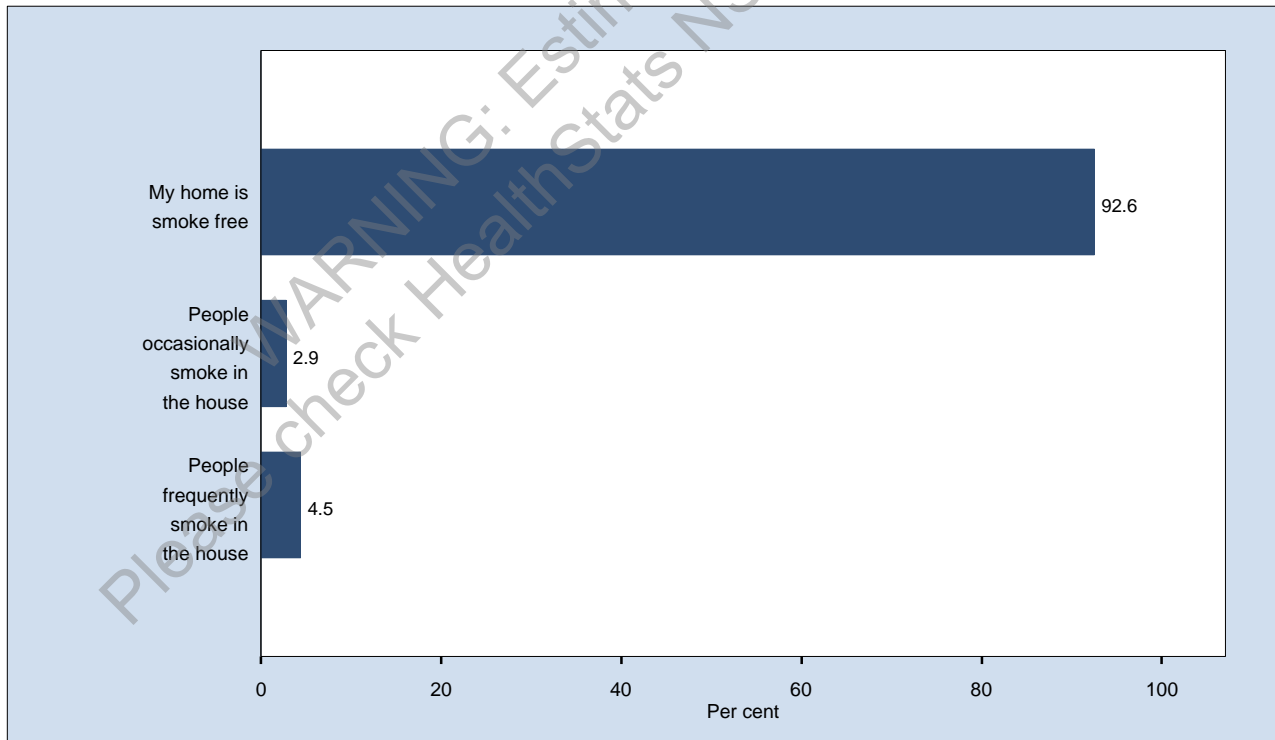
Daily smoking by year, adults aged 16 years and over, NSW, 1997-2010



Note: Estimates are based on the following numbers of respondents for NSW: 1997 (17,496), 1998 (17,457), 2002 (12,616), 2003 (13,002), 2004 (9,781), 2005 (11,490), 2006 (7,957), 2007 (7,510), 2008 (8,755), 2009 (10,703), 2010 (10,238). The indicator includes those who smoked daily. The question used to define the indicator was: Which of the following best describes your smoking status: smoke daily, smoke occasionally, do not smoke now but I used to, I have tried it a few times but never smoked regularly, or I have never smoked?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

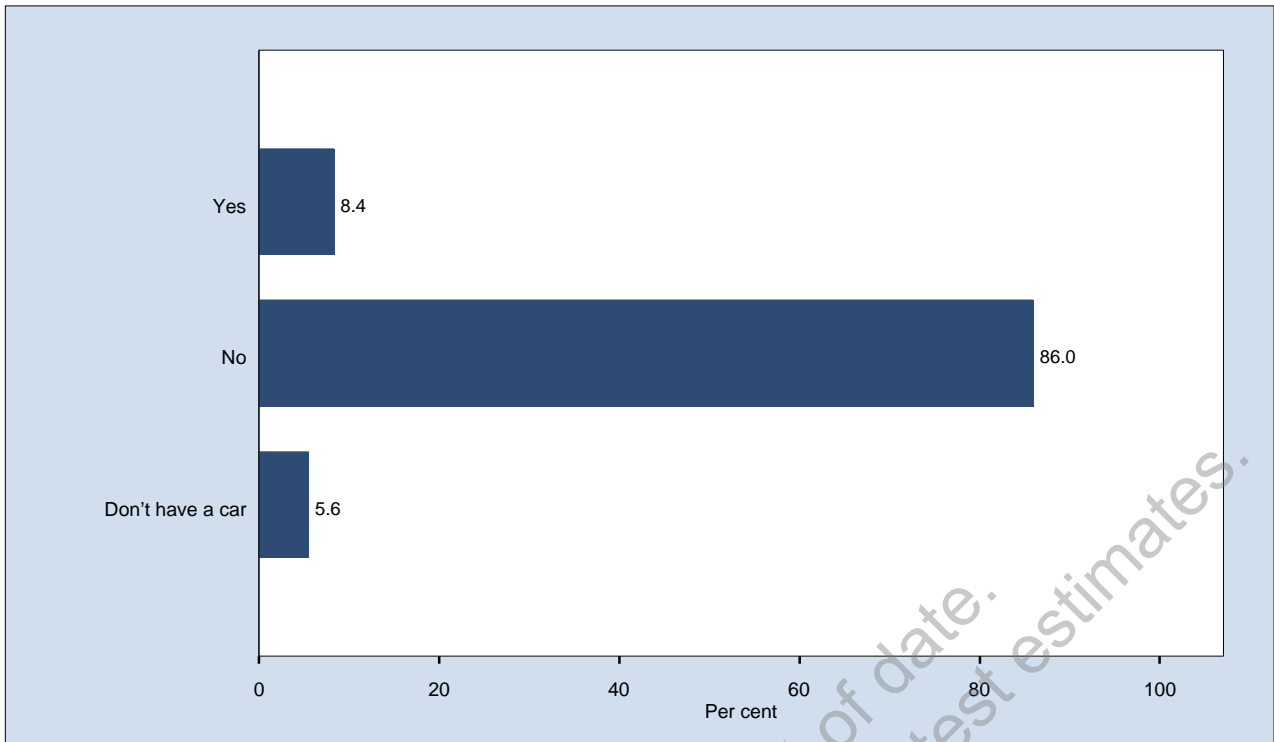
Exposure to tobacco smoke in home, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 9,852 respondents in NSW. For this indicator 16 (0.16%) were not stated (Don't know or Refused) in NSW. The question used was: Which of the following best describes your home situation: my home is smoke-free, people occasionally smoke in the house, and people frequently smoke in the house?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Exposure to tobacco smoke in car, adults aged 16 years and over who own a car, NSW, 2010



Note: Estimates are based on 9,831 respondents in NSW. For this indicator 37 (0.37%) were not stated (Don't know or Refused) in NSW. The question used was: Are people allowed to smoke in your car: yes, no, and don't have a car?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

WARNING: Estimates out of date.
Please check HealthStats NSW for latest estimates.

Sun protection

Introduction

Some sun exposure is beneficial to health; for example, by helping the body to produce vitamin D, which is essential for healthy bones.[1] However, excessive sun exposure can lead to several forms of skin cancer, eye disease, and premature ageing.[2] Most people can prevent skin cancer by avoiding over exposure to the sun and other sources of ultraviolet light such as sunlamps and solariums. Precautions are especially important for children and teenagers, with children in general spending more time outdoors than adults; also, evidence suggests sun exposure in childhood and adolescence contributes more to lifetime risk of skin cancer than a similar level of sun exposure in later life.[3-5]

To reduce over-exposure to ultraviolet radiation, precautions are required. The best advice is to look for or provide some form of shade, as it is an effective form of sun protection, and to always wear suitable clothing, hat, sunglasses, and apply sunscreen to exposed skin when outdoors: especially during summer.[3-5]

Results

Sun protection behaviours last summer

In 2010, when out in the sun for more than 15 minutes last summer, 46.7% of adults aged 16 years and over always wore sunglasses, 28.1% always applied a broad-spectrum sunscreen with an SPF of 15 or more to exposed skin, 26.5% per cent always wore a broad brimmed hat or cap with a back flap, 22.7% per cent always sought shade, and 20.0% always deliberately dressed in clothing to protect themselves from the sun. Respondents could mention more than 1 response.

Times sunburnt last summer

In 2010, 58.4% per cent of adults aged 16 years and over never got sunburnt last summer, 18.9% per cent got sunburnt once, 14.3% per cent got sunburnt twice, 5.7% per cent got sunburnt 3 or 4 times, and 2.7% per cent got sunburnt 5 or more times.

Availability of shade when outdoors

In 2010, among adults aged 16 years and over who were outside locally, 69.1% per cent found it easy to find shade at public parks, 48.3% per cent found it easy to find shade at sporting areas, and 41.7% per cent found it easy to find shade at public pools.

References

1. Nowson C and Margerison C. Vitamin D intake and vitamin D status of Australians. *Med J Aust* 2002 177(3): 149-152.
2. Armstrong BK. How sun exposure causes skin cancer (an epidemiological perspective). Hill D, Elwood JM, English DR (editors). *Prevention of skin cancer*. Boston: Kluwer Academic Publishers, 2004; 89-116.
3. Cancer Council NSW. *Be SunSmart*. Sydney: Cancer Council NSW, 2011.
4. NSW Department of Health. *NSW Health Sun Protection fact sheet*. Sydney: NSW Department of Health, 2007.
5. O'Riordan D, Geller A, Brooks D, Zhang Z, Miller D. Sunburn reduction through parental role modeling and sunscreen vigilance. *J Pediatr* 2003; 142(1).

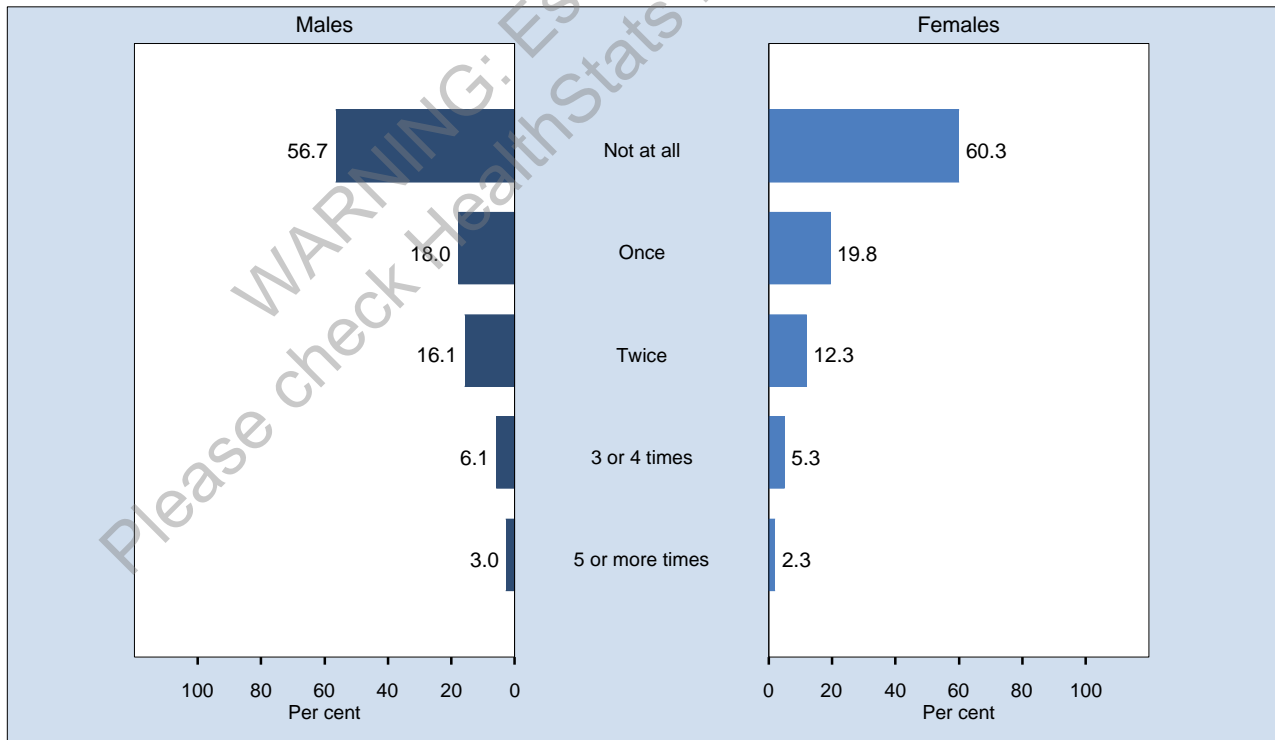
Sun protection behaviours, adults aged 16 years and over who always engaged in sun protection behaviours last summer, NSW, 2010



Note: Estimates are based on 10,022 respondents in NSW. For this indicator 24 (0.24%) were not stated (Don't know or Refused) in NSW. The questions used were: Last summer, when you were out in the sun for more than 15 minutes, how often did you: always seek shade, always wear a broad brimmed hat or cap with a back flap, always apply a broad-spectrum sunscreen with an SPF of 15 or more to exposed skin, always deliberately dressed in clothing to protect you from the sun, always wear sunglasses? Respondents could mention more than 1 response. Percentages may total more than 100%. Respondents could mention more than 1 response. Percentages may total more than 100%.

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

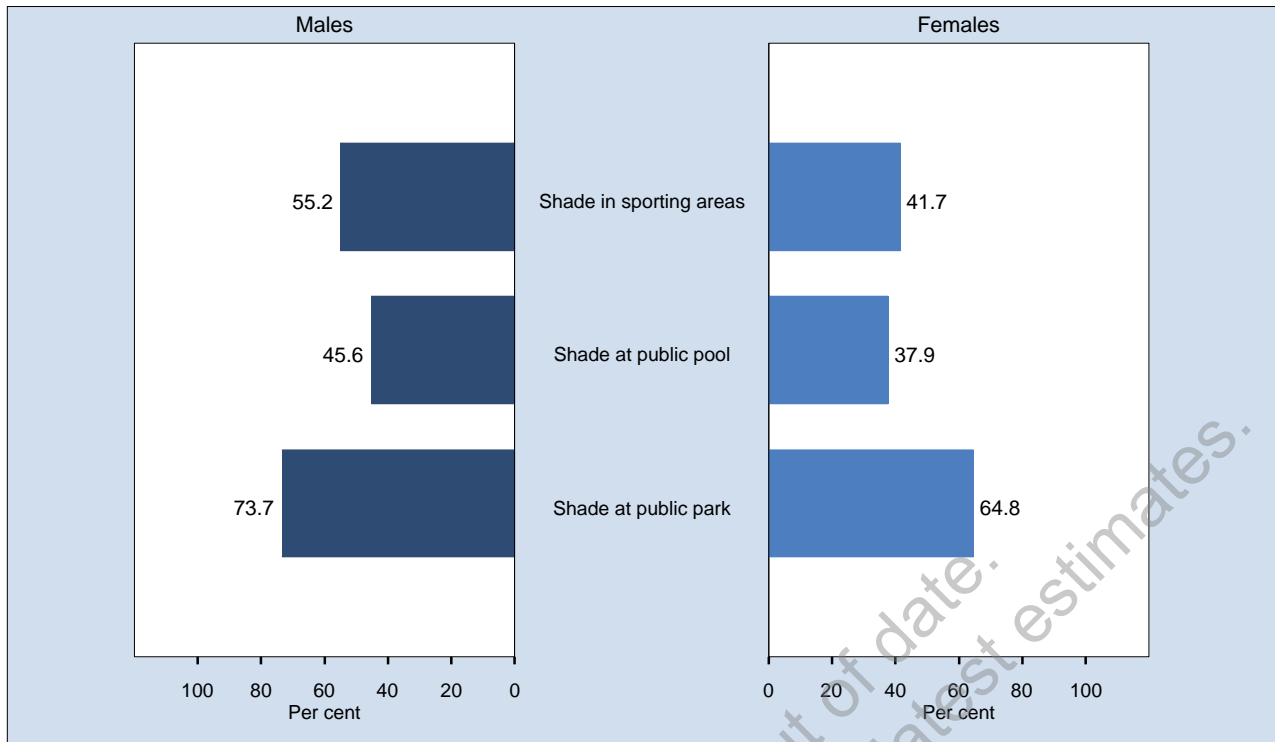
Times sunburnt, adults aged 16 years and over who got sunburnt last summer, NSW, 2010



Note: Estimates are based on 8,662 respondents in NSW. For this indicator 69 (0.79%) were not stated (Don't know or Refused) in NSW. The question used was: Last summer, how often did you get sunburnt so your skin was still sore or tender the next day?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Easy to find shade when outdoors, adults aged 16 years and over who go to local sporting areas, outdoor public swimming pools, and public parks, NSW, 2010



Note: Estimates are based on 9,147 respondents in NSW. For this indicator 127 (1.37%) were not stated (Don't know or Refused) in NSW. The questions used were: In your local area, when you are outside do you find it easy to find shade in sporting areas, at the outdoor public swimming pool, at the public park? Respondents could mention more than 1 response. Percentages may total more than 100%. Respondents could mention more than 1 response. Percentages may total more than 100%.

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

WARNING: Estimates are out of date. Please check HealthStats NSW for latest estimates.

Trends in health behaviours

- **Alcohol consumption**

Since 2002, there has been a significant decrease in the proportion of adults aged 16 years and over who consumed more than 2 standard drinks on a day when they drink alcohol (32.1 per cent to 29.9 per cent). The decrease has been significant in rural-regional health districts.

- **Cannabis consumption**

Since 2007, there has been no significant change in the proportion of adults aged 16-34 years who currently smoked cannabis.

- **Breast screening**

Since 1997, there has been no significant change in the proportion of females aged 50-69 years who had a screening mammogram within the last 2 years.

- **Cervical screening**

Since 1998, there has been a significant decrease in the proportion of females aged 20-69 years who had a Pap test within the last 2 years (77.3 per cent to 68.0 per cent). The decrease has been significant in metropolitan and rural-regional health districts. The decrease since 2008 has also been significant.

- **Hysterectomy**

Since 1997, there has been a significant decrease in the proportion of females aged 20-69 who ever had a hysterectomy (13.3 per cent to 11.3 per cent). The decrease has been significant in metropolitan health districts.

- **Influenza immunisation**

Since 1997, there has been a significant increase in the proportion of adults aged 65 years and over who had been immunised against influenza in the last 12 months (57.1 per cent to 72.7 per cent). The increase has been significant in males and females, and in metropolitan and rural-regional health districts.

- **Pneumococcal immunisation**

Since 2002, there has been a significant increase in the proportion of adults aged 65 years and over who had been immunised against pneumococcal disease in the last 5 years (38.6 per cent to 54.8 per cent). The increase has been significant in males and females, and in metropolitan and rural-regional health districts.

- **Fruit consumption**

Since 1997, there has been a significant increase in the proportion of adults aged 16 years and over who consumed 2 or more serves of fruit a day (46.1 per cent to 56.4 per cent). The increase has been significant in males and females, and in metropolitan and rural-regional health districts.

- **Vegetable consumption**

Since 1997, there has been no significant change in the proportion of adults aged 16 years and over who consumed 5 or more serves of vegetables a day; however, there has been a significant increase in females (9.7 per cent to 12.0 per cent) and in rural-regional health districts (10.6 per cent to 12.6 per cent).

- **Physical activity**

Since 1998, there has been a significant increase in the proportion of adults aged 16 years and over who undertook adequate levels of physical activity (47.9 per cent to 55.2 per cent). The increase has been significant in males and females, and in metropolitan and rural-regional health districts.

- **Current smoking**

Since 1997, there has been a significant decrease in the proportion of adults aged 16 years and over who were current smokers (24.0 per cent to 15.8 per cent). The decrease has been significant in males and females, and in rural-regional and metropolitan health districts.

- **Daily smoking**

Since 1997, there has been a significant decrease in the proportion of adults aged 16 years and over who were daily smokers (19.1 per cent to 11.7 per cent). The decrease has been significant in males and females, and in rural-regional and metropolitan health districts.

Trends in health behaviours NSW, 2010

Indicator	Year	Males % (95% CI)	Females % (95% CI)	Metropolitan % (95% CI)	Rural-regional % (95% CI)	All % (95% CI)	
More than 2 standard drinks on a day when consuming alcohol.	2002	43.2 (41.3-45.2)	21.2 (19.7-22.6)	30.6 (29.0-32.2)	35.3 (33.5-37.1)	32.1 (30.8-33.3)	
	2003	44.8 (42.9-46.8)	20.2 (18.9-21.5)	31.0 (29.5-32.6)	35.0 (33.4-36.7)	32.3 (31.1-33.5)	
	2004	42.7 (40.4-44.9)	21.2 (19.6-22.8)	30.8 (28.9-32.6)	34.1 (32.1-36.1)	31.8 (30.4-33.2)	
	2005	41.5 (39.5-43.5)	19.0 (17.6-20.3)	28.8 (27.2-30.4)	32.6 (30.9-34.3)	30.0 (28.8-31.2)	
	2006	41.9 (39.5-44.2)	19.7 (18.1-21.3)	29.4 (27.5-31.3)	33.3 (31.2-35.4)	30.7 (29.3-32.2)	
	2007	42.7 (40.2-45.3)	19.5 (17.8-21.1)	29.5 (27.6-31.5)	33.2 (30.9-35.5)	30.6 (29.0-32.1)	
	2008	42.6 (40.2-45.0)	20.2 (18.6-21.8)	30.3 (28.4-32.2)	32.7 (30.6-34.8)	31.2 (29.7-32.7)	
	2009	41.4 (39.2-43.6)	19.8 (18.3-21.2)	28.2 (26.5-29.9)	35.5 (33.6-37.5)	30.4 (29.1-31.7)	
	2010	40.2 (37.8-42.6)	19.9 (18.4-21.5)	28.8 (26.9-30.7)	32.0 (29.9-34.1)	29.9 (28.4-31.3)	
	Current cannabis smoking (16 to 34 years)	2007	6.7 (3.4-10.1)	4.0 (1.7-6.2)	3.8 (1.7-5.8)	8.8 (4.3-13.3)	5.3 (3.3-7.3)
2008		6.4 (4.0-8.7)	2.6 (1.5-3.7)	4.4 (2.8-6.0)	4.9 (2.7-7.1)	4.5 (3.2-5.8)	
2009		6.7 (4.4-8.9)	3.4 (1.9-5.0)	4.7 (3.0-6.3)	6.4 (4.0-8.8)	5.1 (3.7-6.4)	
2010		6.2 (3.6-8.7)	2.3 (1.1-3.6)	4.4 (2.6-6.1)	4.1 (1.9-6.3)	4.3 (2.8-5.7)	
Screening mammogram in the last 2 years (50 to 69 years)	1997		73.3 (70.9-75.7)	73.2 (69.9-76.5)	73.6 (70.5-76.6)	73.3 (70.9-75.7)	
	1998		76.4 (74.1-78.7)	75.0 (71.8-78.1)	79.2 (76.7-81.8)	76.4 (74.1-78.7)	
	2002		75.2 (72.6-77.8)	74.5 (70.9-78.1)	76.3 (73.2-79.3)	75.2 (72.6-77.8)	
	2004		74.3 (71.3-77.3)	72.8 (68.7-76.9)	77.2 (73.9-80.5)	74.3 (71.3-77.3)	
	2006		76.2 (73.4-79.0)	75.2 (71.4-79.0)	78.0 (74.3-81.7)	76.2 (73.4-79.0)	
	2008		76.2 (73.7-78.8)	76.0 (72.6-79.3)	76.8 (73.5-80.1)	76.2 (73.7-78.8)	
	2010		76.4 (74.0-78.8)	75.5 (72.3-78.8)	77.8 (74.5-81.2)	76.4 (74.0-78.8)	
	2010		76.4 (74.0-78.8)	75.5 (72.3-78.8)	77.8 (74.5-81.2)	76.4 (74.0-78.8)	
Pap test in the last 2 years (20 to 69 years)	1998		77.3 (75.9-78.7)	75.8 (74.0-77.7)	80.8 (79.1-82.4)	77.3 (75.9-78.7)	
	2004		72.4 (70.3-74.6)	71.4 (68.6-74.1)	75.1 (72.3-77.8)	72.4 (70.3-74.6)	
	2006		72.8 (70.6-74.9)	70.7 (67.8-73.5)	78.1 (75.2-81.0)	72.8 (70.6-74.9)	
	2008		73.9 (71.7-76.0)	72.3 (69.5-75.1)	77.7 (75.0-80.4)	73.9 (71.7-76.0)	
Hysterectomy (20 to 69 years)	2010		68.0 (65.5-70.6)	66.5 (63.1-69.8)	72.1 (68.7-75.5)	68.0 (65.5-70.6)	
	1997		13.3 (12.4-14.2)	11.6 (10.5-12.7)	17.3 (15.9-18.7)	13.3 (12.4-14.2)	
	1998		13.1 (12.2-14.0)	11.3 (10.2-12.4)	17.3 (16.0-18.7)	13.1 (12.2-14.0)	
	2002		12.2 (11.2-13.2)	10.7 (9.5-12.0)	15.9 (14.4-17.5)	12.2 (11.2-13.2)	
	2004		12.0 (10.9-13.2)	10.2 (8.8-11.6)	16.7 (14.8-18.5)	12.0 (10.9-13.2)	
	2006		12.6 (11.4-13.7)	10.8 (9.3-12.3)	16.9 (15.0-18.8)	12.6 (11.4-13.7)	
	2008		11.9 (10.8-13.0)	10.1 (8.8-11.5)	16.3 (14.4-18.2)	11.9 (10.8-13.0)	
	2010		11.3 (10.2-12.3)	9.6 (8.4-10.9)	15.3 (13.5-17.2)	11.3 (10.2-12.3)	
Vaccinated against influenza in the last 12 months (65 years and over)	1997	55.7 (52.3-59.2)	58.1 (55.3-61.0)	57.5 (54.5-60.6)	55.9 (52.9-58.8)	57.1 (54.9-59.3)	
	1998	61.9 (58.4-65.3)	64.5 (61.9-67.2)	62.5 (59.6-65.4)	64.8 (62.0-67.6)	63.3 (61.2-65.5)	
	2002	74.6 (71.6-77.6)	75.8 (73.3-78.2)	76.1 (73.5-78.7)	73.4 (70.8-76.0)	75.2 (73.3-77.1)	
	2003	76.0 (73.0-79.0)	75.9 (73.5-78.3)	76.8 (74.1-79.4)	74.4 (72.0-76.8)	76.0 (74.1-77.9)	
	2004	76.0 (72.6-79.4)	76.0 (73.2-78.8)	76.1 (73.2-79.0)	75.7 (72.8-78.6)	76.0 (73.9-78.1)	
	2005	75.3 (72.6-78.1)	74.5 (72.2-76.8)	75.3 (72.9-77.7)	73.9 (71.6-76.3)	74.9 (73.1-76.7)	
	2006	73.8 (70.5-77.1)	75.9 (73.3-78.4)	75.5 (72.7-78.3)	73.9 (71.1-76.7)	75.0 (72.9-77.0)	
	2007	71.1 (67.6-74.7)	74.2 (71.5-76.9)	72.3 (69.3-75.3)	73.8 (70.9-76.6)	72.8 (70.6-75.0)	
	2008	69.7 (66.5-73.0)	73.1 (70.6-75.5)	71.2 (68.4-73.9)	72.3 (69.7-75.0)	71.6 (69.6-73.6)	
	2009	70.0 (67.1-72.8)	74.8 (72.6-77.0)	71.9 (69.4-74.4)	73.8 (71.5-76.0)	72.6 (70.8-74.4)	
	2010	72.2 (69.4-75.0)	73.2 (71.1-75.3)	72.4 (70.0-74.8)	73.3 (71.0-75.7)	72.7 (71.0-74.5)	
Vaccinated against pneumococcal disease in the last 5 years (65 years and over)	2002	36.0 (32.6-39.4)	40.9 (38.0-43.7)	39.6 (36.5-42.6)	37.0 (34.1-39.9)	38.6 (36.4-40.8)	
	2003	45.3 (41.8-48.8)	48.6 (45.8-51.5)	47.4 (44.3-50.6)	46.5 (43.7-49.2)	47.1 (44.9-49.4)	
	2004	43.6 (39.5-47.6)	50.6 (47.4-53.9)	47.3 (43.9-50.8)	47.7 (44.1-51.4)	47.5 (44.9-50.0)	
	2005	51.0 (47.8-54.3)	56.5 (53.9-59.1)	53.9 (51.1-56.7)	54.3 (51.7-57.0)	54.1 (52.0-56.1)	
	2006	60.0 (56.3-63.8)	61.6 (58.6-64.6)	59.8 (56.5-63.1)	62.8 (59.8-65.9)	60.9 (58.5-63.2)	
	2007	56.7 (52.7-60.7)	61.1 (58.1-64.1)	56.4 (53.1-59.8)	64.1 (60.9-67.2)	59.1 (56.7-61.6)	
	2008	55.1 (51.4-58.7)	61.8 (59.0-64.6)	55.9 (52.8-59.1)	63.5 (60.5-66.4)	58.8 (56.6-61.1)	
	2009	53.7 (50.4-56.9)	57.9 (55.3-60.5)	52.6 (49.8-55.5)	61.8 (59.2-64.4)	56.0 (54.0-58.1)	
	2010	51.2 (47.9-54.5)	57.6 (55.2-60.1)	53.7 (51.0-56.4)	56.5 (53.7-59.4)	54.8 (52.8-56.8)	
	Two or more serves of fruit a day	1997	39.7 (38.3-41.1)	52.4 (51.1-53.7)	47.0 (45.7-48.2)	44.2 (42.8-45.5)	46.1 (45.2-47.1)
		1998	39.5 (38.0-41.0)	50.9 (49.5-52.2)	45.2 (43.9-46.6)	45.4 (44.0-46.8)	45.3 (44.3-46.3)
2002		41.4 (39.4-43.3)	51.2 (49.5-52.9)	47.3 (45.6-49.0)	44.0 (42.2-45.8)	46.3 (45.0-47.6)	
2003		40.1 (38.2-42.0)	54.5 (52.9-56.0)	48.4 (46.7-50.0)	45.1 (43.4-46.7)	47.4 (46.2-48.6)	
2004		40.6 (38.3-42.9)	53.1 (51.2-55.0)	48.0 (46.0-49.9)	44.6 (42.6-46.5)	46.9 (45.5-48.4)	
2005		44.6 (42.6-46.5)	57.5 (55.9-59.1)	51.1 (49.5-52.8)	51.3 (49.6-53.1)	51.2 (49.9-52.4)	
2006		47.0 (44.7-49.3)	59.6 (57.7-61.5)	54.0 (52.0-55.9)	52.0 (49.9-54.1)	53.4 (51.9-54.9)	
2007		48.4 (45.8-50.9)	59.8 (57.9-61.8)	54.7 (52.7-56.8)	53.5 (51.1-55.8)	54.4 (52.8-56.0)	
2008		52.0 (49.7-54.4)	60.9 (59.0-62.8)	57.5 (55.5-59.4)	54.7 (52.6-56.9)	56.6 (55.1-58.1)	
2009		52.5 (50.3-54.7)	60.9 (59.3-62.6)	57.2 (55.4-59.0)	56.0 (54.0-57.9)	56.8 (55.4-58.2)	
2010		53.1 (50.8-55.5)	59.5 (57.7-61.3)	57.1 (55.1-59.0)	54.9 (52.8-57.0)	56.4 (54.9-57.9)	
Five or more serves of vegetables a day	1997	8.0 (7.3-8.8)	9.7 (8.9-10.5)	8.1 (7.4-8.8)	10.6 (9.8-11.5)	8.9 (8.3-9.4)	
	1998	7.1 (6.4-7.9)	8.6 (7.8-9.3)	7.1 (6.4-7.7)	9.8 (9.0-10.7)	7.9 (7.3-8.4)	
	2002	5.8 (4.9-6.6)	9.1 (8.3-10.0)	6.7 (5.9-7.5)	9.3 (8.4-10.2)	7.5 (6.9-8.1)	
	2003	8.1 (7.1-9.1)	11.4 (10.4-12.4)	9.3 (8.4-10.3)	10.6 (9.7-11.6)	9.8 (9.1-10.5)	
	2004	5.9 (5.0-6.9)	10.1 (9.0-11.2)	7.0 (6.1-7.9)	10.6 (9.4-11.9)	8.1 (7.3-8.8)	
	2005	4.7 (3.9-5.4)	10.1 (9.2-10.9)	6.4 (5.7-7.1)	9.9 (9.0-10.8)	7.4 (6.8-8.0)	
	2006	6.4 (5.3-7.5)	12.4 (11.3-13.6)	8.3 (7.3-9.3)	12.0 (10.8-13.2)	9.4 (8.7-10.2)	
	2007	7.2 (6.0-8.4)	13.8 (12.5-15.1)	9.4 (8.3-10.5)	13.6 (12.1-15.0)	10.7 (9.8-11.5)	
	2008	7.2 (6.0-8.4)	13.0 (11.8-14.2)	9.3 (8.2-10.4)	12.4 (11.1-13.6)	10.2 (9.4-11.0)	
	2009	7.5 (6.4-8.6)	13.2 (12.2-14.2)	8.8 (7.9-9.8)	14.0 (12.8-15.2)	10.4 (9.6-11.2)	
	2010	6.9 (5.9-8.0)	12.0 (10.9-13.0)	8.2 (7.2-9.1)	12.6 (11.3-13.9)	9.5 (8.7-10.3)	

Indicator	Year	Males % (95% CI)	Females % (95% CI)	Metropolitan % (95% CI)	Rural-regional % (95% CI)	All % (95% CI)
Adequate physical activity	1998	52.5 (51.0-54.0)	43.4 (42.1-44.7)	48.6 (47.3-49.9)	46.3 (44.9-47.7)	47.9 (46.9-48.9)
	2002	51.0 (49.1-53.0)	43.4 (41.8-45.1)	47.1 (45.4-48.8)	47.3 (45.5-49.2)	47.2 (45.9-48.5)
	2003	49.4 (47.4-51.3)	40.3 (38.7-41.9)	45.7 (44.1-47.3)	42.4 (40.7-44.0)	44.7 (43.5-46.0)
	2004	57.0 (54.7-59.3)	47.4 (45.6-49.3)	52.9 (51.0-54.9)	50.5 (48.5-52.5)	52.2 (50.7-53.7)
	2005	56.6 (54.6-58.5)	47.3 (45.7-49.0)	52.5 (50.8-54.2)	50.1 (48.4-51.9)	51.9 (50.6-53.1)
	2006	60.4 (58.1-62.7)	49.6 (47.6-51.5)	55.1 (53.1-57.0)	54.4 (52.3-56.6)	54.9 (53.4-56.4)
	2007	62.1 (59.3-65.0)	47.6 (45.2-50.0)	54.7 (52.4-57.1)	55.0 (52.3-57.8)	54.8 (52.9-56.7)
	2008	61.3 (59.0-63.6)	48.9 (47.0-50.9)	55.5 (53.5-57.5)	54.2 (52.1-56.4)	55.1 (53.5-56.6)
	2009	60.7 (58.5-62.9)	49.8 (48.1-51.5)	55.5 (53.6-57.3)	54.6 (52.6-56.6)	55.2 (53.8-56.6)
	2010	60.0 (57.6-62.3)	50.7 (48.8-52.5)	56.0 (54.0-57.9)	53.5 (51.4-55.6)	55.2 (53.7-56.7)
Current smoking	1997	27.1 (25.8-28.4)	21.1 (20.0-22.1)	23.6 (22.5-24.7)	25.1 (23.9-26.2)	24.0 (23.2-24.9)
	1998	26.2 (24.8-27.5)	21.3 (20.2-22.4)	23.9 (22.8-25.0)	23.3 (22.2-24.5)	23.7 (22.8-24.6)
	2002	23.9 (22.2-25.6)	19.2 (17.9-20.5)	20.8 (19.5-22.2)	23.1 (21.6-24.7)	21.5 (20.5-22.6)
	2003	24.9 (23.1-26.6)	19.8 (18.5-21.0)	21.7 (20.3-23.1)	23.6 (22.1-25.0)	22.3 (21.2-23.3)
	2004	22.6 (20.6-24.5)	19.3 (17.9-20.8)	21.1 (19.5-22.7)	20.5 (18.9-22.0)	20.9 (19.7-22.1)
	2005	22.6 (20.9-24.3)	17.6 (16.3-18.8)	19.0 (17.6-20.4)	22.6 (21.1-24.2)	20.1 (19.0-21.1)
	2006	19.2 (17.3-21.1)	16.2 (14.8-17.7)	17.1 (15.6-18.7)	19.2 (17.5-20.9)	17.7 (16.5-18.9)
	2007	21.9 (19.8-24.0)	15.4 (14.0-16.7)	18.4 (16.8-20.0)	18.8 (17.0-20.7)	18.6 (17.3-19.8)
	2008	19.7 (17.8-21.6)	17.2 (15.7-18.7)	17.9 (16.3-19.4)	19.7 (17.9-21.4)	18.4 (17.2-19.7)
	2009	20.3 (18.5-22.1)	14.2 (13.0-15.4)	16.6 (15.2-18.0)	18.6 (17.0-20.3)	17.2 (16.1-18.3)
2010	18.1 (16.2-20.0)	13.5 (12.3-14.7)	14.7 (13.2-16.2)	18.2 (16.5-19.9)	15.8 (14.6-16.9)	
Daily smoking	1997	21.6 (20.4-22.7)	16.7 (15.7-17.6)	18.3 (17.4-19.3)	20.8 (19.7-21.9)	19.1 (18.3-19.8)
	1998	20.8 (19.5-22.0)	16.6 (15.6-17.5)	18.4 (17.3-19.4)	19.3 (18.3-20.4)	18.6 (17.9-19.4)
	2002	18.5 (17.0-20.0)	14.3 (13.1-15.5)	15.6 (14.3-16.8)	18.4 (17.0-19.9)	16.4 (15.4-17.3)
	2003	19.8 (18.2-21.4)	15.8 (14.6-17.0)	17.1 (15.8-18.4)	19.3 (17.9-20.6)	17.8 (16.8-18.7)
	2004	17.3 (15.6-19.0)	15.4 (14.0-16.7)	16.2 (14.8-17.6)	16.7 (15.2-18.1)	16.3 (15.2-17.4)
	2005	17.5 (16.0-19.0)	14.1 (13.0-15.3)	14.6 (13.4-15.9)	18.5 (17.1-20.0)	15.8 (14.8-16.7)
	2006	15.0 (13.3-16.7)	12.9 (11.6-14.2)	13.1 (11.8-14.5)	15.8 (14.2-17.4)	13.9 (12.8-15.0)
	2007	17.0 (15.1-18.9)	12.2 (11.0-13.5)	14.2 (12.8-15.7)	15.4 (13.7-17.1)	14.6 (13.4-15.7)
	2008	14.7 (13.0-16.4)	13.0 (11.7-14.4)	12.8 (11.5-14.2)	16.0 (14.4-17.7)	13.9 (12.8-14.9)
	2009	15.8 (14.1-17.4)	11.4 (10.3-12.5)	12.8 (11.6-14.0)	15.3 (13.8-16.8)	13.5 (12.6-14.5)
2010	13.8 (12.1-15.4)	9.8 (8.8-10.8)	10.5 (9.3-11.6)	14.8 (13.2-16.3)	11.7 (10.8-12.7)	

Note: Indicators include adults 16 years and over unless specified.

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

WARNING: Estimates only for NSW
Please check HealthStats NSW for more information

Health status

- Overview of health status
- Health-related quality of life (self-rated health)
- Asthma
- Diabetes or high blood glucose
- Mental health (psychological distress)
- Oral health
- Population weight status
- Hearing and vision
- Trends in health status

WARNING: Estimates out of date.
Please check HealthStats NSW for latest estimates.

Overview for health status

In Australia, the combination of an ageing population and an unhealthy lifestyle are contributing to an increasing burden of disease and disability, for which the top 10 causes are: cancer, cardiovascular disease, mental illness, neurological conditions, chronic respiratory disease, diabetes, unintentional injuries, musculoskeletal disorders, genitourinary diseases, and intentional injuries. It is predicted that an ageing population will increase the burden, primarily as a consequence of neurological and sense disorders, and diabetes will increase the burden, primarily as a consequence of obesity.[1] The burden caused by obesity is compounded by its contribution to cardiovascular disease, diabetes, and cancer.

Among the national Health Priority Areas are cardiovascular health, cancer control, injury prevention and control, mental health, diabetes mellitus, asthma, arthritis and musculoskeletal conditions, and obesity.[2]. The *National Healthcare Agreement* supports an integrated approach to the promotion of healthy lifestyles, prevention of illness and injury, and diagnosis and treatment of illness across the continuum of care.[3] The *National Preventive Health Strategy* aims to reduce inequity through targeting socioeconomic disadvantage.[4] The *NSW State Plan* aims to improve health outcomes and quality of life for those with mental illness.[5] The *NSW Oral Health Implementation Plan 2005-2010* provides key strategies to improve the oral health of the population, reduce inequalities in oral health, and provide equitable access to dental health services.[6]

The continuous monitoring and reporting of health status through the NSW Population Health Survey provides an information base to support the planning, implementation, and evaluation of health services. In particular, comparisons between age groups, sexes, socioeconomic quintiles, and geographical areas support policy development and targeted interventions for those with the poorest health.

This section of the *2010 Report on Adult Health* includes the following indicators for health status: health-related quality of life (self-rated health), asthma, diabetes or high blood glucose, mental health (psychological distress), oral health, population weight status, and hearing and vision.

This report shows a significant decrease in the proportion of adults who rated their health positively, a significant increase in diabetes or high blood glucose, and a significant increase in overweight and obesity.

There has been no significant change in asthma and psychological distress.

For most indicators of health status in this report, inequalities have been found among population subgroups: that is, by age, sex, socioeconomic status, and geographical location. For example, a significantly lower proportion of adults in the fifth or most disadvantaged quintile rated their health positively, adult males had significantly higher prevalence of diabetes and overweight and obesity than adult females, and a significantly higher proportion of adults in the fifth or most disadvantaged quintile were obese.

References

1. Begg S, Vos T, Barker B, Stevenson C, Stanley L, and Lopez A. *The burden of disease and injury in Australia 2003*. Canberra: Australian Institute of Health and Welfare, 2007. Available online at www.aihw.gov.au (accessed 2 May 2011).
2. Australian Government. *Health priority areas*. Canberra: Australian Institute of Health and Welfare, 2010. Available online at www.aihw.gov.au/health-priority-areas (accessed 2 May 2011).
3. Council of Australian Governments. *National Healthcare Agreement*. Canberra: Council of Australian Governments, 2011. Available online at www.coag.gov.au/intergov_agreements/federal_financial_relations (accessed 2 May 2011).
4. National Preventative Health Strategy. *Australia: The healthiest country by 2020*. Canberra: Commonwealth of Australia, 2009. Available online at www.health.gov.au/internet/preventativehealth/publishing.nsf/Content/nphs-overview (accessed 2 May 2011).
5. NSW Government. *NSW State Plan 2010*. Sydney: NSW Government, 2010. Available online at www.stateplan.nsw.gov.au (accessed 2 May 2011).
6. NSW Department of Health. *NSW Oral Health Implementation Plan 2005-2010*. Sydney: NSW Department of Health, 2007. Available online at www.health.nsw.gov.au/pubs/2007/pdf/oh_implementation.pdf (accessed 2 May 2011).

Health-related quality of life

Introduction

The concept of health-related quality of life (HRQL) refers to a person's or a group's perceived physical and mental health over time. Clinicians use HRQL to better understand how an illness interferes with a patient's day-to-day life. Public health professionals use HRQL to measure population health needs, and the effect of public health interventions in different populations.[1]

Self-rated health is the single most reliable and valid HRQL measure. A large number of cross-sectional and longitudinal studies have demonstrated how a person's appraisal of his or her general health is a powerful predictor of future morbidity and mortality, even after controlling for a variety of factors such as age, sex, socioeconomic status, health behaviours, and health status.[2-6]

Results

Self-rated health

In 2010, 19.8 per cent of adults rated their health in the last 4 weeks as excellent, 31.1 per cent as very good, 29.5 per cent as good, 13.3 per cent as fair, 5.3 per cent as poor, and 1.0 per cent as very poor. When ratings of excellent and very good and good were combined to give an overall positive rating, 80.4 per cent of adults rated their health positively.

- A significantly higher proportion of males (82.3 per cent) rated their health positively, compared with females (78.5 per cent).
- Among males, a significantly higher proportion of those aged 16-24 years (87.8 per cent), and a significantly lower proportion of those aged 55-64 years (78.8 per cent), 65-74 years (78.7 per cent), and 75 years and over (68.1 per cent), rated their health positively, compared with the overall adult male population.
- Among females, a significantly higher proportion of those aged 35-44 years (82.4 per cent) and 45-54 years (81.3 per cent), and a significantly lower proportion of those aged 65-74 years (75.4 per cent) and 75 years and over (67.8 per cent), rated their health positively, compared with the overall adult female population.
- A significantly higher proportion of adults in the first or least disadvantaged quintile (84.9 per cent), and a significantly lower proportion of adults in the fifth or most disadvantaged quintile (77.6 per cent), rated their health positively, compared with the overall adult population.
- There was no significant difference between rural-regional and metropolitan health districts.
- A significantly higher proportion of adults in Northern Sydney (83.6 per cent) rated their health positively, compared with the overall adult population.

Since 1997, there has been a significant decrease in the proportion of adults aged 16 years and over who rated their health positively (85.0 per cent to 80.4 per cent). The decrease has been significant in males and females, and in rural-regional and metropolitan health districts.

References

1. National Center for Chronic Disease Prevention and Health Promotion. Center for Disease Control Health-Related Quality of Life website at www.cdc.gov/hrqol (accessed 4 March 2011).
2. Krause NM and Jay GM. What do global self-rated health items measure? *J Med Care* 1994; 32: 930-942.
3. Eriksson I, Unden A-L, and Elofsson S. Self-rated health. Comparisons between three different measures. Results from a population study. *Int J Epidemiol* 2001; 30: 326-333.
4. Borrell C, Muntaner C, Benach J, and Artacoz L. Social class and self-reported health status among men and women: what is the role of work organisation, household material standards and household labour? *Soc Sci Med* 2004; 58(10): 1869-87.
5. Unden AL and Elofsson S. Do different factors explain self-rated health in men and women? *Gen Med* 2006; 3(4): 295-308.
6. McFadden E, Luben R, Bingham S, Wareham N, Kinmonth AL, Khaw KT. Social inequalities in self-rated health by age: cross-sectional study of 22,457 middle-aged men and women. *BMC Public Health* 2008; 8: 230.

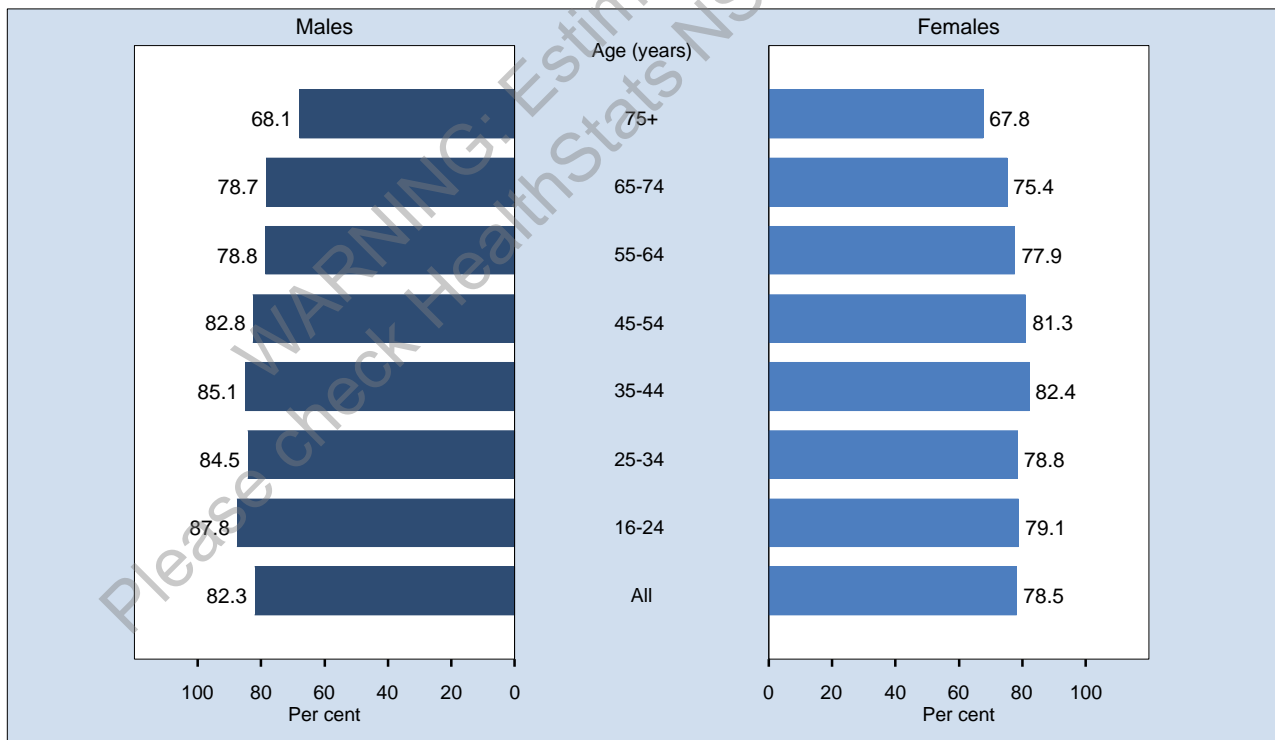
Self-rated health, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 10,212 respondents in NSW. For this indicator 33 (0.32%) were not stated (Don't know or Refused) in NSW. The question used was: Overall, how would you rate your health during the last 4 weeks: Was it excellent, very good, good, fair, poor, or very poor?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

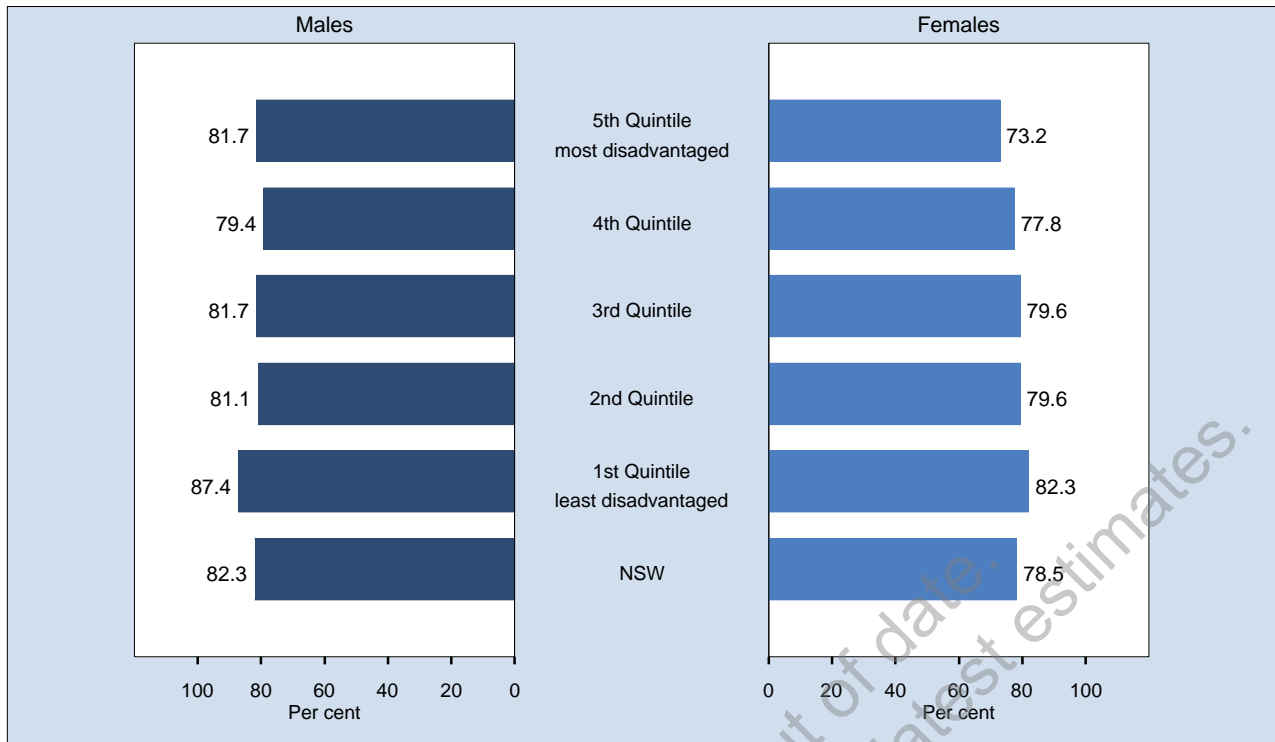
Excellent, very good, or good self-rated health status by age, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 10,212 respondents in NSW. For this indicator 33 (0.32%) were not stated (Don't know or Refused) in NSW. The indicator includes those responding excellent, very good, or good to a global self-rated health status question. The question used to define the indicator was: Overall, how would you rate your health during the last 4 weeks: Was it excellent, very good, good, fair, poor, or very poor? The question used to define the indicator in 1997 and 1998 was: In general would you say your health is excellent, very good, good, fair, or poor?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

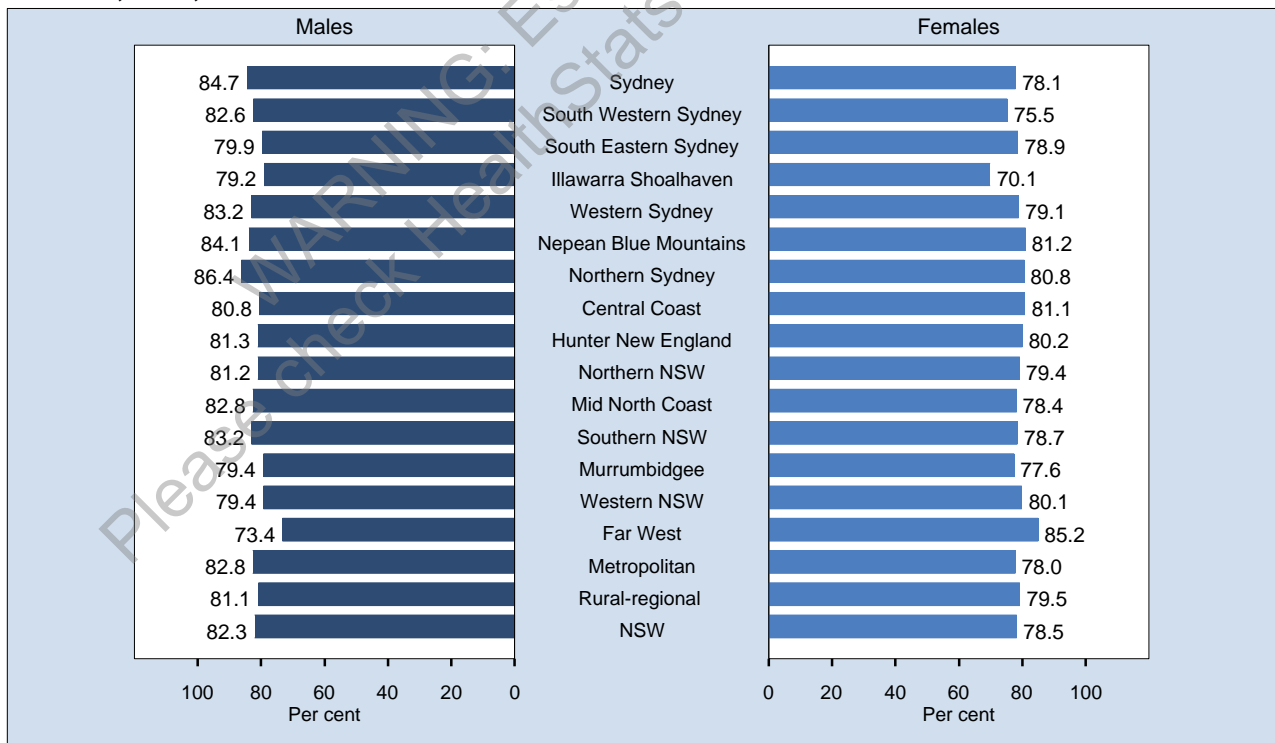
Excellent, very good, or good self-rated health status by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 10,212 respondents in NSW. For this indicator 33 (0.32%) were not stated (Don't know or Refused) in NSW. The indicator includes those responding excellent, very good, or good to a global self-rated health status question. The question used to define the indicator was: Overall, how would you rate your health during the last 4 weeks: Was it excellent, very good, good, fair, poor, or very poor? The question used to define the indicator in 1997 and 1998 was: In general would you say your health is excellent, very good, good, fair, or poor?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

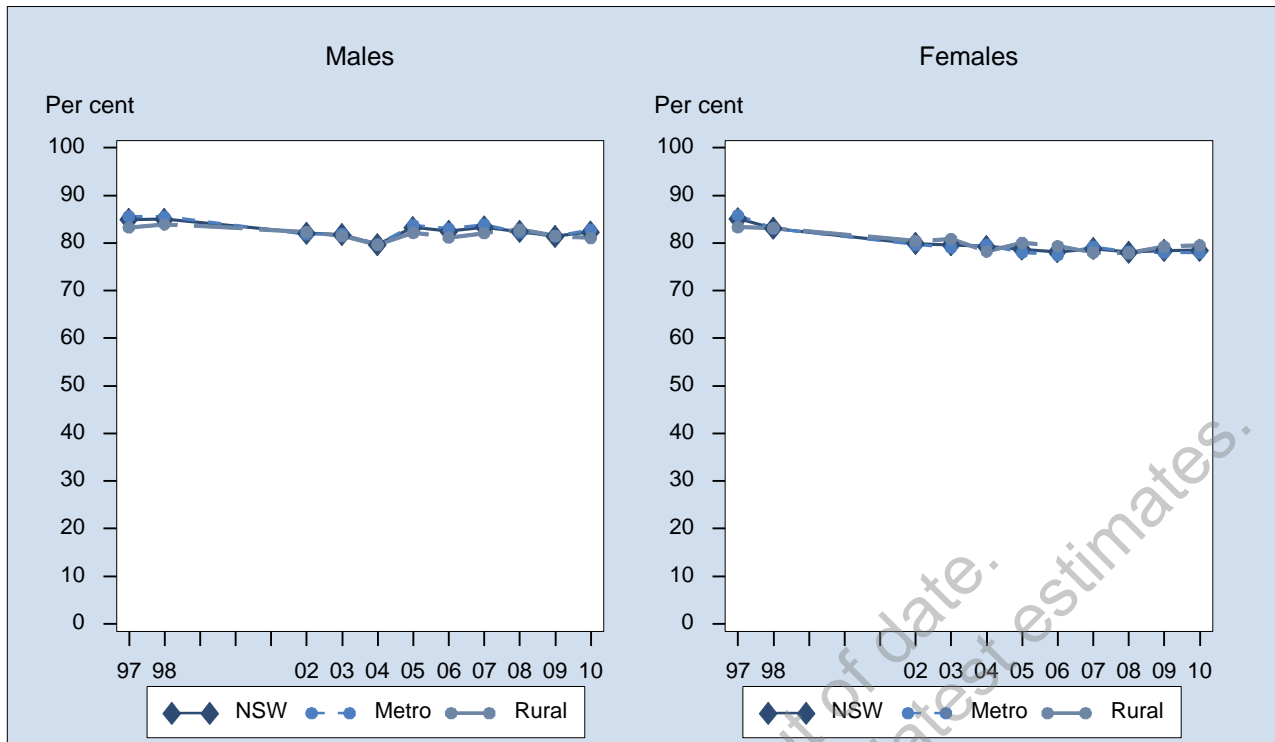
Excellent, very good, or good self-rated health status by local health district, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 10,212 respondents in NSW. For this indicator 33 (0.32%) were not stated (Don't know or Refused) in NSW. The indicator includes those responding excellent, very good, or good to a global self-rated health status question. The question used to define the indicator was: Overall, how would you rate your health during the last 4 weeks: Was it excellent, very good, good, fair, poor, or very poor? The question used to define the indicator in 1997 and 1998 was: In general would you say your health is excellent, very good, good, fair, or poor? NSW total includes the 15 LHDs and Albury (Victoria in-reach).

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Excellent, very good, or good self-rated health status by year, adults aged 16 years and over, NSW, 1997-2010



Note: Estimates are based on the following numbers of respondents for NSW: 1997 (17,494), 1998 (17,440), 2002 (12,610), 2003 (12,992), 2004 (9,768), 2005 (11,474), 2006 (7,942), 2007 (11,511), 2008 (10,264), 2009 (10,668), 2010 (10,212). The indicator includes those responding excellent, very good, or good to a global self-rated health status question. The question used to define the indicator was: Overall, how would you rate your health during the last 4 weeks: Was it excellent, very good, good, fair, poor, or very poor? The question used to define the indicator in 1997 and 1998 was: In general would you say your health is excellent, very good, good, fair, or poor?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

WARNING: Estimates are unvalidated estimates. Please check HealthStats NSW

Asthma

Introduction

Asthma is a chronic inflammatory disorder of the airways in which, in response to a wide range of triggers, the airways narrow too much and too easily, resulting in episodes of wheeze, chest tightness, and shortness of breath. Asthma remains a significant health problem in Australia, with prevalence rates high by international standards.[1-2]

Asthma is not curable but can be managed effectively. The use of a written asthma action plan has been found to decrease visits to doctors, hospitalisations, and deaths due to asthma.[3] Research has shown most patients with a written asthma action plan found it useful for managing their asthma.[4-5]

Results

Current asthma

In 2010, 11.3 per cent of adults aged 16 years and over had current asthma; that is, doctor diagnosed asthma with recent symptoms or treatment.

- A significantly lower proportion of males (9.3 per cent) had current asthma, compared with females (13.3 per cent).
- Among males, there was no significant difference among age groups, compared with the overall adult male population.
- Among females, a significantly lower proportion of those aged 75 years and over (9.7 per cent) had current asthma, compared with the overall adult female population.
- A significantly lower proportion of adults in the first or least disadvantaged quintile (8.8 per cent) had current asthma, compared with the overall adult population.
- A significantly higher proportion of adults in rural-regional health districts (13.2 per cent) had current asthma, compared with metropolitan health districts (10.6 per cent).
- A significantly higher proportion of adults in Murrumbidgee (15.7 per cent) had current asthma, compared with the overall adult population.

Since 1997, there has been no significant change in the proportion of adults aged 16 years and over who had current asthma.

Written asthma action plan

In 2010, 34.0 per cent of adults aged 16 years and over with current asthma have a written asthma action plan; that is, written instructions of what to do if their asthma is worse or out of control.

- There was no significant difference between males and females.
- A significantly higher proportion of adults aged 45-54 years with current asthma (42.8 per cent) have a written asthma action plan, compared with the overall adult population.
- There was no significant difference among quintiles of disadvantage, compared with the overall adult population.
- There was no significant difference between metropolitan and rural-regional health districts.
- A significantly lower proportion of adults with current asthma in South Western Sydney (18.6 per cent), and a significantly higher proportion of adults with current asthma in Central Coast (55.9 per cent), have a written asthma action plan, compared with the overall adult population.

Since 2009, there has been no significant change in the proportion of adults aged 16 years and over with current asthma who have a written asthma action plan.

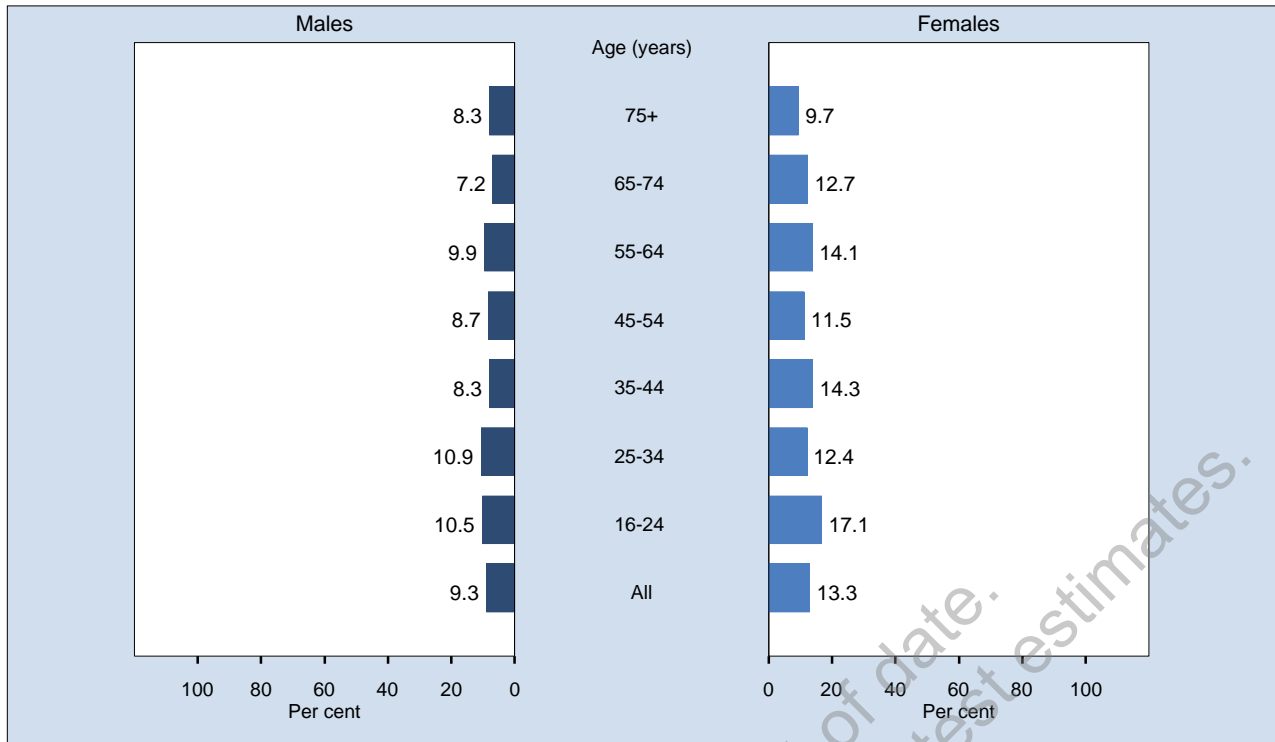
References

1. Australian Government Department of Health and Ageing. Health Insite: Asthma website at www.healthinsite.gov.au/topics/asthma (accessed 4 March 2011).
2. Australian Centre for Asthma Monitoring. *Asthma in Australia 2008*. Canberra: Australian Institute of Health and Welfare, 2008.

3. Abramson M, Bailey J, Couper F, Driver J, Drummer O, Forbes A et al. Are Asthma Medications and Management Related to Deaths from Asthma? *Am J Respir Crit Care Med* 2001; 163(1): 12-18.
4. Gibson PG, Coughlan J, Wilson AJ et al. Self-management education and regular practitioner review for adults with asthma. *Cochrane Database of Systematic Reviews*. Oxford: John Wiley & Sons, 2009.
5. Douglass J, Aroni R, Goeman D, Stewart K, Sawyer S, Thien F, Abramson M. A qualitative study of action plans for asthma. *BMJ* 2002; 324: 1003.

WARNING: Estimates out of date.
Please check HealthStats NSW for latest estimates.

Current asthma by age, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 10,207 respondents in NSW. For this indicator 38 (0.37%) were not stated (Don't know or Refused) in NSW. The indicator includes those who had symptoms of asthma or treatment for asthma in the last 12 months. The questions used to define the indicator were: Have you ever been told by a doctor or hospital you have asthma? Have you had symptoms of asthma or treatment for asthma in the last 12 months?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

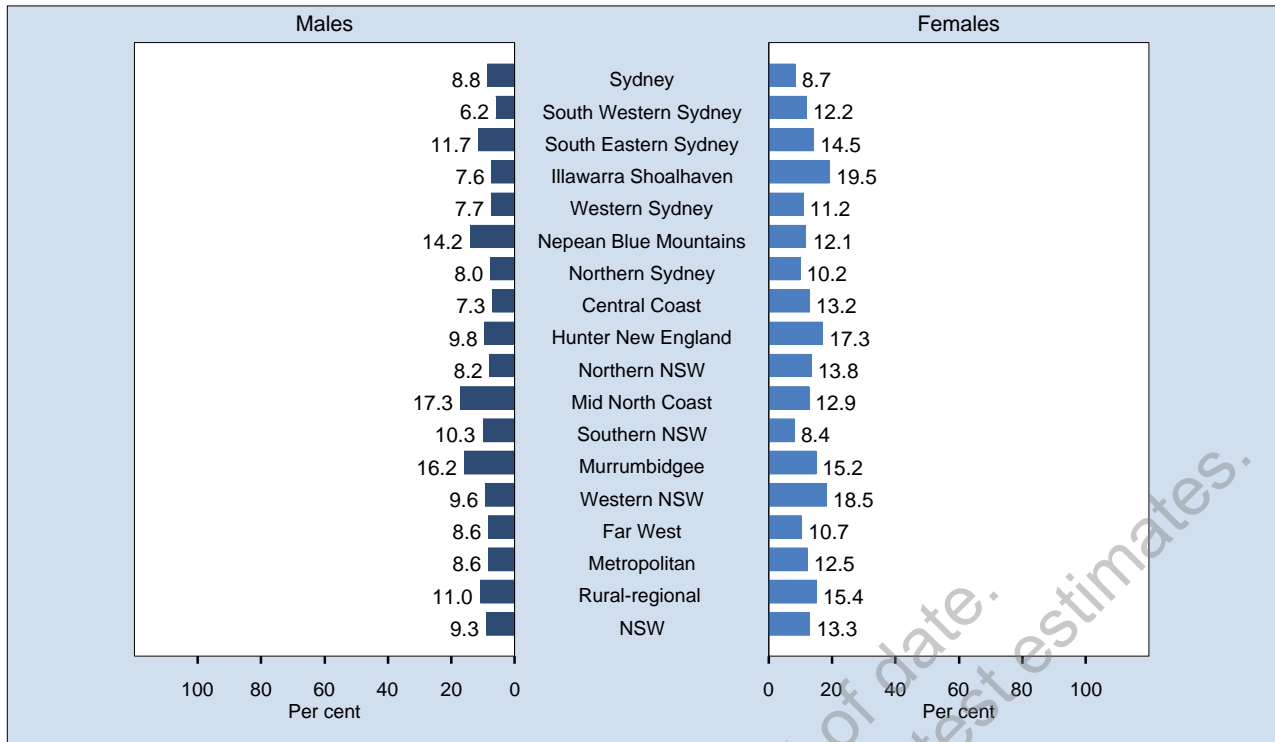
Current asthma by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 10,207 respondents in NSW. For this indicator 38 (0.37%) were not stated (Don't know or Refused) in NSW. The indicator includes those who had symptoms of asthma or treatment for asthma in the last 12 months. The questions used to define the indicator were: Have you ever been told by a doctor or hospital you have asthma? Have you had symptoms of asthma or treatment for asthma in the last 12 months?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

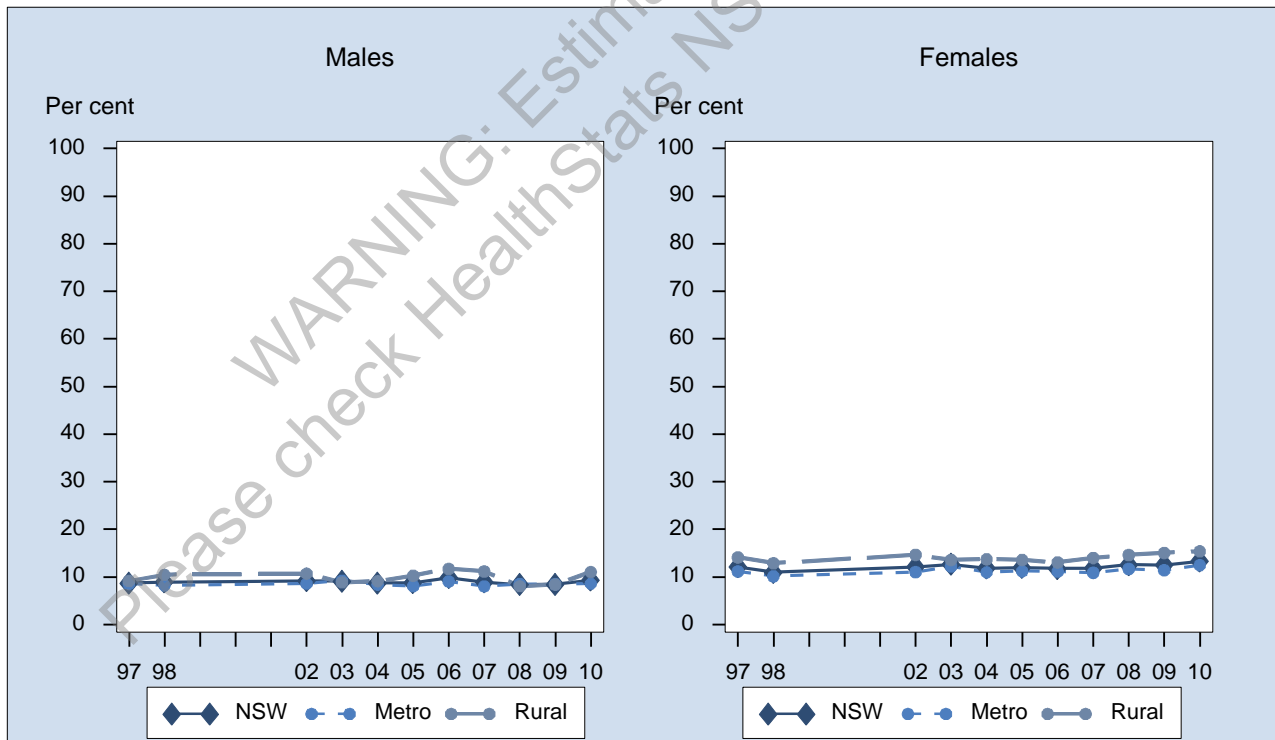
Current asthma by local health district, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 10,207 respondents in NSW. For this indicator 38 (0.37%) were not stated (Don't know or Refused) in NSW. The indicator includes those who had symptoms of asthma or treatment for asthma in the last 12 months. The questions used to define the indicator were: Have you ever been told by a doctor or hospital you have asthma? Have you had symptoms of asthma or treatment for asthma in the last 12 months? NSW total includes the 15 LHDs and Albury (Victoria in-reach).

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

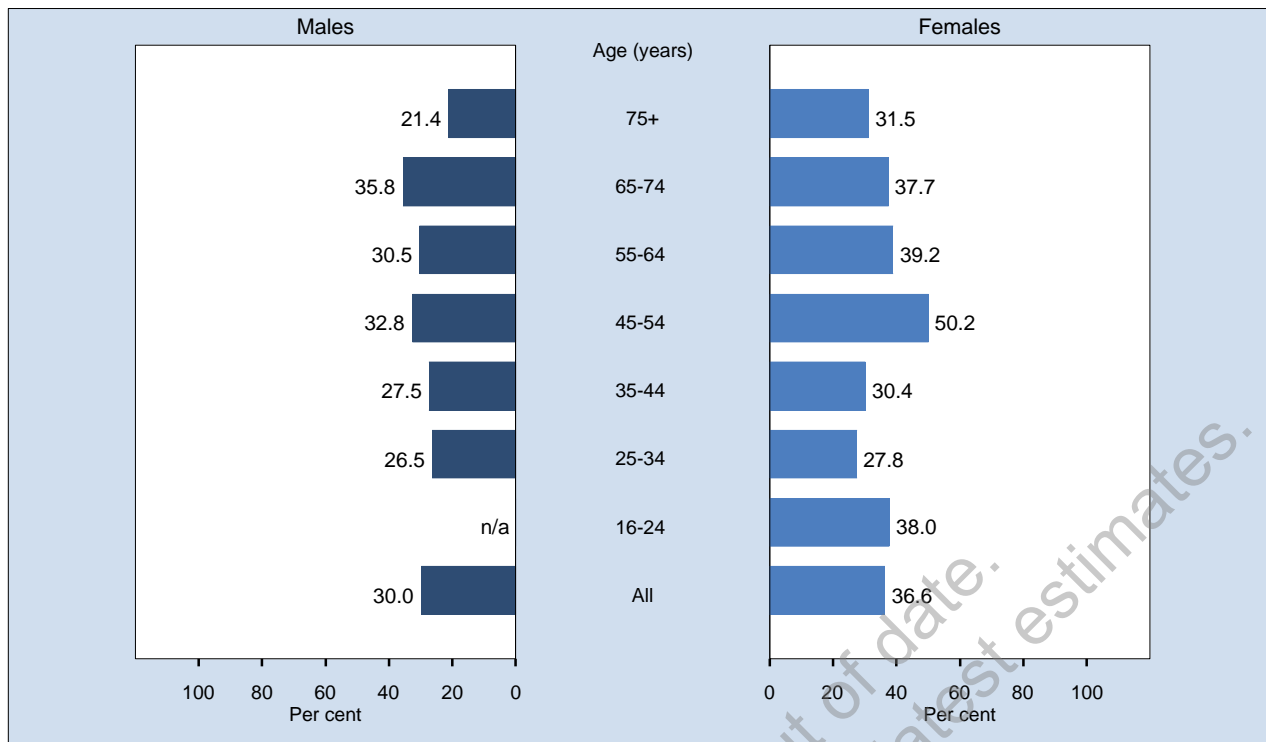
Current asthma by year, adults aged 16 years and over, NSW, 1997-2010



Note: Estimates are based on the following numbers of respondents for NSW: 1997 (17,458), 1998 (17,446), 2002 (12,604), 2003 (13,000), 2004 (9,775), 2005 (11,474), 2006 (7,941), 2007 (7,391), 2008 (8,513), 2009 (10,688), 2010 (10,207). The indicator includes those who had symptoms of asthma or treatment for asthma in the last 12 months. The questions used to define the indicator were: Have you ever been told by a doctor or hospital you have asthma? Have you had symptoms of asthma or treatment for asthma in the last 12 months?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

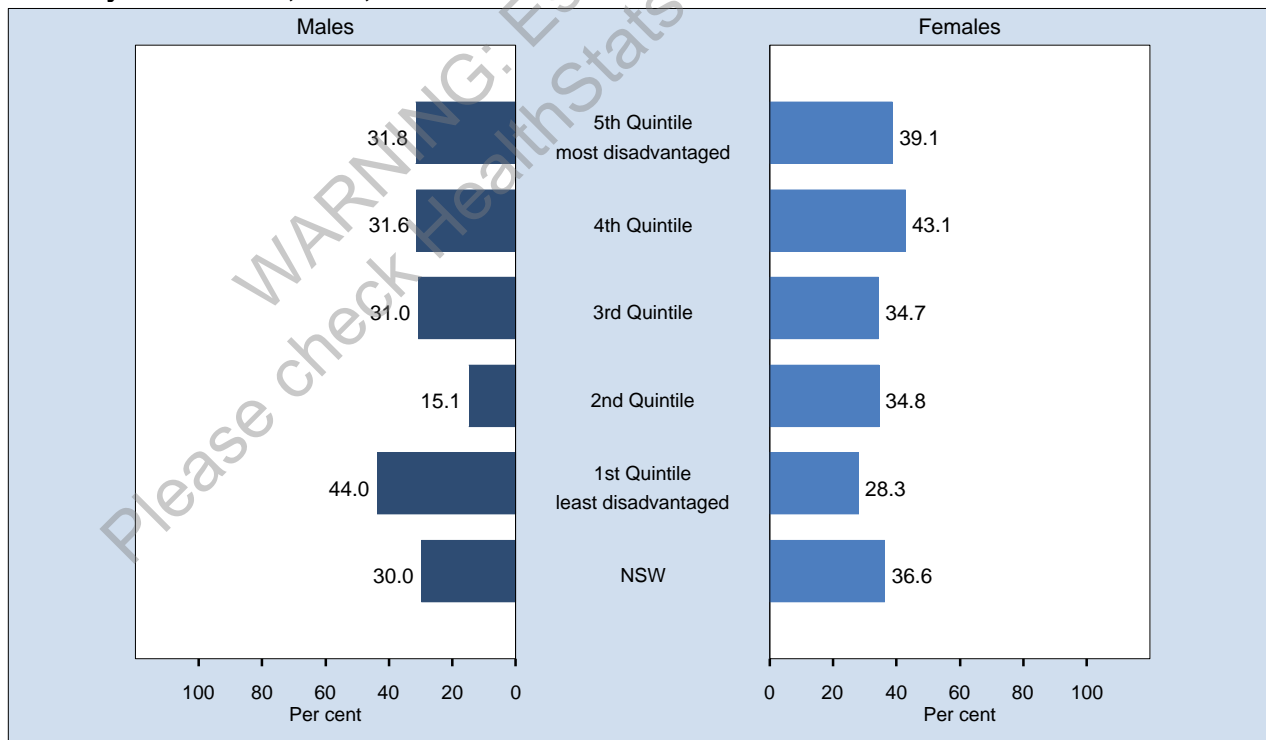
Written asthma action plan by age, adults aged 16 years and over who currently have asthma, NSW, 2010



Note: Estimates are based on 1,094 respondents in NSW. For this indicator 13 (1.17%) were not stated (Don't know or Refused) in NSW. The indicator includes those who have current asthma and who have a written asthma action plan. The questions used to define the indicator were: Have you ever been told by a doctor or hospital you have asthma? Have you had symptoms of asthma or treatment for asthma in the last 12 months? Do you have an asthma action plan, written instructions of what to do if your asthma is worse or out of control?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

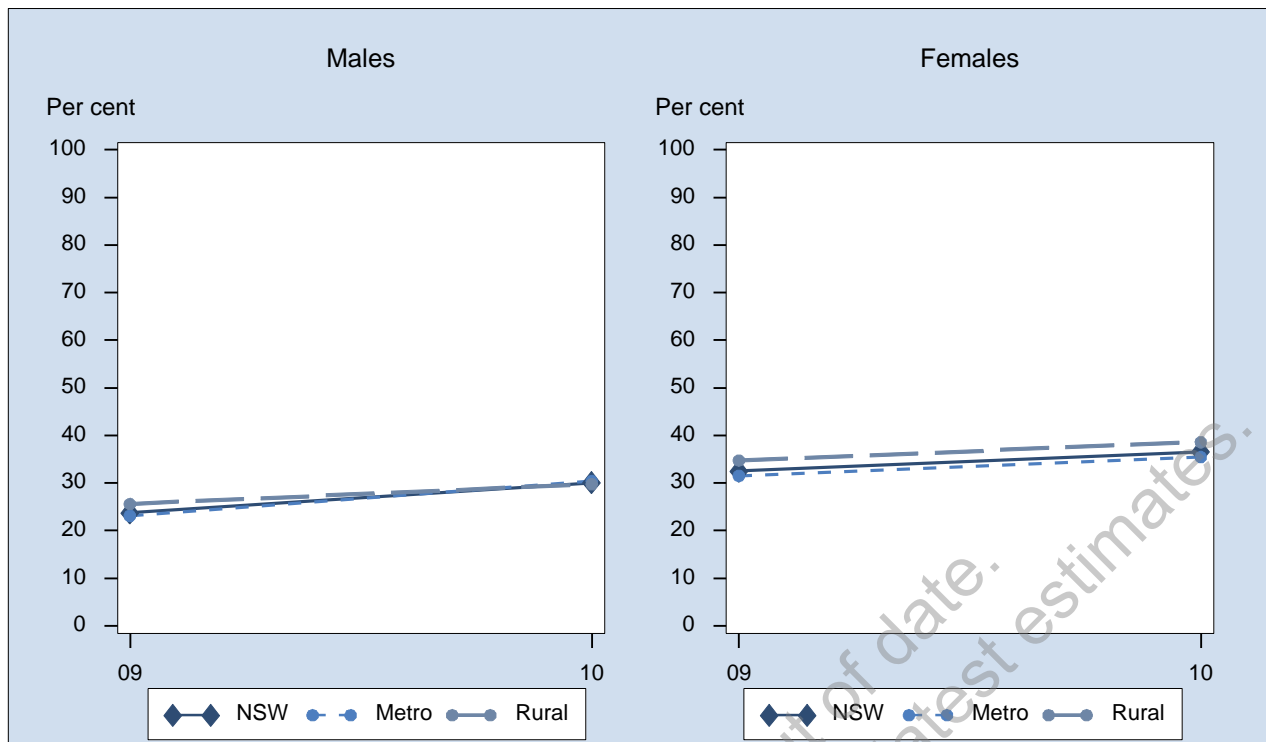
Written asthma action plan by socioeconomic disadvantage, adults aged 16 years and over who currently have asthma, NSW, 2010



Note: Estimates are based on 1,094 respondents in NSW. For this indicator 13 (1.17%) were not stated (Don't know or Refused) in NSW. The indicator includes those who have current asthma and who have a written asthma action plan. The questions used to define the indicator were: Have you ever been told by a doctor or hospital you have asthma? Have you had symptoms of asthma or treatment for asthma in the last 12 months? Do you have an asthma action plan, written instructions of what to do if your asthma is worse or out of control?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Written asthma action plan by year, adults aged 16 years and over who currently have asthma, NSW, 2009-2010



Note: Estimates are based on the following numbers of respondents for NSW: 2009 (1,128), 2010 (1,094). The indicator includes those who have current asthma and who have a written asthma action plan. The questions used to define the indicator were: Have you ever been told by a doctor or hospital you have asthma? Have you had symptoms of asthma or treatment for asthma in the last 12 months? Do you have an asthma action plan, written instructions of what to do if your asthma is worse or out of control?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

WARNING: Estimates may not be up to date. Please check HealthStats NSW for latest estimates.

Diabetes or high blood glucose

Introduction

Diabetes is a chronic disease characterised by high blood glucose levels, resulting from the body either not producing insulin or not using insulin properly. Diabetes affects a person's health by direct metabolic complications, which can be immediately life threatening if not treated promptly, and by long term complications involving the eyes, kidneys, nerves, and major blood vessels including those in the heart.[1]

There are 3 main forms of diabetes: type 1 occurs when the pancreas no longer produces insulin; type 2 occurs when the pancreas is not producing enough insulin and the insulin it produces is not working effectively; gestational diabetes occurs in pregnancy and should disappear after birth. Type 2 diabetes accounts for up to 90 per cent of all cases of diabetes. The management of type 2 diabetes depends on a healthy lifestyle; careful control of glucose levels, blood lipid levels (especially cholesterol levels), and blood pressure; and regular screening for complications.[1]

Impaired glucose metabolism (pre-diabetes) occurs in persons whose blood-glucose readings are not high enough to be classified as diabetes but are not normal either. Pre-diabetes is more common in persons with a family history of type 2 diabetes, who are inactive and overweight, particularly when excess weight is carried around the waistline. Persons diagnosed with impaired glucose metabolism are at 10-20 times greater risk of developing type 2 diabetes.[2]

Results

In 2010, 7.4 per cent of adults aged 16 years and over had ever been told by a doctor or hospital they had diabetes or high blood glucose.

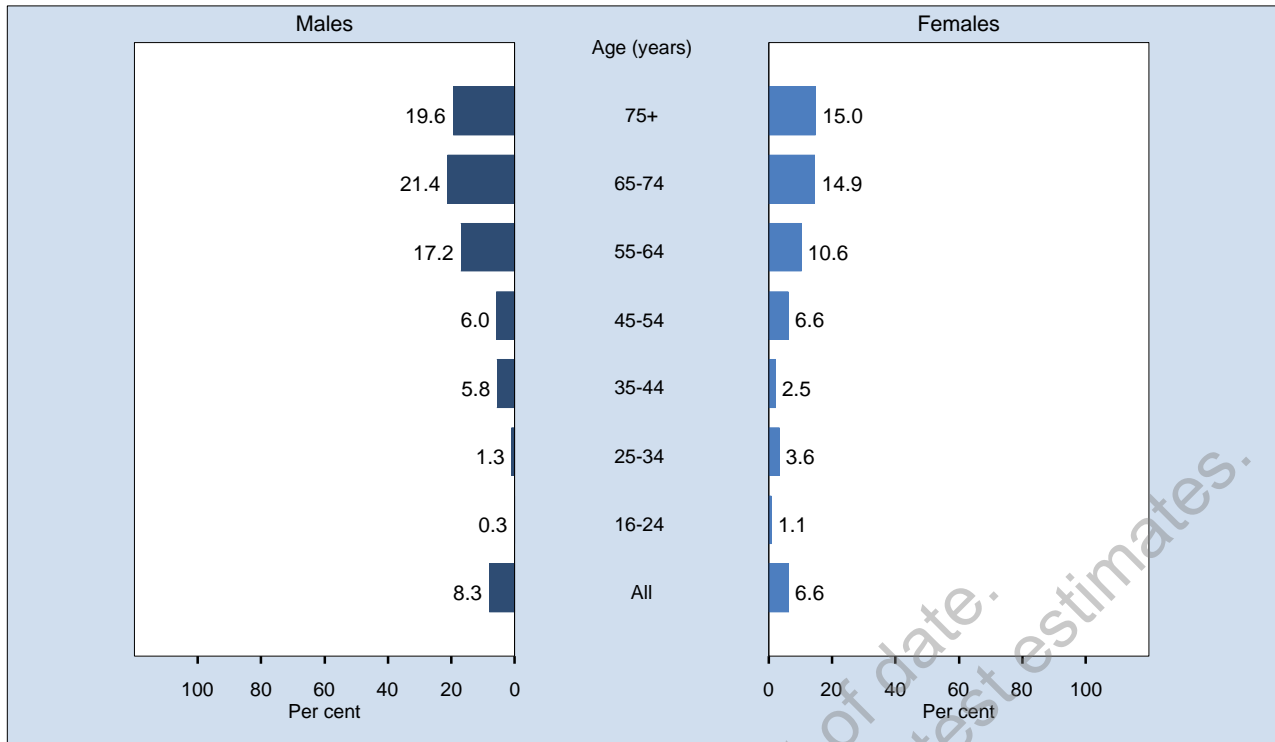
- A significantly higher proportion of males (8.3 per cent) had ever been told by a doctor or hospital they had diabetes or high blood glucose, compared with females (6.6 per cent).
- Among males, a significantly lower proportion of those aged 16-24 years (0.3 per cent), 25-34 years (1.3 per cent), and 45-54 years (6.0 per cent), and a significantly higher proportion of those aged 55-64 years (17.2 per cent), 65-74 years (21.4 per cent), and 75 years and over (19.6 per cent), had ever been told by a doctor or hospital they had diabetes or high blood glucose, compared with the overall adult male population.
- Among females, a significantly lower proportion of those aged 16-24 years (1.1 per cent), 25-34 years (3.6 per cent), and 35-44 years (2.5 per cent), and a significantly higher proportion of those aged 55-64 years (10.6 per cent), 65-74 years (14.9 per cent), and 75 years and over (15.0 per cent), had ever been told by a doctor or hospital they had diabetes or high blood glucose, compared with the overall adult female population.
- A significantly lower proportion of adults in the first or least disadvantaged quintile (5.2 per cent) and second quintile (6.0 per cent), and a significantly higher proportion of adults in the third quintile (9.2 per cent), had ever been told by a doctor or hospital they had diabetes or high blood glucose, compared with the overall adult population.
- There was no significant difference between metropolitan and rural-regional health districts.
- A significantly lower proportion of adults in Northern Sydney (4.4 per cent), and a significantly higher proportion of adults in Illawarra Shoalhaven (11.4 per cent), had ever been told by a doctor or hospital they had diabetes or high blood glucose, compared with the overall adult population.

Since 1997, there has been a significant increase in the proportion of adults aged 16 years and over who had ever been told by a doctor or hospital they had diabetes or high blood glucose (4.7 per cent to 7.4 per cent). The increase has been significant in males and females, and in rural-regional and metropolitan health districts.

References

1. Diabetes Australia. *What is Diabetes?* Available online at www.diabetesaustralia.com.au/Understanding-Diabetes/What-is-Diabetes (accessed 4 March 2011).
2. Diabetes Australia. *Impaired Glucose Metabolism or Pre-diabetes.* Available online at www.diabetesaustralia.com.au/Understanding-Diabetes/What-is-Diabetes/Other-Types-of-Diabetes (accessed 4 March 2011).

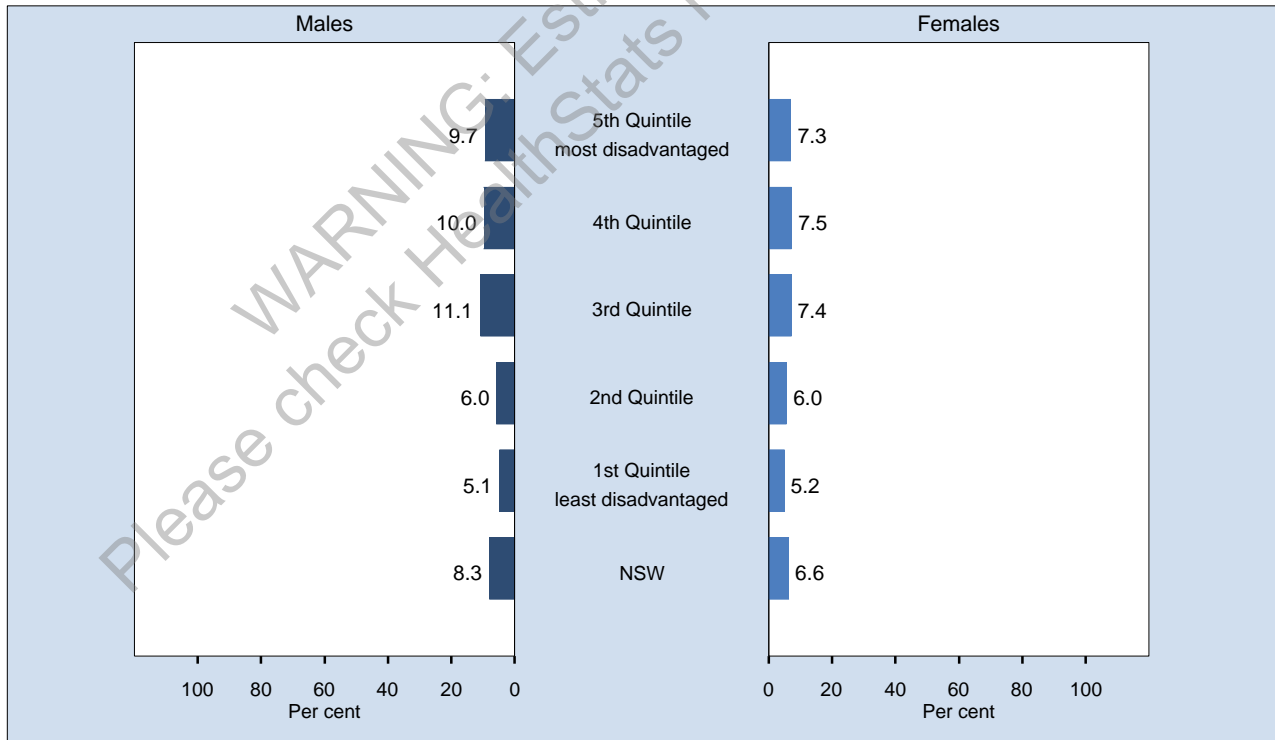
Diabetes or high blood glucose by age, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 10,181 respondents in NSW. For this indicator 64 (0.62%) were not stated (Don't know or Refused) in NSW. The indicator includes those who either had diabetes or high blood glucose but did not have gestational diabetes. The questions used to define the indicator were: Have you ever been told by a doctor or hospital you have diabetes? Have you ever been told by a doctor or hospital you have high blood glucose? If female, Were you pregnant when you were first told you had diabetes or high blood glucose? Have you ever had diabetes or high blood glucose apart from when you were pregnant?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

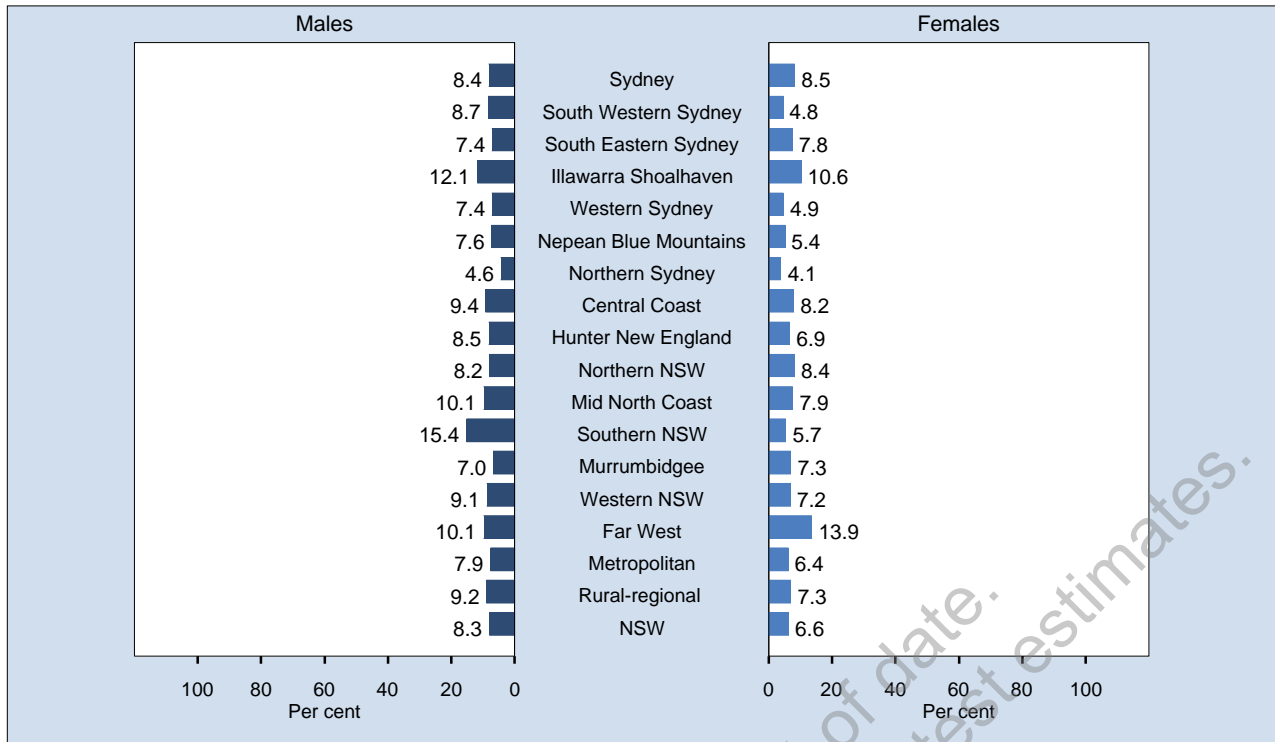
Diabetes or high blood glucose by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 10,181 respondents in NSW. For this indicator 64 (0.62%) were not stated (Don't know or Refused) in NSW. The indicator includes those who either had diabetes or high blood glucose but did not have gestational diabetes. The questions used to define the indicator were: Have you ever been told by a doctor or hospital you have diabetes? Have you ever been told by a doctor or hospital you have high blood glucose? If female, Were you pregnant when you were first told you had diabetes or high blood glucose? Have you ever had diabetes or high blood glucose apart from when you were pregnant?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

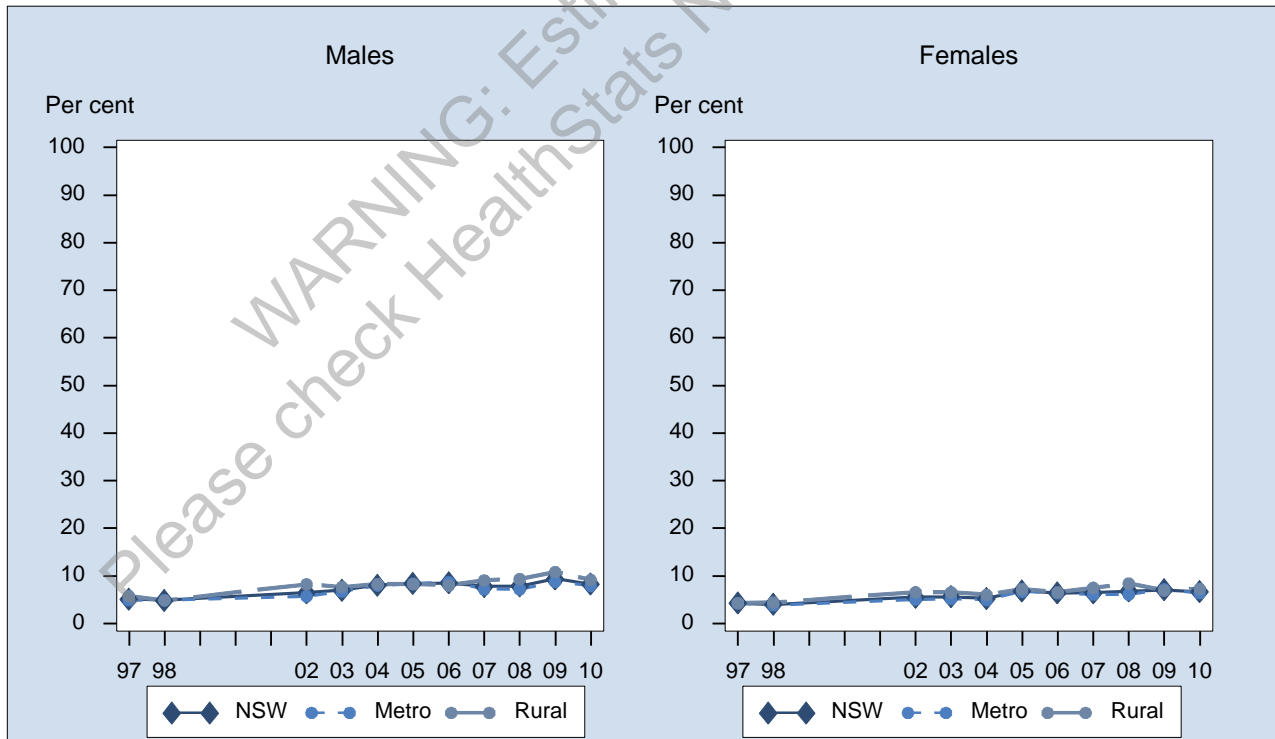
Diabetes or high blood glucose by local health district, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 10,181 respondents in NSW. For this indicator 64 (0.62%) were not stated (Don't know or Refused) in NSW. The indicator includes those who either had diabetes or high blood glucose but did not have gestational diabetes. The questions used to define the indicator were: Have you ever been told by a doctor or hospital you have diabetes? Have you ever been told by a doctor or hospital you have high blood glucose? If female, Were you pregnant when you were first told you had diabetes or high blood glucose? Have you ever had diabetes or high blood glucose apart from when you were pregnant? NSW total includes the 15 LHDs and Albury (Victoria in-reach).

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Diabetes or high blood glucose by year, adults aged 16 years and over, NSW, 1997-2010



Note: Estimates are based on the following numbers of respondents for NSW: 1997 (17,446), 1998 (17,326), 2002 (12,570), 2003 (12,960), 2004 (9,764), 2005 (11,457), 2006 (7,935), 2007 (7,316), 2008 (8,616), 2009 (10,629), 2010 (10,181). The indicator includes those who either had diabetes or high blood glucose but did not have gestational diabetes. The questions used to define the indicator were: Have you ever been told by a doctor or hospital you have diabetes? Have you ever been told by a doctor or hospital you have high blood glucose? If female, Were you pregnant when you were first told you had diabetes or high blood glucose? Have you ever had diabetes or high blood glucose apart from when you were pregnant?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Mental health

Introduction

The New South Wales Population Health Survey uses Kessler 10 Plus (K10+) to measure psychological distress in people aged 16 years and over.[1] K10+ is a 10-item questionnaire that measures anxiety, depression, agitation, and psychological fatigue in the most recent 4-week period, with additional questions to establish the effect of the distress. At both the population and individual level, the K10+ measure is a brief and accurate screening scale for mental health.[2-5]

For each item in the questionnaire there is a 5-level response scale based on the amount of time (from none of the time to all of the time) the person experienced the particular symptom. When scoring responses, 1-5 points were assigned to each symptom, with 1 indicating none of the time and 5 indicating all of the time. The total score ranges from 10 points (all responses none of the time) to 50 points (all responses all of the time). Responses are classified into 4 categories: low when the score is 10-15, moderate when the score is 16-21, high when the score is 22-29, and very high when the score is 30 or higher.

The scores are a combination of actual and imputed. Where a respondent answered all 10 questions, the score is the sum of the individual scores. Where the respondent answered 9 questions, the score for the missing question is imputed as the mean score of the 9 answered questions. Respondents who scored 16 points and above in the 10 item questionnaire were asked the additional questions to assess the effects of psychological distress on functioning and related factors.

Results

In 2010, 68.7 per cent of adults aged 16 years and over had low levels of psychological distress in the last 4 weeks, 20.3 per cent had moderate levels, 8.0 per cent had high levels, and 3.0 per cent had very high levels. When ratings of high and very high were combined, 11.0 per cent of adults experienced high or very high levels of psychological distress in the last 4 weeks.

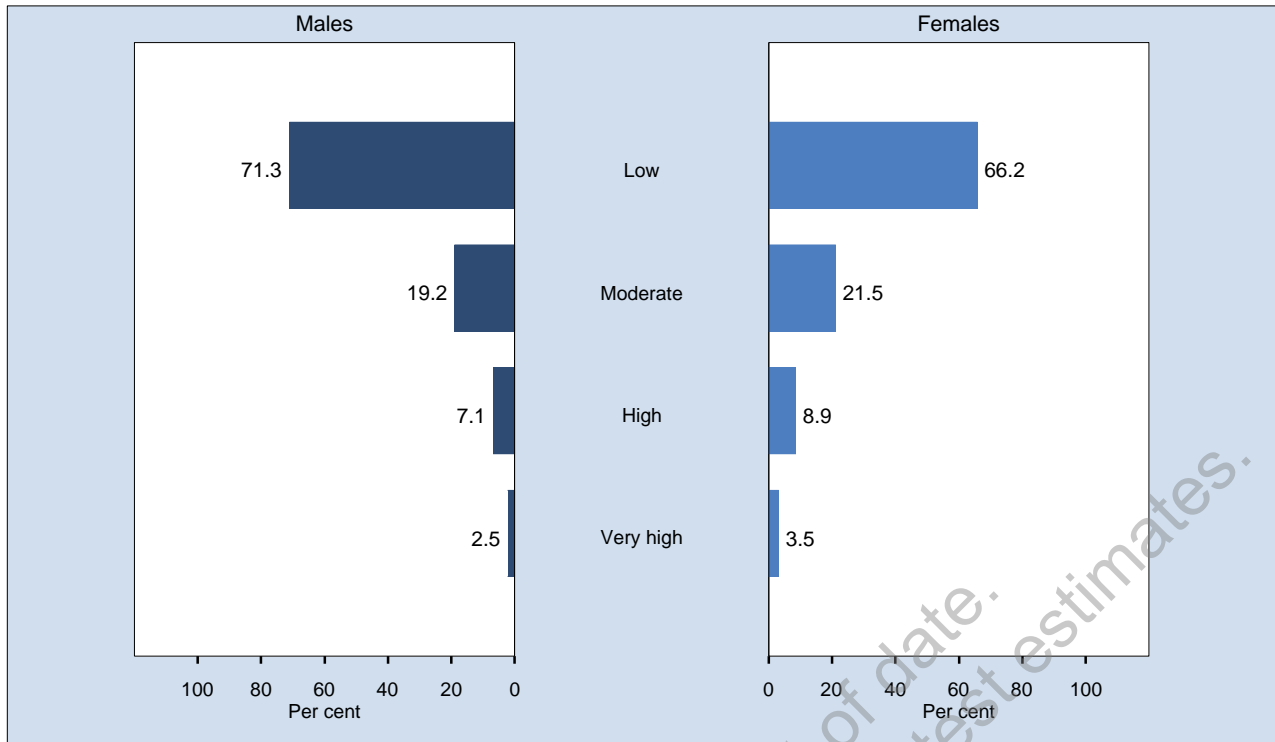
- A significantly lower proportion of males (9.6 per cent) had experienced high or very high levels of psychological distress in the last 4 weeks, compared with females (12.4 per cent).
- Among males, a significantly lower proportion of those aged 65-74 years (5.7 per cent) and 75 years and over (5.8 per cent) had experienced high or very high levels of psychological distress in the last 4 weeks, compared with the overall adult male population.
- Among females, a significantly higher proportion of those aged 16-24 years (18.2 per cent), and a significantly lower proportion of those aged 65-74 years (7.5 per cent) and 75 years and over (6.4 per cent), had experienced high or very high levels of psychological distress in the last 4 weeks, compared with the overall adult female population.
- A significantly lower proportion of adults in the first or least disadvantaged quintile (8.6 per cent), and a significantly higher proportion of adults in the fifth or most disadvantaged quintile (13.1 per cent), experienced high or very high levels of psychological distress in the last 4 weeks, compared with the overall adult population.
- There was no significant difference between metropolitan and rural-regional health districts.
- There was no significant difference among local health districts, compared with the overall adult population.

Since 1997, there has been no significant change in the proportion of adults aged 16 years and over who experienced high or very high levels of psychological distress in the last 4 weeks.

References

1. National Comorbidity Survey. *K10 and K6 Scales*. Boston: Department of Health Care Policy, Harvard School of Medicine, 2005.
2. Andrews G, Slade T. Interpreting Scores on the Kessler Psychological Distress Scale (K10). *Aust N Z J Public Health* 2001; 25: 494-497.
3. Australian Bureau of Statistics. *Information paper: Use of the Kessler Psychological Distress Scale in ABS Health Surveys*. Catalogue no. 4187.0.55.001. Canberra: ABS, 2003.
4. Kessler RC, Andrews G, Colpe LJ, Hiripi E, Mroczek DK, Normand S-LT, Walters EE, Zaslavsky A. Screening for Serious Mental Illness in the General Population. *Arch Gen Psychiatry* 2003; 60: 184-189.

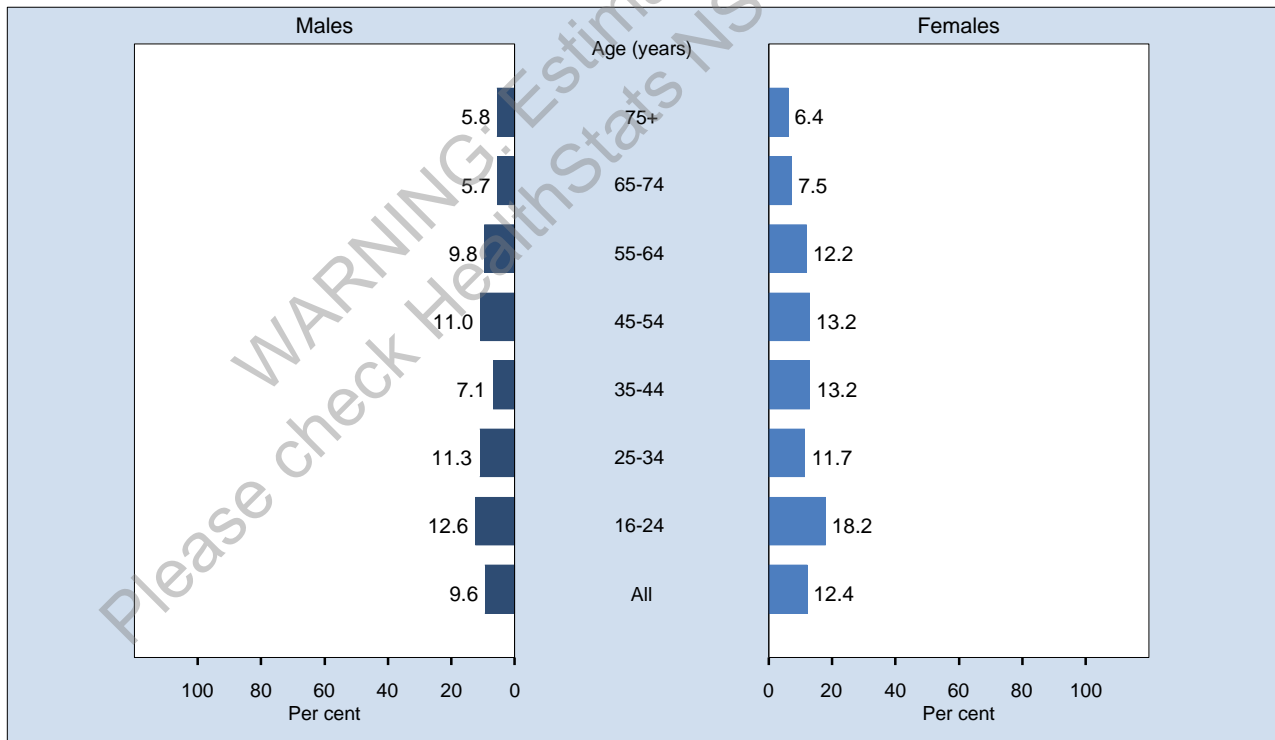
Psychological distress by Kessler 10 categories, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 10,081 respondents in NSW. For this indicator 164 (1.60%) were not stated (Don't know or Refused) in NSW. The K10 is a 10-item questionnaire that measures the level of psychological distress in the most recent 4-week period. The categories shown for the K10 scores are low (K10 between 10 and 15.9), moderate (K10 between 16 and 21.9), high (K10 between 22 and 29.9), and very high (K10 of 30 and over).

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

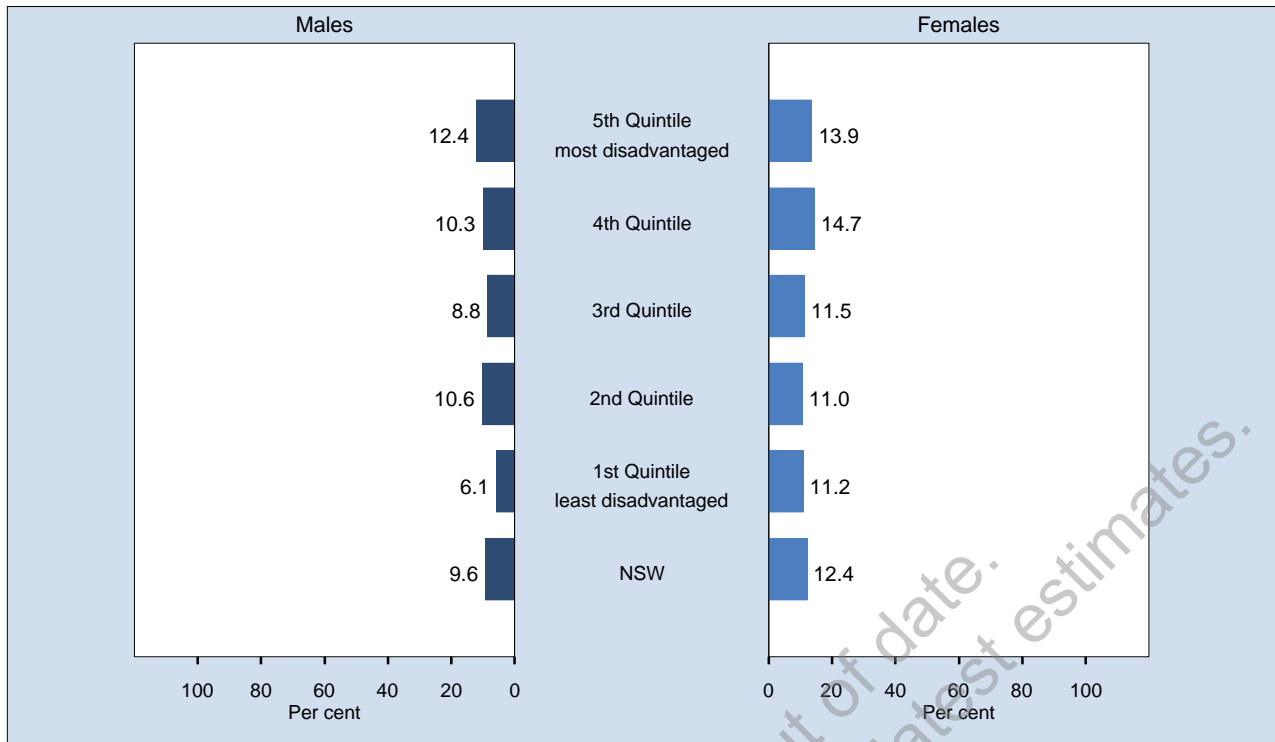
High or very high psychological distress by age, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 10,081 respondents in NSW. For this indicator 164 (1.60%) were not stated (Don't know or Refused) in NSW. The indicator includes those with a Kessler 10 (K10) score of 22 or above. The K10 is a 10-item questionnaire that measures the level of psychological distress in the most recent 4-week period.

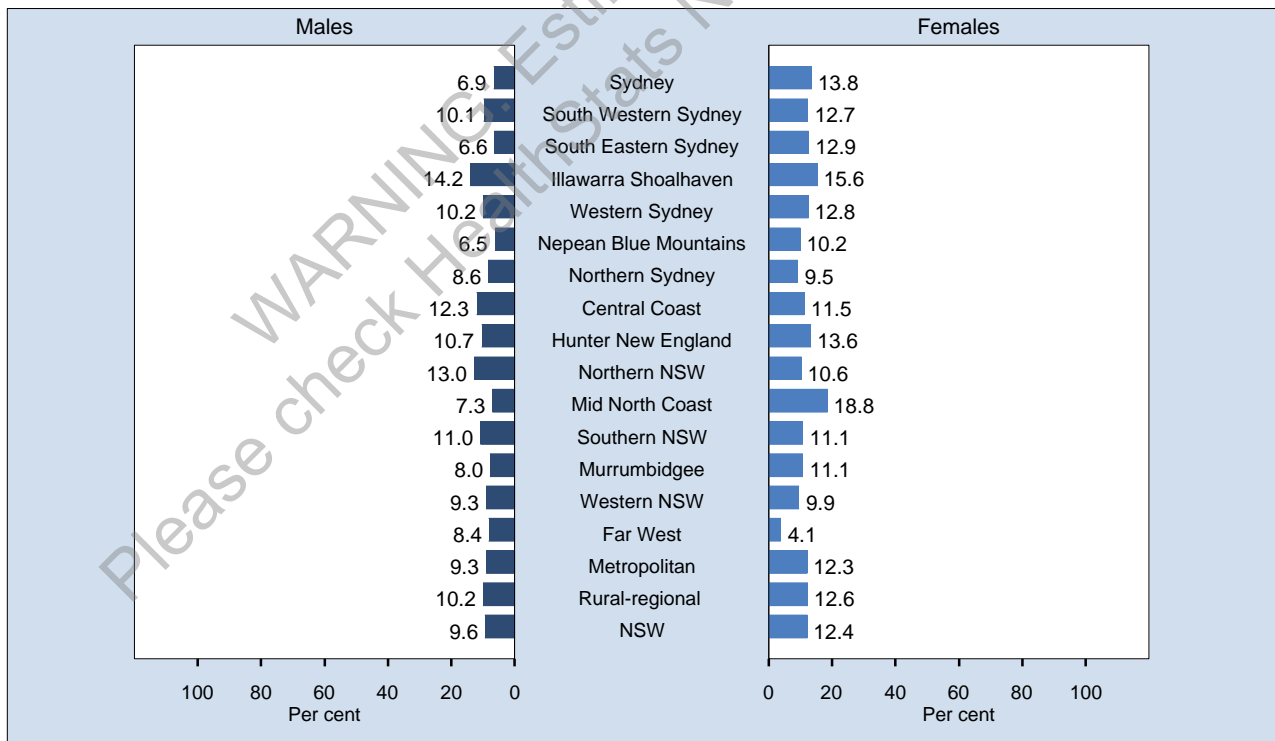
Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

High or very high psychological distress by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2010



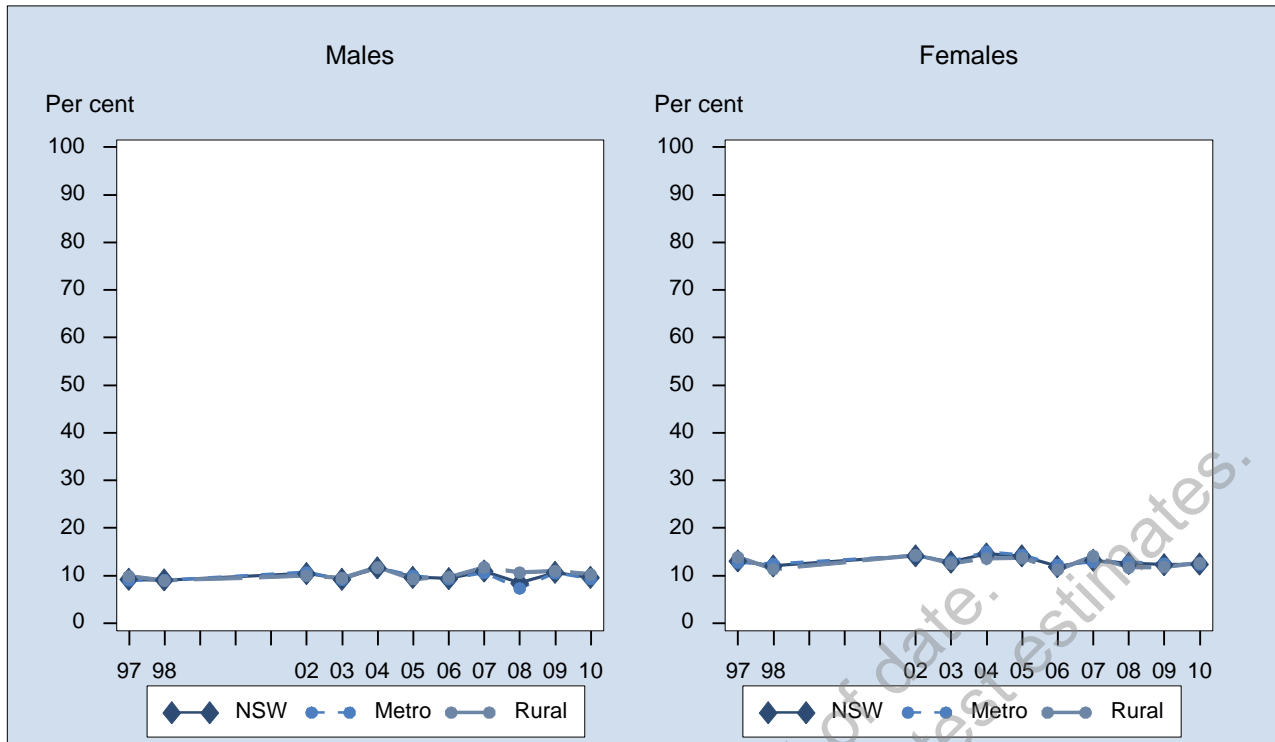
Note: Estimates are based on 10,081 respondents in NSW. For this indicator 164 (1.60%) were not stated (Don't know or Refused) in NSW. The indicator includes those with a Kessler 10 (K10) score of 22 or above. The K10 is a 10-item questionnaire that measures the level of psychological distress in the most recent 4-week period.
Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

High or very high psychological distress by local health district, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 10,081 respondents in NSW. For this indicator 164 (1.60%) were not stated (Don't know or Refused) in NSW. The indicator includes those with a Kessler 10 (K10) score of 22 or above. The K10 is a 10-item questionnaire that measures the level of psychological distress in the most recent 4-week period. NSW total includes the 15 LHDs and Albury (Victoria in-reach).
Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

High or very high psychological distress by year, adults aged 16 years and over, NSW, 1997-2010



Note: Estimates are based on the following numbers of respondents for NSW: 1997 (17,326), 1998 (17,343), 2002 (12,527), 2003 (12,852), 2004 (9,654), 2005 (11,388), 2006 (7,869), 2007 (7,366), 2008 (8,360), 2009 (10,466), 2010 (10,081). The indicator includes those with a Kessler 10 (K10) score of 22 or above. The K10 is a 10-item questionnaire that measures the level of psychological distress in the most recent 4-week period.

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

WARNING: Estimates out of date.
Please check HealthStats NSW for latest estimates.

Oral health

Introduction

Australians enjoy a high standard of oral health; however, there are inequalities, with higher rates of dental caries and tooth loss, and differential access to dental services, according to country of birth, language spoken at home, health insurance status, socioeconomic status, educational status, indigenous status, and generation.[1-3]

While there have been improvements in oral health, particularly among the 'fluoride generation', there is a population divide between those who have regular visits to a dental professional and those who do not.[1-3] The latter group is worse off on almost all measures of oral health.[4]

Health insurance which covers dental expenses is an enabling factor in visiting a dentist.[1] Many Australians cite cost as a reason for not receiving recommended or wanted dental treatment.[5]

Results

When last visited a dental professional

In 2010, 58.6 per cent of adults aged 16 years and over visited a dental professional less than 12 months ago, 17.5 per cent visited a dental professional 1 to less than 2 years ago, 12.0 per cent visited a dental professional 2 to less than 5 years ago, 5.8 per cent visited a dental professional 5 to less than 10 years ago, 4.9 per cent visited a dental professional 10 years ago or more, and 1.1 per cent had never visited a dental professional.

Visited a dental professional in the last 12 months

In 2010, 58.6 per cent of adults aged 16 years and over visited a dental professional less than 12 months ago.

- A significantly lower proportion of males (55.0 per cent) visited a dental professional less than 12 months ago, compared with females (62.0 per cent).
- Among males, a significantly higher proportion of those aged 55-64 years (65.2 per cent) and 65-74 years (61.0 per cent), and a significantly lower proportion of those aged 25-34 years (47.0 per cent), visited a dental professional less than 12 months ago, compared with the overall adult male population.
- Among females, a significantly higher proportion of those aged 45-54 years (66.5 per cent), 55-64 years (68.2 per cent), and 65-74 years (65.4 per cent), and a significantly lower proportion of those aged 25-34 years (54.3 per cent), visited a dental professional less than 12 months ago, compared with the overall adult female population.
- A significantly higher proportion of adults in the first or least disadvantaged quintile (68.6 per cent), and a significantly lower proportion of adults in the fifth or most disadvantaged quintile (53.5 per cent) and fourth quintile (53.1 per cent), visited a dental professional less than 12 months ago, compared with the overall adult population.
- A significantly lower proportion of adults in rural-regional health districts (53.0 per cent) visited a dental professional less than 12 months ago, compared with metropolitan health districts (61.0 per cent).
- A significantly higher proportion of adults in South Eastern Sydney (67.6 per cent) and Northern Sydney (69.9 per cent), and a significantly lower proportion of adults in Hunter New England (52.4 per cent), Murrumbidgee (49.5 per cent), and Western NSW (52.0 per cent), visited a dental professional less than 12 months ago, compared with the overall adult population.

Since 2002, there has been a significant increase in the proportion of adults aged 16 years and over who visited a dental professional less than 12 months ago (55.8 per cent to 58.6 per cent). The increase has been significant in females and in metropolitan health districts.

Type of dental service last visited

In 2010, among those adults who visited a dental professional less than 12 months ago, 86.8 per cent last visited a private dental practice, 4.7 per cent last visited a community dental practice, 4.4 per cent last visited a health fund dental clinic, and 3.3 per cent last visited a dental hospital.

Has private health insurance for dental expenses

In 2010, 51.2 per cent of adults aged 16 years and over had private health insurance for dental expenses.

- There was no significant difference between males and females.
- A significantly higher proportion of adults aged 45-54 years (56.6 per cent) and 55-64 years (57.2 per cent), and a significantly lower proportion of adults aged 25-34 years (46.2 per cent), 65-74 years (46.4 per cent), and 75 years and over (35.8 per cent), had private health insurance for dental expenses, compared with the overall adult population.
- A significantly higher proportion of adults in the first or least disadvantaged quintile (69.8 per cent) and second quintile (59.5 per cent), and a significantly lower proportion of adults in the fifth or most disadvantaged quintile (35.6 per cent) and fourth quintile (40.2 per cent), had private health insurance for dental expenses, compared with the overall adult population.
- A significantly lower proportion of adults in rural-regional health districts (41.8 per cent) had private health insurance for dental expenses, compared with metropolitan health districts (55.4 per cent).
- A significantly higher proportion of adults in South Eastern Sydney (64.6 per cent) and Northern Sydney (70.6 per cent), and a significantly lower proportion of adults in Hunter New England (45.2 per cent), Northern NSW (38.8 per cent), Mid North Coast (31.0 per cent), Southern NSW (40.3 per cent), Murrumbidgee (43.4 per cent), and Western NSW (42.3 per cent), had private health insurance for dental expenses, compared with the overall adult population.

Since 2009, there has been no significant change in the proportion of adults aged 16 years and over who had private health insurance for dental expenses.

Payment for last dental visit

In 2010, among those adults aged 16 years and over who visited a dental professional less than 12 months ago: 35.3 per cent paid all their expenses, 42.0 per cent paid some expenses and their insurance paid some expenses, 8.0 per cent paid no expenses and their insurance paid all expenses, 3.0 per cent paid some expenses and both the government and their insurance paid some expenses, and 11.4 per cent paid no expenses and the government paid all expenses.

Cost of last dental visit

In 2010, among those adults aged 16 years and over who visited a dental professional less than 12 months ago, the cost of their last dental visit before any insurance rebate was: less than \$200 (50.4 per cent), \$200 to \$399 (29.5 per cent), \$400 to \$599 (6.0 per cent), \$600 to \$799 (2.1 per cent), \$800 to \$999 (1.7 per cent), and \$1,000 or over (10.2 per cent).

References

1. Australian Institute of Health and Welfare Dental Statistics and Research Unit. *Australia's Dental Generations: The National Survey of Adult Oral Health 2004-06*. Adelaide: Australian Institute of Health and Welfare Dental Statistics and Research Unit, 2007.
2. Australian Institute of Health and Welfare. *The National Survey of Adult Oral Health 2004-06: New South Wales*. Adelaide: Australian Institute of Health and Welfare Dental Statistics and Research Unit, 2008.
3. Sivaneswaran S. The oral health of adults in NSW, 2004-06. *N S W Public Health Bull* 2010; 20(3-4): 46-51.
4. Kay EJ. Do regular attenders have better oral health? *Br Dent J* 2002; 193(12): 697-702.
5. Carter KD and Stewart JF. *National Dental Telephone Interview Survey 1999*. Adelaide: Australian Institute of Health and Welfare Dental Statistics and Research Unit, 2002.

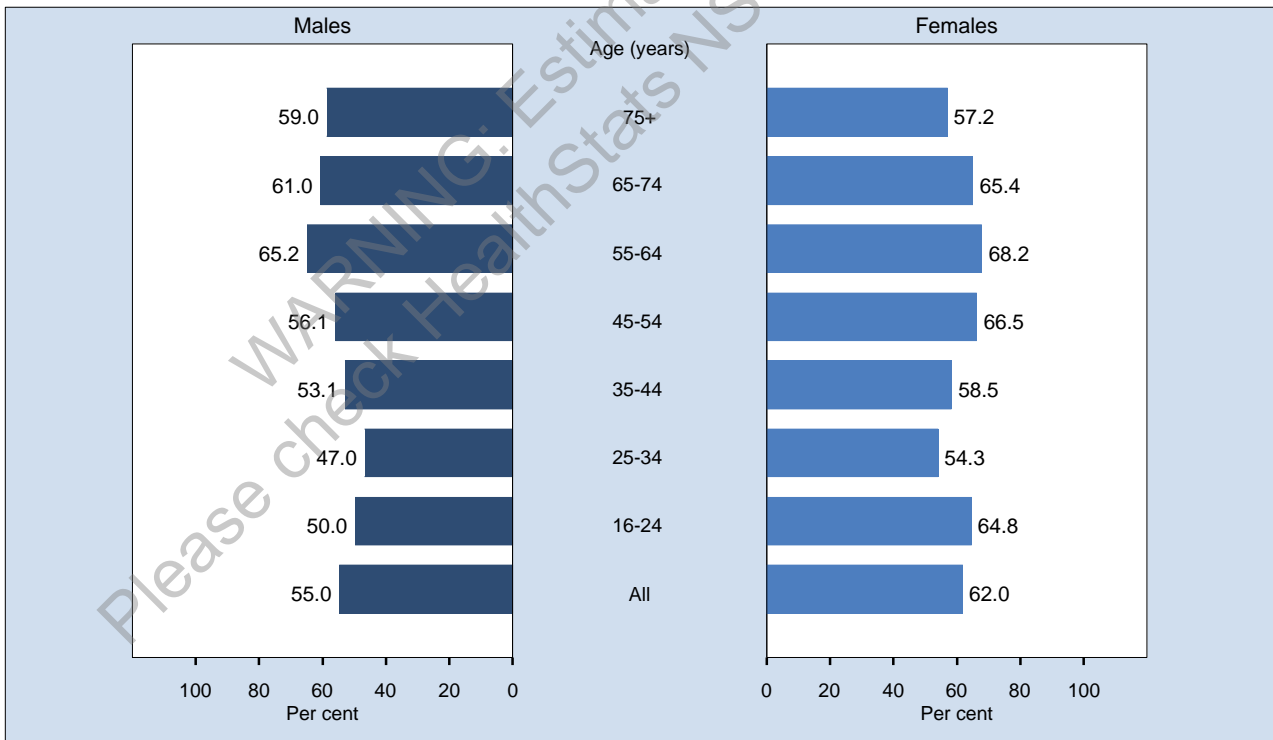
Time since last dental visit, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 10,161 respondents in NSW. For this indicator 84 (0.82%) were not stated (Don't know or Refused) in NSW. The question used was: When did you last visit a dental professional about your teeth, dentures or gums? (A dental professional includes dentist, dental specialist, dental hygienist, dental therapist or oral health therapist).

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

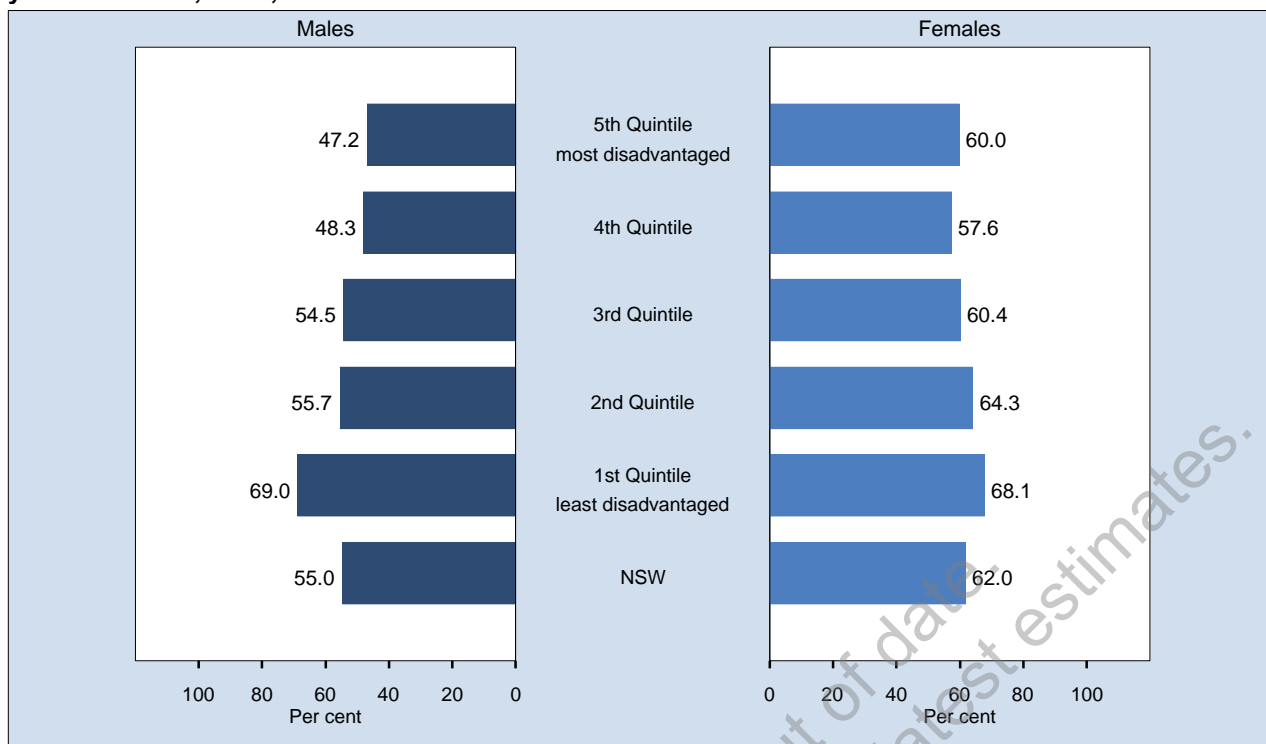
Visited a dental professional in the last 12 months by age, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 10,161 respondents in NSW. For this indicator 84 (0.82%) were not stated (Don't know or Refused) in NSW. The indicator includes those who have attended a dental professional within the last 12 months. The question used to define the indicator was: When did you last visit a dental professional about your teeth, dentures, or gums?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

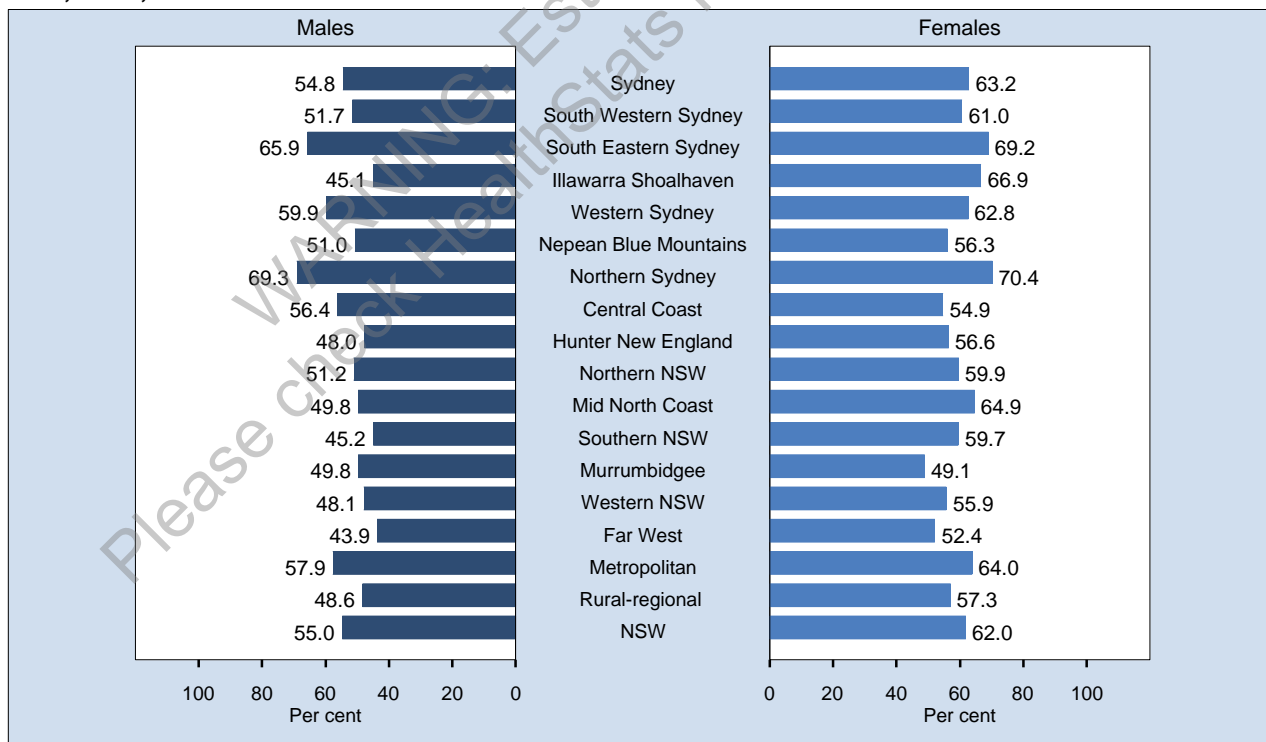
Visited a dental professional in the last 12 months by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 10,161 respondents in NSW. For this indicator 84 (0.82%) were not stated (Don't know or Refused) in NSW. The indicator includes those who have attended a dental professional within the last 12 months. The question used to define the indicator was: When did you last visit a dental professional about your teeth, dentures, or gums?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

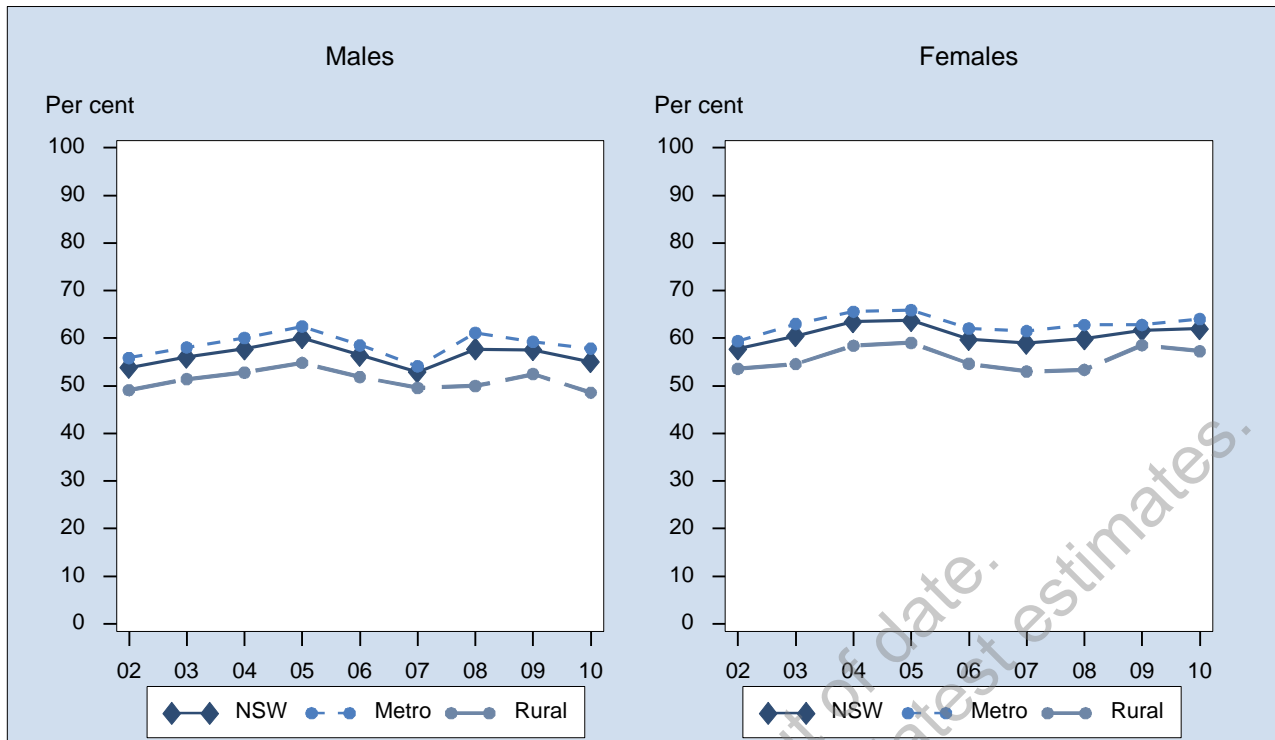
Visited a dental professional in the last 12 months by local health district, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 10,161 respondents in NSW. For this indicator 84 (0.82%) were not stated (Don't know or Refused) in NSW. The indicator includes those who have attended a dental professional within the last 12 months. The question used to define the indicator was: When did you last visit a dental professional about your teeth, dentures, or gums? NSW total includes the 15 LHDs and Albury (Victoria in-reach).

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

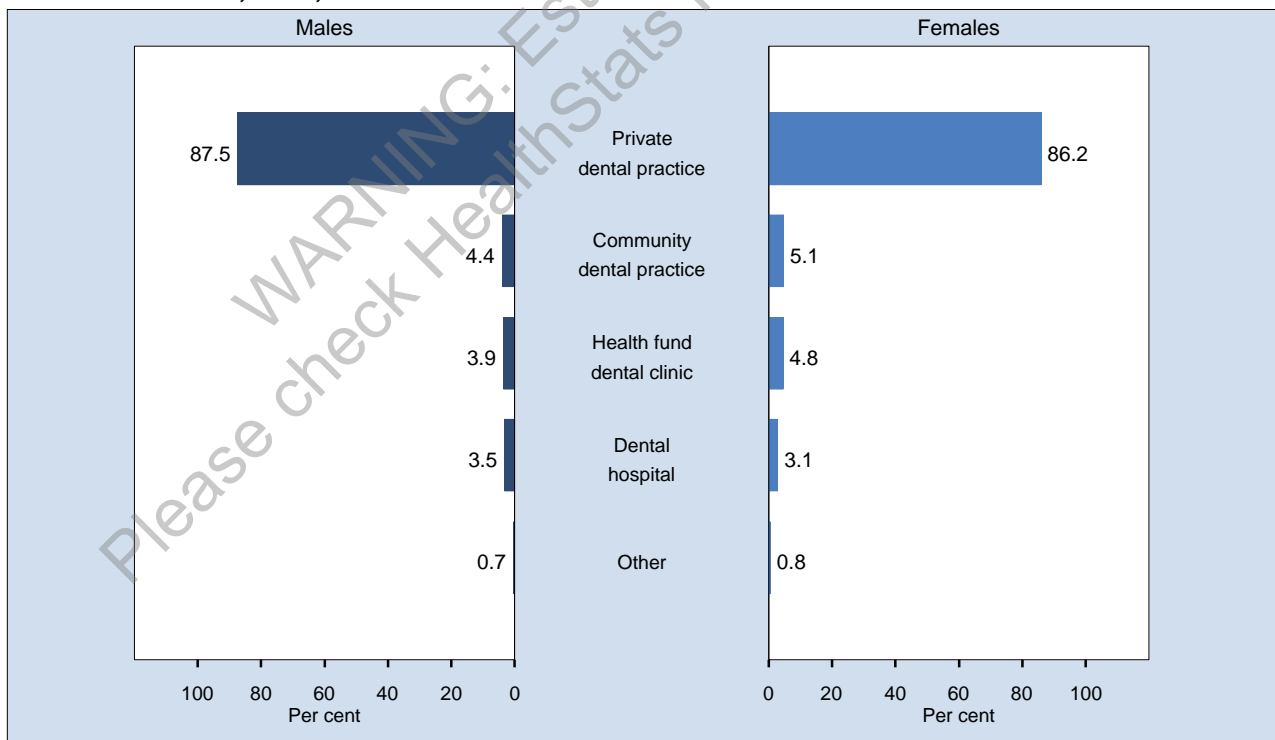
Visited a dental professional in the last 12 months by year, adults aged 16 years and over, NSW, 2002-2010



Note: Estimates are based on the following numbers of respondents for NSW: 2002 (12,166), 2003 (12,865), 2004 (9,675), 2005 (11,301), 2006 (7,902), 2007 (7,443), 2008 (8,543), 2009 (5,880), 2010 (10,161). The indicator includes those who have attended a dental professional within the last 12 months. The question used to define the indicator was: When did you last visit a dental professional about your teeth, dentures, or gums?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

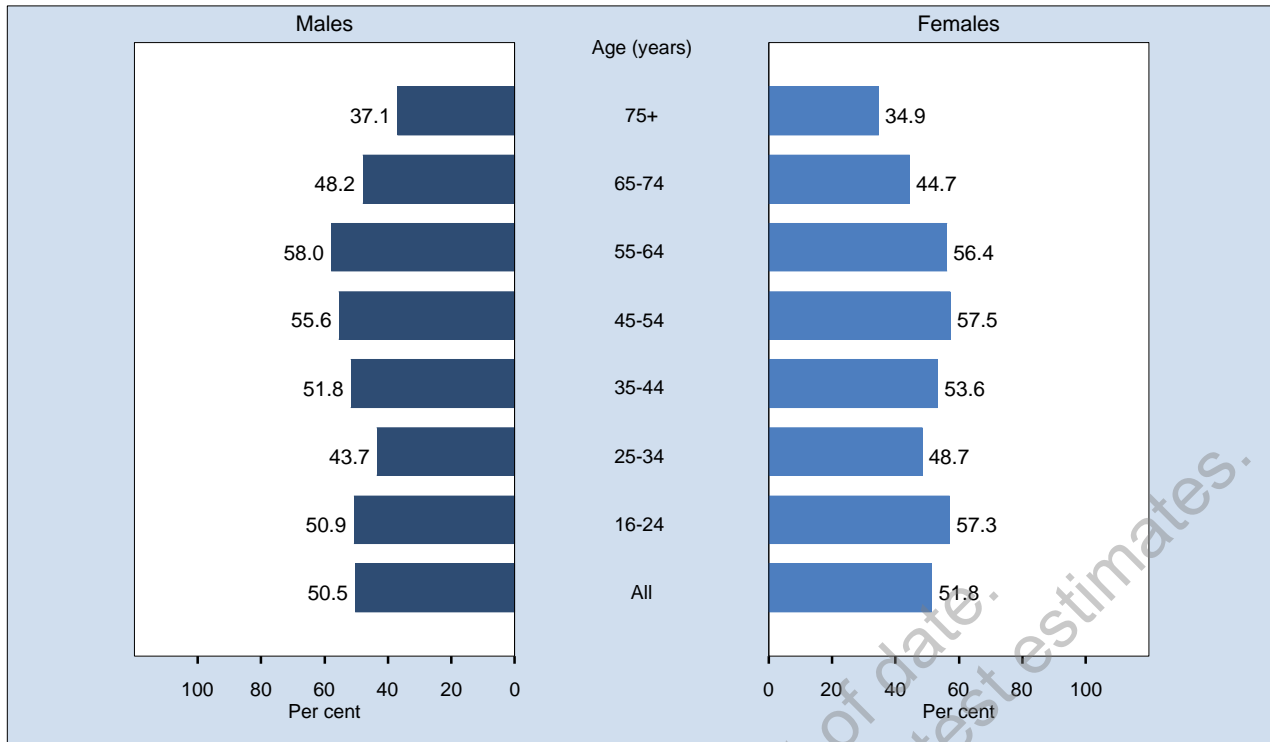
Type of dental service last visited, adults aged 16 years and over who visited a dental professional in the last 12 months, NSW, 2010



Note: Estimates are based on 6,012 respondents in NSW. For this indicator 89 (1.46%) were not stated (Don't know or Refused) in NSW. The questions used were: When did you last visit a dental professional about your teeth, dentures, or gums? Was the last dental visit made at a private dental practice, community dental practice, health fund dental clinic, dental hospital or any other place?

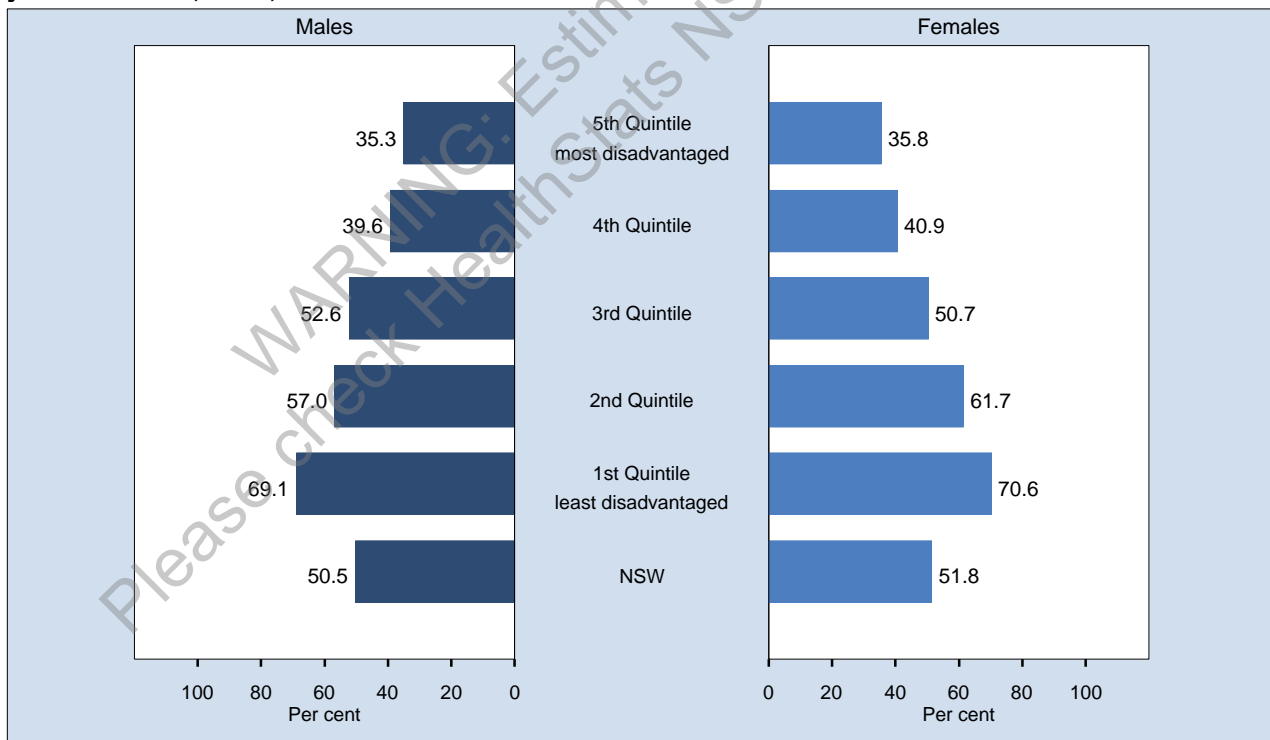
Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Has private health insurance for dental expenses by age, adults aged 16 years and over, NSW, 2010



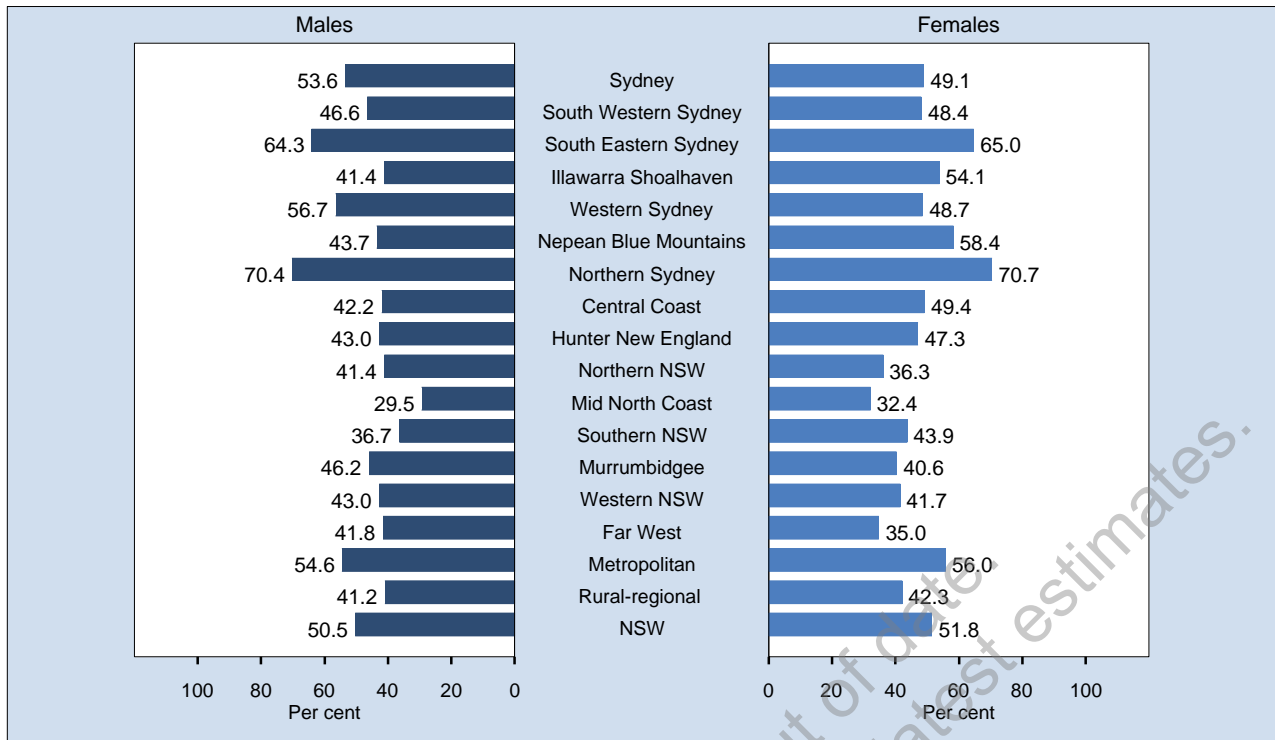
Note: Estimates are based on 10,105 respondents in NSW. For this indicator 140 (1.37%) were not stated (Don't know or Refused) in NSW. The indicator includes those who have private health insurance for dental expenses. The question used to define the indicator was: Do you have private health insurance cover for dental expenses?
Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Has private health insurance for dental expenses by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 10,105 respondents in NSW. For this indicator 140 (1.37%) were not stated (Don't know or Refused) in NSW. The indicator includes those who have private health insurance for dental expenses. The question used to define the indicator was: Do you have private health insurance cover for dental expenses?
Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

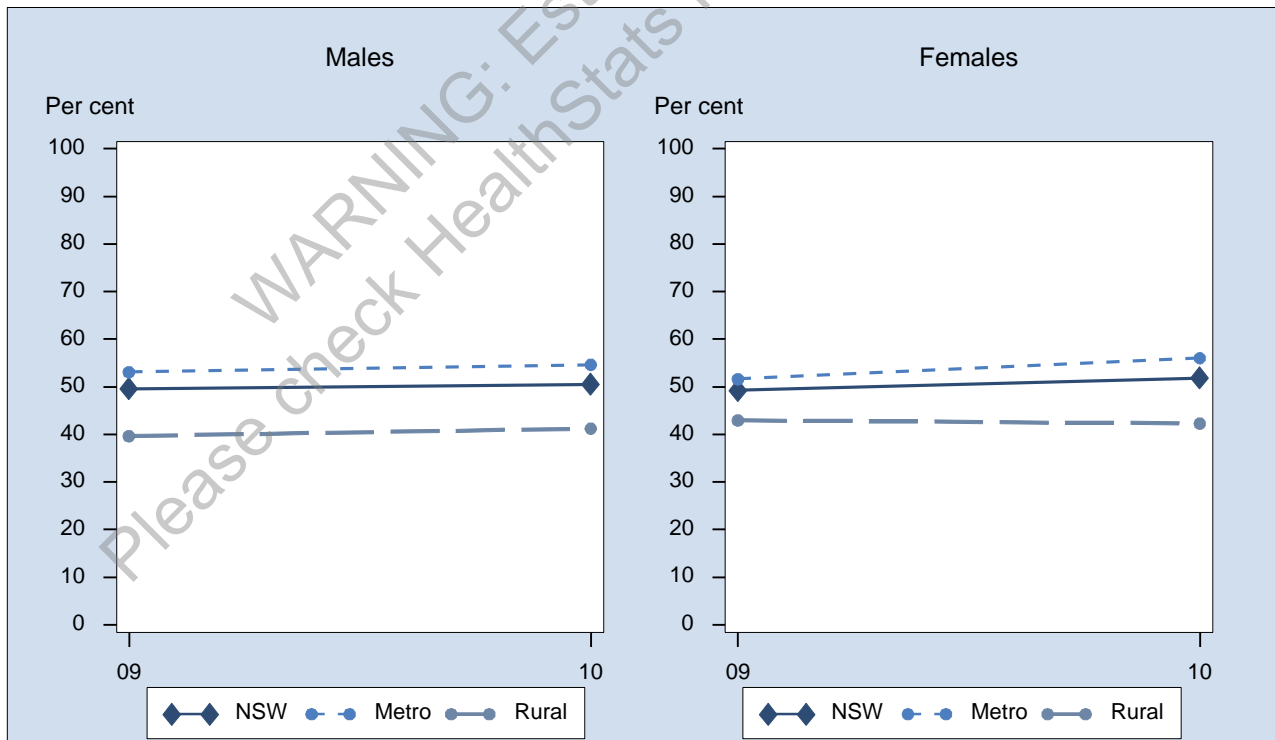
Has private health insurance for dental expenses by local health district, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 10,105 respondents in NSW. For this indicator 140 (1.37%) were not stated (Don't know or Refused) in NSW. The indicator includes those who have private health insurance for dental expenses. The question used to define the indicator was: Do you have private health insurance cover for dental expenses? NSW total includes the 15 LHDs and Albury (Victoria in-reach).

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

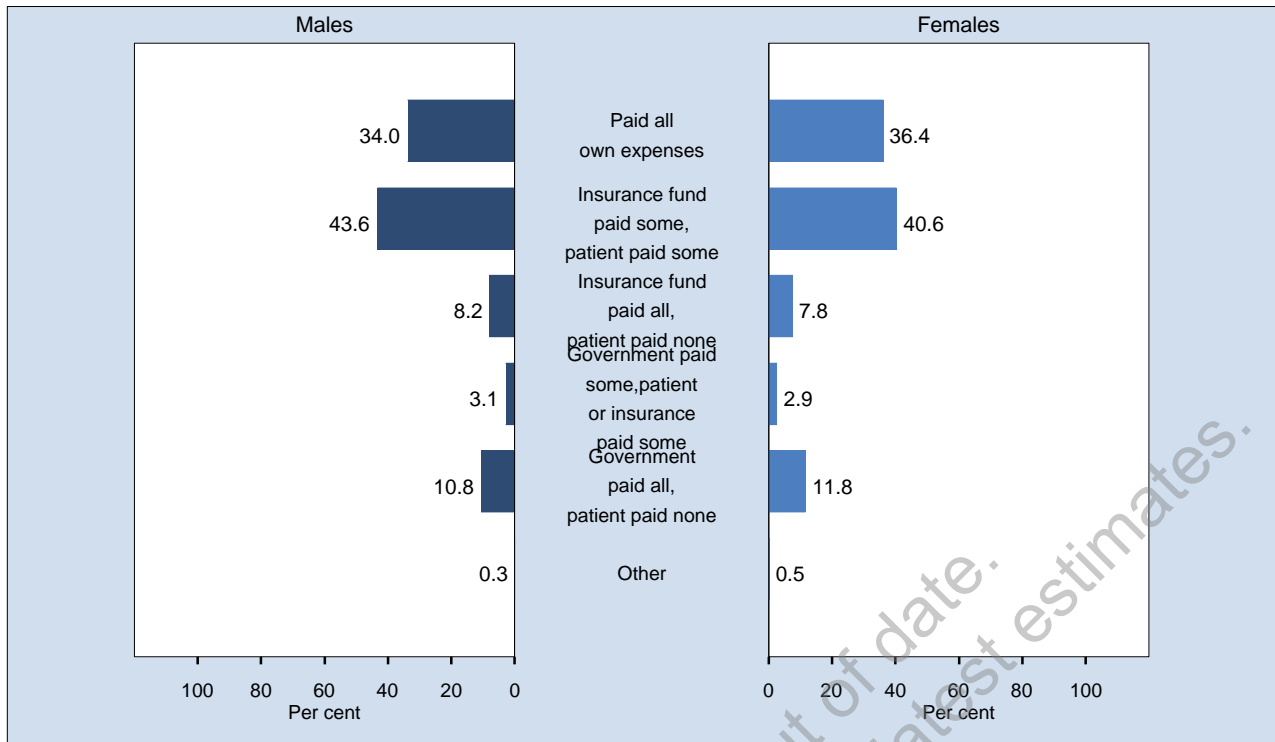
Has private health insurance for dental expenses by year, adults aged 16 years and over, NSW, 2009-2010



Note: Estimates are based on the following numbers of respondents for NSW: 2009 (5,831), 2010 (10,105). The indicator includes those who have private health insurance for dental expenses. The question used to define the indicator was: Do you have private health insurance cover for dental expenses?

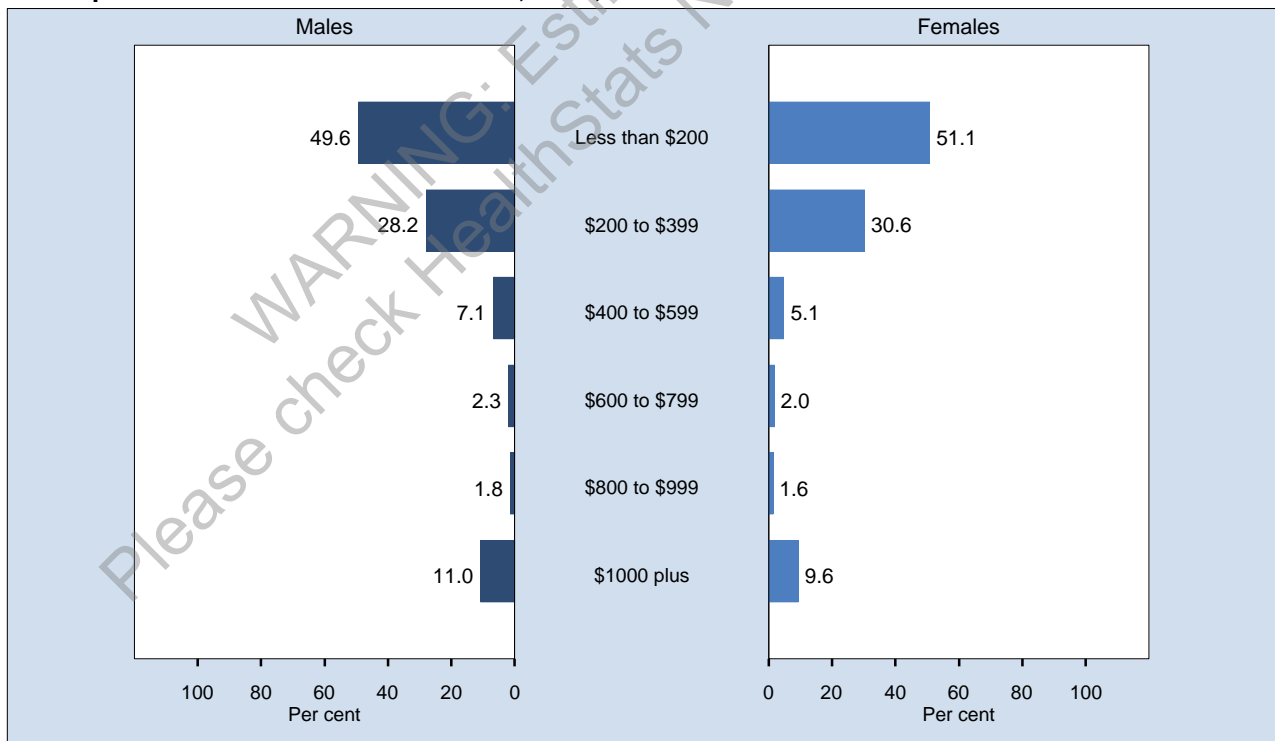
Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Payment for last dental visit, adults aged 16 years and over visited a dental professional in the last 12 months, NSW, 2010



Note: Estimates are based on 5,890 respondents in NSW. For this indicator 346 (5.55%) were not stated (Don't know or Refused) in NSW. The questions used were: When did you last visit a dental professional about your teeth, dentures, or gums? Did the government or an insurance fund pay any part of the expenses for the last dental visit?
Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Cost of last dental visit before any insurance rebate, adults aged 16 years and over who visited a dental professional in the last 12 months, NSW, 2010



Note: Estimates are based on 3,902 respondents in NSW. For this indicator 3,855 (49.70%) were not stated (Don't know or Refused) in NSW. The questions used were: When did you last visit a dental professional about your teeth, dentures, or gums? How much did the last dental visit cost before any insurance rebate?
Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Population weight status

Introduction

Healthy weight is associated with physical, social, and emotional health, and is linked with a lower risk of chronic illness and premature death.[1] While healthy weight is determined by different factors in each person,[2] preventing weight gain in people with healthy weight, and avoiding further weight gain among those already overweight, are important public health priorities.[1]

Two indicators of weight status are conventionally used in population health surveys: Body Mass Index (BMI) and waist circumference. There are age and sex defined norms for these indicators which makes it possible to quantify the prevalence of overweight and obesity in the population.[1]

In this survey, for 18 years and over, BMI is calculated by dividing a person's weight (in kilograms) by their height (in metres) squared. The resulting BMI is then classified into 4 categories: underweight when the BMI is less than 18.5, healthy weight when the BMI is greater than or equal to 18.5 and less than 25, overweight when the BMI is greater than or equal to 25 and less than 30, and obese when the BMI is greater than or equal to 30. For 16-17 years olds, the same categories are used but are linked to international cut-off points defined by sex to pass through a BMI of 16, 17, and 18.5 (for underweight), 25 (for overweight), and 30 (for obesity) at age 18 years.[3-4]

The validity of self-reported height and weight has been investigated in adult, adolescent, and young adult populations. While many studies have observed a high correlation (96 per cent agreement) between BMI calculated from self-reported and measured height and weight, there is ample evidence that self-reported height and weight is not as exact as measured height and weight but is adequate for conducting epidemiological research.[5-7]

Results

Body Mass Index categories

In 2010, according to estimates of BMI based on self-reported height and weight, 2.6 per cent of adults were underweight, 43.2 per cent were healthy weight, 33.3 per cent were overweight, and 21.0 per cent were obese. When obesity was further classified, 14.6 per cent of adults had a BMI between 30 and 35 (Obesity Class I), 3.7 per cent of adults had a BMI between 35 and 40 (Obesity Class II), and 2.6 per cent of adults had a BMI of 40 or over (Obesity Class III).

Overweight

In 2010, 33.3 per cent of adults aged 16 years and over were overweight: that is, had a BMI between 25 to 30 calculated from self-reported height and weight.

- A significantly higher proportion of males (39.9 per cent) were overweight, compared with females (26.9 per cent).
- Among males, a significantly lower proportion of those aged 16-24 years (27.5 per cent), and a significantly higher proportion of those aged 35-44 years (49.0 per cent), were overweight, compared with the overall adult male population.
- Among females, a significantly lower proportion of those aged 16-24 years (15.9 per cent), and a significantly higher proportion of those aged 45-54 years (31.1 per cent), 55-64 years (29.8 per cent), 65-74 years (30.9 per cent), and 75 years and over (30.7 per cent), were overweight, compared with the overall adult female population.
- There was no significant difference among quintiles of disadvantage, compared with the overall adult population.
- There was no significant difference between metropolitan and rural-regional health districts.
- There was no significant difference among local health districts, compared with the overall adult population.

Since 1997, there has been a significant increase in the proportion of adults who were overweight (30.6 per cent to 33.3 per cent). The increase has been significant in females, and in metropolitan health districts.

Obese

In 2010, 21.0 per cent of adults aged 16 years and over were obese: that is, had a BMI of 30 or over calculated from self-reported height and weight.

- There was no significant difference between males and females.
- A significantly lower proportion of adults aged 16-24 years (9.1 per cent) and 75 years and over (15.4 per cent), and a significantly higher proportion of adults aged 45-54 years (25.4 per cent), 55-64 years (29.5 per cent), and 65-74 years (26.2 per cent), were obese, compared with the overall adult population.
- A significantly lower proportion of adults in the first or least disadvantaged quintile (13.2 per cent), and a significantly higher proportion of adults in the fifth or most disadvantaged quintile (24.2 per cent) and fourth quintile (24.8 per cent), were obese, compared with the overall adult population.
- A significantly higher proportion of adults in rural-regional health districts (25.0 per cent) were obese, compared with metropolitan health districts (19.1 per cent).
- A significantly higher proportion of adults in Hunter New England (26.9 per cent), Murrumbidgee (28.4 per cent), Western NSW (24.7 per cent), and Far West (42.5 per cent) and a significantly lower proportion of adults in Sydney (15.4 per cent), South Eastern Sydney (13.7 per cent), and Northern Sydney (13.3 per cent), were obese, compared with the overall adult population.

Since 1997, there has been a significant increase in the proportion of adults who were obese (11.2 per cent to 21.0 per cent). The increase has been significant in males and females, and in rural-regional and metropolitan health districts.

Overweight or obese

In 2010, 54.3 per cent of adults were overweight or obese: that is, had a BMI of 25 or over calculated from self-reported height and weight.

- A significantly higher proportion of males (60.7 per cent) were overweight or obese, compared with females (48.0 per cent).
- Among males, a significantly lower proportion of those aged 16-24 years (37.5 per cent) and 25-34 years (52.1 per cent), and a significantly higher proportion of those aged 35-44 years (70.7 per cent), 45-54 years (68.7 per cent), 55-64 years (68.4 per cent), and 65-74 years (68.1 per cent), were overweight or obese, compared with the overall adult male population.
- Among females, a significantly lower proportion of those aged 16-24 years (24.1 per cent), and a significantly higher proportion of those aged 45-54 years (53.9 per cent), 55-64 years (60.3 per cent), and 65-74 years (58.4 per cent), were overweight or obese, compared with the overall adult female population.
- A significantly lower proportion of adults in the first or least disadvantaged quintile (47.3 per cent), and a significantly higher proportion of adults in the third quintile (58.5 per cent), were overweight or obese, compared with the overall adult population.
- A significantly higher proportion of adults in rural-regional health districts (58.8 per cent) were overweight or obese, compared with metropolitan health districts (52.2 per cent).
- A significantly higher proportion of adults in Hunter New England (61.2 per cent), Murrumbidgee (64.5 per cent), Western NSW (58.8 per cent), and Far West (72.1 per cent), and a significantly lower proportion of adults in Sydney (46.6 per cent), South Eastern Sydney (47.0 per cent), and Northern Sydney (47.3 per cent), were overweight or obese, compared with the overall adult population.

Since 1997, there has been a significant increase in the proportion of adults who were overweight or obese (41.8 per cent to 54.3 per cent). The increase has been significant in males and females, and in rural-regional and metropolitan health districts.

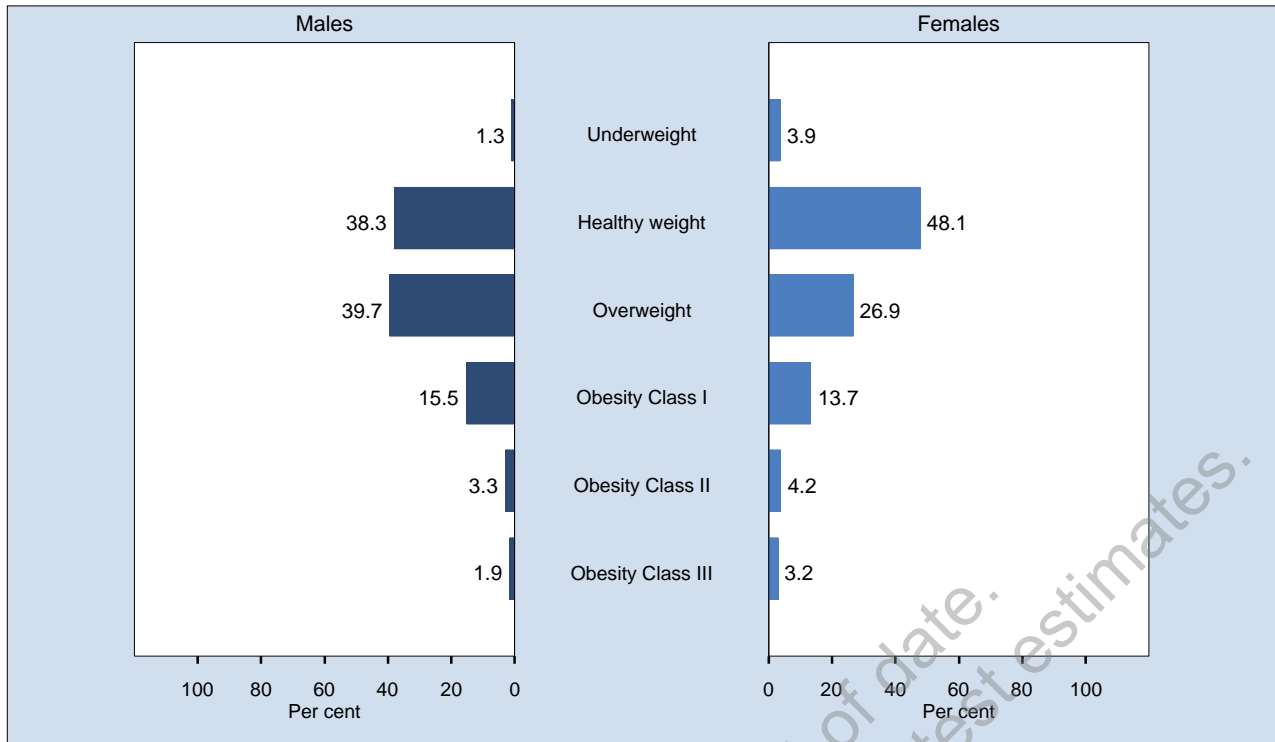
References

1. NSW Centre for Public Health Nutrition. *Report on the weight status of New South Wales: 2003*. Sydney: NSW Centre for Public Health Nutrition, 2003.
2. Willett W, Dietz W, and Colditz G. Guidelines for Healthy Weight. *N Engl J Med* 2000; 341(6): 427-434.
3. Cole T, Bellizzi M, Flegal K, Dietz W. Establishing a standard definition for child overweight and obesity worldwide: International survey. *BMJ* 2000; 320.
4. Cole T, Flegal K, Nicholls D, Jackson A. Body mass index cut offs to define thinness in children and adolescents: international survey. *BMJ* 2007; 335(7612): 194.

5. Flood V, Webb K, Lazarus R, Pang G. Use of self-report to monitor overweight and obesity in populations: Some issues for consideration. *Aust NZ J Public Health* 2000; 24(2): 213.
6. Field AE, Aneja P, Rosner B. The validity of self-reported weight change among adolescents and young adults. *Obesity* 2007; 15: 23572364.
7. Elgar FJ, Roberts C, Tudor-Smith C, Moore L. Validity of self-reported height and weight and predictors of bias in adolescents. *J Adolesc Health* 2005; 37: 371375.

WARNING: Estimates out of date.
Please check HealthStats NSW for latest estimates.

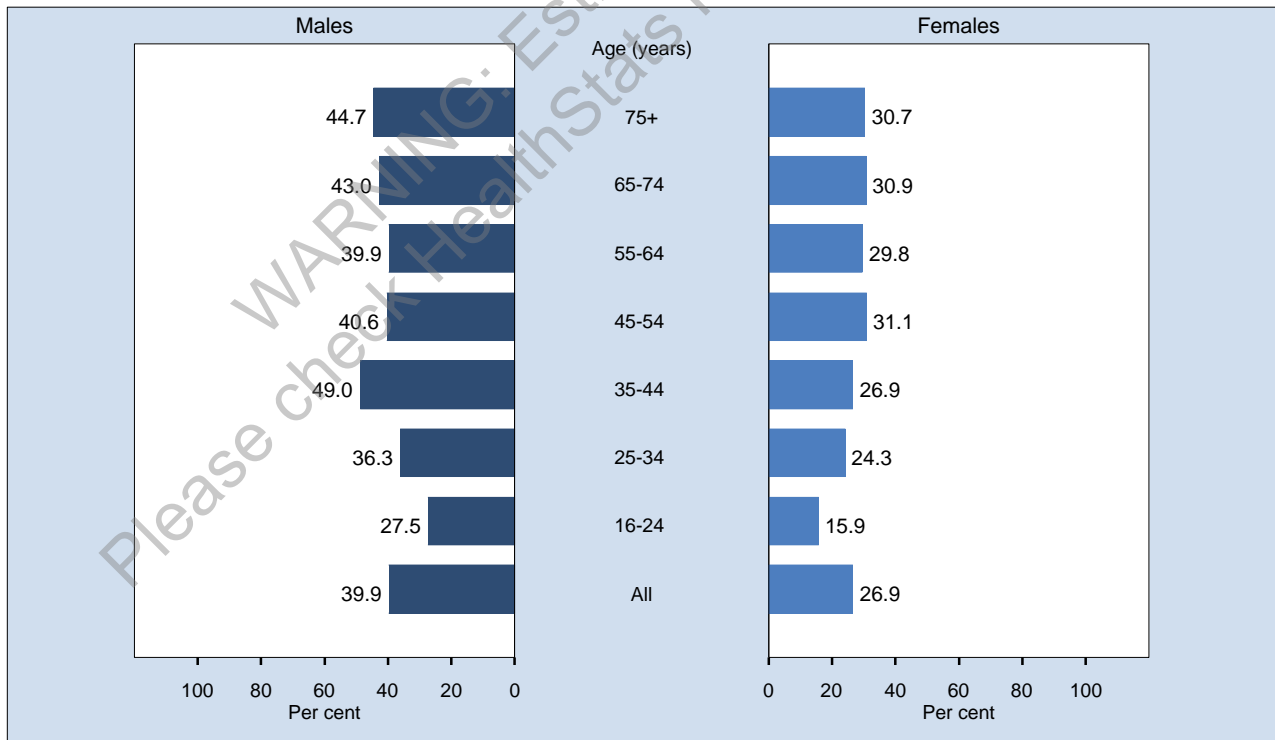
Body Mass Index categories, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 9,743 respondents in NSW. For this indicator 502 (4.90%) were not stated (Don't know or Refused) in NSW. The questions used were: How tall are you without shoes? How much do you weigh without clothes or shoes? Body Mass Index (BMI) is calculated as follows: $BMI = \text{weight(kg)} / \text{height}^2(\text{m})$. For 18 years and over, the BMI scores are underweight (BMI under 18.5), healthy weight (BMI from 18.5 to 24.9), overweight (BMI from 25 to 29.9), obesity class I (BMI from 30 to 34.9), obesity class II (BMI from 35.0 to 39.9), and obesity class III (BMI of 40 and over). For 16-17 year olds, the same categories are used but are linked to international cut off points defined by sex to pass through a BMI of 16, 17, and 18.5 (for underweight), 25 (for overweight), and 30 (for obesity) at age 18 years [Cole et al. 2000; Cole et al. 2007].

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Overweight by age, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 9,743 respondents in NSW. For this indicator 502 (4.90%) were not stated (Don't know or Refused) in NSW. The indicator includes those who are overweight: that is, with a Body Mass Index (BMI) from 25.0 to 29.9. The questions used to define the indicator were: How tall are you without shoes? How much do you weigh without clothes or shoes? For 18 years and over, BMI is calculated as follows $BMI = \text{weight(kg)} / \text{height}^2(\text{m})$. For 16-17 year olds, the same categories are used but are linked to international cut off points defined by sex to pass through a BMI of 16, 17, and 18.5 (for underweight), 25 (for overweight), and 30 (for obesity) at age 18 years [Cole et al. 2000; Cole et al. 2007].

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

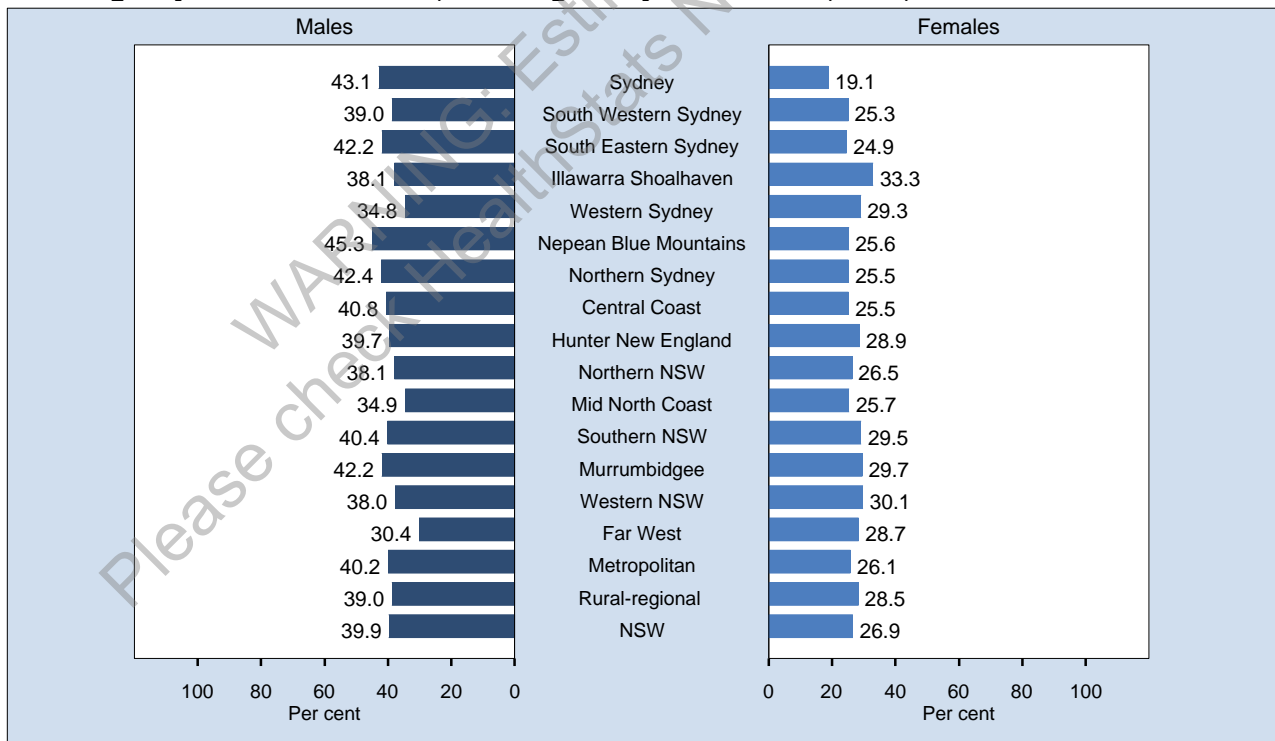
Overweight by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 9,743 respondents in NSW. For this indicator 502 (4.90%) were not stated (Don't know or Refused) in NSW. The indicator includes those who are overweight: that is, with a Body Mass Index (BMI) from 25.0 to 29.9. The questions used to define the indicator were: How tall are you without shoes? How much do you weigh without clothes or shoes? For 18 years and over, BMI is calculated as follows $BMI = \text{weight(kg)}/\text{height}^2(\text{m})$. For 16-17 year olds, the same categories are used but are linked to international cut off points defined by sex to pass through a BMI of 16, 17, and 18.5 (for underweight), 25 (for overweight), and 30 (for obesity) at age 18 years [Cole et al. 2000; Cole et al. 2007].

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

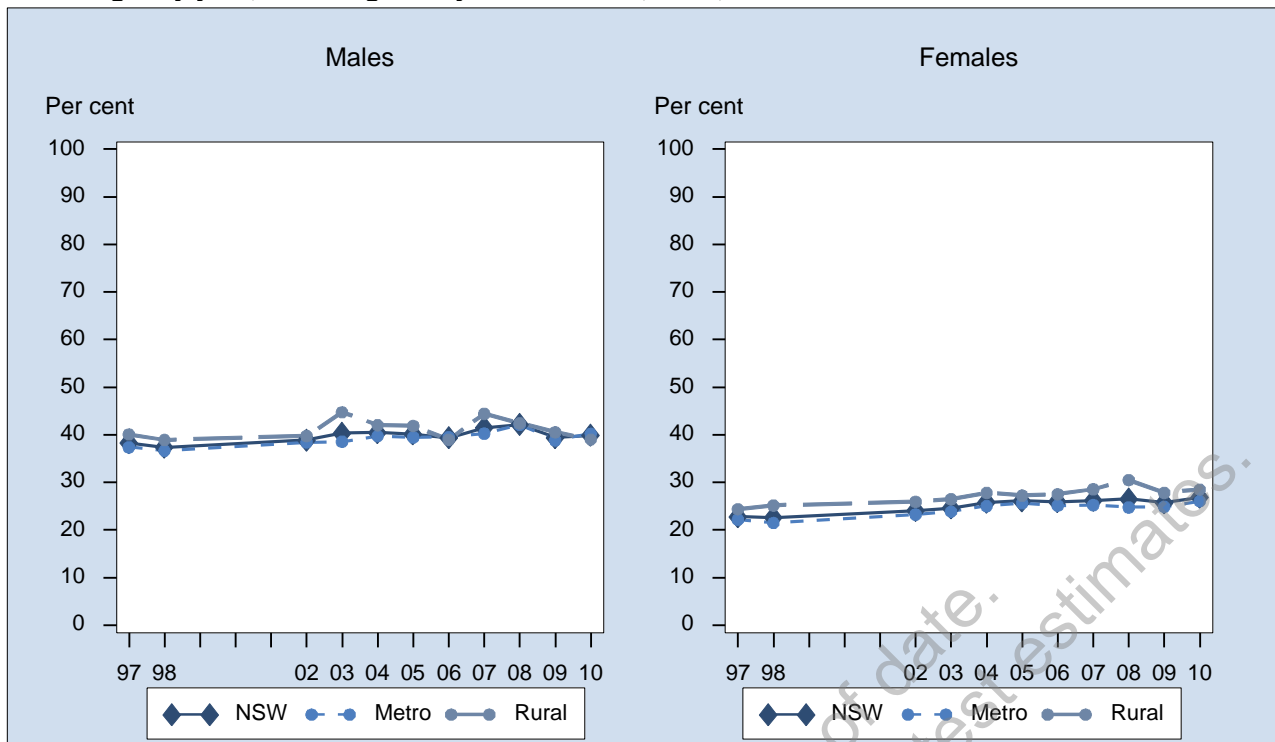
Overweight by local health district, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 9,743 respondents in NSW. For this indicator 502 (4.90%) were not stated (Don't know or Refused) in NSW. The indicator includes those who are overweight: that is, with a Body Mass Index (BMI) from 25.0 to 29.9. The questions used to define the indicator were: How tall are you without shoes? How much do you weigh without clothes or shoes? For 18 years and over, BMI is calculated as follows $BMI = \text{weight(kg)}/\text{height}^2(\text{m})$. For 16-17 year olds, the same categories are used but are linked to international cut off points defined by sex to pass through a BMI of 16, 17, and 18.5 (for underweight), 25 (for overweight), and 30 (for obesity) at age 18 years [Cole et al. 2000; Cole et al. 2007]. NSW total includes the 15 LHDs and Albury (Victoria in-reach).

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

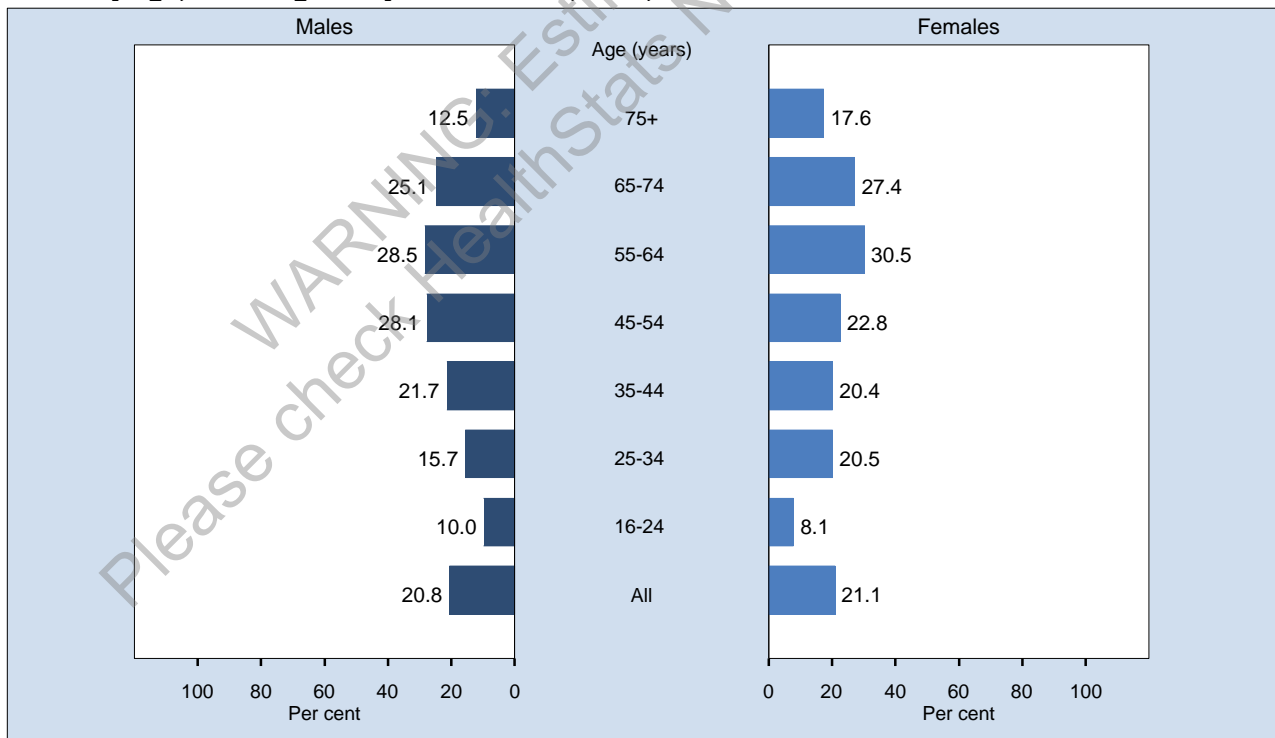
Overweight by year, adults aged 16 years and over, NSW, 1997-2010



Note: Estimates are based on the following numbers of respondents for NSW: 1997 (16,790), 1998 (16,445), 2002 (11,989), 2003 (12,441), 2004 (9,398), 2005 (11,078), 2006 (7,668), 2007 (7,257), 2008 (8,222), 2009 (10,252), 2010 (9,743). The indicator includes those who are overweight: that is, with a Body Mass Index (BMI) from 25.0 to 29.9. The questions used to define the indicator were: How tall are you without shoes? How much do you weigh without clothes or shoes? For 18 years and over, BMI is calculated as follows $BMI = \text{weight(kg)}/\text{height}^2(\text{m})$. For 16-17 year olds, the same categories are used but are linked to international cut off points defined by sex to pass through a BMI of 16, 17, and 18.5 (for underweight), 25 (for overweight), and 30 (for obesity) at age 18 years [Cole et al. 2000; Cole et al. 2007].

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

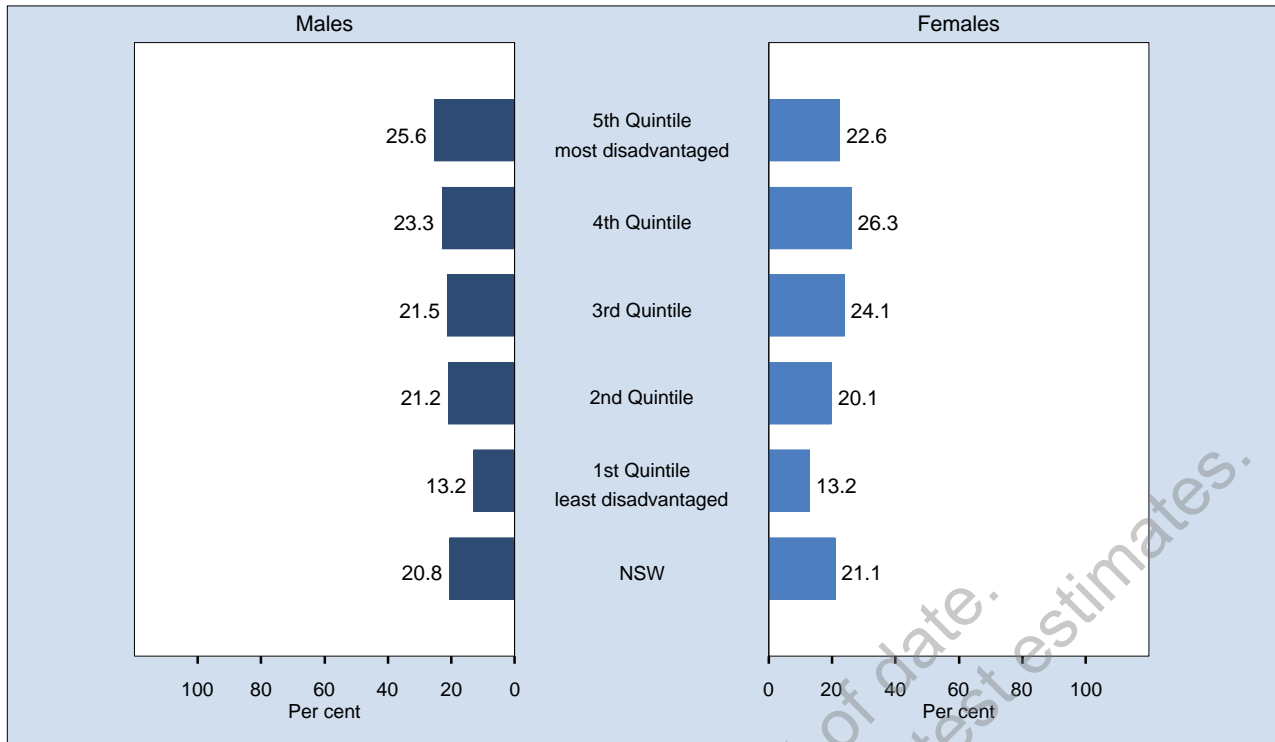
Obese by age, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 9,743 respondents in NSW. For this indicator 502 (4.90%) were not stated (Don't know or Refused) in NSW. The indicator includes those who are obese: that is, with a Body Mass Index (BMI) of 30.0 or higher. The questions used to define the indicator were: How tall are you without shoes? How much do you weigh without clothes or shoes? For 18 years and over, BMI is calculated as follows $BMI = \text{weight(kg)}/\text{height}^2(\text{m})$. For 16-17 year olds, the same categories are used but are linked to international cut off points defined by sex to pass through a BMI of 16, 17, and 18.5 (for underweight), 25 (for overweight), and 30 (for obesity) at age 18 years [Cole et al. 2000; Cole et al. 2007].

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

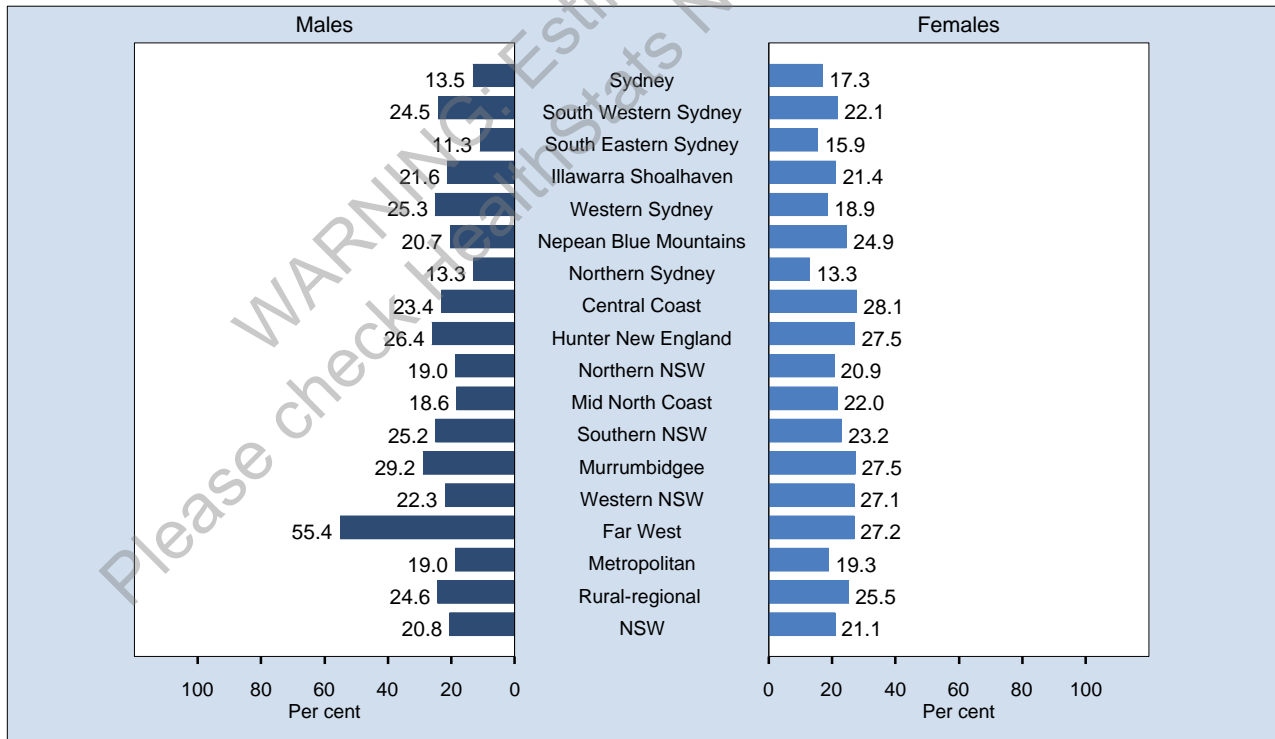
Obese by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 9,743 respondents in NSW. For this indicator 502 (4.90%) were not stated (Don't know or Refused) in NSW. The indicator includes those who are obese: that is, with a Body Mass Index (BMI) of 30.0 or higher. The questions used to define the indicator were: How tall are you without shoes? How much do you weigh without clothes or shoes? For 18 years and over, BMI is calculated as follows $BMI = \text{weight(kg)/height}^2(\text{m})$. For 16-17 year olds, the same categories are used but are linked to international cut off points defined by sex to pass through a BMI of 16, 17, and 18.5 (for underweight), 25 (for overweight), and 30 (for obesity) at age 18 years [Cole et al. 2000; Cole et al. 2007].

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

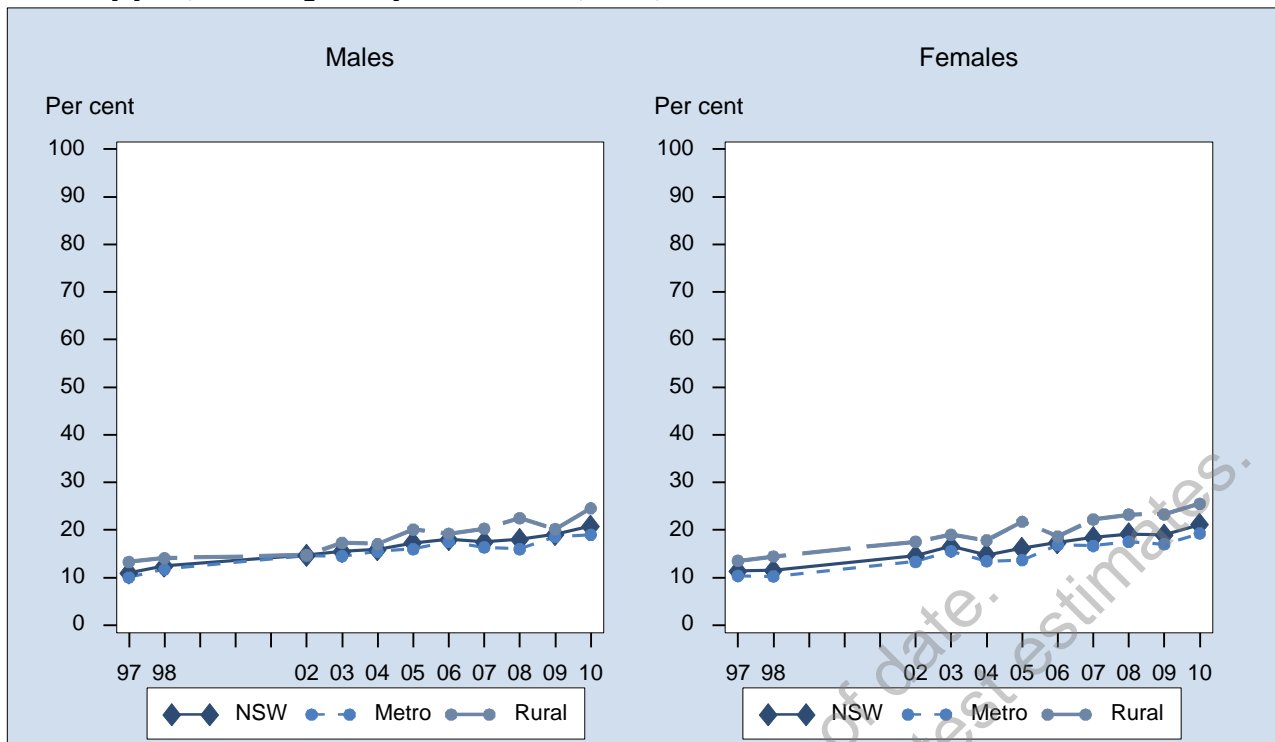
Obese by local health district, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 9,743 respondents in NSW. For this indicator 502 (4.90%) were not stated (Don't know or Refused) in NSW. The indicator includes those who are obese: that is, with a Body Mass Index (BMI) of 30.0 or higher. The questions used to define the indicator were: How tall are you without shoes? How much do you weigh without clothes or shoes? For 18 years and over, BMI is calculated as follows $BMI = \text{weight(kg)/height}^2(\text{m})$. For 16-17 year olds, the same categories are used but are linked to international cut off points defined by sex to pass through a BMI of 16, 17, and 18.5 (for underweight), 25 (for overweight), and 30 (for obesity) at age 18 years [Cole et al. 2000; Cole et al. 2007]. NSW total includes the 15 LHDs and Albury (Victoria in-reach).

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

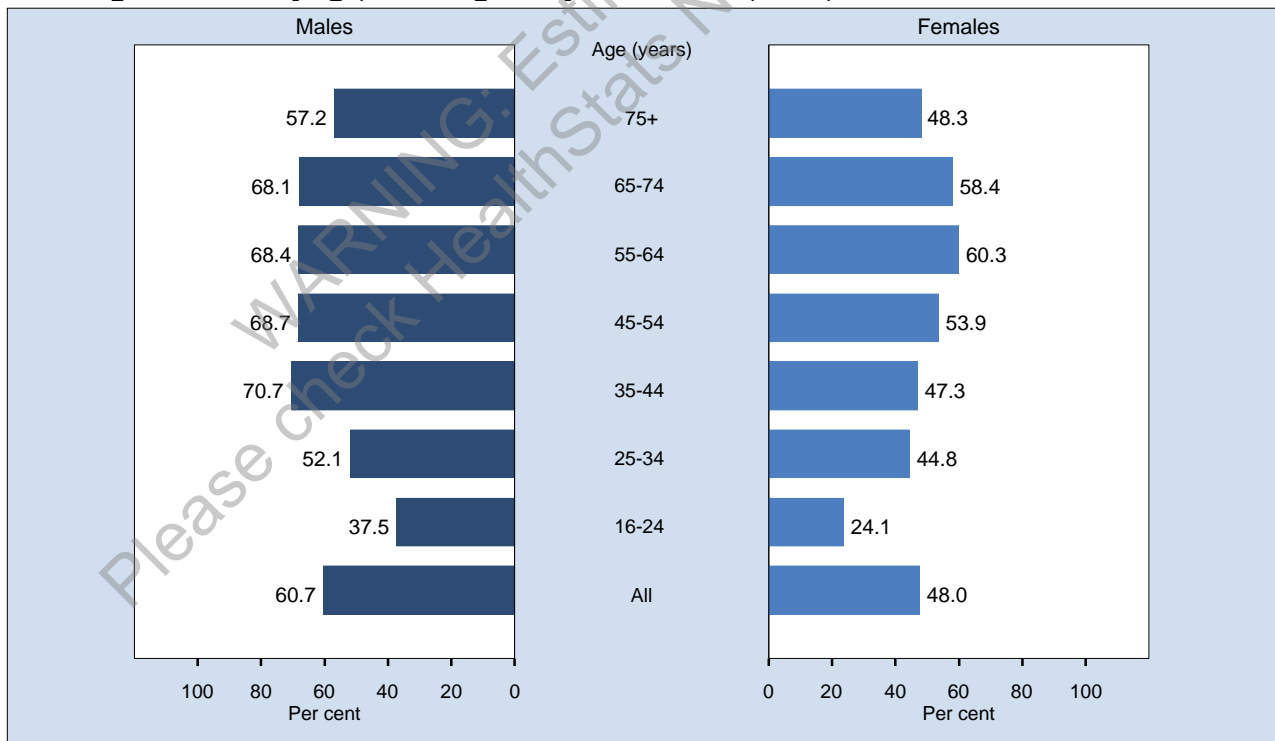
Obese by year, adults aged 16 years and over, NSW, 1997-2010



Note: Estimates are based on the following numbers of respondents for NSW: 1997 (16,790), 1998 (16,445), 2002 (11,989), 2003 (12,441), 2004 (9,398), 2005 (11,078), 2006 (7,668), 2007 (7,257), 2008 (8,222), 2009 (10,252), 2010 (9,743). The indicator includes those who are obese: that is, with a Body Mass Index (BMI) of 30.0 or higher. The questions used to define the indicator were: How tall are you without shoes? How much do you weigh without clothes or shoes? For 18 years and over, BMI is calculated as follows $BMI = \text{weight}(\text{kg})/\text{height}^2(\text{m})$. For 16-17 year olds, the same categories are used but are linked to international cut off points defined by sex to pass through a BMI of 16, 17, and 18.5 (for underweight), 25 (for overweight), and 30 (for obesity) at age 18 years [Cole et al. 2000; Cole et al. 2007].

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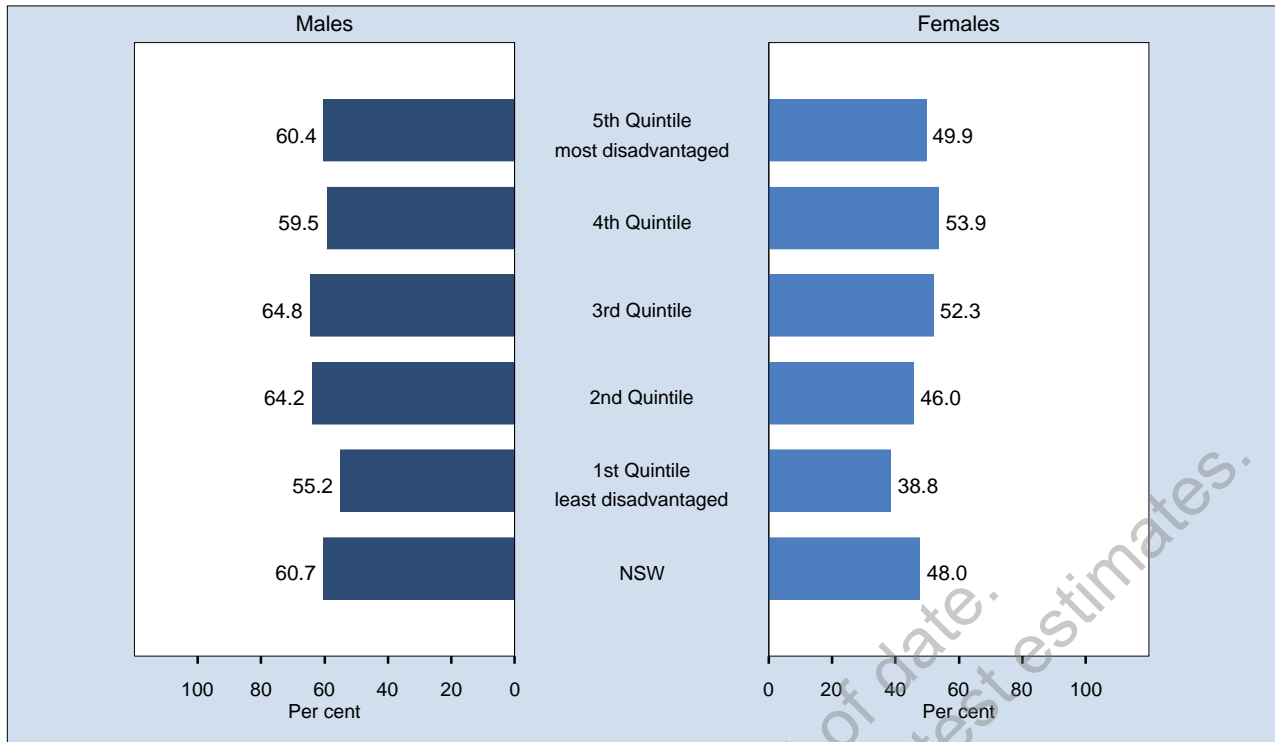
Overweight or obese by age, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 9,743 respondents in NSW. For this indicator 502 (4.90%) were not stated (Don't know or Refused) in NSW. The indicator includes those who are overweight or obese: that is with a Body Mass Index (BMI) of 25.0 or higher. The questions used to define the indicator were: How tall are you without shoes? How much do you weigh without clothes or shoes? For 18 years and over, BMI is calculated as follows: $BMI = \text{weight}(\text{kg})/\text{height}^2(\text{m})$. Categories for this indicator include overweight (BMI from 25.0 to 29.9) and obese (BMI of 30.0 and over). For 16-17 year olds, the same categories are used but are linked to international cut off points defined by sex to pass through a BMI of 16, 17, and 18.5 (for underweight), 25 (for overweight), and 30 (for obesity) at age 18 years [Cole et al. 2000; Cole et al. 2007].

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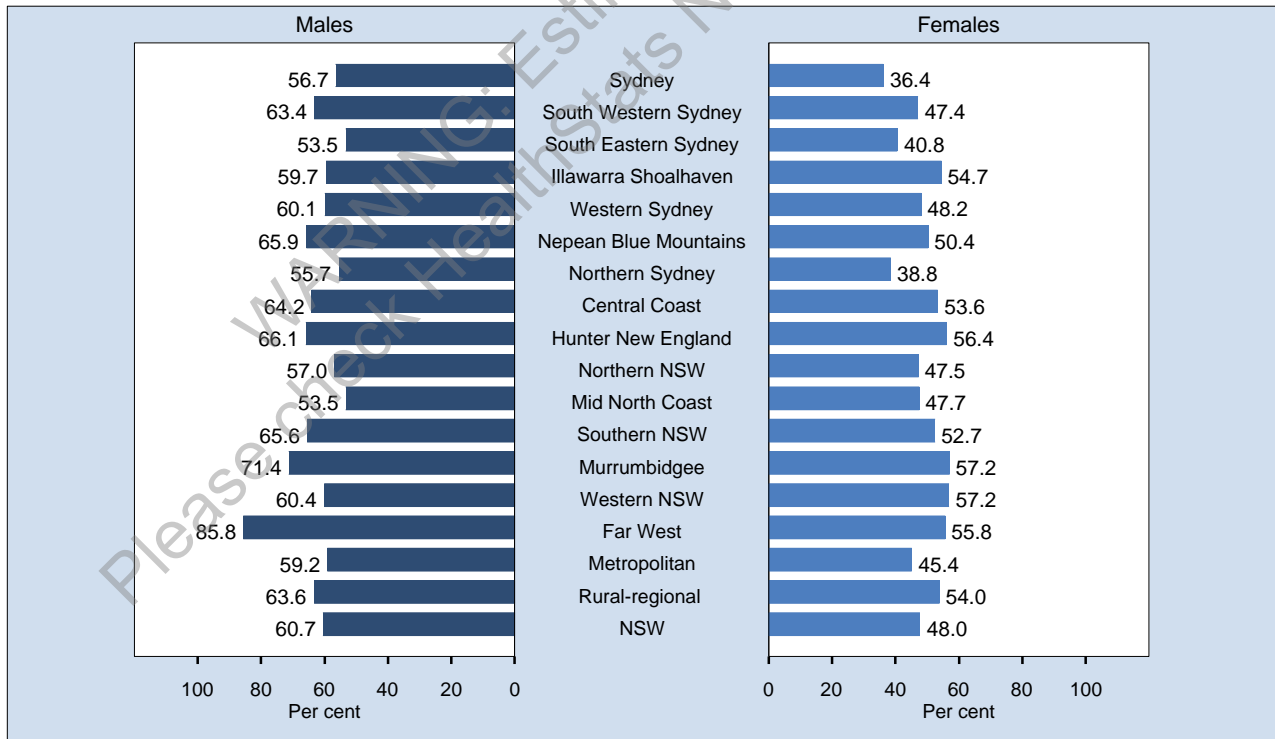
Overweight or obese by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 9,743 respondents in NSW. For this indicator 502 (4.90%) were not stated (Don't know or Refused) in NSW. The indicator includes those who are overweight or obese: that is with a Body Mass Index (BMI) of 25.0 or higher. The questions used to define the indicator were: How tall are you without shoes? How much do you weigh without clothes or shoes? For 18 years and over, BMI is calculated as follows: $BMI = \text{weight (kg)} / \text{height}^2(\text{m})$. Categories for this indicator include overweight (BMI from 25.0 to 29.9) and obese (BMI of 30.0 and over). For 16-17 year olds, the same categories are used but are linked to international cut off points defined by sex to pass through a BMI of 16, 17, and 18.5 (for underweight), 25 (for overweight), and 30 (for obesity) at age 18 years [Cole et al. 2000; Cole et al. 2007].

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

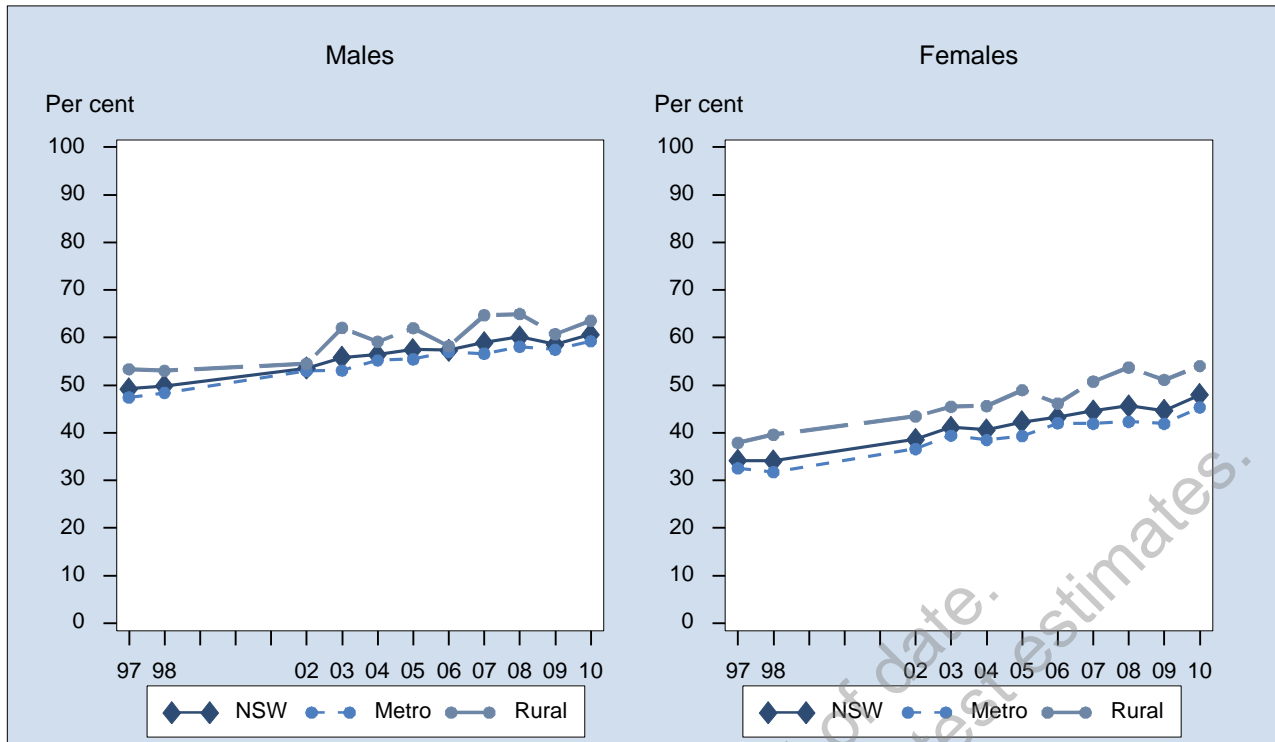
Overweight or obese by local health district, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 9,743 respondents in NSW. For this indicator 502 (4.90%) were not stated (Don't know or Refused) in NSW. The indicator includes those who are overweight or obese: that is with a Body Mass Index (BMI) of 25.0 or higher. The questions used to define the indicator were: How tall are you without shoes? How much do you weigh without clothes or shoes? For 18 years and over, BMI is calculated as follows: $BMI = \text{weight (kg)} / \text{height}^2(\text{m})$. Categories for this indicator include overweight (BMI from 25.0 to 29.9) and obese (BMI of 30.0 and over). For 16-17 year olds, the same categories are used but are linked to international cut off points defined by sex to pass through a BMI of 16, 17, and 18.5 (for underweight), 25 (for overweight), and 30 (for obesity) at age 18 years [Cole et al. 2000; Cole et al. 2007]. NSW total includes the 15 LHDs and Albury (Victoria in-reach).

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Overweight or obese by year, adults aged 16 years and over, NSW, 1997-2010



Note: Estimates are based on the following numbers of respondents for NSW: 1997 (16,790), 1998 (16,445), 2002 (11,989), 2003 (12,441), 2004 (9,398), 2005 (11,078), 2006 (7,668), 2007 (7,257), 2008 (8,222), 2009 (10,252), 2010 (9,743). The indicator includes those who are overweight or obese: that is with a Body Mass Index (BMI) of 25.0 or higher. The questions used to define the indicator were: How tall are you without shoes? How much do you weigh without clothes or shoes? For 18 years and over, BMI is calculated as follows: $BMI = \text{weight (kg)} / \text{height}^2(\text{m})$. Categories for this indicator include overweight (BMI from 25.0 to 29.9) and obese (BMI of 30.0 and over). For 16-17 year olds, the same categories are used but are linked to international cut off points defined by sex to pass through a BMI of 16, 17, and 18.5 (for underweight), 25 (for overweight), and 30 (for obesity) at age 18 years [Cole et al. 2000; Cole et al. 2007].

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

WARNING: Estimates are for date. Please check HealthStats NSW for latest estimates.

Hearing and vision

Introduction

Hearing loss reduces the ability to communicate, work, and learn. In Australia, adult onset hearing loss is a leading cause of years lost to disability in males and females, with a particularly heavy burden of disability among the elderly. Self-reported hearing loss has been validated as a way of estimating the prevalence of hearing loss in older people.[1-2]

Good vision is a key component of most basic activities, including employment and education. Loss of vision is a contributor to decreased wellbeing, restricted personal independence, and reduced social and community participation. Even mild to moderate visual impairment increases difficulty with daily living and reduces ease of social functioning. Poor vision contributes to significant morbidity by doubling the risk of falls and depression, and by increasing the risk of hip fractures fourfold.[3-4]

Results

Hearing

In 2010, 13.2 per cent of adults aged 16 years and over had their hearing tested less than 1 year ago, 8.5 per cent had their hearing tested 1 year ago to less than 2 years ago, 11.1 per cent had their hearing tested 2 years ago to less than 5 years ago, 32.8 per cent had their hearing tested 5 or more years ago, and 34.4 per cent have never had their hearing tested.

In 2010, as far as they could tell, 80.5 per cent of adults aged 16 years and over had normal hearing in both ears (77.1 per cent males; 83.7 per cent females).

Vision

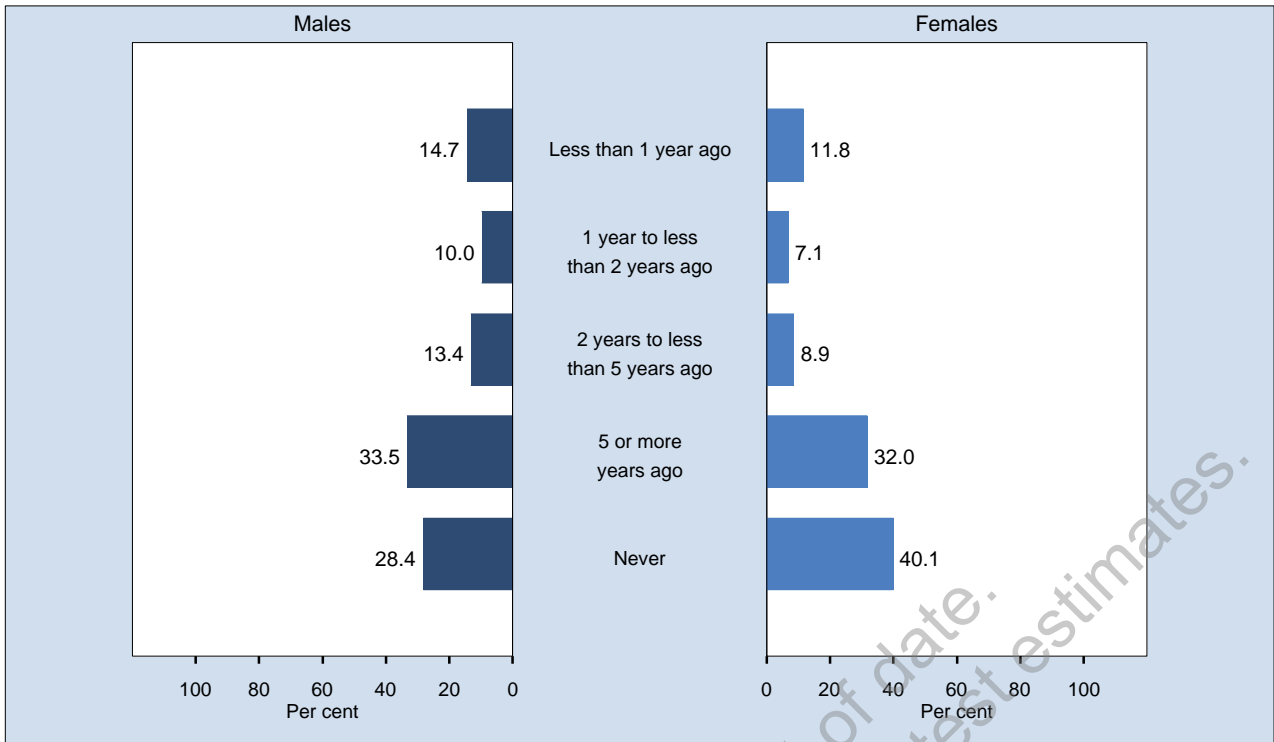
In 2010, 47.0 per cent of adults aged 16 years and over had their eyesight tested less than 1 year ago, 22.3 per cent had their eyesight tested 1 year ago to less than 2 years ago, 12.9 per cent had their eyesight tested 2 years ago to less than 5 years ago, 11.6 per cent had their eyesight tested 5 or more years ago, and 6.1 per cent have never had their eyesight tested.

In 2010, as far as they knew, 39.9 per cent of adults aged 16 years and over had normal vision in both eyes (43.6 per cent males; 36.3 per cent females), 47.7 per cent had normal vision with glasses (43.9 per cent males; 51.4 per cent females). The remaining 12.4 per cent did not have normal vision (12.5 per cent males; 12.3 per cent females).

References

1. Mathers C, Vos E, Stevenson C, Begg S. The Australian Burden of Disease Study: Measuring the loss of health from diseases, injuries and risk factors. *Med J Aust* 2000; 172: 592-596.
2. Sindhusake D, Mitchell P, Smith W, Golding M, Newall P, Hartley D, Rubin G. Validation of self-reported hearing loss. The Blue Mountains Hearing Study. *Int J Epidemiol* 2001; 30(6): 1371-1378.
3. Wang JJ, Foran S, Mitchell P. Age-specific prevalence and causes of bilateral and unilateral visual impairment in older Australians: The Blue Mountains Eye Study. *Clin Experiment Ophthalmol* 2000; 28: 268-273.
4. Australian Institute of Health and Welfare. *Eye health in Australia: a hospital perspective*. Canberra: Australian Institute of Health and Welfare, 2008.

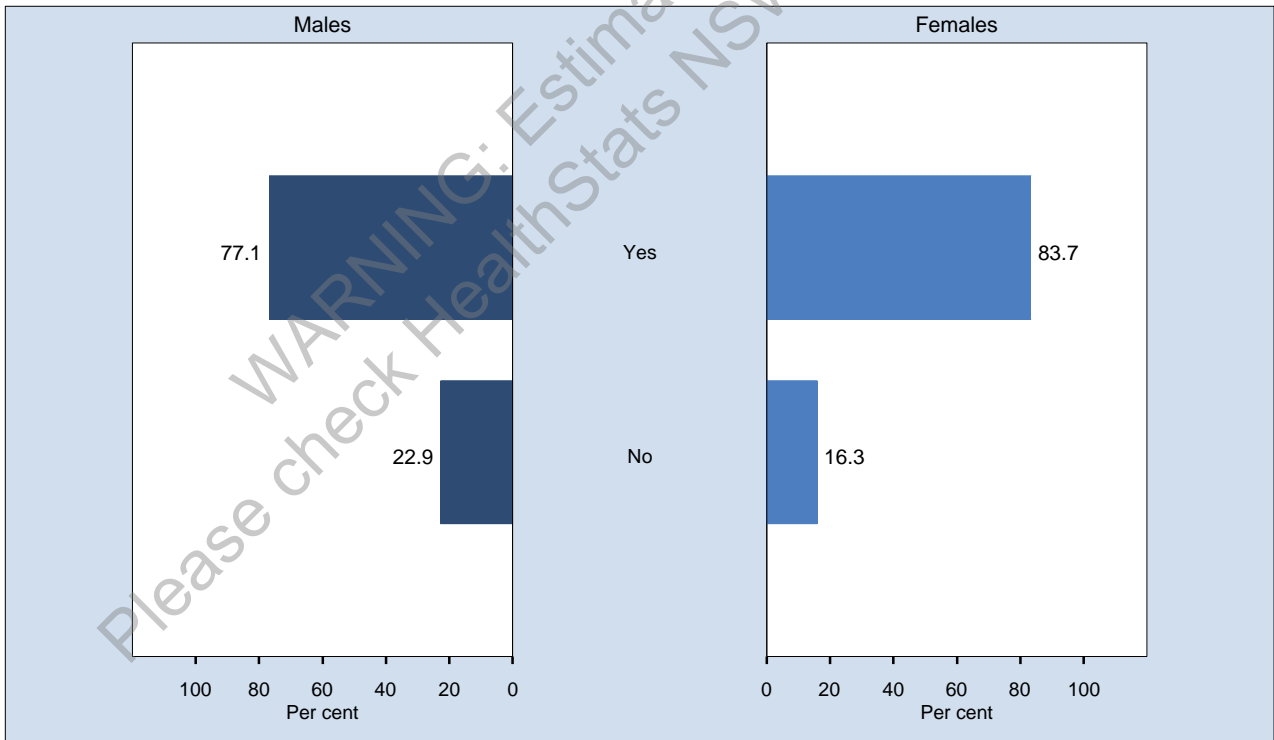
When hearing last tested, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 7,042 respondents in NSW. For this indicator 418 (5.60%) were not stated (Don't know or Refused) in NSW. The question used was: When did you last have your hearing checked?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

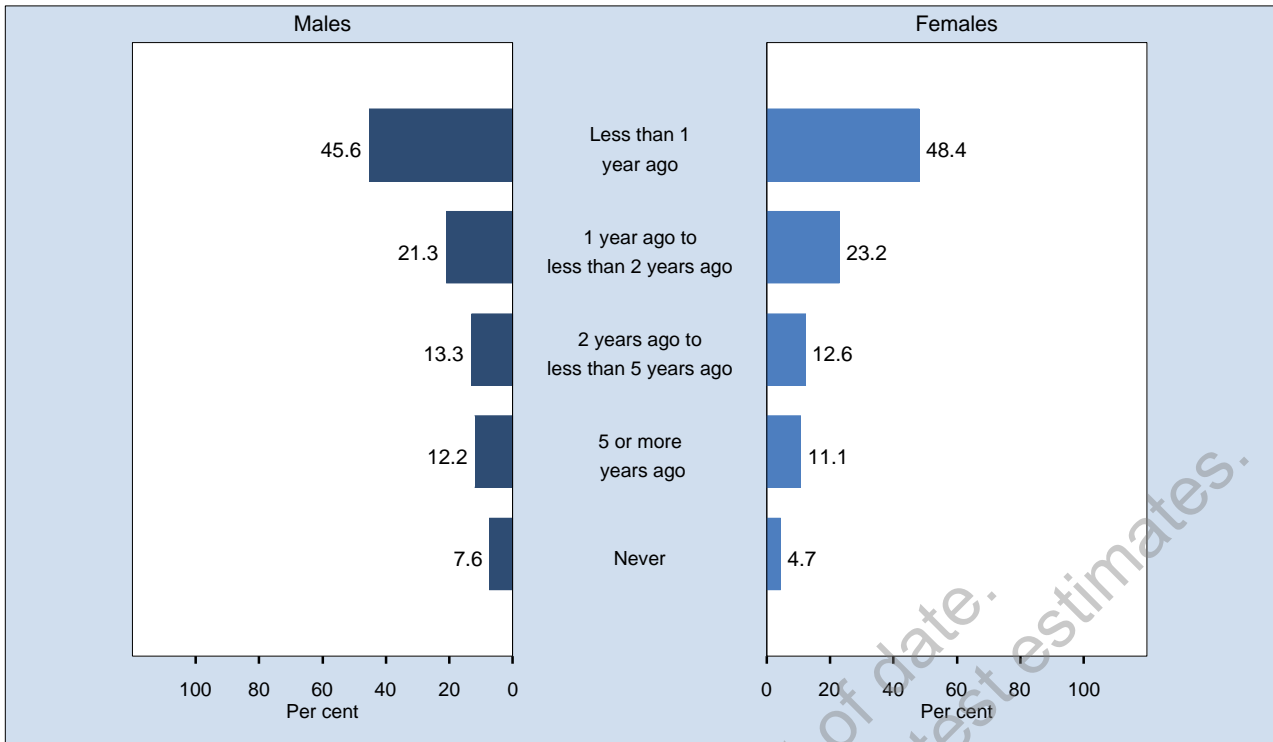
Normal hearing in both ears, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 7,388 respondents in NSW. For this indicator 72 (0.97%) were not stated (Don't know or Refused) in NSW. The question used was: As far as you know, do you currently have normal hearing in both ears?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

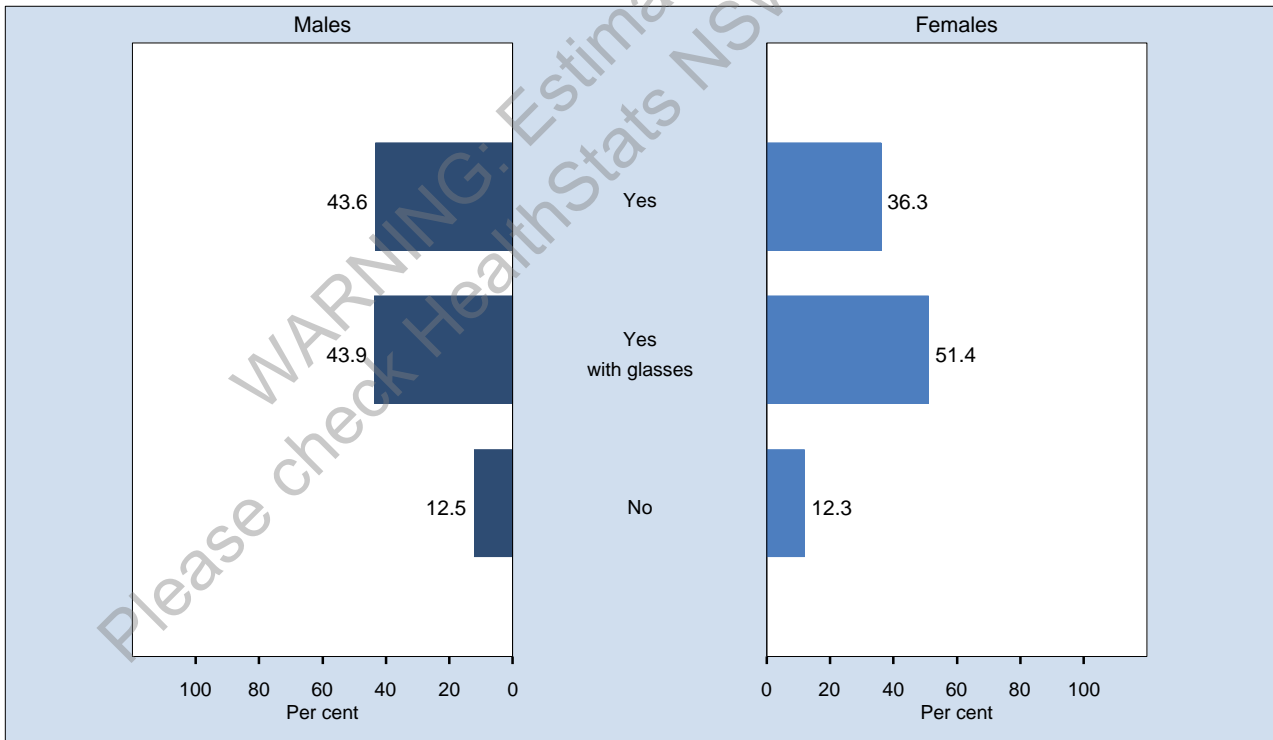
When eyesight last tested, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 7,402 respondents in NSW. For this indicator 58 (0.78%) were not stated (Don't know or Refused) in NSW. The question used was: When did you last have your eyesight checked?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Normal vision in both eyes, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 7,439 respondents in NSW. For this indicator 21 (0.28%) were not stated (Don't know or Refused) in NSW. The question used was: As far as you know, do you currently have normal vision in both eyes?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Trends in health status

- **Health-related quality of life**

Since 1997, there has been a significant decrease in the proportion of adults aged 16 years and over who rated their health positively (85.0 per cent to 80.4 per cent). The decrease has been significant in males and females, and in rural-regional and metropolitan health districts.

- **Current asthma**

Since 1997, there has been no significant change in the proportion of adults aged 16 years and over who have current asthma.

- **Diabetes or high blood glucose**

Since 1997, there has been a significant increase in the proportion of adults aged 16 years and over who had ever been told by a doctor or hospital they had diabetes or high blood glucose (4.7 per cent to 7.4 per cent). The increase has been significant in males and females, and in rural-regional and metropolitan health districts.

- **Mental health**

Since 1997, there has been no significant change in the proportion of adults aged 16 years and over who experienced high or very high levels of psychological distress in the last 4 weeks.

- **Visited a dental professional**

Since 2002, there has been a significant increase in the proportion of adults aged 16 years and over who visited a dental professional less than 12 months ago (55.8 per cent to 58.6 per cent). The increase has been significant in females and in metropolitan health districts.

- **Private dental cover**

Since 2009, there has been no significant change in the proportion of adults aged 16 years and over who had private health insurance for dental expenses.

- **Overweight**

Since 1997, there has been a significant increase in the proportion of adults aged 16 years and over who were overweight (30.6 per cent to 33.3 per cent); that is, had a BMI between 25 to 30 calculated from self-reported height and weight. The increase has been significant in females, and in metropolitan health districts.

- **Obese**

Since 1997, there has been a significant increase in the proportion of adults aged 16 years and over who were obese (11.2 per cent to 21.0 per cent); that is, had a BMI of 30 or over calculated from self-reported height and weight. The increase has been significant in males and females, and in rural-regional and metropolitan health districts.

- **Overweight or obese**

Since 1997, there has been a significant increase in the proportion of adults aged 16 years and over who were overweight or obese (41.8 per cent to 54.3 per cent); that is, had a BMI of 25 or over calculated from self-reported height and weight. The increase has been significant in males and females, and in rural-regional and metropolitan health districts.

Please check [NSW Health website](#) for latest estimates.

Trends in health status NSW, 2010

Indicator	Year	Males % (95% CI)	Females % (95% CI)	Metropolitan % (95% CI)	Rural-regional % (95% CI)	All % (95% CI)
Excellent, very good, or good self-rated health status	1997	85.0 (84.0-85.9)	85.1 (84.2-86.0)	85.7 (84.9-86.5)	83.3 (82.3-84.3)	85.0 (84.4-85.7)
	1998	85.0 (84.0-86.0)	83.1 (82.2-84.0)	84.2 (83.3-85.2)	83.5 (82.6-84.5)	84.0 (83.3-84.7)
	2002	82.0 (80.5-83.5)	79.9 (78.6-81.2)	80.7 (79.5-82.0)	81.4 (80.0-82.8)	81.0 (80.0-81.9)
	2003	81.8 (80.4-83.2)	79.6 (78.4-80.9)	80.5 (79.3-81.7)	81.2 (79.9-82.4)	80.7 (79.8-81.6)
	2004	79.7 (77.9-81.6)	79.3 (77.8-80.7)	79.7 (78.1-81.2)	78.9 (77.3-80.5)	79.5 (78.3-80.7)
	2005	83.3 (81.9-84.7)	78.7 (77.4-80.0)	80.9 (79.6-82.1)	81.1 (79.8-82.4)	80.9 (80.0-81.9)
	2006	82.5 (80.9-84.2)	78.1 (76.6-79.7)	80.2 (78.7-81.7)	80.2 (78.7-81.8)	80.3 (79.2-81.4)
	2007	83.3 (82.0-84.7)	78.8 (77.6-80.0)	81.5 (80.3-82.7)	80.0 (78.6-81.4)	81.0 (80.1-82.0)
	2008	82.4 (80.9-84.0)	78.1 (76.7-79.5)	80.2 (78.8-81.5)	80.3 (78.9-81.8)	80.2 (79.2-81.3)
	2009	81.4 (79.8-83.1)	78.4 (77.1-79.8)	79.7 (78.3-81.1)	80.4 (78.9-81.8)	79.9 (78.9-81.0)
2010	82.3 (80.6-84.1)	78.5 (77.0-80.0)	80.3 (78.8-81.9)	80.3 (78.7-81.8)	80.4 (79.2-81.5)	
Current asthma	1997	8.8 (7.9-9.6)	12.1 (11.2-13.0)	9.9 (9.1-10.7)	11.7 (10.8-12.6)	10.5 (9.8-11.1)
	1998	8.9 (8.0-9.8)	11.0 (10.2-11.7)	9.2 (8.5-10.0)	11.7 (10.8-12.6)	9.9 (9.4-10.5)
	2002	9.2 (8.1-10.4)	12.1 (11.1-13.2)	9.8 (8.9-10.8)	12.7 (11.4-13.9)	10.7 (9.9-11.5)
	2003	9.1 (8.0-10.3)	12.6 (11.6-13.7)	10.8 (9.8-11.8)	11.3 (10.2-12.3)	10.9 (10.1-11.7)
	2004	8.7 (7.3-10.1)	11.8 (10.7-13.0)	9.7 (8.5-10.9)	11.5 (10.2-12.7)	10.3 (9.4-11.2)
	2005	8.8 (7.7-9.9)	12.0 (11.0-13.0)	9.7 (8.7-10.7)	12.0 (10.9-13.0)	10.4 (9.7-11.2)
	2006	9.9 (8.5-11.3)	11.8 (10.6-13.0)	10.1 (8.9-11.3)	12.4 (10.9-13.8)	10.9 (9.9-11.8)
	2007	8.9 (7.5-10.4)	11.8 (10.6-13.1)	9.5 (8.4-10.7)	12.6 (11.1-14.2)	10.5 (9.5-11.4)
	2008	8.4 (7.1-9.7)	12.6 (11.4-13.8)	10.2 (9.0-11.3)	11.3 (10.0-12.7)	10.5 (9.6-11.4)
	2009	8.5 (7.3-9.6)	12.5 (11.4-13.6)	10.0 (9.0-11.0)	11.8 (10.6-12.9)	10.5 (9.7-11.3)
2010	9.3 (7.9-10.7)	13.3 (12.0-14.6)	10.6 (9.3-11.8)	13.2 (11.8-14.7)	11.3 (10.4-12.3)	
Written asthma action plan	2009	23.8 (17.7-29.8)	32.5 (28.2-36.9)	27.8 (23.0-32.7)	31.6 (26.5-36.6)	29.0 (25.4-32.6)
	2010	30.0 (22.7-37.4)	36.6 (31.3-41.9)	33.5 (27.5-39.4)	35.0 (29.1-41.0)	34.0 (29.6-38.3)
Diabetes or high blood glucose	1997	5.2 (4.6-5.7)	4.2 (3.7-4.8)	4.5 (4.0-5.1)	5.0 (4.4-5.6)	4.7 (4.3-5.1)
	1998	4.9 (4.2-5.5)	4.0 (3.5-4.5)	4.4 (3.8-4.9)	4.6 (4.1-5.2)	4.4 (4.0-4.8)
	2002	6.5 (5.7-7.3)	5.5 (4.9-6.2)	5.4 (4.7-6.0)	7.4 (6.6-8.2)	6.0 (5.5-6.5)
	2003	7.0 (6.2-7.8)	5.6 (5.0-6.2)	5.9 (5.3-6.6)	7.1 (6.4-7.8)	6.3 (5.8-6.8)
	2004	8.1 (7.0-9.2)	5.3 (4.6-6.0)	6.5 (5.6-7.3)	7.1 (6.2-8.1)	6.7 (6.0-7.3)
	2005	8.4 (7.4-9.3)	6.9 (6.1-7.6)	7.5 (6.7-8.3)	7.7 (7.0-8.5)	7.6 (7.0-8.2)
	2006	8.5 (7.4-9.7)	6.4 (5.6-7.2)	7.5 (6.6-8.4)	7.3 (6.4-8.2)	7.4 (6.7-8.1)
	2007	7.8 (6.7-8.9)	6.5 (5.7-7.3)	6.6 (5.8-7.5)	8.3 (7.2-9.3)	7.1 (6.4-7.8)
	2008	7.9 (6.9-8.8)	6.8 (6.0-7.5)	6.7 (5.9-7.4)	8.8 (7.8-9.9)	7.3 (6.7-7.9)
	2009	9.4 (8.4-10.4)	7.0 (6.3-7.7)	8.0 (7.2-8.7)	8.9 (7.9-9.8)	8.2 (7.6-8.8)
2010	8.3 (7.3-9.3)	6.6 (5.9-7.4)	7.1 (6.4-7.9)	8.2 (7.3-9.1)	7.4 (6.8-8.1)	
High or very high psychological distress	1997	9.2 (8.4-10.0)	13.0 (12.1-13.9)	10.9 (10.1-11.7)	11.9 (11.0-12.8)	11.2 (10.5-11.8)
	1998	9.0 (8.1-9.9)	12.1 (11.2-12.9)	10.8 (10.0-11.6)	10.2 (9.3-11.0)	10.6 (10.0-11.2)
	2002	10.5 (9.3-11.6)	14.2 (13.0-15.4)	12.5 (11.4-13.5)	12.1 (10.9-13.4)	12.4 (11.5-13.2)
	2003	9.2 (8.2-10.3)	12.8 (11.8-13.9)	11.1 (10.1-12.1)	11.0 (10.0-12.1)	11.1 (10.3-11.8)
	2004	11.7 (10.2-13.2)	14.6 (13.2-15.9)	13.3 (12.0-14.7)	12.7 (11.3-14.1)	13.1 (12.1-14.1)
	2005	9.7 (8.4-10.9)	14.1 (12.9-15.3)	12.2 (11.0-13.3)	11.5 (10.4-12.7)	11.9 (11.1-12.8)
	2006	9.4 (8.1-10.7)	11.9 (10.7-13.2)	10.8 (9.6-12.0)	10.5 (9.2-11.7)	10.7 (9.8-11.6)
	2007	10.9 (9.4-12.5)	13.2 (11.9-14.5)	11.8 (10.5-13.1)	12.9 (11.3-14.5)	12.1 (11.1-13.1)
	2008	8.5 (7.2-9.8)	12.6 (11.3-13.9)	10.2 (9.0-11.3)	11.2 (9.8-12.5)	10.6 (9.6-11.5)
	2009	10.7 (9.2-12.1)	12.3 (11.2-13.4)	11.5 (10.4-12.7)	11.4 (10.2-12.7)	11.5 (10.6-12.4)
2010	9.6 (8.1-11.0)	12.4 (11.1-13.7)	10.9 (9.6-12.1)	11.4 (10.1-12.8)	11.0 (10.0-12.0)	
Visited a dental professional in the last 12 months	2002	53.8 (51.8-55.8)	57.7 (56.0-59.4)	57.6 (55.9-59.3)	51.4 (49.5-53.2)	56.8 (54.5-57.1)
	2003	56.0 (54.1-58.0)	60.5 (59.0-62.0)	60.6 (59.0-62.2)	53.0 (51.3-54.7)	58.3 (57.1-59.5)
	2004	57.8 (55.5-60.1)	63.4 (61.6-65.2)	62.9 (61.0-64.8)	55.6 (53.6-57.7)	60.6 (59.2-62.1)
	2005	60.1 (58.1-62.0)	63.8 (62.2-65.3)	64.2 (62.6-65.8)	57.0 (55.3-58.7)	61.9 (60.7-63.2)
	2006	56.4 (54.1-58.7)	59.8 (57.9-61.6)	60.3 (58.4-62.2)	53.3 (51.2-55.4)	58.1 (56.6-59.6)
	2007	52.9 (50.4-55.4)	59.0 (57.1-60.9)	57.9 (55.8-59.9)	51.3 (49.1-53.6)	56.0 (54.4-57.6)
	2008	57.7 (55.3-60.0)	59.9 (58.1-61.8)	62.0 (60.0-63.9)	51.7 (49.6-53.9)	58.8 (57.3-60.3)
	2009	57.5 (54.6-60.4)	61.7 (59.5-63.9)	61.1 (58.8-63.4)	55.6 (52.8-58.4)	59.6 (57.8-61.5)
	2010	55.0 (52.6-57.4)	62.0 (60.2-63.8)	61.0 (59.1-62.9)	53.0 (50.9-55.0)	58.6 (57.1-60.1)
	2009	49.6 (46.6-52.6)	49.2 (47.0-51.5)	52.3 (50.0-54.7)	41.4 (38.6-44.1)	49.4 (47.6-51.3)
2010	50.5 (48.1-52.9)	51.8 (50.0-53.6)	55.4 (53.4-57.3)	41.8 (39.7-43.8)	51.2 (49.7-52.7)	
Overweight	1997	38.3 (36.9-39.7)	22.8 (21.7-23.9)	29.8 (28.6-31.0)	32.3 (31.0-33.5)	30.6 (29.7-31.5)
	1998	37.4 (35.9-38.9)	22.6 (21.5-23.7)	29.1 (27.9-30.4)	32.1 (30.8-33.5)	30.1 (29.1-31.0)
	2002	38.9 (36.9-40.8)	24.0 (22.6-25.5)	30.9 (29.3-32.5)	33.0 (31.2-34.8)	31.6 (30.3-32.8)
	2003	40.4 (38.5-42.3)	24.6 (23.2-25.9)	31.2 (29.6-32.7)	35.7 (34.1-37.4)	32.5 (31.3-33.7)
	2004	40.5 (38.2-42.8)	25.8 (24.2-27.4)	32.4 (30.6-34.3)	35.0 (33.0-36.9)	33.2 (31.8-34.6)
	2005	40.2 (38.2-42.1)	26.1 (24.7-27.5)	32.5 (30.9-34.2)	34.5 (32.8-36.2)	33.1 (31.9-34.3)
	2006	39.4 (37.1-41.6)	25.9 (24.3-27.6)	32.4 (30.6-34.3)	33.3 (31.3-35.3)	32.7 (31.3-34.1)
	2007	41.5 (39.0-44.0)	26.2 (24.5-27.9)	32.7 (30.8-34.6)	36.4 (34.1-38.7)	33.8 (32.3-35.3)
	2008	42.1 (39.8-44.4)	26.5 (24.9-28.2)	33.4 (31.5-35.3)	36.5 (34.4-38.6)	34.3 (32.9-35.8)
	2009	39.5 (37.3-41.6)	25.7 (24.3-27.2)	31.9 (30.2-33.6)	34.3 (32.4-36.2)	32.6 (31.3-33.9)
2010	39.9 (37.6-42.2)	26.9 (25.2-28.5)	33.1 (31.2-34.9)	33.8 (31.8-35.8)	33.3 (31.9-34.8)	
Obese	1997	11.0 (10.1-11.8)	11.3 (10.6-12.1)	10.2 (9.5-10.9)	13.4 (12.5-14.3)	11.2 (10.6-11.7)
	1998	12.5 (11.5-13.4)	11.5 (10.7-12.3)	11.0 (10.2-11.8)	14.3 (13.3-15.2)	12.0 (11.4-12.6)
	2002	14.7 (13.3-16.1)	14.6 (13.4-15.7)	14.0 (12.8-15.1)	16.1 (14.9-17.4)	14.6 (13.7-15.5)
	2003	15.5 (14.2-16.8)	16.5 (15.4-17.7)	15.0 (13.9-16.2)	18.1 (16.9-19.4)	16.0 (15.1-16.9)
	2004	15.9 (14.3-17.5)	14.8 (13.5-16.0)	14.5 (13.1-15.8)	17.4 (16.0-18.9)	15.3 (14.3-16.4)
2005	17.3 (15.8-18.8)	16.2 (15.1-17.3)	14.8 (13.7-16.0)	20.9 (19.5-22.4)	16.7 (15.8-17.6)	

Indicator	Year	Males % (95% CI)	Females % (95% CI)	Metropolitan % (95% CI)	Rural-regional % (95% CI)	All % (95% CI)
	2006	18.0 (16.2-19.8)	17.4 (15.9-18.8)	17.2 (15.7-18.7)	18.9 (17.3-20.6)	17.7 (16.6-18.9)
	2007	17.5 (15.6-19.4)	18.4 (16.9-19.9)	16.5 (15.0-18.0)	21.3 (19.4-23.1)	18.0 (16.8-19.2)
	2008	18.0 (16.3-19.7)	19.1 (17.7-20.6)	16.8 (15.4-18.2)	22.9 (21.0-24.7)	18.6 (17.4-19.7)
	2009	19.1 (17.4-20.8)	18.9 (17.7-20.2)	17.8 (16.5-19.2)	21.7 (20.2-23.3)	19.0 (18.0-20.0)
	2010	20.8 (19.0-22.6)	21.1 (19.7-22.5)	19.1 (17.7-20.6)	25.0 (23.2-26.8)	21.0 (19.8-22.1)
Overweight or obese	1997	49.3 (47.8-50.7)	34.2 (32.9-35.4)	40.0 (38.8-41.3)	45.7 (44.3-47.0)	41.8 (40.8-42.7)
	1998	49.8 (48.3-51.4)	34.1 (32.9-35.4)	40.2 (38.8-41.5)	46.4 (45.0-47.8)	42.0 (41.0-43.1)
	2002	53.6 (51.6-55.5)	38.6 (37.0-40.2)	44.9 (43.2-46.6)	49.1 (47.3-51.0)	46.2 (44.9-47.5)
	2003	55.9 (53.9-57.8)	41.1 (39.5-42.7)	46.2 (44.6-47.9)	53.9 (52.2-55.6)	48.5 (47.2-49.8)
	2004	56.4 (54.0-58.8)	40.6 (38.7-42.4)	46.9 (44.9-48.9)	52.4 (50.4-54.5)	48.6 (47.0-50.1)
	2005	57.5 (55.5-59.5)	42.3 (40.7-43.9)	47.4 (45.7-49.1)	55.4 (53.7-57.2)	49.9 (48.6-51.1)
	2006	57.4 (55.0-59.7)	43.3 (41.4-45.2)	49.6 (47.6-51.6)	52.3 (50.1-54.4)	50.4 (48.9-52.0)
	2007	59.0 (56.5-61.5)	44.6 (42.7-46.6)	49.2 (47.2-51.3)	57.7 (55.3-60.0)	51.7 (50.1-53.3)
	2008	60.1 (57.8-62.5)	45.7 (43.8-47.6)	50.2 (48.2-52.2)	59.4 (57.3-61.5)	52.9 (51.4-54.4)
	2009	58.5 (56.3-60.7)	44.7 (43.0-46.3)	49.7 (47.9-51.5)	56.0 (54.0-58.0)	51.6 (50.2-53.0)
	2010	60.7 (58.3-63.0)	48.0 (46.1-49.9)	52.2 (50.3-54.2)	58.8 (56.8-60.9)	54.3 (52.8-55.8)

Note: Indicators include adults 16 years and over unless specified.

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

WARNING: Estimates out of date.
Please check HealthStats NSW for latest estimates.

Health services

- Overview of health services
- Health service use and access (including private health insurance and difficulties getting health care)
- Emergency department presentations
- Hospital admissions
- General practice visits
- Public dental service attendances
- Community health centre attendances
- Trends in health services

WARNING: Estimates out of date.
Please check HealthStats NSW for latest estimates.

Overview for health services

The *National Healthcare Agreement* affirms that Australia's health system should: be shaped around the health needs of individual patients, their families and communities; support an integrated approach to the promotion of healthy lifestyles, prevention of illness and injury, and diagnosis and treatment of illness across the continuum of care; and, provide all Australians with timely access to quality health services based on their needs, not ability to pay, regardless of where they live in the country.[1] Targets under the *NSW State Plan* are set to meet and maintain national benchmarks for timely access to emergency departments and surgical treatment, and reducing preventable hospitalisation.[2]

This section of the *2010 Report on Adult Health* includes the following indicators for health services: health service use, private health insurance, difficulties getting health care, emergency department presentations, hospital admissions, general practice visits, public dental service attendances, and community health centre attendances. Information is also provided on the rating of care received for each of these services. Comparisons have been made between age groups, sexes, socioeconomic quintiles, and geographical locations.

Trends for these indicators include increases in emergency department presentations, hospital admissions, general practice visits, public dental service attendances, and community health centre attendances. While there has been no significant change in positive ratings of hospital care and community health centre care, there has been a significant increase in positive ratings of general practice care and public dental care. However, there has been a significant decrease in positive rating of emergency department care and a significant increase in difficulty getting health care. There has also been a significant increase in private health insurance coverage.

The survey indicated that, among rural-regional health districts, there were significantly higher proportions of emergency department presentations and hospital admissions, significantly higher proportions of positive rating of emergency department care; significantly higher proportions of difficulties getting health care, and significantly lower proportions of private health insurance.

References

1. Council of Australian Governments. *National Healthcare Agreement*. Canberra: Council of Australian Governments, 2011. Available online at http://www.coag.gov.au/intergov_agreements/federal_financial_relations (accessed 2 May 2011).
2. NSW Government. *NSW State Plan 2010*. Sydney: NSW Government, 2010. Available online at www.stateplan.nsw.gov.au (accessed 2 May 2011).

WARNING: Estimates NSW State Plan
Please check HealthStats NSW website for updates

Health service use and access

Introduction

To monitor use of and access to health services, the New South Wales Population Health Survey asks respondents questions about health service use, private health insurance, and difficulties getting health care.

Results

Used a health service in the last 12 months

In 2010, in the last 12 months, 16.1 per cent of adults were admitted to hospital for at least 1 night, 19.2 per cent presented to an emergency department, 9.3 per cent attended a community health centre, 6.6 per cent attended a public dental service or hospital, 96.3 per cent visited a general practitioner, and 1.0 per cent did not attend any health services. Respondents could mention more than 1 response.

Private health insurance

In 2010, 58.1 per cent of adults aged 16 years and over were covered by private health insurance.

- There was no significant difference between males and females.
- A significantly lower proportion of adults aged 25-34 years (52.0 per cent), and 75 years and over (47.6 per cent), and a significantly higher proportion of adults aged 45-54 years (64.4 per cent) and 55-64 years (65.3 per cent), were covered by private health insurance, compared with the overall adult population.
- A significantly higher proportion of adults in the first or least disadvantaged quintile (78.5 per cent) and second quintile (66.2 per cent), and a significantly lower proportion of adults in the fifth or most disadvantaged quintile (39.6 per cent) and fourth quintile (47.0 per cent), were covered by private health insurance, compared with the overall adult population.
- A significantly higher proportion of adults in metropolitan health districts (61.8 per cent) were covered by private health insurance, compared with rural-regional health districts (49.7 per cent).
- A significantly higher proportion of adults in South Eastern Sydney (73.4 per cent) and Northern Sydney (78.9 per cent), and a significantly lower proportion of adults in South Western Sydney (50.3 per cent), Hunter New England (52.6 per cent), Northern NSW (44.0 per cent), Mid North Coast (39.6 per cent), Southern NSW (49.8 per cent), Western NSW (50.9 per cent), and Far West (38.5 per cent), were covered by private health insurance, compared with the overall adult population.

Since 1997, there has been a significant increase in the proportion of adults aged 16 years and over who were covered by private health insurance (42.0 per cent to 58.1 per cent). The increase has been significant in males and females, and in rural-regional and metropolitan health districts.

Difficulties getting health care

In 2010, 18.1 per cent of adults aged 16 years and over experienced difficulties getting health care.

- A significantly lower proportion of males (15.3 per cent) experienced difficulties getting health care, compared with females (20.7 per cent).
- Among males, a significantly lower proportion of those aged 16-24 years (6.7 per cent) and 75 years and over (10.1 per cent), and a significantly higher proportion of those aged 35-44 years (21.9 per cent), experienced difficulties getting health care, compared with the overall adult male population.
- Among females, a significantly lower proportion of those aged 16-24 years (14.3 per cent), 65-74 years (16.4 per cent), and 75 years and over (8.6 per cent), and a significantly higher proportion of those aged 35-44 years (25.6 per cent) and 45-54 years (31.2 per cent), experienced difficulties getting health care, compared with the overall adult female population.
- A significantly lower proportion of adults in the first or least disadvantaged quintile (11.8 per cent), and a significantly higher proportion of adults in the fourth quintile (26.0 per cent), experienced difficulties getting health care, compared with the overall adult population.
- A significantly higher proportion of adults in rural-regional health districts (28.3 per cent) experienced difficulties getting health care, compared with metropolitan health districts (13.7 per cent).
- A significantly higher proportion of adults in Central Coast (24.2 per cent), Hunter New England (27.9

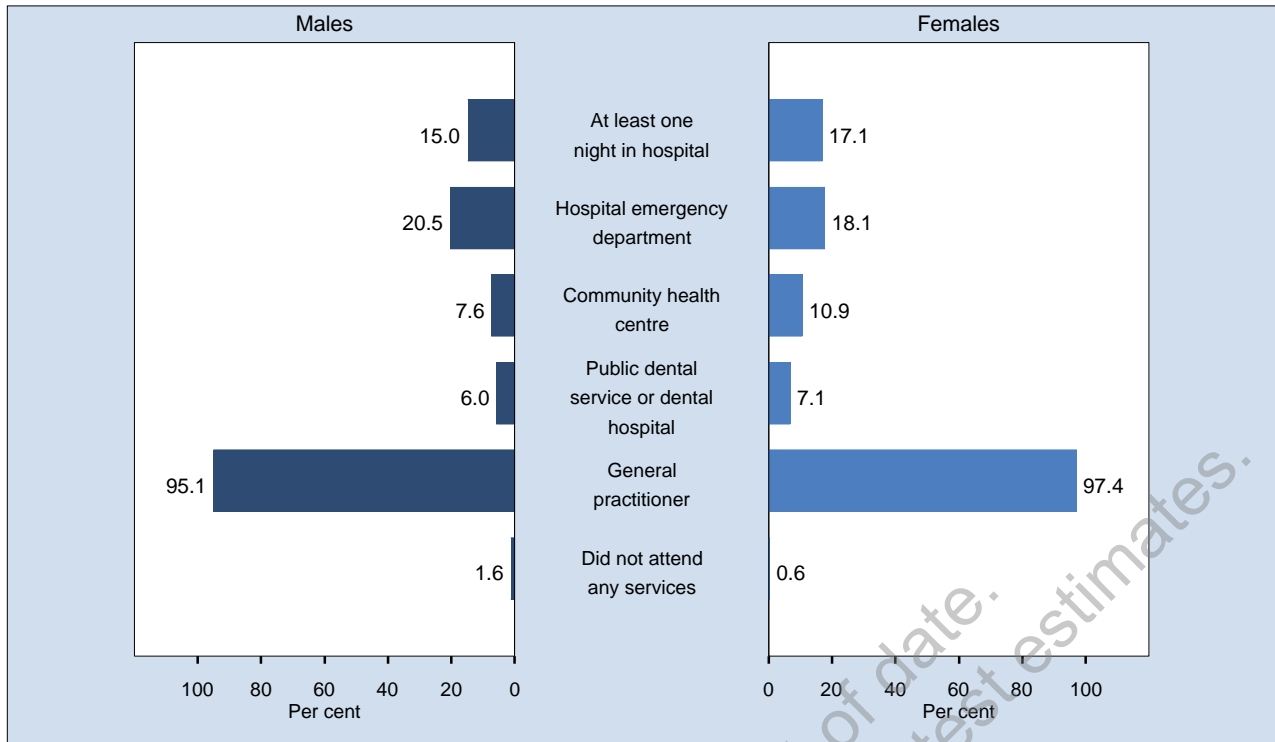
per cent), Northern NSW (23.8 per cent), Mid North Coast (29.1 per cent), Southern NSW (33.3 per cent), Murrumbidgee (26.6 per cent), and Western NSW (32.6 per cent), and a significantly lower proportion of adults in South Western Sydney (12.6 per cent), South Eastern Sydney (10.6 per cent), Western Sydney (9.9 per cent), Nepean Blue Mountains (11.3 per cent), and Northern Sydney (12.3 per cent), experienced difficulties getting health care, compared with the overall adult population.

Since 1997, there has been a significant increase in the proportion of adults who experienced difficulties getting health care (9.9 per cent to 18.1 per cent). The increase has been significant in males and females, and in rural-regional and metropolitan health districts.

Among those who experienced difficulties getting health care, the main difficulties were: waiting time for an appointment with a general practitioner (48.6 per cent), difficulty in accessing specialists (17.6 per cent), shortage of general practitioners in area (14.7 per cent), quality of treatment (11.5 per cent), shortage of health services (11.1 per cent), transport issues (10.3 per cent), cost of health services (8.1 per cent), waiting time in emergency departments (7.1 per cent), waiting time for dental services (4.9 per cent), difficulty getting after hours general practitioner appointment (2.5 per cent), waiting time for elective surgery (1.6 per cent), and no bulk billing (1.4 per cent). Respondents could mention more than 1 type of difficulty.

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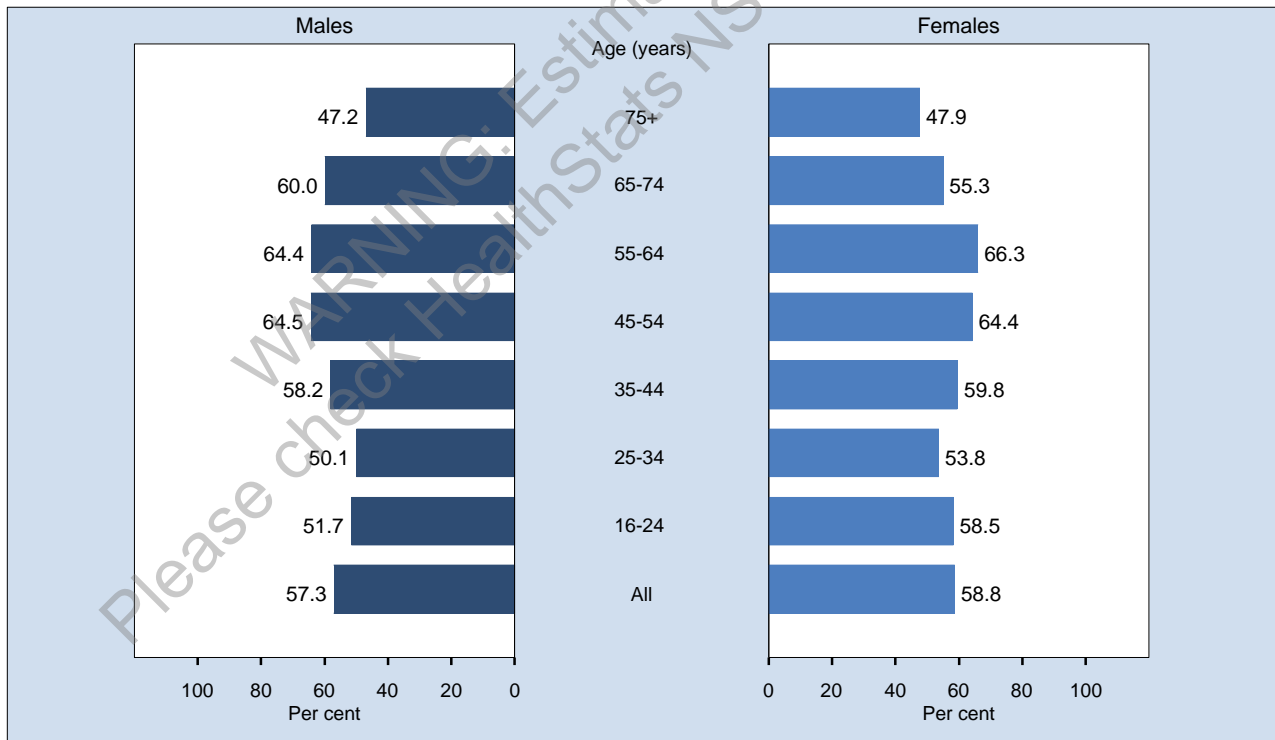
Health services attended in the last 12 months, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 9,465 respondents in NSW. For this indicator 780 (7.61%) were not stated (Don't know or Refused) in NSW. The question used was: In the last 12 months, have you stayed for at least 1 night in hospital, or attended any of the following services: a hospital emergency department, a general practice, a community health centre, a public dental service or dental hospital? Respondents could mention more than 1 response. Percentages may total more than 100%.

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Private health insurance by age, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 10,164 respondents in NSW. For this indicator 81 (0.79%) were not stated (Don't know or Refused) in NSW. The indicator includes those who have private health insurance. The question used to define the indicator was: Apart from Medicare, are you covered by private health insurance?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

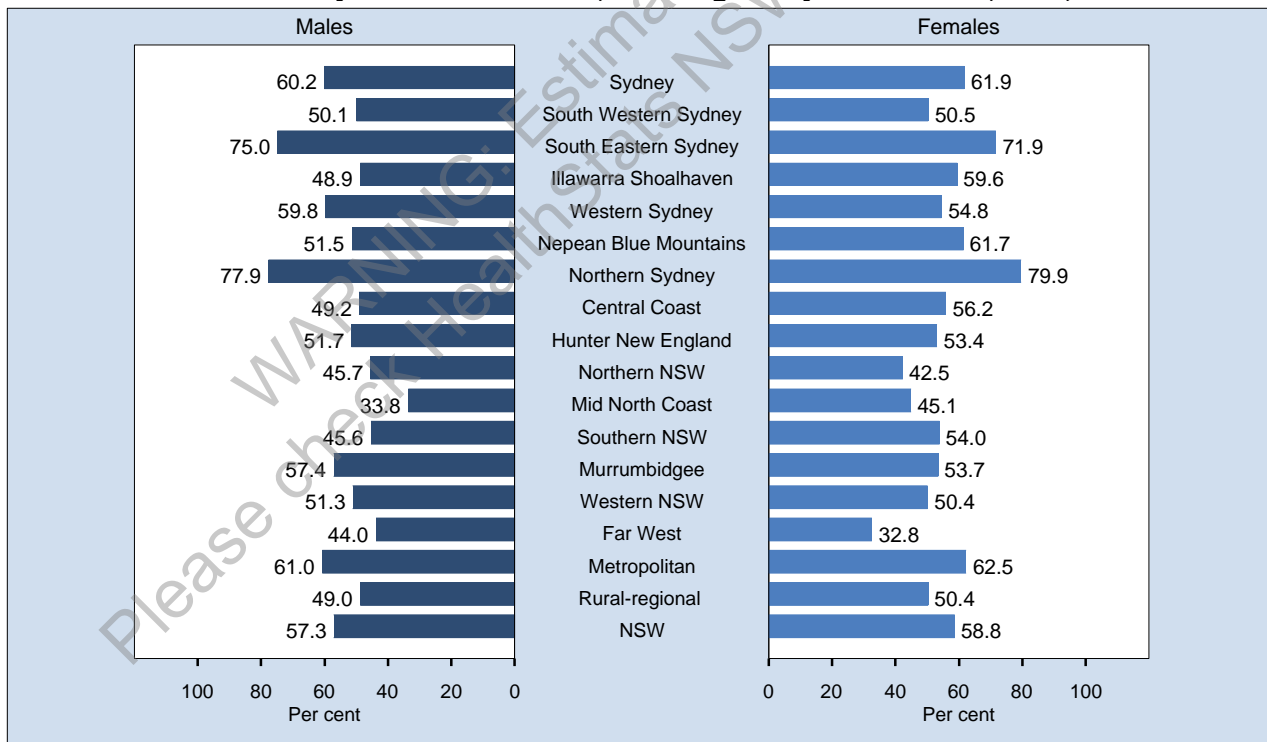
Private health insurance by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 10,164 respondents in NSW. For this indicator 81 (0.79%) were not stated (Don't know or Refused) in NSW. The indicator includes those who have private health insurance. The question used to define the indicator was: Apart from Medicare, are you covered by private health insurance?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

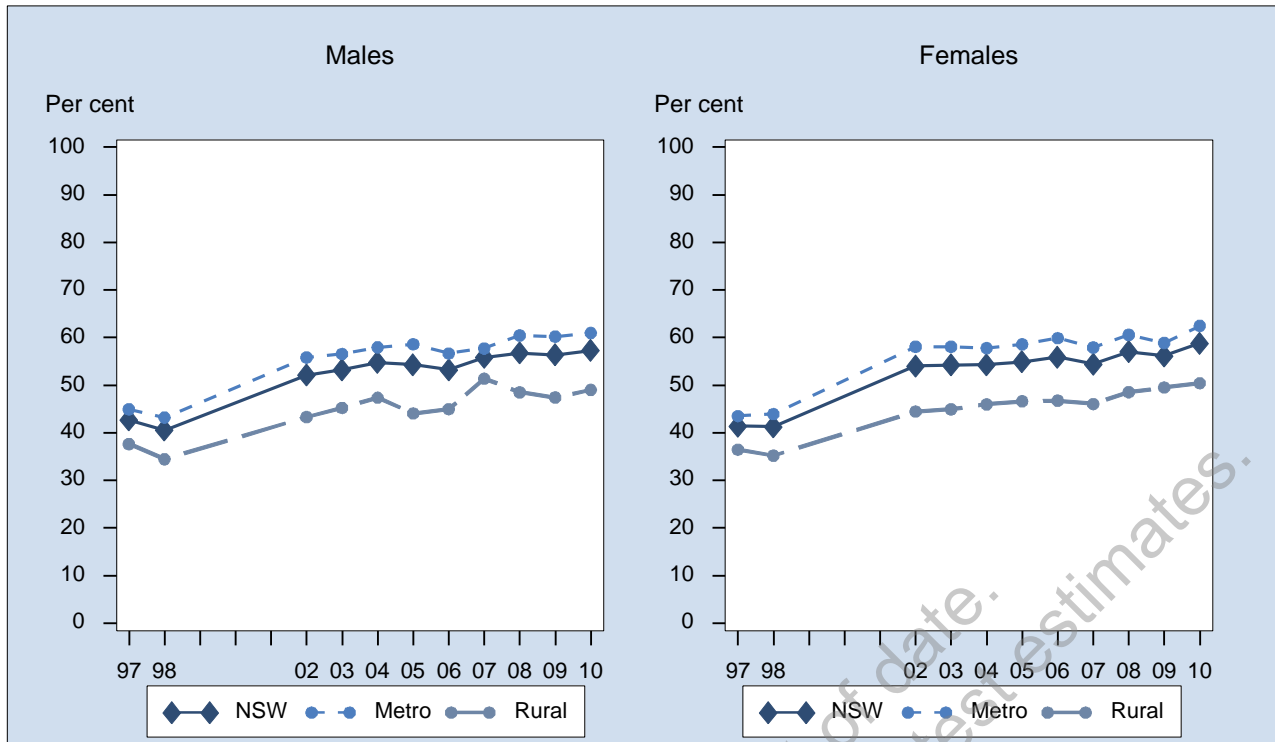
Private health insurance by local health district, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 10,164 respondents in NSW. For this indicator 81 (0.79%) were not stated (Don't know or Refused) in NSW. The indicator includes those who have private health insurance. The question used to define the indicator was: Apart from Medicare, are you covered by private health insurance? NSW total includes the 15 LHDs and Albury (Victoria in-reach).

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

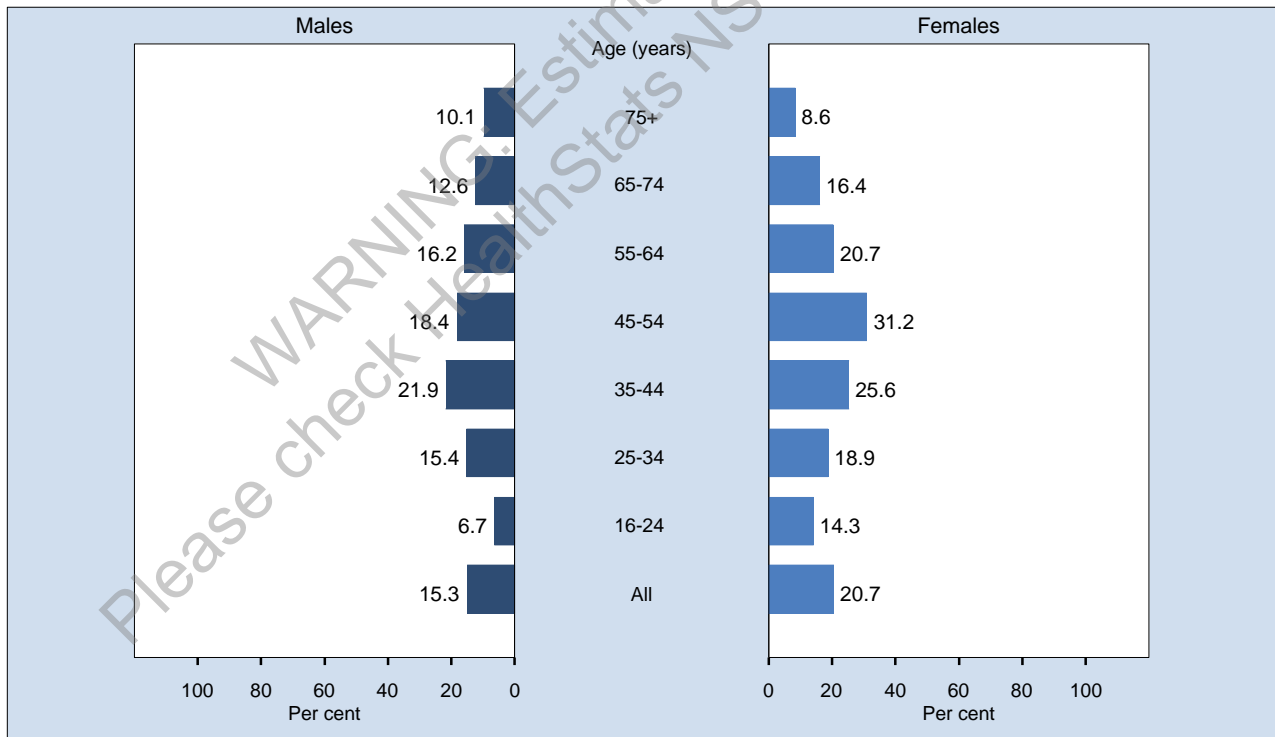
Private health insurance by year, adults aged 16 years and over, NSW, 1997-2010



Note: Estimates are based on the following numbers of respondents for NSW: 1997 (17,427), 1998 (17,373), 2002 (12,537), 2003 (12,903), 2004 (9,716), 2005 (11,413), 2006 (7,911), 2007 (13,039), 2008 (10,203), 2009 (10,601), 2010 (10,164). The indicator includes those who have private health insurance. The question used to define the indicator was: Apart from Medicare, are you covered by private health insurance?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

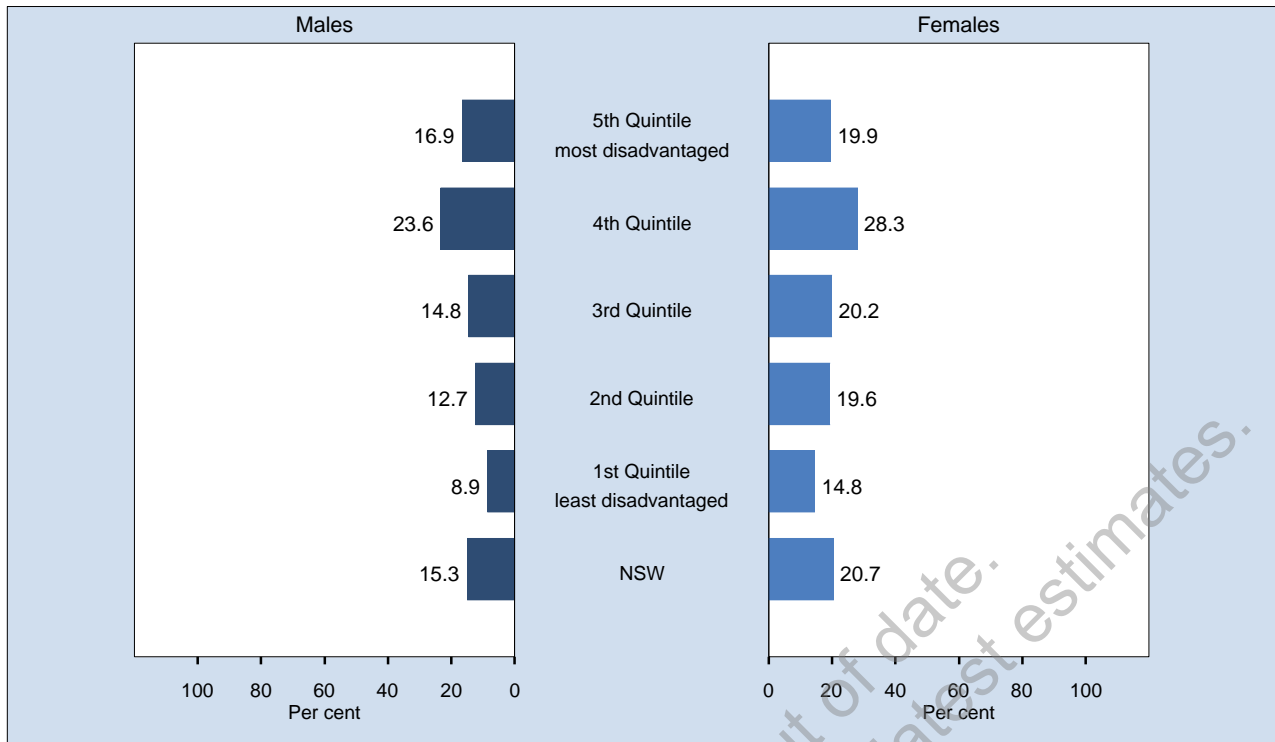
Difficulties getting health care when needing it by age, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 10,007 respondents in NSW. For this indicator 32 (0.32%) were not stated (Don't know or Refused) in NSW. The indicator includes those who had difficulties getting health care when they needed it. It excludes those who said they do not need health care. The question used to define the indicator was: Do you have any difficulties getting health care when you need it?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

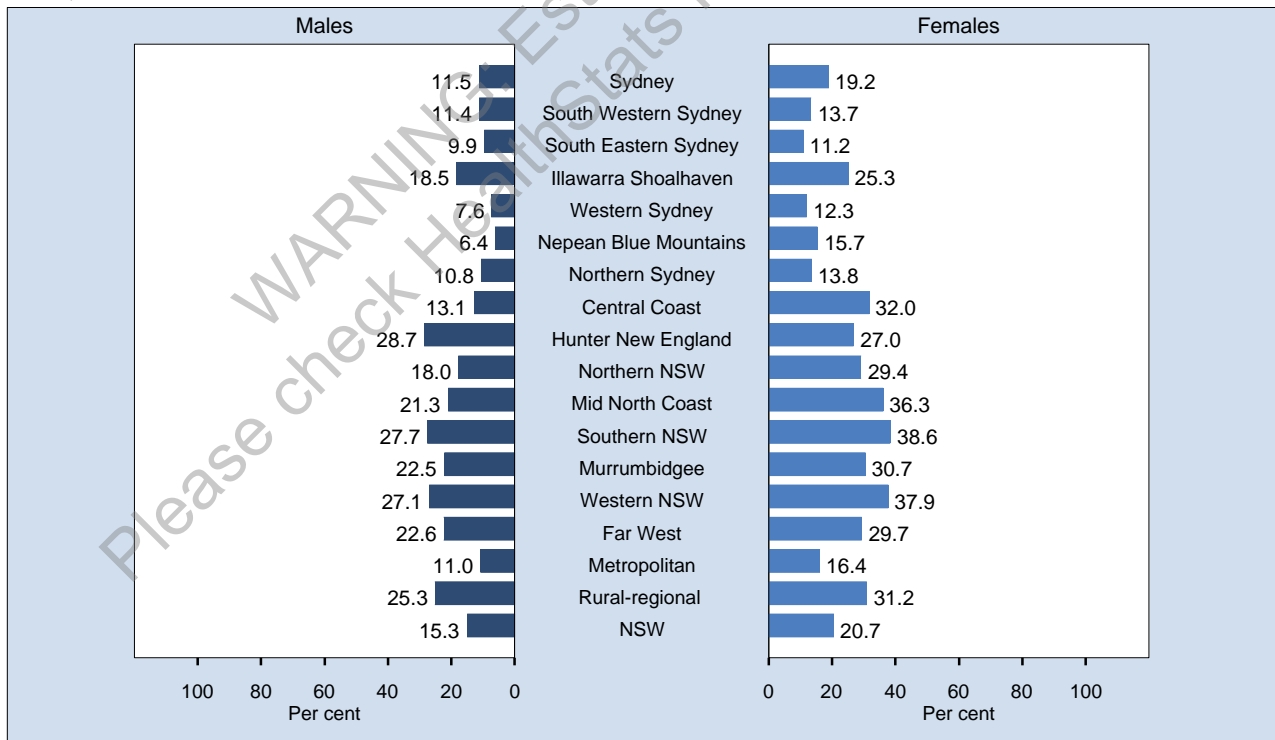
Difficulties getting health care when needing it by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 10,007 respondents in NSW. For this indicator 32 (0.32%) were not stated (Don't know or Refused) in NSW. The indicator includes those who had difficulties getting health care when they needed it. It excludes those who said they do not need health care. The question used to define the indicator was: Do you have any difficulties getting health care when you need it?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

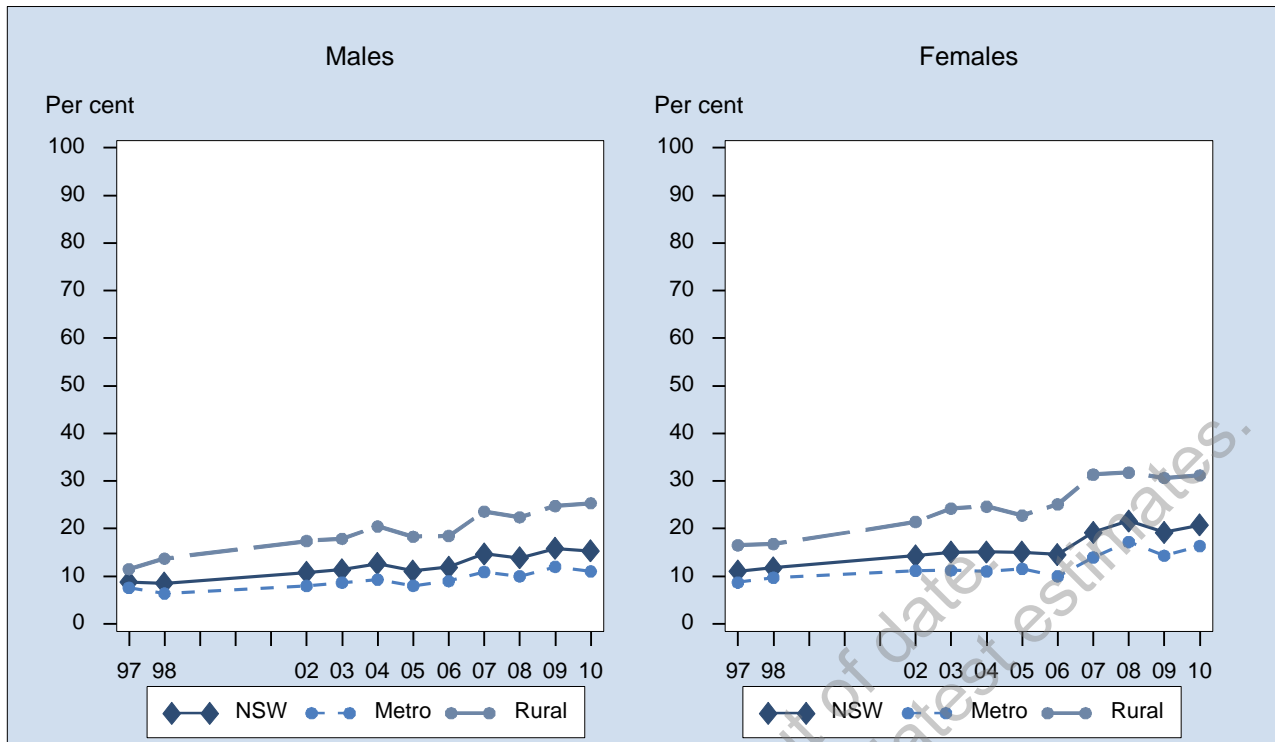
Difficulties getting health care when needing it by local health district, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 10,007 respondents in NSW. For this indicator 32 (0.32%) were not stated (Don't know or Refused) in NSW. The indicator includes those who had difficulties getting health care when they needed it. It excludes those who said they do not need health care. The question used to define the indicator was: Do you have any difficulties getting health care when you need it? NSW total includes the 15 LHDs and Albury (Victoria in-reach).

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

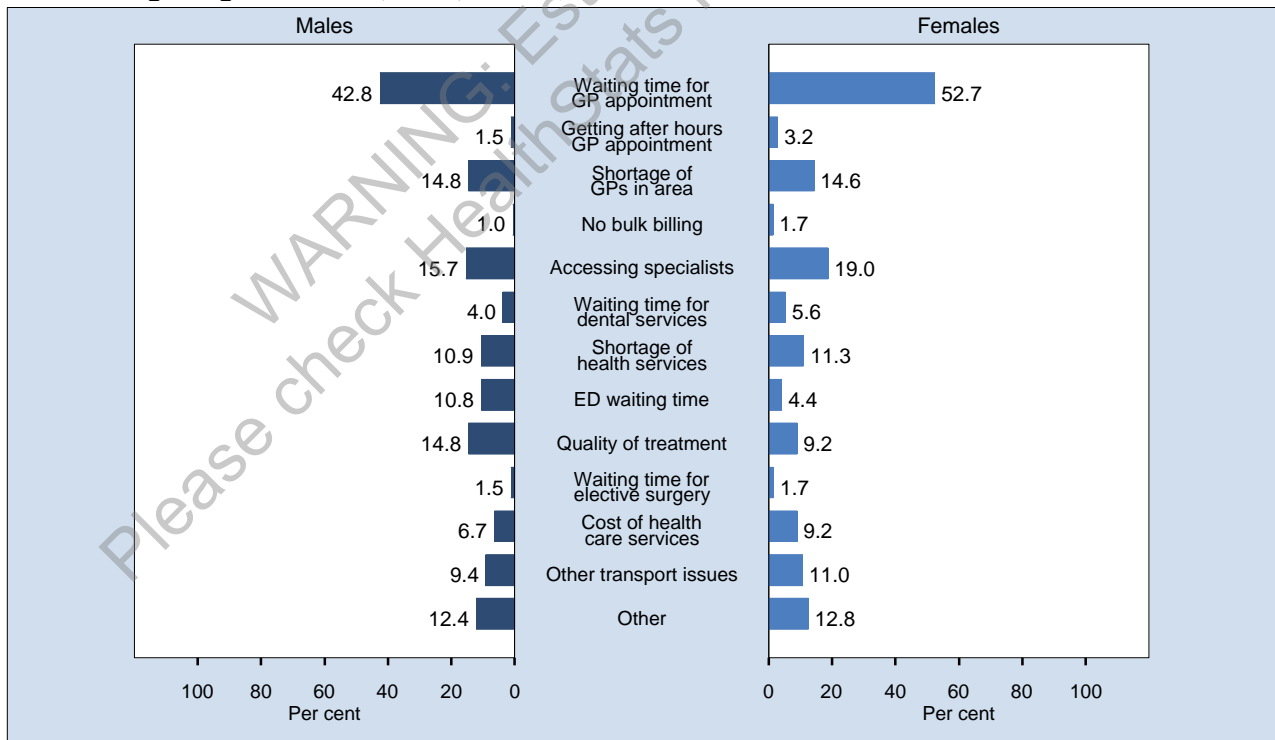
Difficulties getting health care when needing it by year, adults aged 16 years and over, NSW, 1997-2010



Note: Estimates are based on the following numbers of respondents for NSW: 1997 (16,968), 1998 (17,112), 2002 (12,016), 2003 (12,456), 2004 (9,432), 2005 (11,201), 2006 (7,769), 2007 (12,738), 2008 (10,047), 2009 (10,479), 2010 (10,007). The indicator includes those who had difficulties getting health care when they needed it. It excludes those who said they do not need health care. The question used to define the indicator was: Do you have any difficulties getting health care when you need it?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Types of difficulties getting health care when needing it, adults aged 16 years and over who had difficulties getting health care, NSW, 2010



Note: Estimates are based on 2,077 respondents in NSW. For this indicator 32 (1.52%) were not stated (Don't know or Refused) in NSW. The questions used were: Do you have any difficulties getting health care when you need it? Please describe the difficulties you have? Respondents could mention more than 1 response. Percentages may total more than 100%.

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Emergency department presentations

Introduction

To monitor quality of care, the New South Wales Population Health Survey asks respondents questions about presentations to emergency departments and how they rated the care received.

Results

Presented to an emergency department

In 2010, 19.2 per cent of adults aged 16 years and over presented to an emergency department on 1 or more occasions in the last 12 months.

- There was no significant difference between males and females.
- A significantly lower proportion of adults aged 45-54 years (16.5 per cent) and 55-64 years (16.2 per cent), and a significantly higher proportion of adults aged 16-24 years (26.3 per cent), presented to an emergency department, compared with the overall adult population.
- A significantly lower proportion of adults in the first or least disadvantaged quintile (13.8 per cent) and second quintile (16.3 per cent), and a significantly higher proportion of adults in the fifth or most disadvantaged quintile (22.1 per cent) and fourth quintile (25.7 per cent), presented to an emergency department, compared with the overall adult population.
- A significantly higher proportion of adults in rural-regional health districts (25.5 per cent) presented to an emergency department, compared with metropolitan health districts (16.5 per cent).
- A significantly higher proportion of adults in Hunter New England (26.7 per cent), Northern NSW (25.4 per cent), Mid North Coast (24.3 per cent), and Western NSW (26.8 per cent), and a significantly lower proportion of adults in Western Sydney (15.9 per cent), Nepean Blue Mountains (13.4 per cent), and Northern Sydney (14.3 per cent), presented to an emergency department, compared with the overall adult population.

Since 1997, there has been a significant increase in the proportion of adults aged 16 years and over who presented to an emergency department on 1 or more occasions in the last 12 months (13.9 per cent to 19.2 per cent). The increase has been significant in males and females, and in rural-regional and metropolitan health districts.

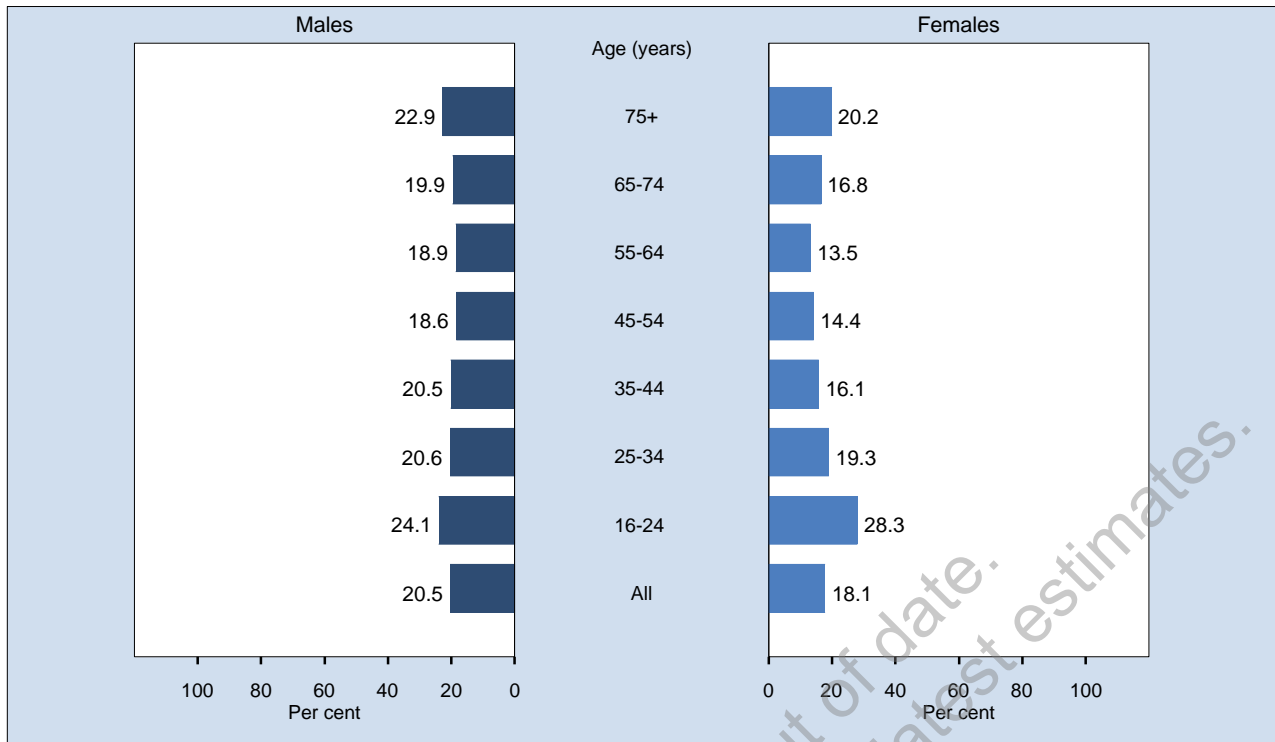
Rating of emergency department care

In 2010, those who presented to an emergency department were asked to rate the care they received: 24.4 per cent rated their care as excellent, 25.8 per cent as very good, 25.5 per cent as good, 12.5 per cent as fair, and 11.8 per cent as poor. When responses of excellent, very good and good were combined, 75.7 per cent gave a positive rating to the emergency department care they received.

- There was no significant difference between males and females.
- A significantly higher proportion of adults aged 55-64 years (82.8 per cent), 65-74 years (86.4 per cent), and 75 years and over (94.1 per cent), and a significantly lower proportion of adults aged 16-24 years (64.6 per cent) and 25-34 years (66.7 per cent), gave a positive rating to the emergency department care they received, compared with the overall adult population.
- There was no significant difference among quintiles of disadvantage, compared with the overall adult population.
- A significantly higher proportion of adults in rural-regional health districts (80.5 per cent) gave a positive rating to the emergency department care they received, compared with metropolitan health districts (72.8 per cent).
- A significantly higher proportion of adults in Northern Sydney (86.3 per cent), Northern NSW (88.0 per cent), and Murrumbidgee (88.0 per cent), gave a positive rating to the emergency department care they received, compared with the overall adult population.

Since 1997, there has been a significant decrease in the proportion of adults aged 16 years and over who gave a positive rating to the emergency department care they received (80.1 per cent to 75.7 per cent). The decrease has been significant in females.

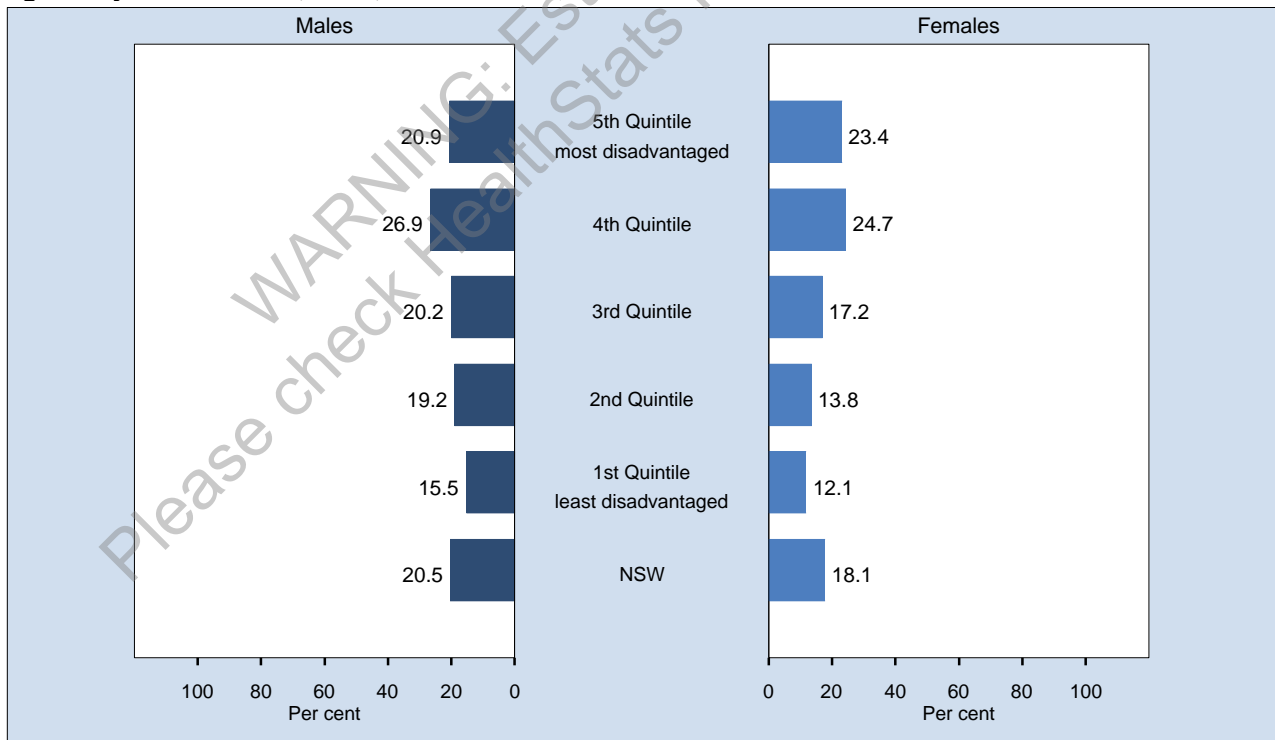
Emergency department presentation in the last 12 months by age, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 9,465 respondents in NSW. For this indicator 780 (7.61%) were not stated (Don't know or Refused) in NSW. The indicator includes those who presented to an emergency department in the last 12 months. The question used to define the indicator was: In the last 12 months, have you attended a hospital emergency department or casualty for your own medical care?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

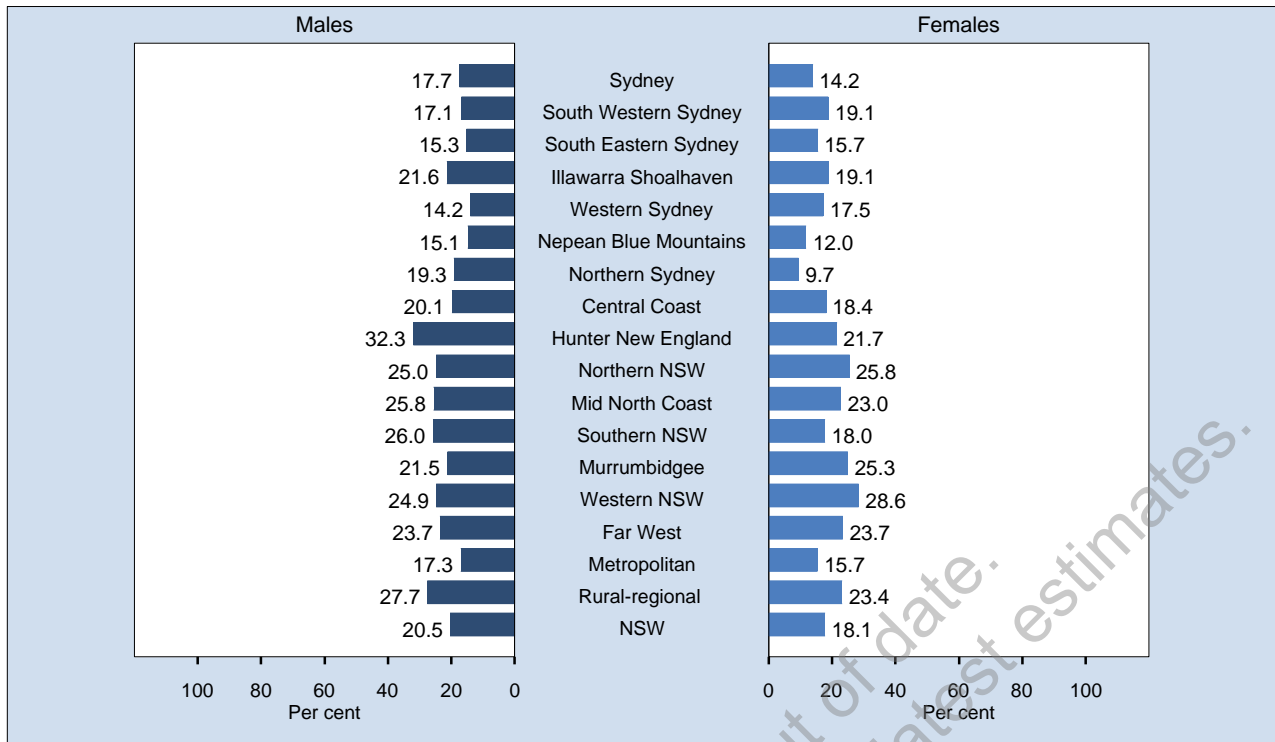
Emergency department presentation in the last 12 months by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 9,465 respondents in NSW. For this indicator 780 (7.61%) were not stated (Don't know or Refused) in NSW. The indicator includes those who presented to an emergency department in the last 12 months. The question used to define the indicator was: In the last 12 months, have you attended a hospital emergency department or casualty for your own medical care?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

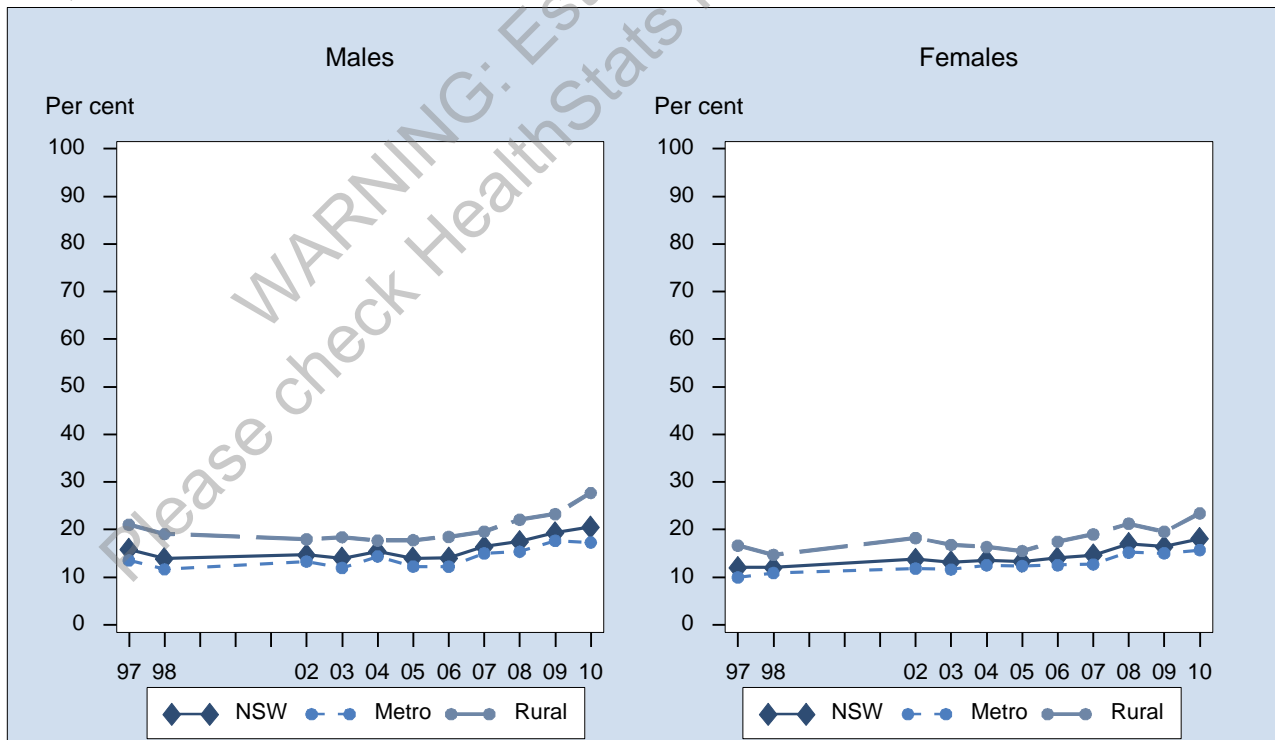
Emergency department presentation in the last 12 months by local health district, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 9,465 respondents in NSW. For this indicator 780 (7.61%) were not stated (Don't know or Refused) in NSW. The indicator includes those who presented to an emergency department in the last 12 months. The question used to define the indicator was: In the last 12 months, have you attended a hospital emergency department or casualty for your own medical care? NSW total includes the 15 LHDs and Albury (Victoria in-reach).

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Emergency department presentation in the last 12 months by year, adults aged 16 years and over, NSW, 1997-2010



Note: Estimates are based on the following numbers of respondents for NSW: 1997 (17,494), 1998 (17,438), 2002 (12,603), 2003 (12,992), 2004 (9,771), 2005 (11,470), 2006 (7,941), 2007 (13,097), 2008 (10,290), 2009 (10,646), 2010 (9,465). The indicator includes those who presented to an emergency department in the last 12 months. The question used to define the indicator was: In the last 12 months, have you attended a hospital emergency department or casualty for your own medical care?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

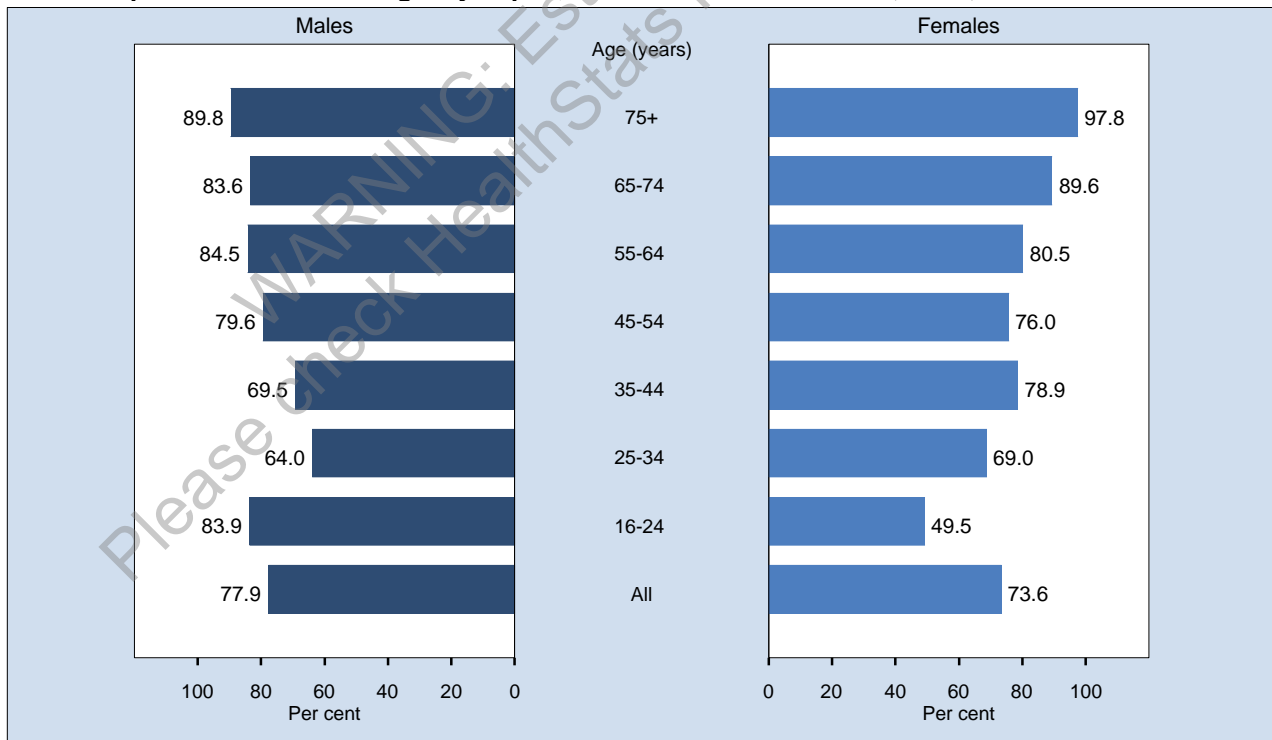
Emergency department care ratings, adults aged 16 years and over who presented to an emergency department in the last 12 months, NSW, 2010



Note: Estimates are based on 1,866 respondents in NSW. For this indicator 26 (1.37%) were not stated (Don't know or Refused) in NSW. The questions used were: In the last 12 months, have you attended a hospital emergency department or casualty for your own medical care? Overall, what do you think of the care you received at this emergency department: Was it excellent, very good, good, fair, or poor?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

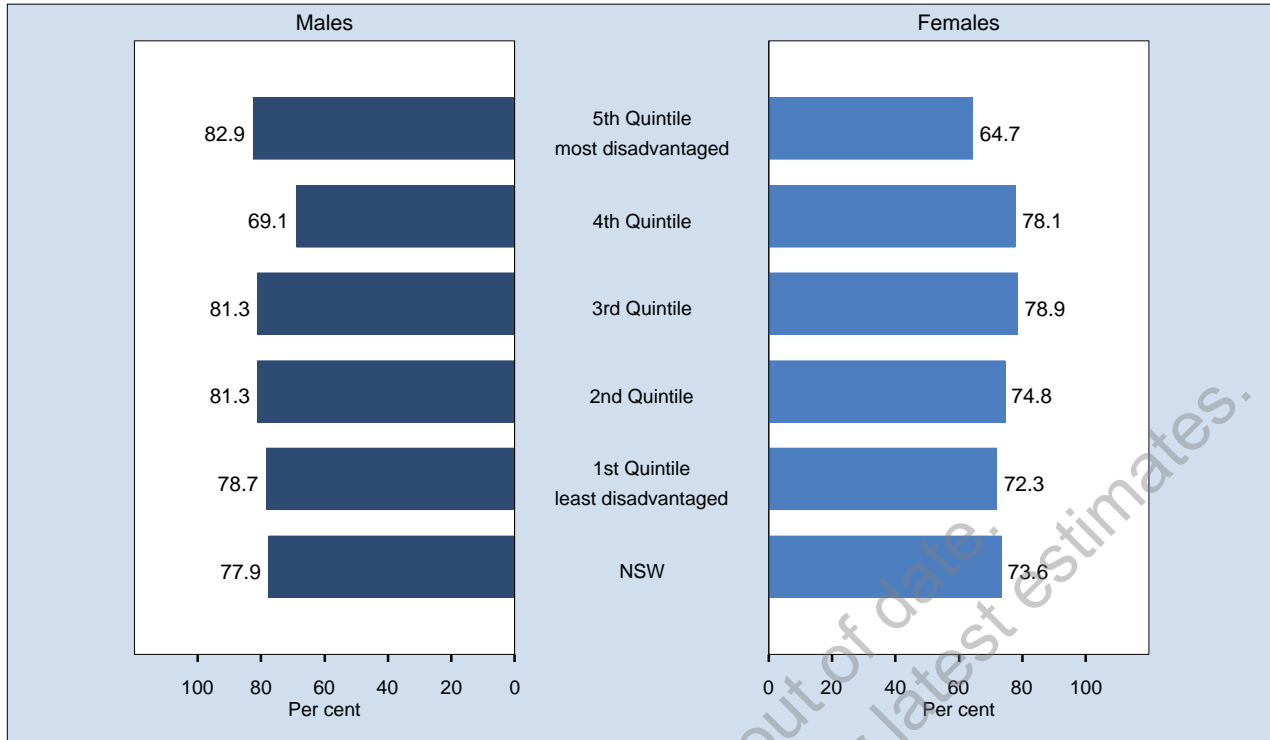
Emergency department care rated as excellent, very good or good by age, adults aged 16 years and over who presented to an emergency department in the last 12 months, NSW, 2010



Note: Estimates are based on 1,866 respondents in NSW. For this indicator 26 (1.37%) were not stated (Don't know or Refused) in NSW. The indicator includes those who presented to an emergency department in the last 12 months who rated their care as excellent, very good, or good for the most recent visit. The questions used to define the indicator were: In the last 12 months, have you attended a hospital emergency department or casualty for your own medical care? Overall what do you think of the care you received at this emergency department: Was it excellent, very good, good, fair, or poor?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

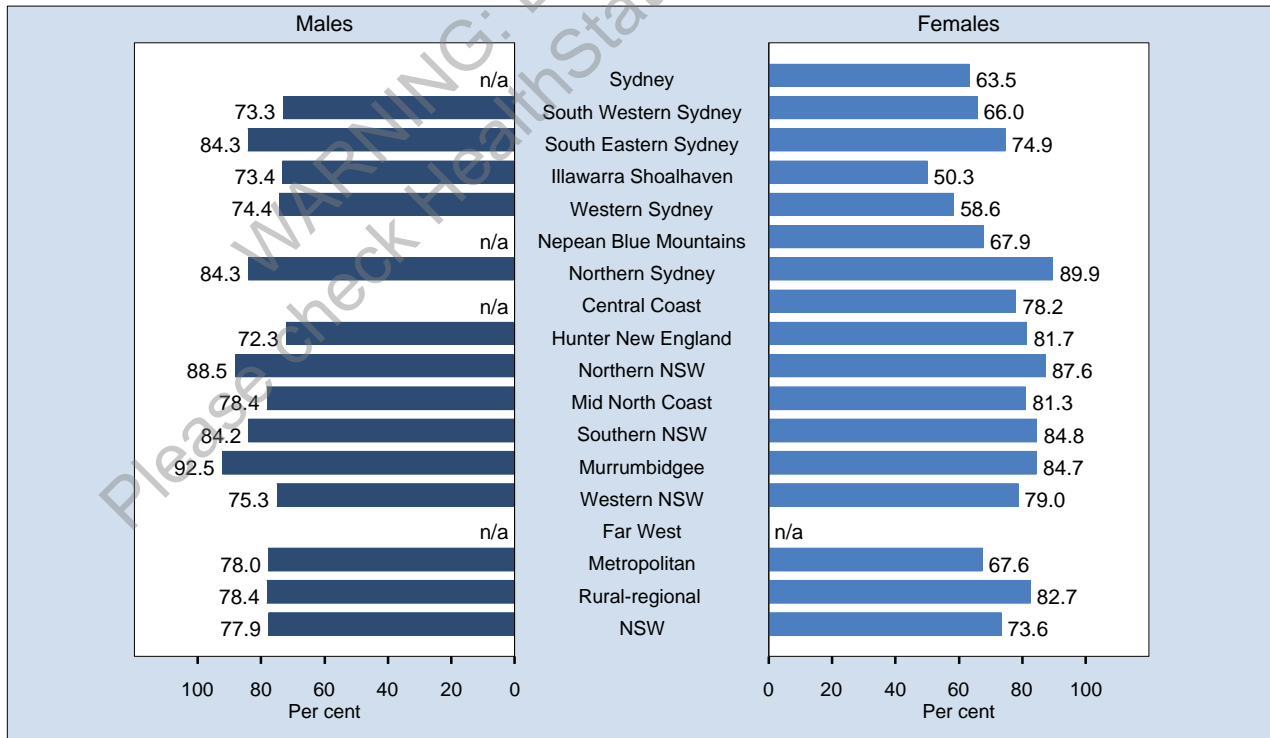
Emergency department care rated as excellent, very good or good by socioeconomic disadvantage, adults aged 16 years and over who presented to an emergency department in the last 12 months, NSW, 2010



Note: Estimates are based on 1,866 respondents in NSW. For this indicator 26 (1.37%) were not stated (Don't know or Refused) in NSW. The indicator includes those who presented to an emergency department in the last 12 months who rated their care as excellent, very good, or good for the most recent visit. The questions used to define the indicator were: In the last 12 months, have you attended a hospital emergency department or casualty for your own medical care? Overall what do you think of the care you received at this emergency department: Was it excellent, very good, good, fair, or poor?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

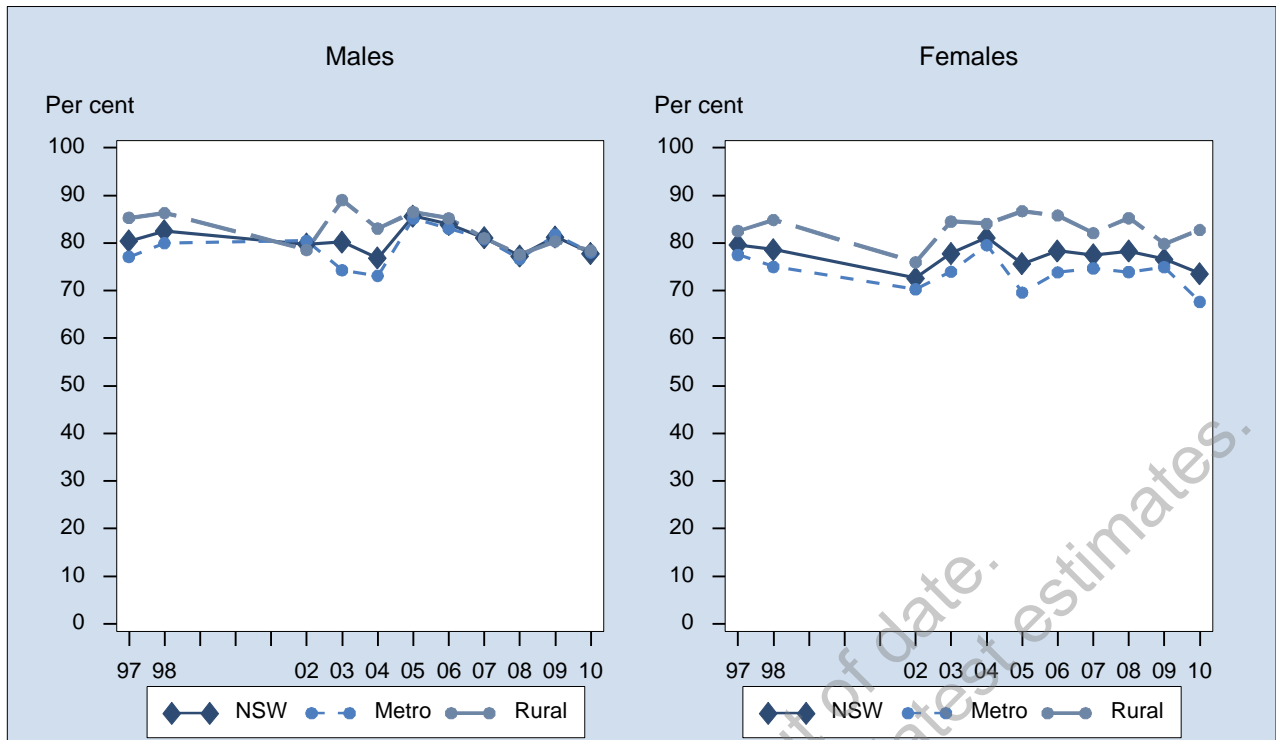
Emergency department care rated as excellent, very good or good by local health district, adults aged 16 years and over who presented to an emergency department in the last 12 months, NSW, 2010



Note: Estimates are based on 1,866 respondents in NSW. For this indicator 26 (1.37%) were not stated (Don't know or Refused) in NSW. The indicator includes those who presented to an emergency department in the last 12 months who rated their care as excellent, very good, or good for the most recent visit. The questions used to define the indicator were: In the last 12 months, have you attended a hospital emergency department or casualty for your own medical care? Overall what do you think of the care you received at this emergency department: Was it excellent, very good, good, fair, or poor? NSW total includes the 15 LHDs and Albury (Victoria in-reach).

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Emergency department care rated as excellent, very good or good by year, adults aged 16 years and over who presented to an emergency department in the last 12 months, NSW, 1997-2010



Note: Estimates are based on the following numbers of respondents for NSW: 1997 (2,727), 1998 (2,581), 2002 (2,025), 2003 (2,054), 2004 (1,587), 2005 (1,689), 2006 (1,225), 2007 (2,157), 2008 (1,891), 2009 (1,992), 2010 (1,866). The indicator includes those who presented to an emergency department in the last 12 months who rated their care as excellent, very good, or good for the most recent visit. The questions used to define the indicator were: In the last 12 months, have you attended a hospital emergency department or casualty for your own medical care? Overall what do you think of the care you received at this emergency department: Was it excellent, very good, good, fair, or poor?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

WARNING: Estimates are out of date. Please check HealthStats NSW for related estimates.

Hospital admissions

Introduction

To monitor quality of care, the New South Wales Population Health Survey asks respondents questions about admissions to hospitals and how they rated the care received.

Results

Admitted to a hospital

In 2010, 16.1 per cent of adults aged 16 years and over were admitted to hospital on 1 or more occasions in the last 12 months.

- There was no significant difference between males and females.
- A significantly higher proportion of adults aged 65-74 years (20.9 per cent) and 75 years and over (27.1 per cent), and a significantly lower proportion of adults aged 35-44 years (12.2 per cent) and 45-54 years (12.7 per cent), were admitted to hospital in the last 12 months, compared with the overall adult population.
- A significantly higher proportion of adults in the fourth quintile (18.3 per cent), and a significantly lower proportion of adults in the second quintile (14.0 per cent), were admitted to hospital in the last 12 months, compared with the overall adult population.
- A significantly higher proportion of adults in rural-regional health districts (18.1 per cent) were admitted to hospital in the last 12 months, compared with metropolitan health districts (15.3 per cent).
- A significantly higher proportion of adults in Murrumbidgee (20.9 per cent), and a significantly lower proportion of adults in South Eastern Sydney (12.9 per cent), were admitted to hospital in the last 12 months, compared with the overall adult population.

Since 1997, there has been a significant increase in the proportion of adults aged 16 years and over who were admitted to hospital on 1 or more occasions in the last 12 months (13.0 per cent to 16.1 per cent). The increase has been significant in males and females, and in rural-regional and metropolitan health districts.

Rating of hospital care

Those who were admitted to hospital were asked to rate the care they received: 39.5 per cent rated their care as excellent, 29.4 per cent as very good, 18.9 per cent as good, 6.8 per cent as fair, and 5.4 per cent as poor. When responses of excellent, very good, and good were combined, 87.8 per cent gave a positive rating to the hospital care they received.

- There was no significant difference between males and females.
- A significantly higher proportion of adults aged 55-64 years (92.3 per cent), 65-74 years (92.6 per cent), and 75 years and over (94.2 per cent), gave a positive rating to the hospital care they received, compared with the overall adult population.
- A significantly higher proportion of adults in the first or least disadvantaged quintile (93.6 per cent) gave a positive rating to the hospital care they received, compared with the overall adult population.
- There was no significant difference between rural-regional and metropolitan health districts.
- A significantly higher proportion of adults in Central Coast (95.1 per cent), Northern NSW (93.1 per cent), and Southern NSW (95.2 per cent), gave a positive rating to the hospital care they received, compared with the overall adult population.

Since 1997, there has been no significant change in the proportion of adults aged 16 years and over who gave a positive rating to the hospital care they received.

Hospital admission in the last 12 months by age, adults aged 16 years and over, NSW, 2010



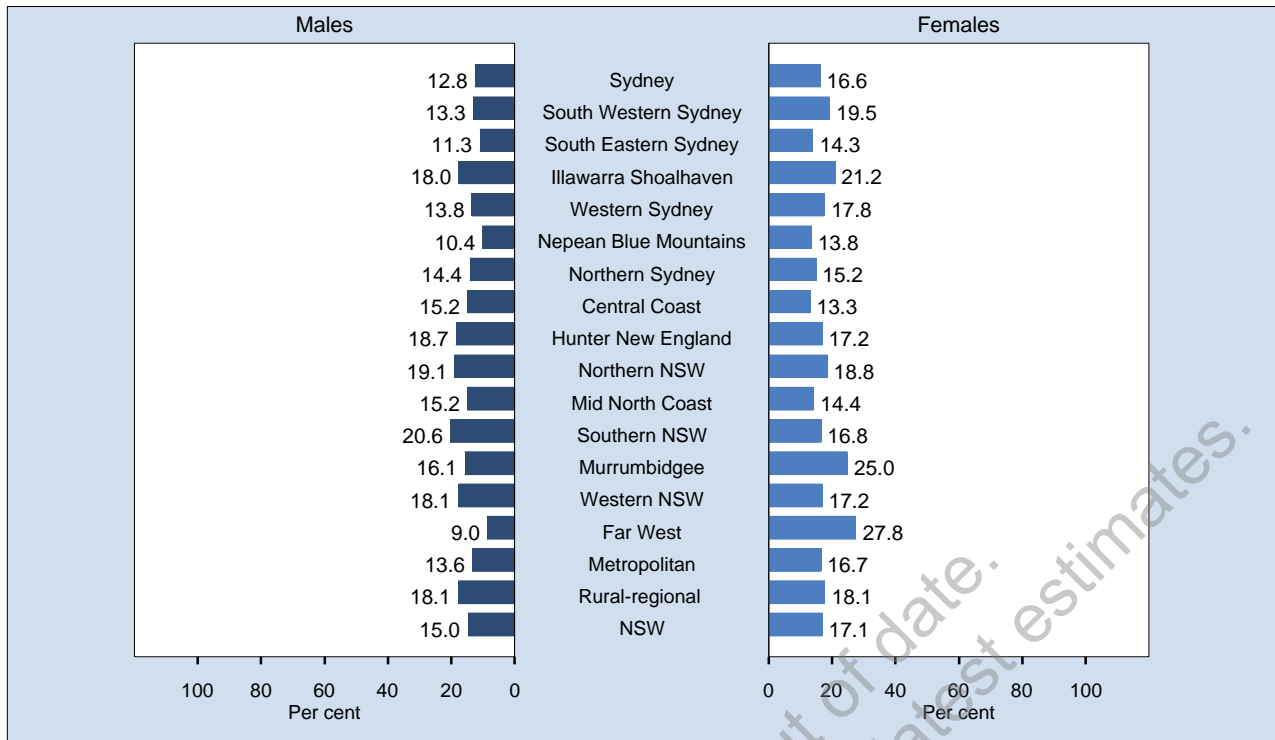
Note: Estimates are based on 9,465 respondents in NSW. For this indicator 780 (7.61%) were not stated (Don't know or Refused) in NSW. The indicator includes those admitted to hospital in the last 12 months. The question used to define the indicator was: In the last 12 months, have you stayed for at least 1 night in hospital?
Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Hospital admission in the last 12 months by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 9,465 respondents in NSW. For this indicator 780 (7.61%) were not stated (Don't know or Refused) in NSW. The indicator includes those admitted to hospital in the last 12 months. The question used to define the indicator was: In the last 12 months, have you stayed for at least 1 night in hospital?
Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

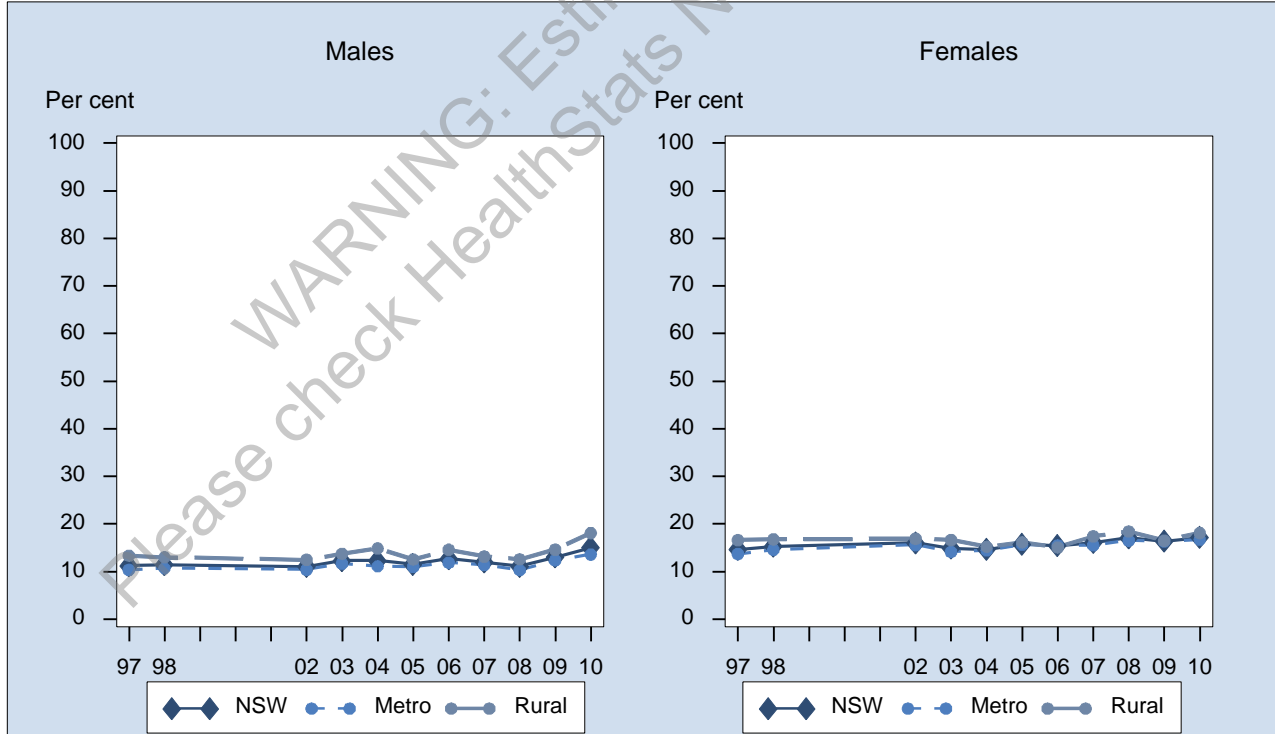
Hospital admission in the last 12 months by local health district, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 9,465 respondents in NSW. For this indicator 780 (7.61%) were not stated (Don't know or Refused) in NSW. The indicator includes those admitted to hospital in the last 12 months. The question used to define the indicator was: In the last 12 months, have you stayed for at least 1 night in hospital? NSW total includes the 15 LHDs and Albury (Victoria in-reach).

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Hospital admission in the last 12 months by year, adults aged 16 years and over, NSW, 1997-2010



Note: Estimates are based on the following numbers of respondents for NSW: 1997 (17,494), 1998 (17,454), 2002 (12,603), 2003 (12,992), 2004 (9,771), 2005 (11,470), 2006 (7,941), 2007 (13,097), 2008 (10,290), 2009 (10,646), 2010 (9,465). The indicator includes those admitted to hospital in the last 12 months. The question used to define the indicator was: In the last 12 months, have you stayed for at least 1 night in hospital?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

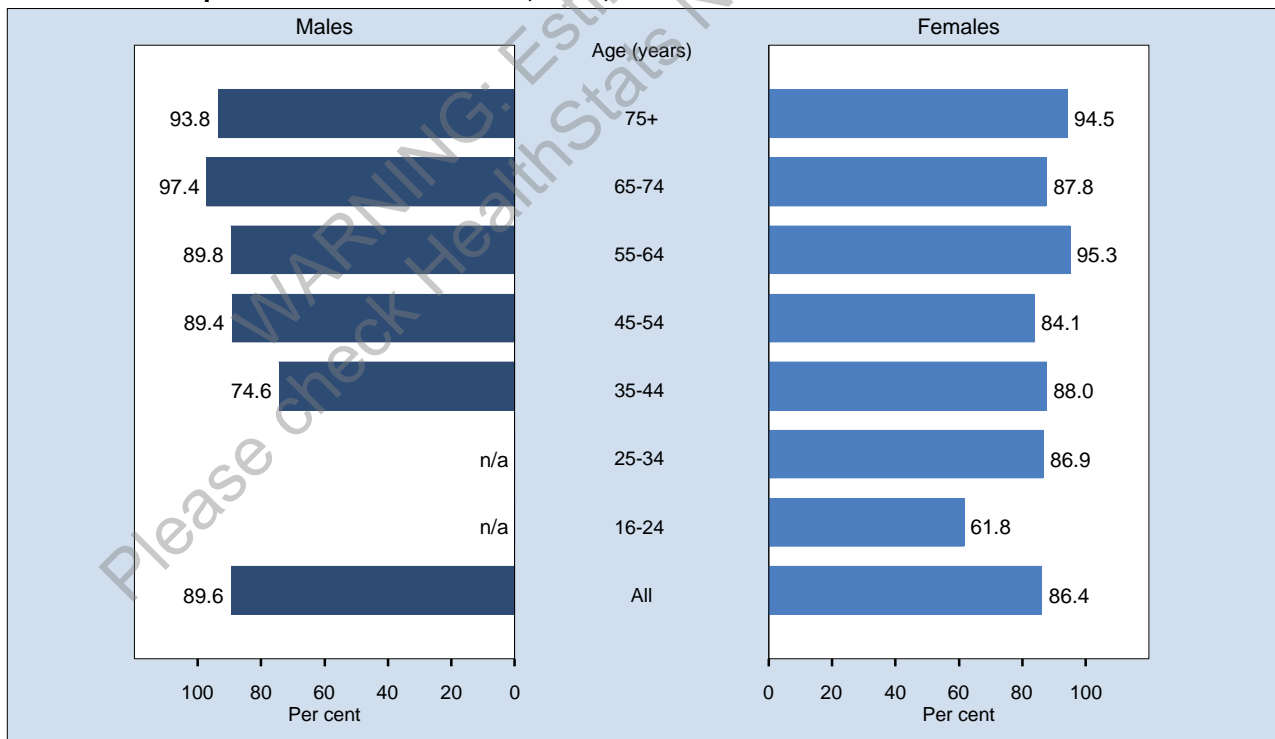
Hospital care ratings, adults aged 16 years and over who were admitted to hospital in the last 12 months, NSW, 2010



Note: Estimates are based on 1,751 respondents in NSW. For this indicator 11 (0.62%) were not stated (Don't know or Refused) in NSW. The questions used were: In the last 12 months, have you stayed at least 1 night in hospital? Overall, what do you think of the care you received at this hospital: Was it excellent, very good, good, fair or poor?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

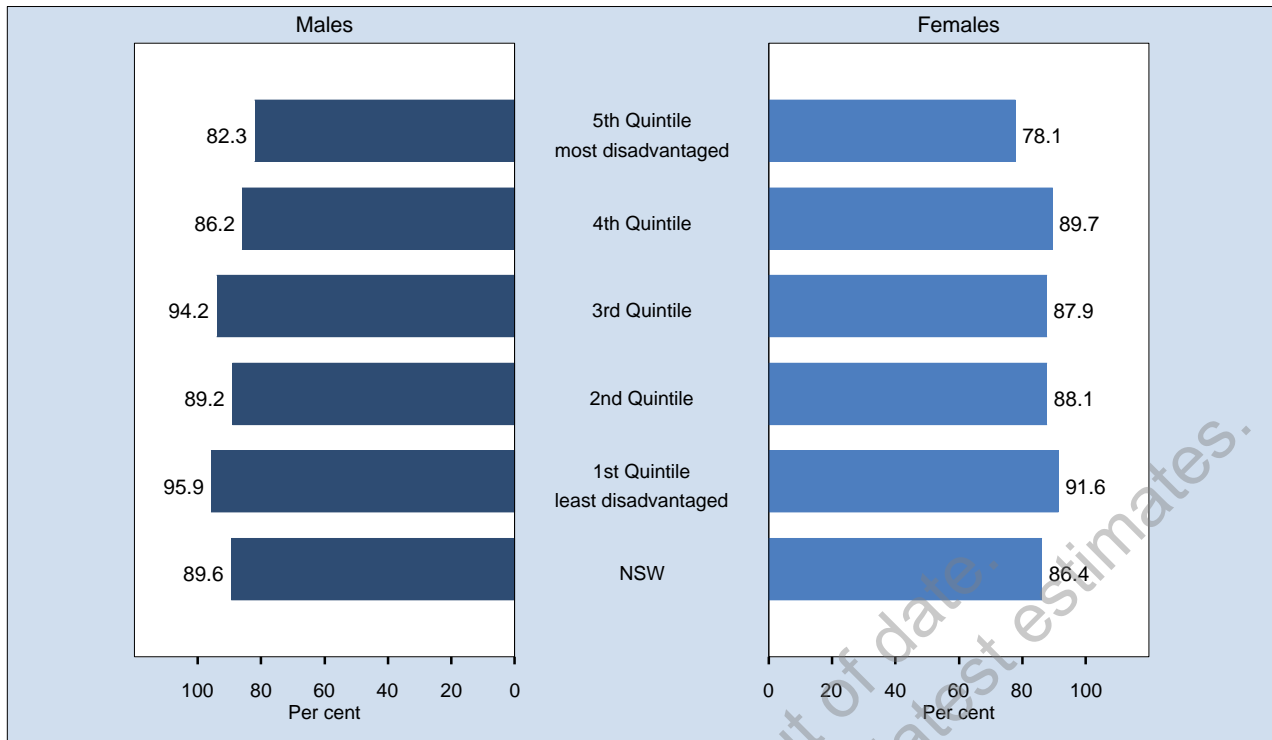
Hospital care rated as excellent, very good or good by age, adults aged 16 years and over who were admitted to hospital in the last 12 months, NSW, 2010



Note: Estimates are based on 1,751 respondents in NSW. For this indicator 11 (0.62%) were not stated (Don't know or Refused) in NSW. The indicator includes those admitted to hospital in the last 12 months who rated their care as excellent, very good, or good for the most recent overnight stay. The questions used to define the indicator were: In the last 12 months, have you stayed for at least 1 night in hospital? Overall what do you think of the care you received at this hospital: Was it excellent, very good, good, fair, or poor?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

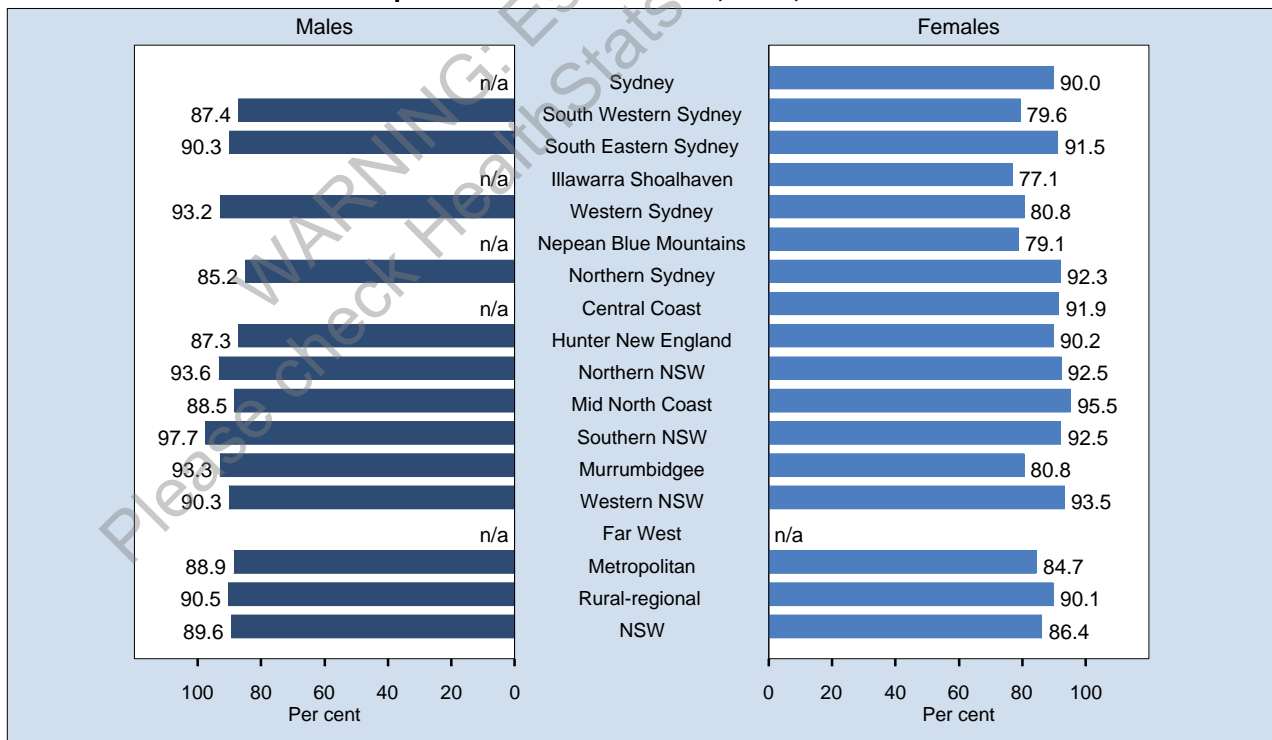
Hospital care rated as excellent, very good or good by socioeconomic disadvantage, adults aged 16 years and over who were admitted to hospital in the last 12 months, NSW, 2010



Note: Estimates are based on 1,751 respondents in NSW. For this indicator 11 (0.62%) were not stated (Don't know or Refused) in NSW. The indicator includes those admitted to hospital in the last 12 months who rated their care as excellent, very good, or good for the most recent overnight stay. The questions used to define the indicator were: In the last 12 months, have you stayed for at least 1 night in hospital? Overall what do you think of the care you received at this hospital: Was it excellent, very good, good, fair, or poor?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

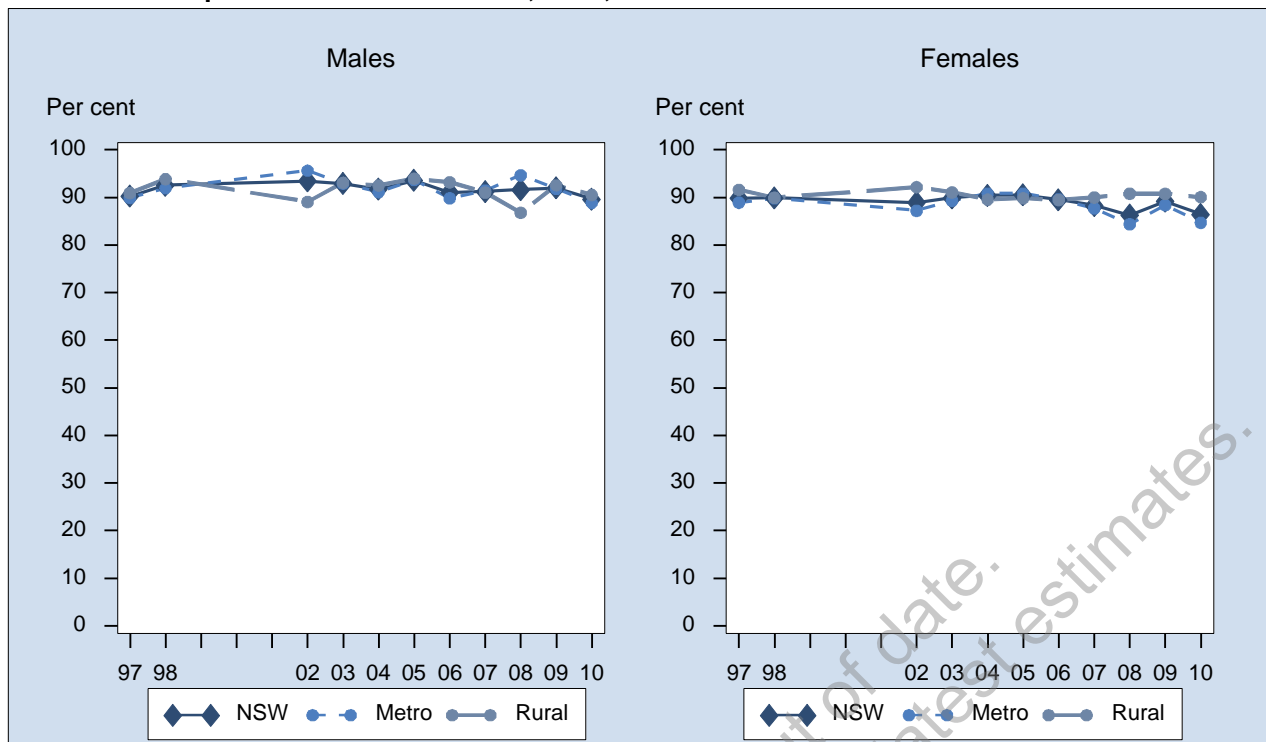
Hospital care rated as excellent, very good or good by local health district, adults aged 16 years and over who were admitted to hospital in the last 12 months, NSW, 2010



Note: Estimates are based on 1,751 respondents in NSW. For this indicator 11 (0.62%) were not stated (Don't know or Refused) in NSW. The indicator includes those admitted to hospital in the last 12 months who rated their care as excellent, very good, or good for the most recent overnight stay. The questions used to define the indicator were: In the last 12 months, have you stayed for at least 1 night in hospital? Overall what do you think of the care you received at this hospital: Was it excellent, very good, good, fair, or poor? NSW total includes the 15 LHDs and Albury (Victoria in-reach).

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Hospital care rated as excellent, very good or good by year, adults aged 16 years and over who were admitted to hospital in the last 12 months, NSW, 1997-2010



Note: Estimates are based on the following numbers of respondents for NSW: 1997 (2,550), 1998 (2,659), 2002 (1,926), 2003 (2,012), 2004 (1,514), 2005 (1,772), 2006 (1,245), 2007 (2,099), 2008 (1,681), 2009 (1,781), 2010 (1,751). The indicator includes those admitted to hospital in the last 12 months who rated their care as excellent, very good, or good for the most recent overnight stay. The questions used to define the indicator were: In the last 12 months, have you stayed for at least 1 night in hospital? Overall what do you think of the care you received at this hospital: Was it excellent, very good, good, fair, or poor?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

WARNING: Estimates are unvalidated estimates. Please check HealthStats NSW for related estimates.

General practice visits

Introduction

To monitor quality of care, the New South Wales Population Health Survey asks respondents questions about visits to general practices and how they rated the care received.

Results

General practice visits

In 2010, 96.3 per cent of adults aged 16 years and over visited a general practice in the last 12 months.

- A significantly lower proportion of males (95.1 per cent) visited a general practice in the last 12 months, compared with females (97.4 per cent).
- Among males, a significantly lower proportion of those aged 16-24 years (87.8 per cent), and a significantly higher proportion of those aged 55-64 years (97.3 per cent), 65-74 years (98.3 per cent), and 75 years and over (98.4 per cent), visited a general practice in the last 12 months, compared with the overall adult male population.
- Among females, a significantly lower proportion of those aged 16-24 years (93.7 per cent), and a significantly higher proportion of those aged 25-34 years (98.6 per cent), 65-74 years (98.4 per cent), and 75 years and over (98.5 per cent), visited a general practice in the last 12 months, compared with the overall adult female population.
- There was no significant difference among quintiles of disadvantage, compared with the overall adult population.
- A significantly lower proportion of adults in rural-regional health districts (95.0 per cent) visited a general practice in the last 12 months, compared with metropolitan health districts (96.9 per cent).
- A significantly higher proportion of adults in Illawarra Shoalhaven (98.0 per cent), Central Coast (98.0 per cent), and Far West (99.0 per cent), visited a general practice in the last 12 months, compared with the overall adult population.

Since 1997, there has been a significant increase in the proportion of adults aged 16 years and over who visited a general practice in the last 12 months (87.8 per cent to 96.3 per cent). The increase has been significant in males and females, and in rural-regional and metropolitan health districts.

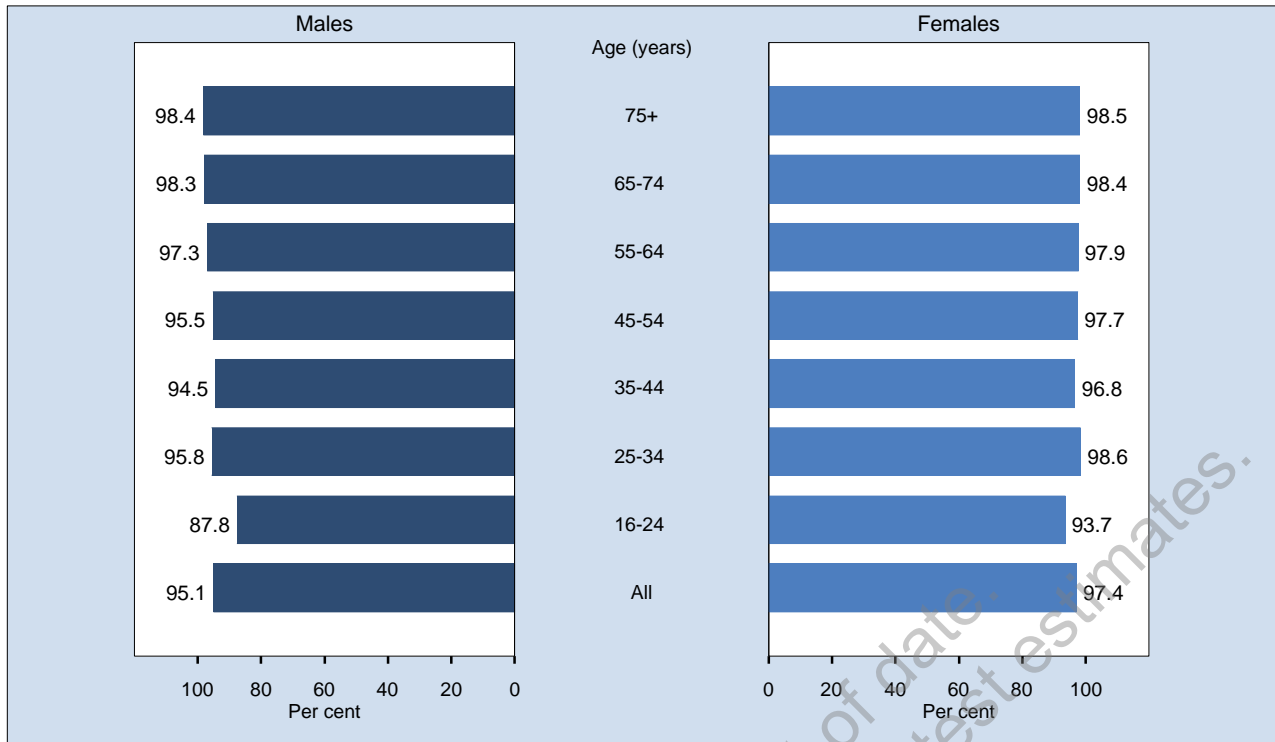
Rating of most recent general practice visit

Those who visited a general practice in the last 12 months were asked to rate the care they received at their most recent visit: 38.0 per cent rated their care as excellent, 33.4 per cent as very good, 23.4 per cent as good, 4.0 per cent as fair, and 1.3 per cent as poor. When responses of excellent, very good and good were combined, 94.7 per cent gave a positive rating to the general practice care they received.

- There was no significant difference between males and females.
- A significantly lower proportion of adults aged 25-34 years (92.1 per cent), and a significantly higher proportion of adults aged 55-64 years (96.0 per cent), 65-74 years (97.5 per cent), and 75 years and over (98.0 per cent), gave a positive rating to the general practice care they received, compared with the overall adult population.
- A significantly higher proportion of adults in the first or least disadvantaged quintile (96.1 per cent) gave a positive rating to the general practice care they received, compared with the overall adult population.
- There was no significant difference between rural-regional and metropolitan health districts.
- A significantly higher proportion of adults in Hunter New England (96.2 per cent) and Southern NSW (96.7 per cent) gave a positive rating to the general practice care they received, compared with the overall adult population.

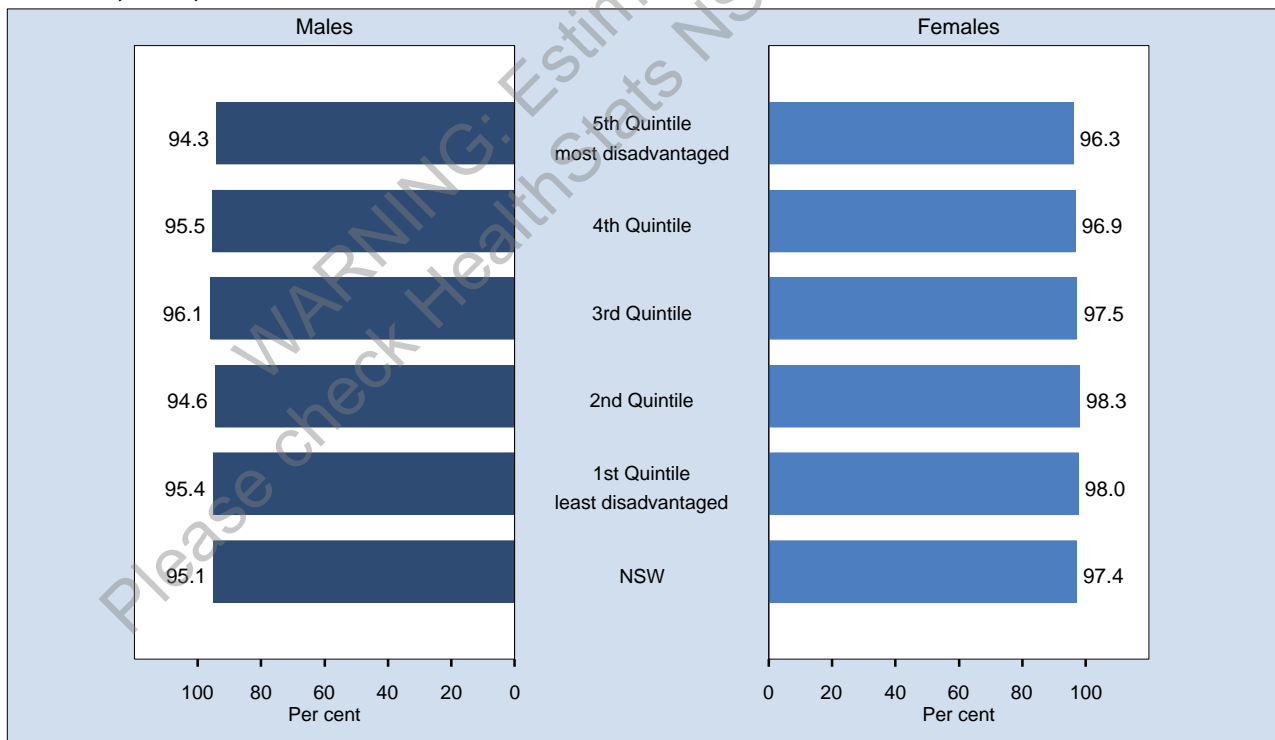
Since 2007, there has been a significant increase in the proportion of adults aged 16 years and over who gave a positive rating to the general practice care they received (93.3 per cent to 94.7 per cent). The increase has been significant in females, and in rural-regional and metropolitan health districts.

Visited a general practice in the last 12 months by age, adults aged 16 years and over, NSW, 2010



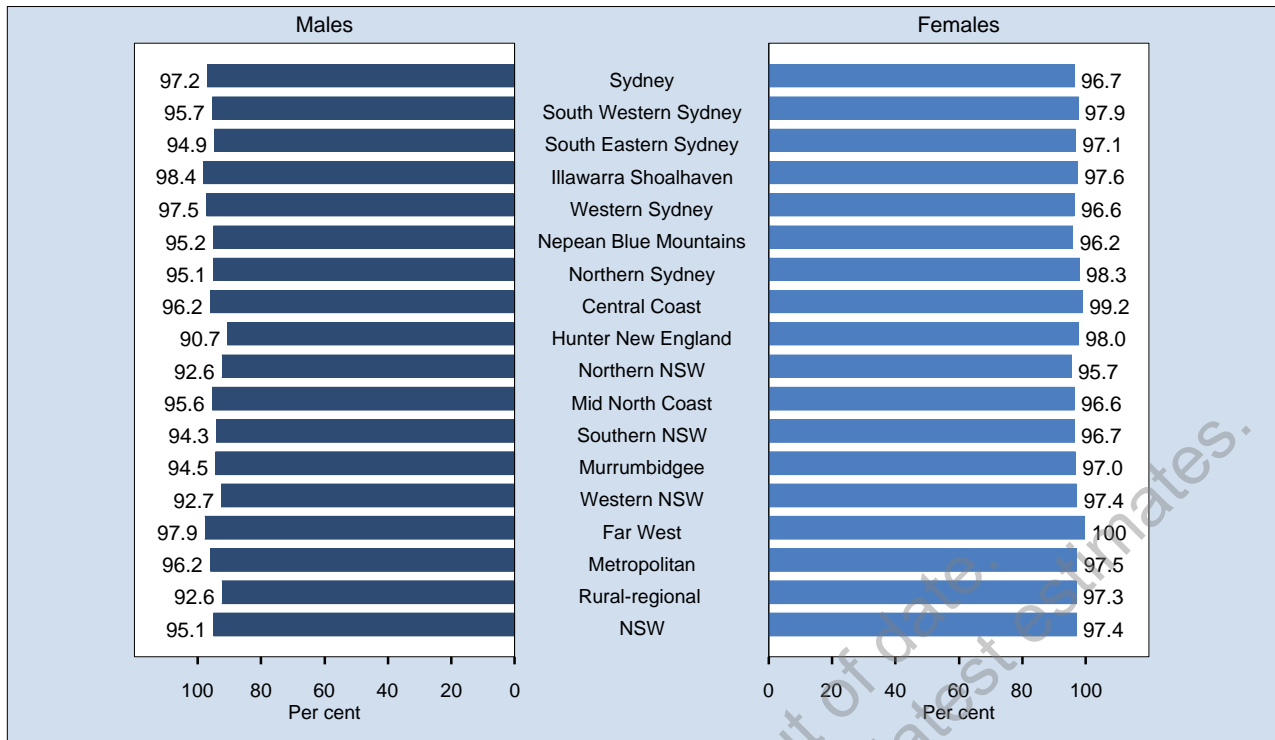
Note: Estimates are based on 9,465 respondents in NSW. For this indicator 780 (7.61%) were not stated (Don't know or Refused) in NSW. The indicator includes those that have seen a general practitioner in the last 12 months. The question used to define the indicator was: In the last 12 months did you see a general practitioner?
Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Visited a general practice in the last 12 months by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 9,465 respondents in NSW. For this indicator 780 (7.61%) were not stated (Don't know or Refused) in NSW. The indicator includes those that have seen a general practitioner in the last 12 months. The question used to define the indicator was: In the last 12 months did you see a general practitioner?
Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

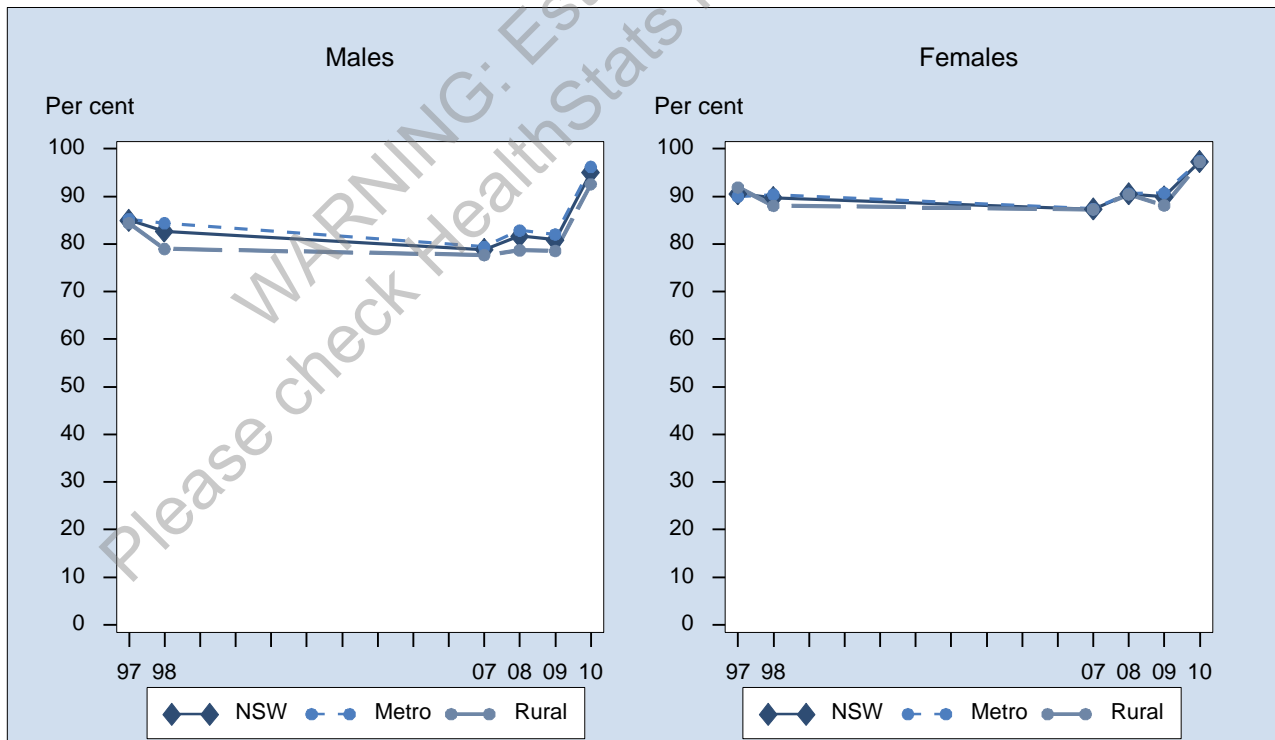
Visited a general practice in the last 12 months by local health district, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 9,465 respondents in NSW. For this indicator 780 (7.61%) were not stated (Don't know or Refused) in NSW. The indicator includes those that have seen a general practitioner in the last 12 months. The question used to define the indicator was: In the last 12 months did you see a general practitioner? NSW total includes the 15 LHDs and Albury (Victoria in-reach).

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Visited a general practice in the last 12 months by year, adults aged 16 years and over, NSW, 1997-2010



Note: Estimates are based on the following numbers of respondents for NSW: 1997 (17,470), 1998 (17,433), 2007 (13,097), 2008 (10,290), 2009 (10,646), 2010 (9,465). The indicator includes those that have seen a general practitioner in the last 12 months. The question used to define the indicator was: In the last 12 months did you see a general practitioner?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

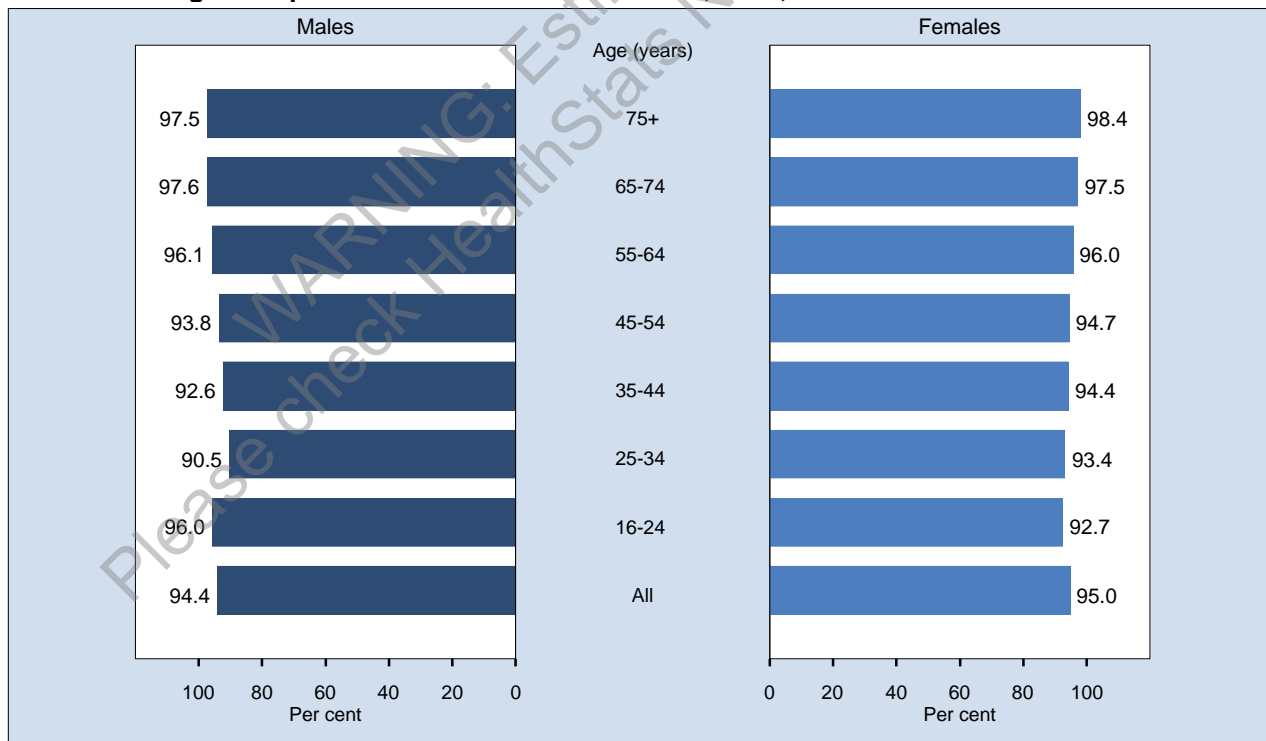
General practice care ratings, adults aged 16 years or over who have visited a general practitioner in the last 12 months, NSW, 2010



Note: Estimates are based on 9,162 respondents in NSW. For this indicator 800 (8.03%) were not stated (Don't know or Refused) in NSW. The questions used were: In the last 12 months did you see a general practitioner? Overall, what do you think of the care you received at your most recent general practitioner visit?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

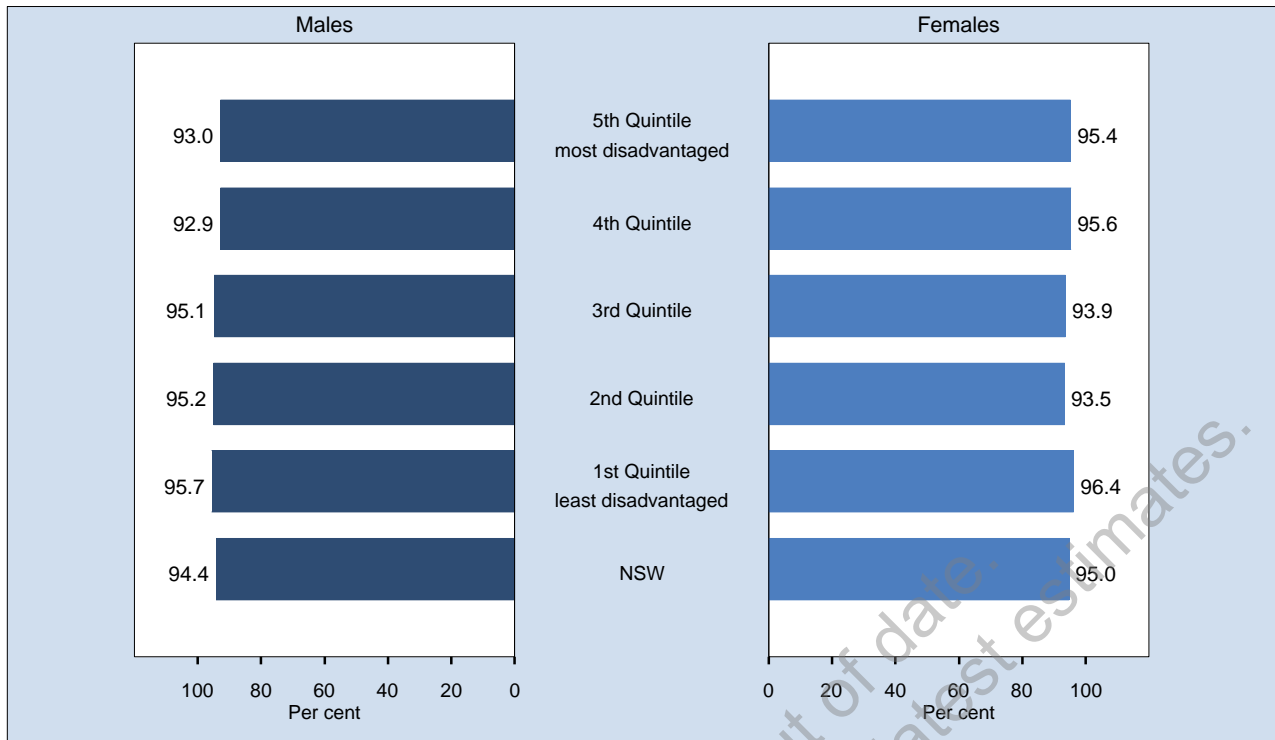
General practice care rated as excellent, very good or good by age, adults aged 16 years or over who have visited a general practitioner in the last 12 months, NSW, 2010



Note: Estimates are based on 9,162 respondents in NSW. For this indicator 800 (8.03%) were not stated (Don't know or Refused) in NSW. The indicator includes those who rated their care as excellent or very good or good for the most recent general practitioner visit. The questions used to define the indicator were: In the last 12 months did you see a general practitioner? Overall, what do you think of the care you received at your most recent general practitioner visit?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

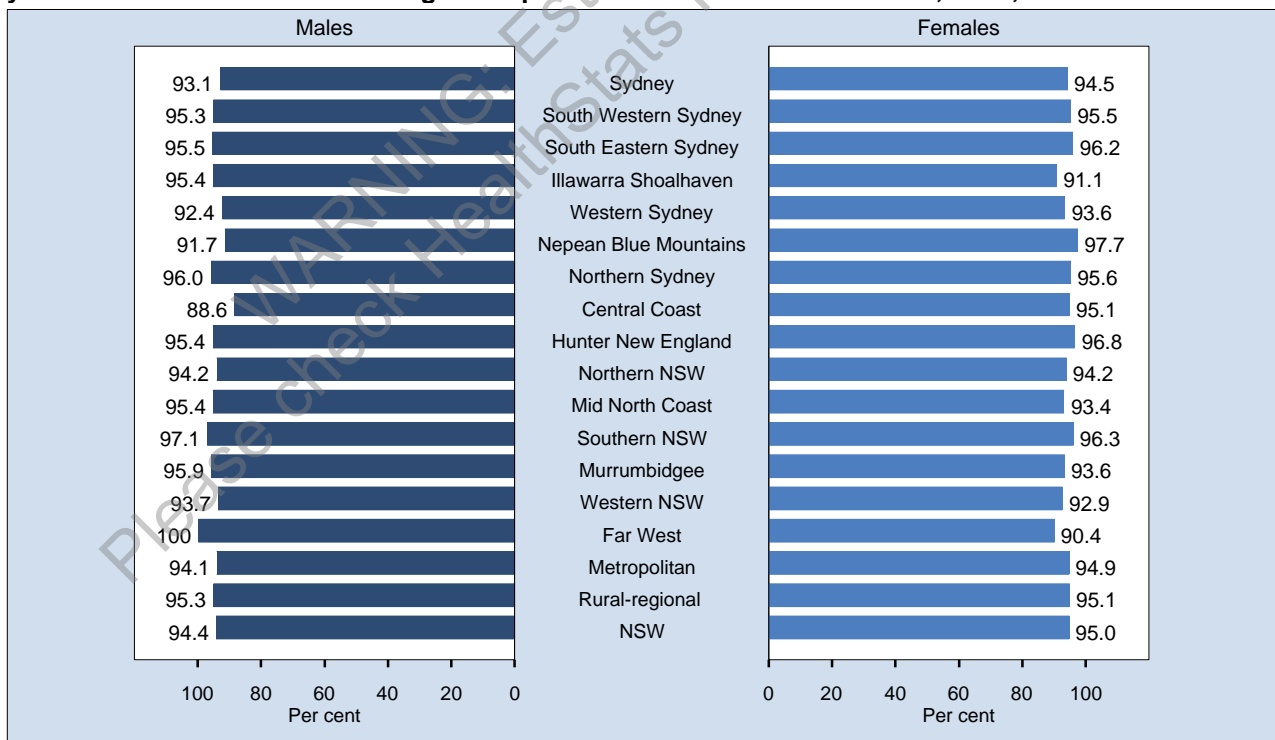
General practice care rated as excellent, very good or good by socioeconomic disadvantage, adults aged 16 years or over who have visited a general practitioner in the last 12 months, NSW, 2010



Note: Estimates are based on 9,162 respondents in NSW. For this indicator 800 (8.03%) were not stated (Don't know or Refused) in NSW. The indicator includes those who rated their care as excellent or very good or good for the most recent general practitioner visit. The questions used to define the indicator were: In the last 12 months did you see a general practitioner? Overall, what do you think of the care you received at your most recent general practitioner visit?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

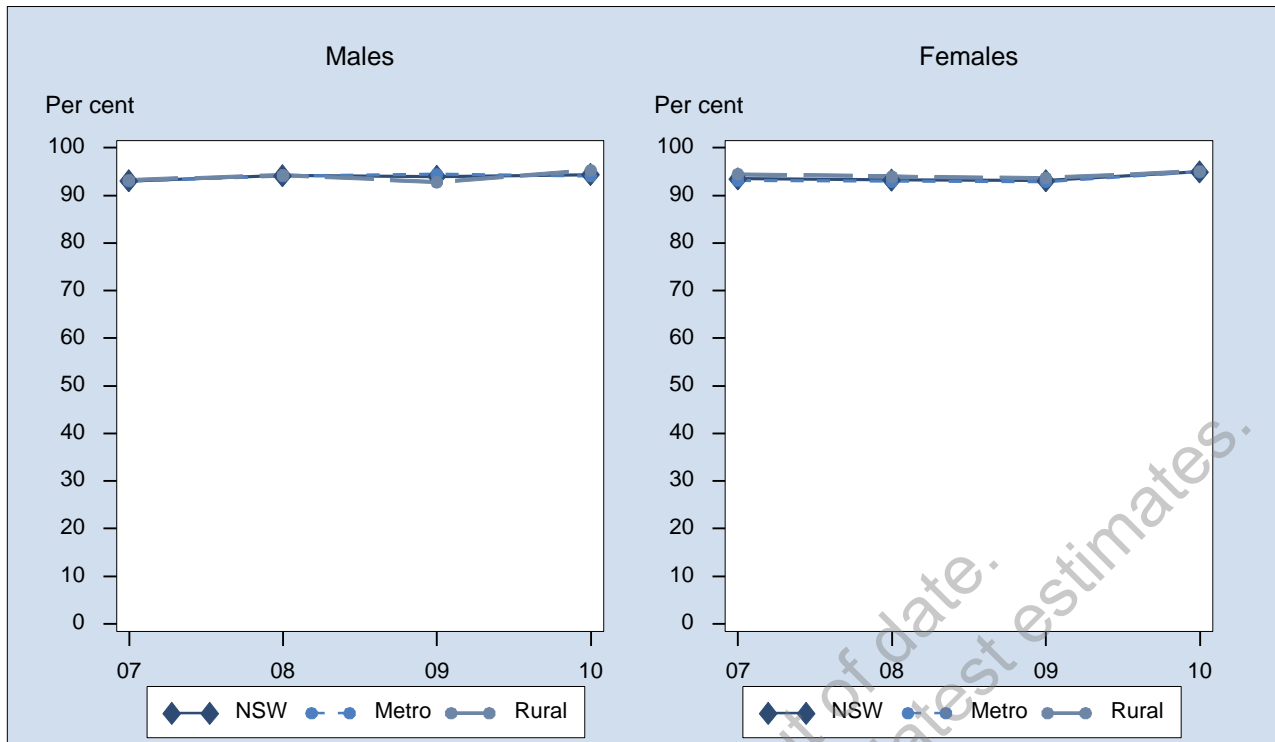
General practice care rated as excellent, very good or good by local health district, adults aged 16 years or over who have visited a general practitioner in the last 12 months, NSW, 2010



Note: Estimates are based on 9,162 respondents in NSW. For this indicator 800 (8.03%) were not stated (Don't know or Refused) in NSW. The indicator includes those who rated their care as excellent or very good or good for the most recent general practitioner visit. The questions used to define the indicator were: In the last 12 months did you see a general practitioner? Overall, what do you think of the care you received at your most recent general practitioner visit? NSW total includes the 15 LHDs and Albury (Victoria in-reach).

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

General practice care rated as excellent, very good or good by year, adults aged 16 years or over who have visited a general practitioner in the last 12 months, NSW, 2007-2010



Note: Estimates are based on the following numbers of respondents for NSW: 2007 (11,336), 2008 (9,121), 2009 (9,455), 2010 (9,162). The indicator includes those who rated their care as excellent or very good or good for the most recent general practitioner visit. The questions used to define the indicator were: In the last 12 months did you see a general practitioner? Overall, what do you think of the care you received at your most recent general practitioner visit?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

WARNING: Estimates out of date. Please check HealthStats NSW for latest estimates.

Public dental service attendances

Introduction

New South Wales residents with a health care card or pensioner concession card are eligible for public dental care. To monitor quality of care, the New South Wales Population Health Survey asks respondents questions about visits to public dental services and how they rated the care received.

Results

Attended a public dental service

In 2010, 6.6 per cent of adults aged 16 years and over attended a public dental service in the last 12 months.

- There was no significant difference between males and females.
- A significantly higher proportion of adults aged 16-24 years (15.5 per cent), and a significantly lower proportion of adults aged 35-44 years (4.2 per cent), 45-54 years (4.1 per cent), and 55-64 years (5.2 per cent), attended a public dental service in the last 12 months, compared with the overall adult population.
- A significantly lower proportion of adults in the first or least disadvantaged quintile (3.3 per cent) and second quintile (4.2 per cent), and a significantly higher proportion of adults in the fifth or most disadvantaged quintile (9.8 per cent), attended a public dental service in the last 12 months, compared with the overall adult population.
- There was no significant difference between rural-regional and metropolitan health districts.
- A significantly higher proportion of adults in Western Sydney (10.2 per cent), and a significantly lower proportion of adults in South Western Sydney (4.9 per cent) and Northern Sydney (3.0 per cent), attended a public dental service in the last 12 months, compared with the overall adult population.

Since 2002, there has been a significant increase in the proportion of adults aged 16 years and over who attended a public dental service in the last 12 months (4.6 per cent to 6.6 per cent). The increase has been significant in males and females, and in rural-regional and metropolitan health districts.

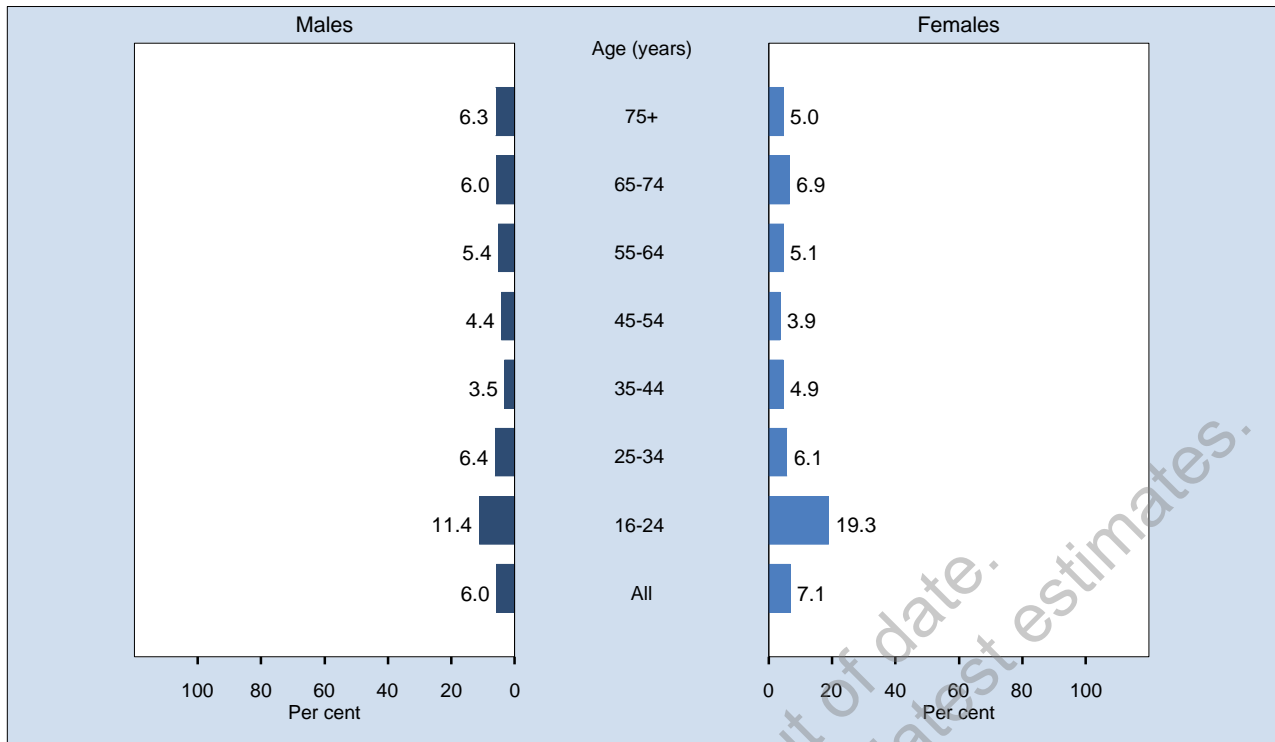
Rating of public dental care

Those who attended a public dental service were asked to rate the care they received: 27.7 per cent rated their care as excellent, 30.5 per cent as very good, 31.6 per cent as good, 6.3 per cent as fair, and 3.8 per cent as poor. When responses of excellent, very good, and good were combined, 89.9 per cent gave a positive rating to the public dental care they received.

- There was no significant difference between males and females.
- A significantly higher proportion of adults aged 16-24 years (95.9 per cent) gave a positive rating to the public dental care they received, compared with the overall adult population.
- A significantly higher proportion of adults in the first or least disadvantaged quintile (95.4 per cent) and fourth quintile (93.9 per cent) gave a positive rating to the public dental care they received, compared with the overall adult population.
- There was no significant difference between rural-regional and metropolitan health districts.
- A significantly higher proportion of adults in Western Sydney (98.9 per cent) and Northern NSW (96.8 per cent) gave a positive rating to the public dental care they received, compared with the overall adult population.

Since 2002, there has been a significant increase in the proportion of adults aged 16 years and over who gave a positive rating to the public dental care they received (81.6 per cent to 89.9 per cent). The increase has been significant in males, and in metropolitan health districts.

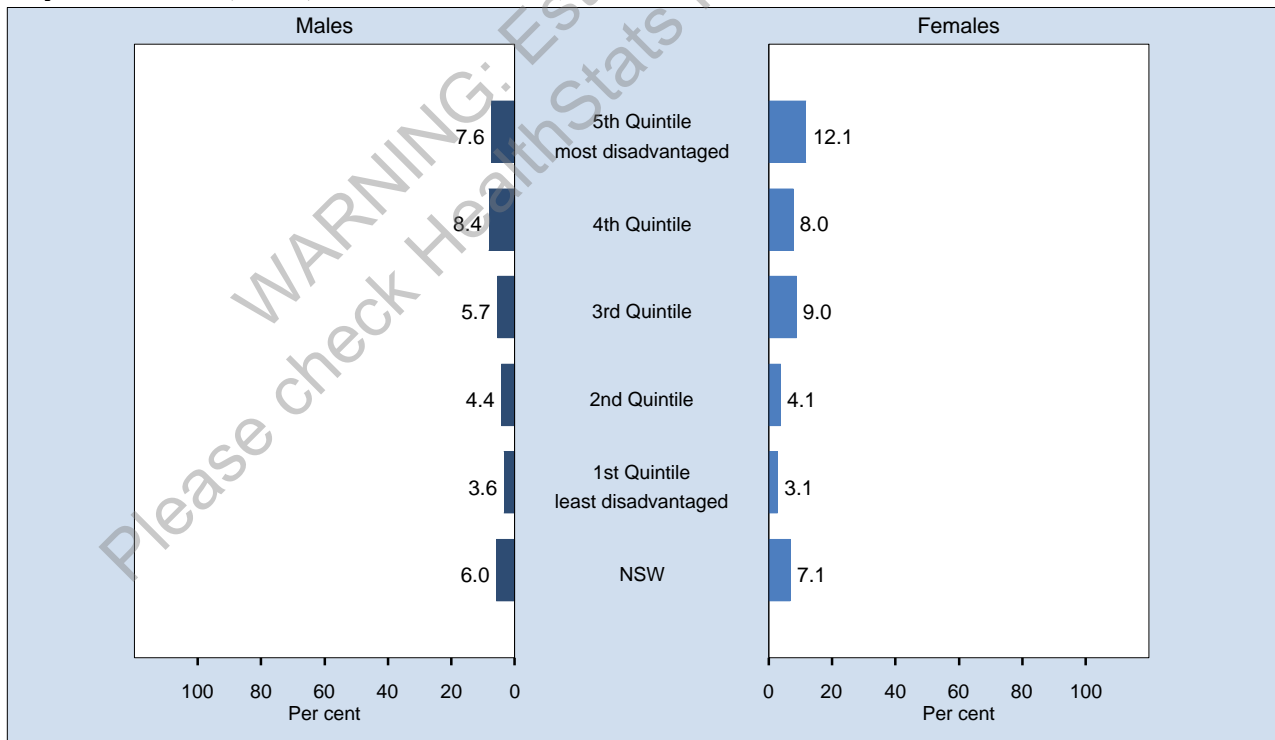
Public dental service attendance in the last 12 months by age, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 9,465 respondents in NSW. For this indicator 780 (7.61%) were not stated (Don't know or Refused) in NSW. The indicator includes those who attended a public dental service or dental hospital in the last 12 months. The question used to define the indicator was: In the last 12 months, have you attended a public (government-run) dental service or dental hospital?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

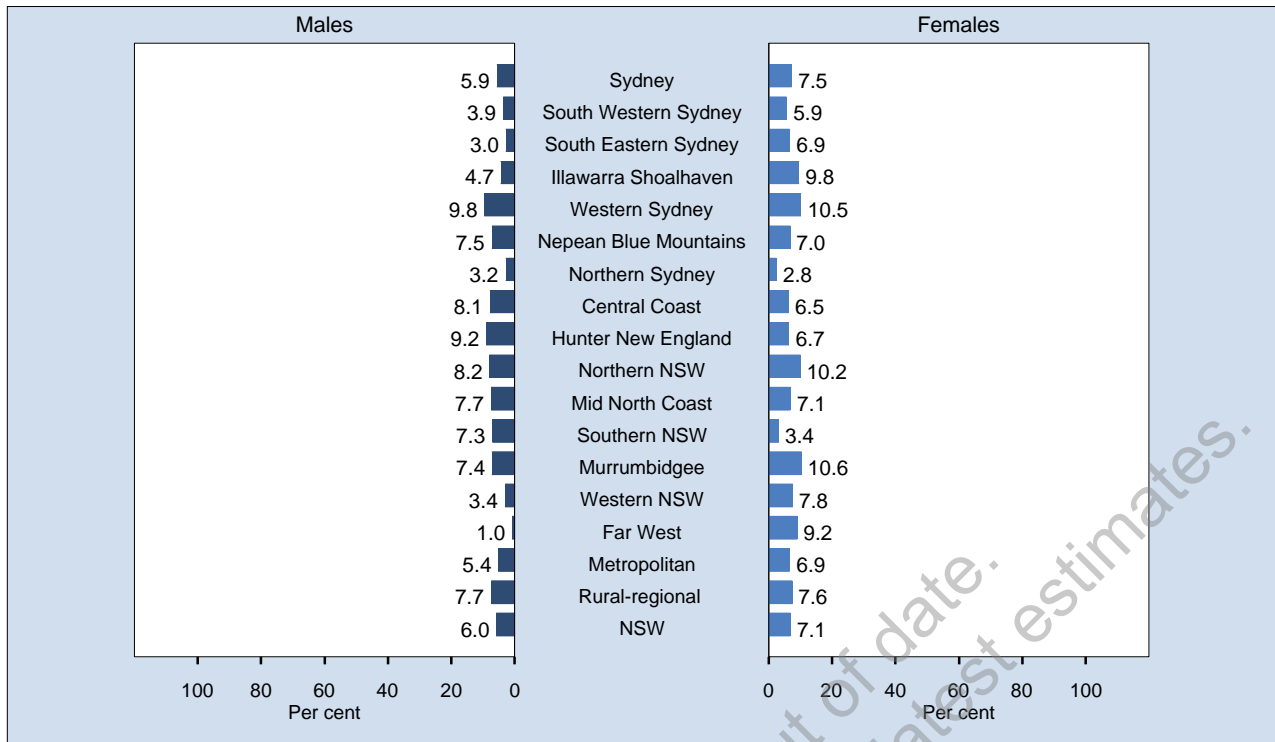
Public dental service attendance in the last 12 months by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 9,465 respondents in NSW. For this indicator 780 (7.61%) were not stated (Don't know or Refused) in NSW. The indicator includes those who attended a public dental service or dental hospital in the last 12 months. The question used to define the indicator was: In the last 12 months, have you attended a public (government-run) dental service or dental hospital?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

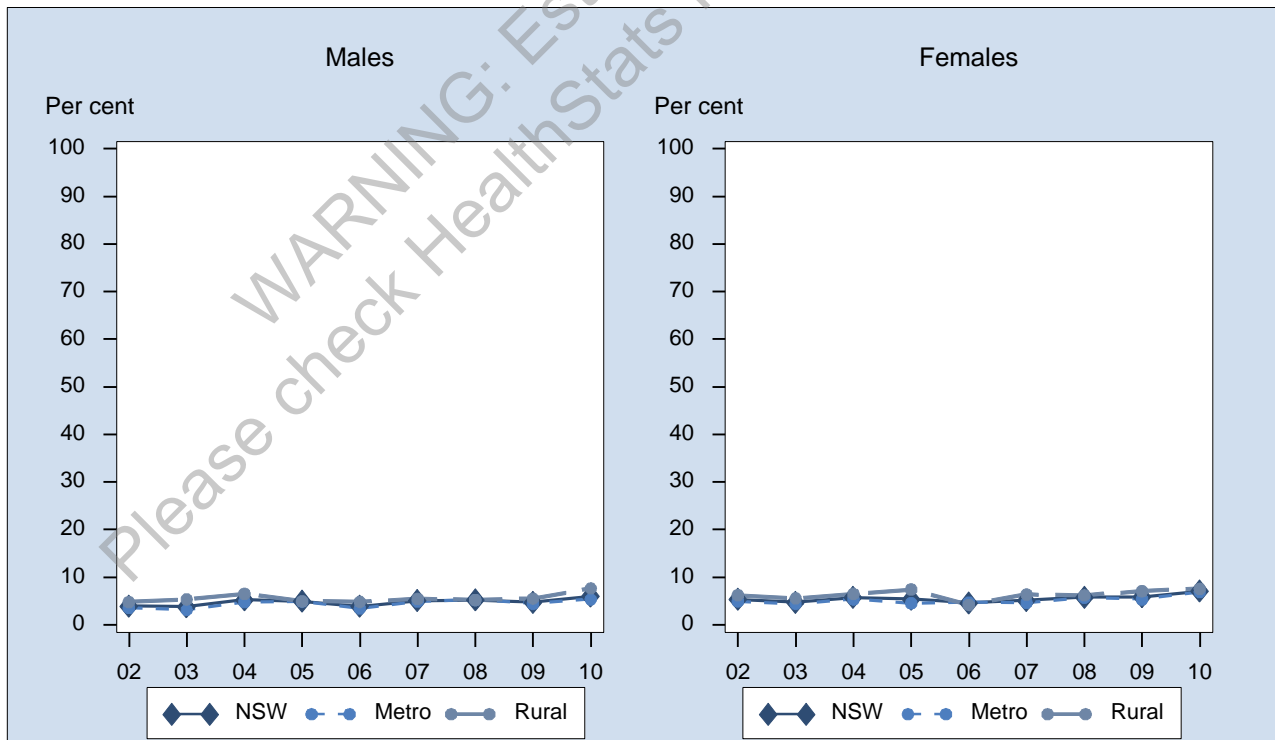
Public dental service attendance in the last 12 months by local health district, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 9,465 respondents in NSW. For this indicator 780 (7.61%) were not stated (Don't know or Refused) in NSW. The indicator includes those who attended a public dental service or dental hospital in the last 12 months. The question used to define the indicator was: In the last 12 months, have you attended a public (government-run) dental service or dental hospital? NSW total includes the 15 LHDs and Albury (Victoria in-reach).

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Public dental service attendance in the last 12 months by year, adults aged 16 years and over, NSW, 2002-2010



Note: Estimates are based on the following numbers of respondents for NSW: 2002 (12,603), 2003 (12,992), 2004 (9,771), 2005 (11,470), 2006 (7,941), 2007 (13,097), 2008 (10,290), 2009 (10,646), 2010 (9,465). The indicator includes those who attended a public dental service or dental hospital in the last 12 months. The question used to define the indicator was: In the last 12 months, have you attended a public (government-run) dental service or dental hospital?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

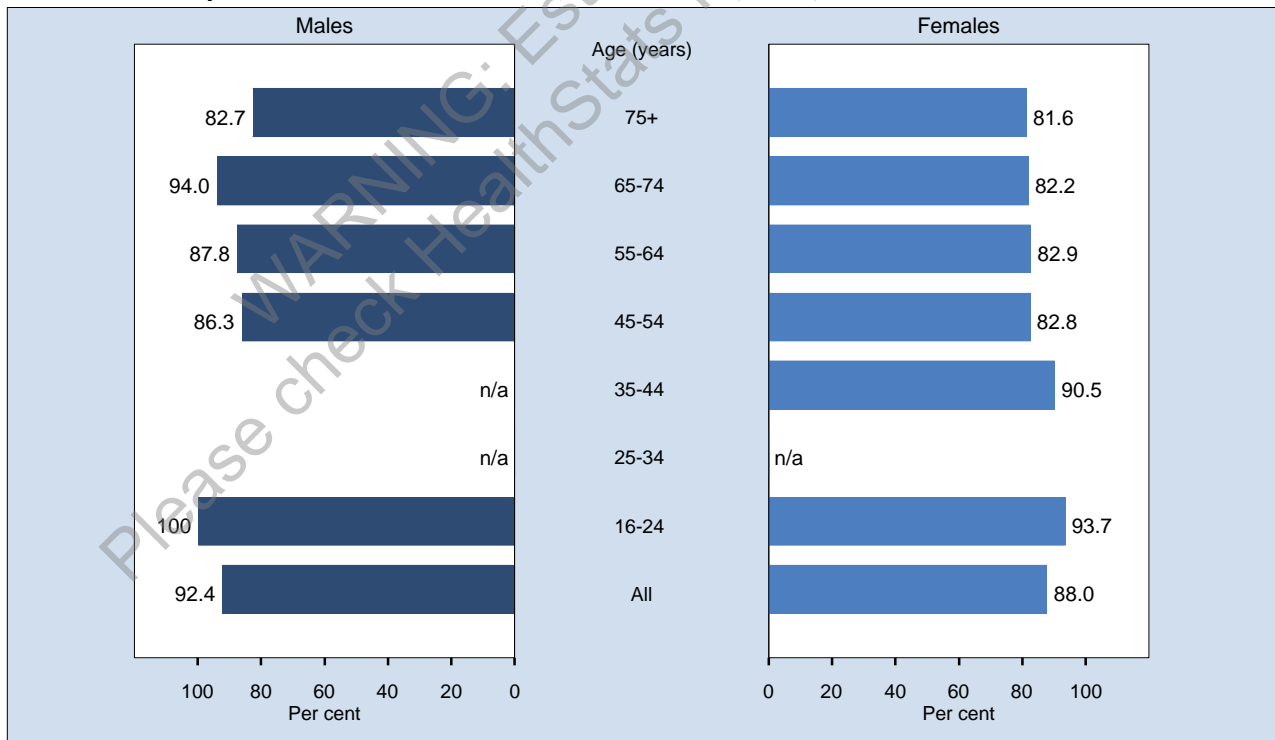
Public dental service care rating, adults aged 16 years or over who attended a public dental service in the last 12 months, NSW, 2010



Note: Estimates are based on 590 respondents in NSW. For this indicator 5 (0.84%) were not stated (Don't know or Refused) in NSW. The questions used were: In the last 12 months, have you attended a public (government-run) dental service or dental hospital? Overall, what do you think of the care you received at the public dental service: Was it excellent, very good, good, fair, or poor?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

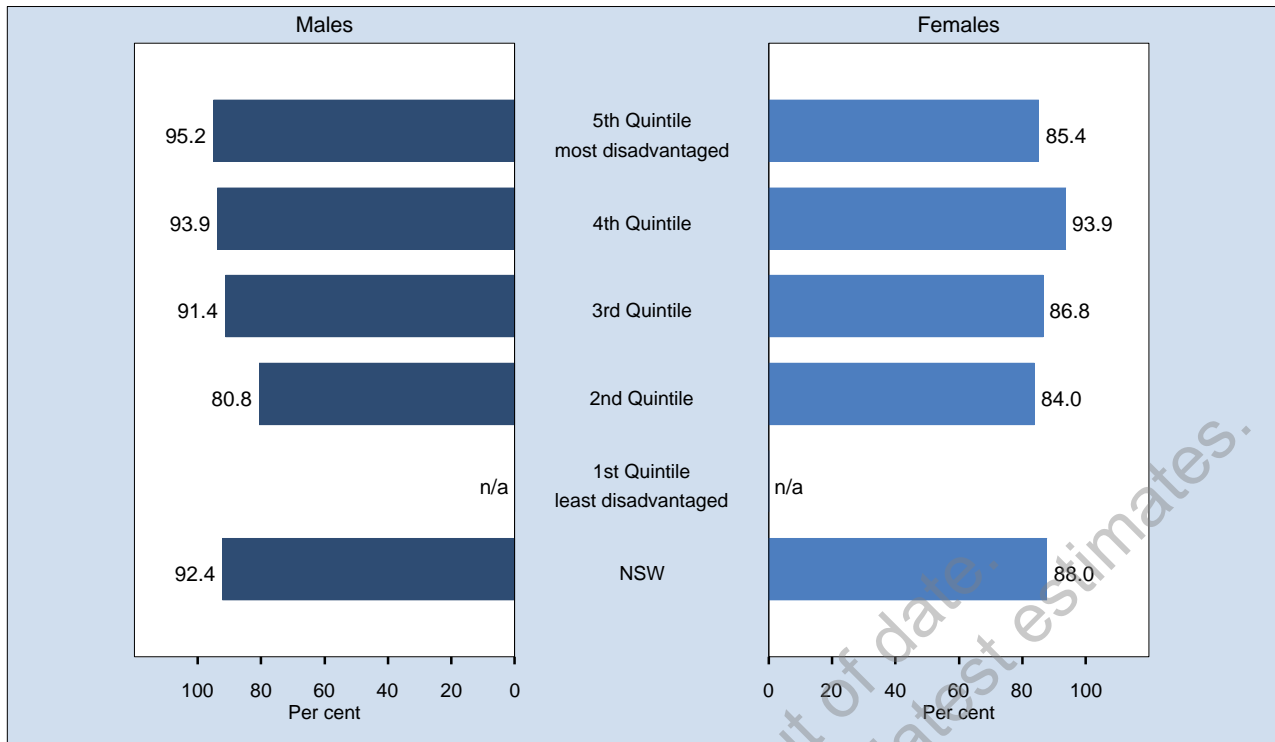
Public dental service care rated as excellent, very good, or good by age, adults aged 16 years or over who attended a public dental service in the last 12 months, NSW, 2010



Note: Estimates are based on 590 respondents in NSW. For this indicator 5 (0.84%) were not stated (Don't know or Refused) in NSW. The indicator includes those who attended a public dental service or dental hospital in the last 12 months who rated their care as excellent, very good, or good for the most recent attendance. The questions used to define the indicator were: In the last 12 months, have you attended a public (government-run) dental service or dental hospital? Overall what do you think of the care you received: Was it excellent, very good, good, fair, or poor?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

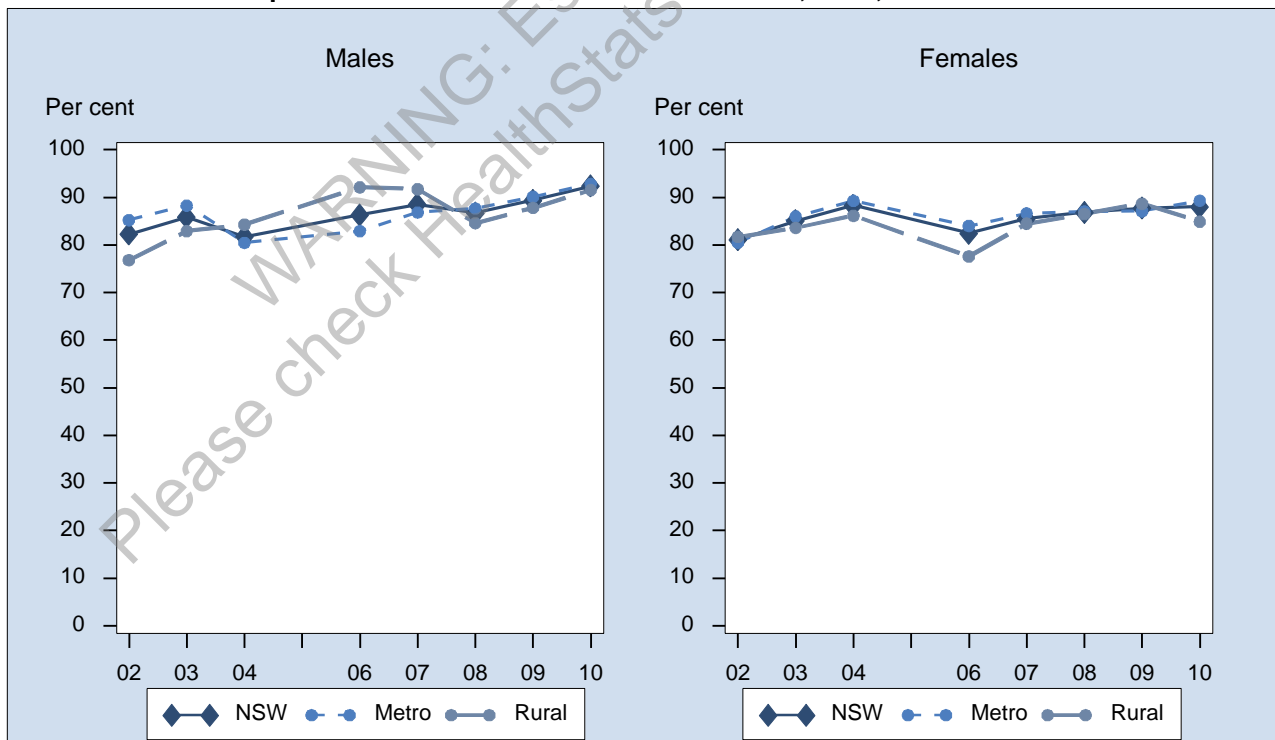
Public dental service care rated as excellent, very good, or good by socioeconomic disadvantage, adults aged 16 years or over who attended a public dental service in the last 12 months, NSW, 2010



Note: Estimates are based on 590 respondents in NSW. For this indicator 5 (0.84%) were not stated (Don't know or Refused) in NSW. The indicator includes those who attended a public dental service or dental hospital in the last 12 months who rated their care as excellent, very good, or good for the most recent attendance. The questions used to define the indicator were: In the last 12 months, have you attended a public (government-run) dental service or dental hospital? Overall what do you think of the care you received: Was it excellent, very good, good, fair, or poor?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Public dental service care rated as excellent, very good, or good by year, adults aged 16 years or over who attended a public dental service in the last 12 months, NSW, 2002-2010



Note: Estimates are based on the following numbers of respondents for NSW: 2002 (636), 2003 (656), 2004 (562), 2006 (331), 2007 (684), 2008 (574), 2009 (577), 2010 (590). The indicator includes those who attended a public dental service or dental hospital in the last 12 months who rated their care as excellent, very good, or good for the most recent attendance. The questions used to define the indicator were: In the last 12 months, have you attended a public (government-run) dental service or dental hospital? Overall what do you think of the care you received: Was it excellent, very good, good, fair, or poor?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Community health centre attendances

Introduction

To monitor quality of care, the New South Wales Population Health Survey asks respondents questions about visits to community health centres and how they rated the care received.

Results

Attended a community health centre

In 2010, 9.3 per cent of adults attended a community health centre on 1 or more occasions in the last 12 months.

- A significantly lower proportion of males (7.6 per cent) attended a community health centre in the last 12 months, compared with females (10.9 per cent).
- Among males, a significantly higher proportion of those aged 16-24 years (15.7 per cent) attended a community health centre in the last 12 months, compared with the overall adult male population.
- Among females, a significantly higher proportion of those aged 16-24 years (18.2 per cent) and 25-34 years (17.5 per cent), and a significantly lower proportion of those aged 45-54 years (8.4 per cent), 55-64 years (6.9 per cent), 65-74 years (6.7 per cent), and 75 years and over (5.5 per cent), attended a community health centre in the last 12 months, compared with the overall adult female population.
- A significantly lower proportion of adults in the first or least disadvantaged quintile (7.0 per cent) attended a community health centre in the last 12 months, compared with the overall adult population.
- A significantly higher proportion of adults in rural-regional health districts (11.9 per cent) attended a community health centre in the last 12 months, compared with metropolitan health districts (8.2 per cent).
- A significantly lower proportion of adults in Nepean Blue Mountains (5.6 per cent), Northern Sydney (6.7 per cent), and Central Coast (6.1 per cent), and a significantly higher proportion of adults in Northern NSW (12.9 per cent), Mid North Coast (12.9 per cent), Murrumbidgee (14.0 per cent), and Western NSW (16.4 per cent), attended a community health centre in the last 12 months, compared with the overall adult population.

Since 2002, there has been a significant increase in the proportion of adults who attended a community health centre in the last 12 months (6.9 per cent to 9.3 per cent). The increase has been significant in males and females, and in rural-regional and metropolitan health districts.

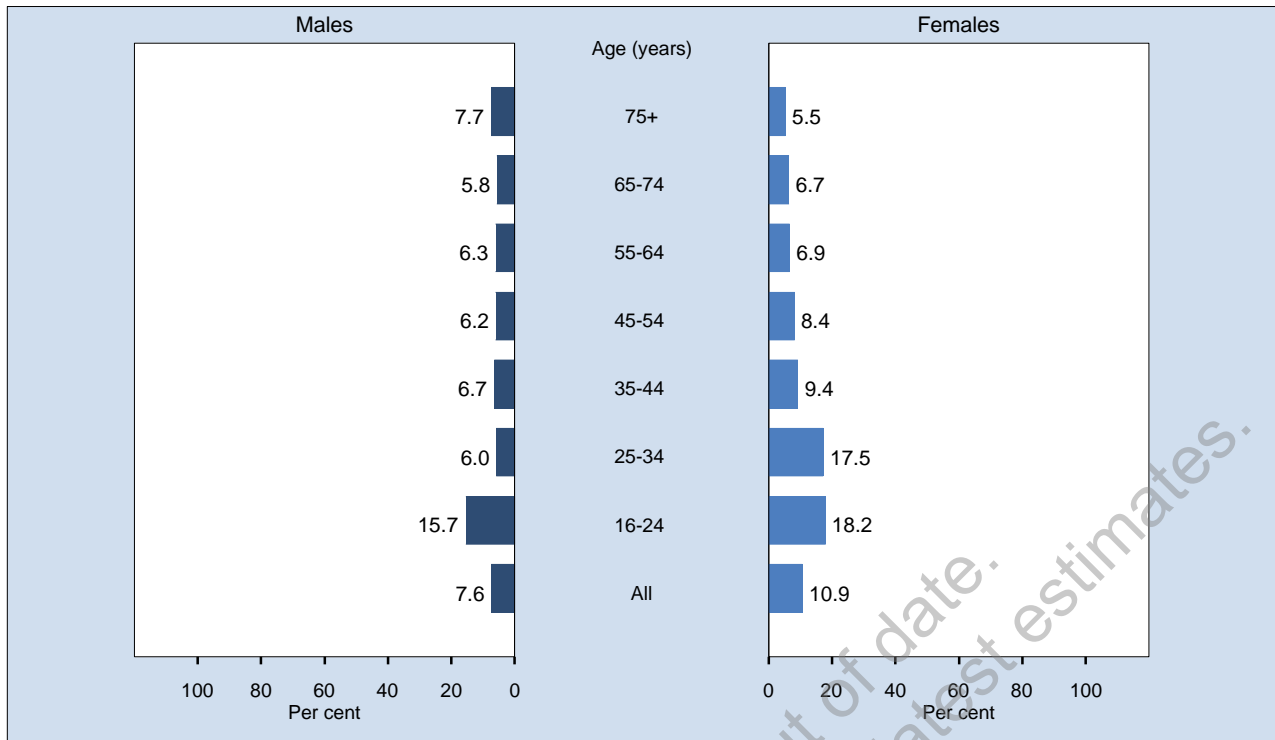
Rating of community health centre care

Those who attended a community health centre were asked to rate the care they received: 25.6 per cent rated their care as excellent, 38.1 per cent as very good, 28.2 per cent as good, 5.7 per cent as fair, and 2.4 per cent as poor. When responses of excellent, very good, and good were combined, 91.9 per cent gave a positive rating to the community health centre care they received.

- There was no significant difference between males and females.
- A significantly higher proportion of adults aged 75 years and over (97.4 per cent) gave a positive rating to the community health centre care they received, compared with the overall adult population.
- A significantly higher proportion of adults in the fourth quintile (97.7 per cent) gave a positive rating to the community health centre care they received, compared with the overall adult population.
- There was no significant difference between rural-regional and metropolitan health districts.
- A significantly higher proportion of adults in Northern NSW (99.2 per cent) and Southern NSW (97.6 per cent) gave a positive rating to the community health centre care they received, compared with the overall adult population.

Since 2002, there has been no significant change in the proportion of adults who gave a positive rating to the community health centre care they received.

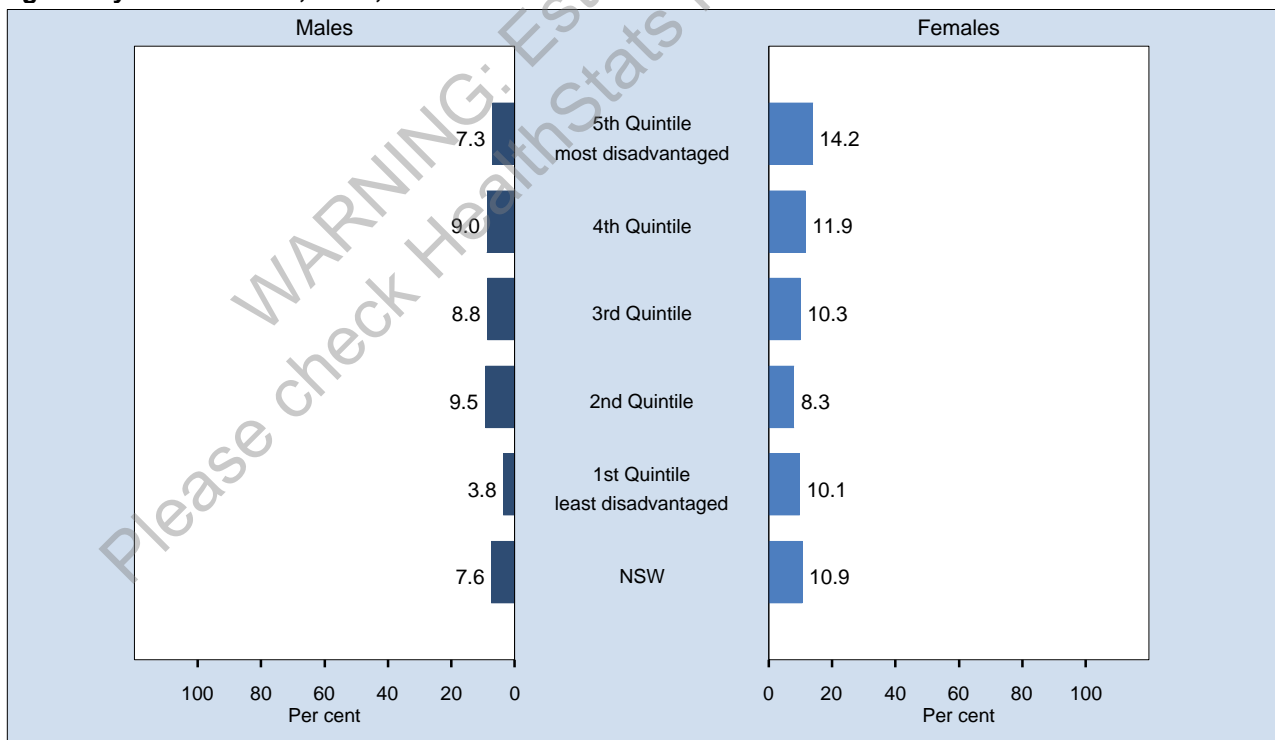
Community health centre attendance in the last 12 months by age, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 9,465 respondents in NSW. For this indicator 780 (7.61%) were not stated (Don't know or Refused) in NSW. The indicator includes those who attended a community health centre in the last 12 months. The question used to define the indicator was: In the last 12 months, have you attended a government-run community health centre?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

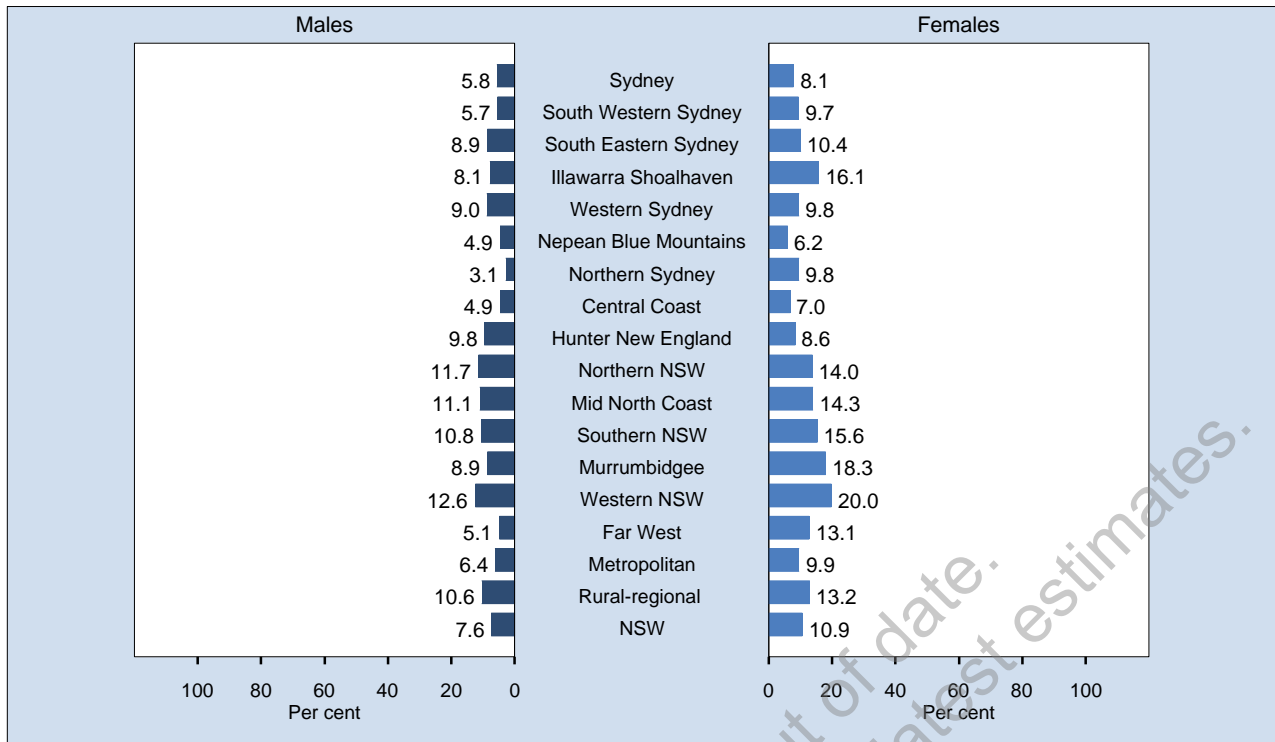
Community health centre attendance in the last 12 months by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 9,465 respondents in NSW. For this indicator 780 (7.61%) were not stated (Don't know or Refused) in NSW. The indicator includes those who attended a community health centre in the last 12 months. The question used to define the indicator was: In the last 12 months, have you attended a government-run community health centre?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

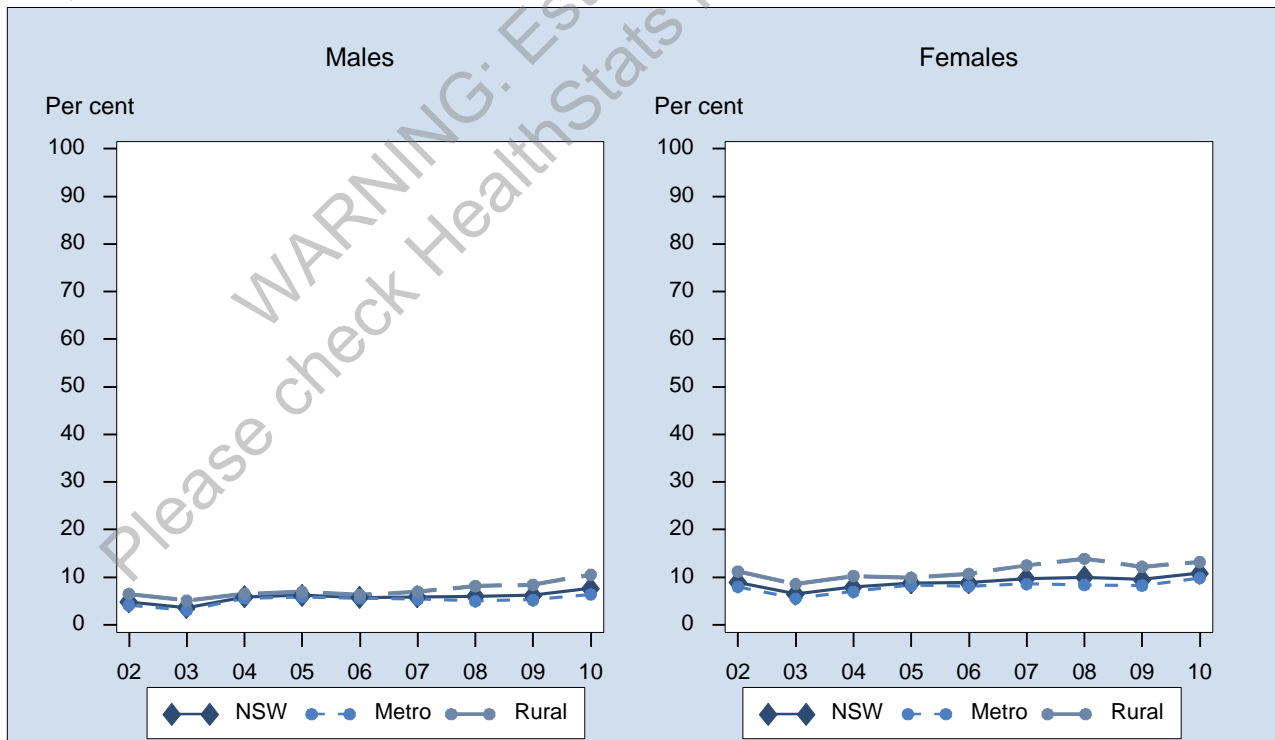
Community health centre attendance in the last 12 months by local health district, adults aged 16 years and over, NSW, 2010



Note: Estimates are based on 9,465 respondents in NSW. For this indicator 780 (7.61%) were not stated (Don't know or Refused) in NSW. The indicator includes those who attended a community health centre in the last 12 months. The question used to define the indicator was: In the last 12 months, have you attended a government-run community health centre? NSW total includes the 15 LHDs and Albury (Victoria in-reach).

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Community health centre attendance in the last 12 months by year, adults aged 16 years and over, NSW, 2002-2010



Note: Estimates are based on the following numbers of respondents for NSW: 2002 (12,603), 2003 (12,992), 2004 (9,771), 2005 (11,470), 2006 (7,941), 2007 (13,097), 2008 (10,290), 2009 (10,646), 2010 (9,465). The indicator includes those who attended a community health centre in the last 12 months. The question used to define the indicator was: In the last 12 months, have you attended a government-run community health centre?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

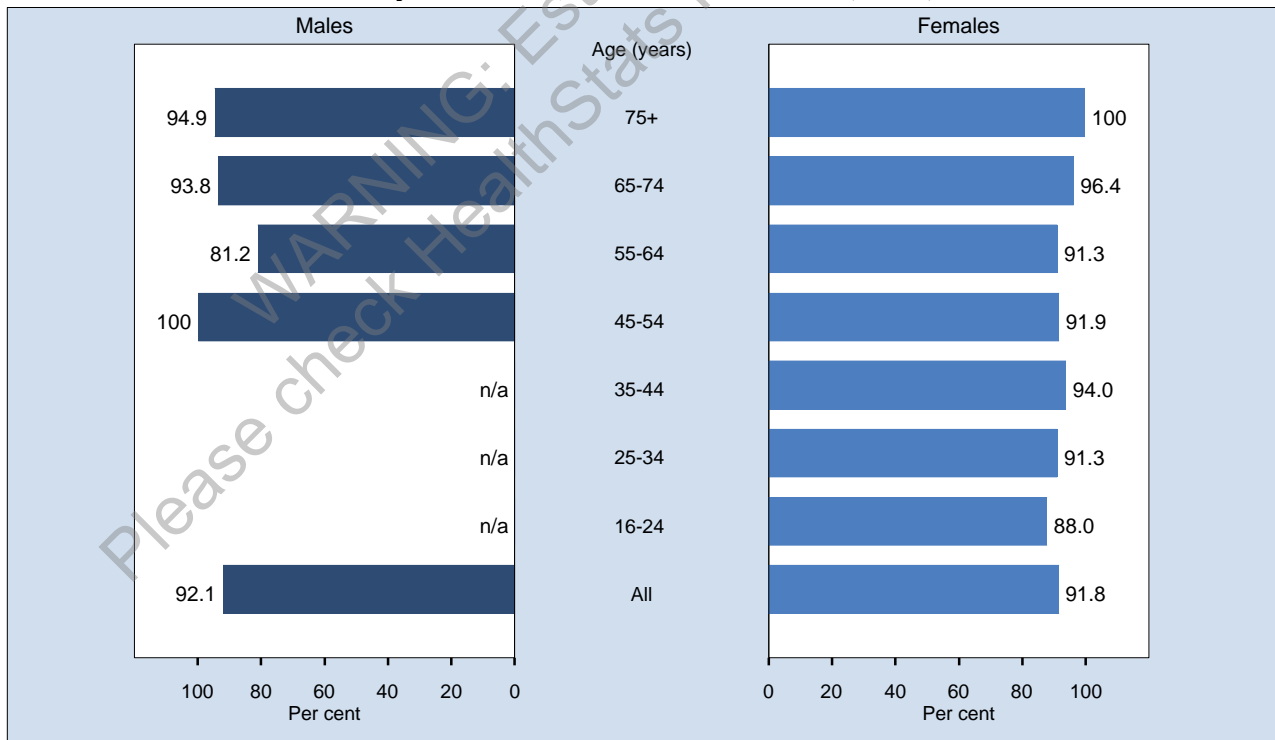
Community health centre care ratings, adults aged 16 years or over who attended a community health centre in the last 12 months, NSW, 2010



Note: Estimates are based on 849 respondents in NSW. For this indicator 14 (1.62%) were not stated (Don't know or Refused) in NSW. The questions used were: In the last 12 months, have you attended a government-run community health centre? Overall, what do you think of the care you received at this community health centre: Was it excellent, very good, good, fair, or poor?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

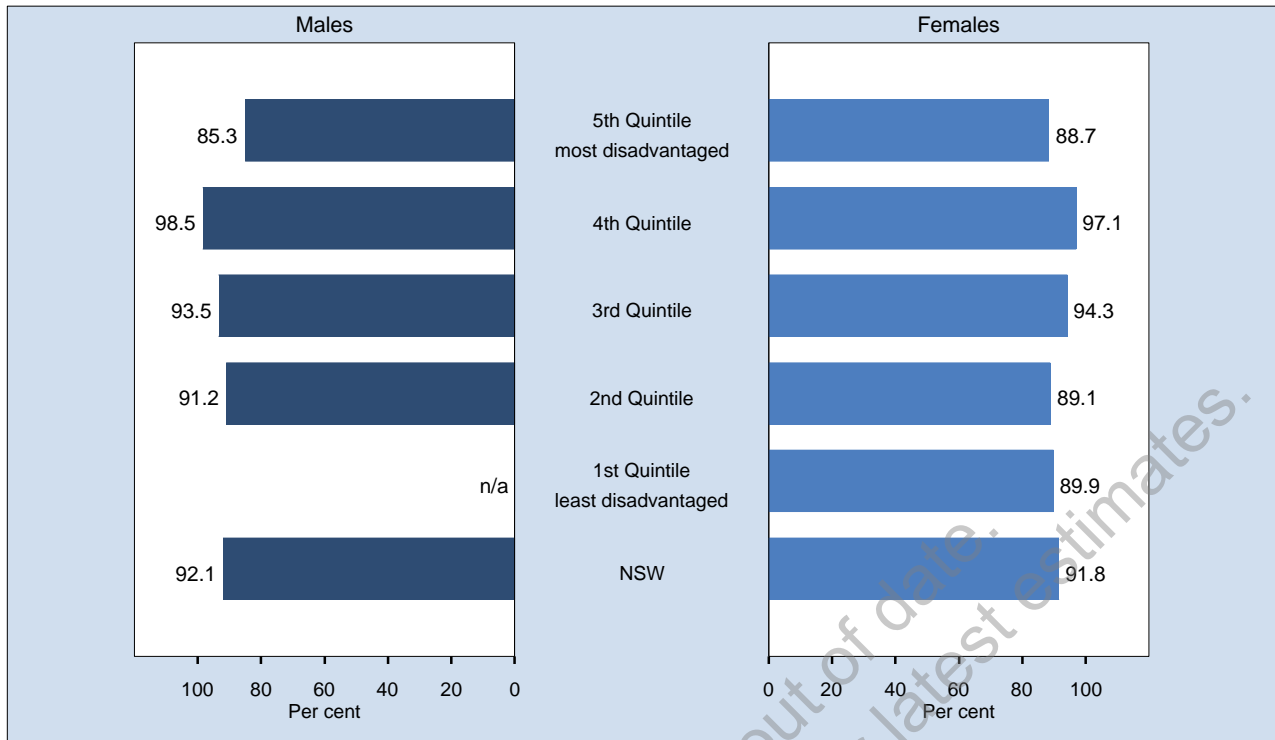
Community health centre care rated as excellent, very good, or good by age, adults aged 16 years or over who attended a community health centre in the last 12 months, NSW, 2010



Note: Estimates are based on 849 respondents in NSW. For this indicator 14 (1.62%) were not stated (Don't know or Refused) in NSW. The indicator includes those who attended a community health centre in the last 12 months who rated the care as excellent, very good or good for their most recent attendance. The questions used to define the indicator were: In the last 12 months, have you attended a government-run community health centre? Overall, what do you think of the care you received at this community health centre: Was it excellent, very good, good, fair, or poor?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

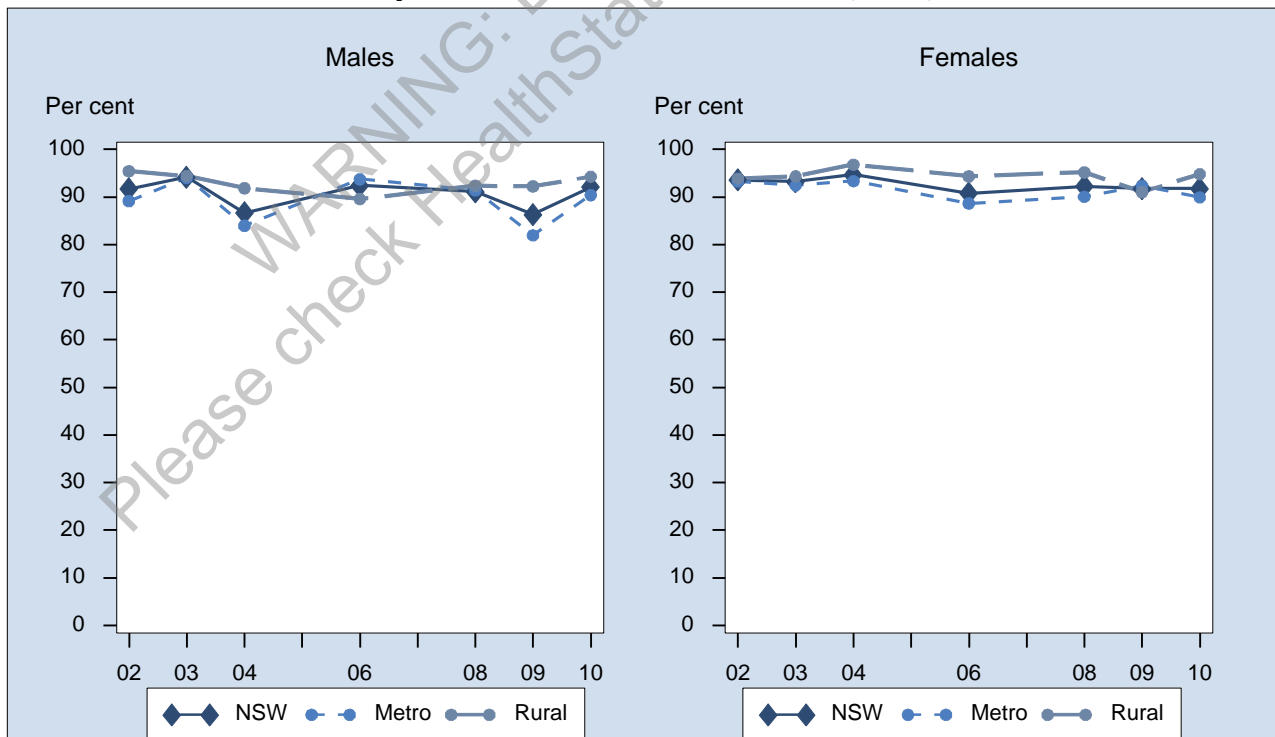
Community health centre care rated as excellent, very good, or good by socioeconomic disadvantage, adults aged 16 years or over who attended a community health centre in the last 12 months, NSW, 2010



Note: Estimates are based on 849 respondents in NSW. For this indicator 14 (1.62%) were not stated (Don't know or Refused) in NSW. The indicator includes those who attended a community health centre in the last 12 months who rated the care as excellent, very good or good for their most recent attendance. The questions used to define the indicator were: In the last 12 months, have you attended a government-run community health centre? Overall, what do you think of the care you received at this community health centre: Was it excellent, very good, good, fair, or poor?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Community health centre care rated as excellent, very good, or good by year, adults aged 16 years or over who attended a community health centre in the last 12 months, NSW, 2002-2010



Note: Estimates are based on the following numbers of respondents for NSW: 2002 (979), 2003 (852), 2004 (836), 2006 (609), 2008 (914), 2009 (873), 2010 (849). The indicator includes those who attended a community health centre in the last 12 months who rated the care as excellent, very good or good for their most recent attendance. The questions used to define the indicator were: In the last 12 months, have you attended a government-run community health centre? Overall, what do you think of the care you received at this community health centre: Was it excellent, very good, good, fair, or poor?

Source: New South Wales Population Health Survey 2010 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Trends in health services

- **Private health insurance**

Since 1997, there has been a significant increase in the proportion of adults aged 16 years and over who were covered by private health insurance (42.0 per cent to 58.1 per cent). The increase has been significant in males and females, and in rural-regional and metropolitan health districts.

- **Difficulties getting health care when needing it**

Since 1997, there has been a significant increase in the proportion of adults aged 16 years and over who experienced difficulties getting health care (9.9 per cent to 18.1 per cent). The increase has been significant in males and females, and in rural-regional and metropolitan health districts.

- **Emergency department presentations**

Since 1997, there has been a significant increase in the proportion of adults aged 16 years and over who presented to an emergency department on 1 or more occasions in the last 12 months (13.9 per cent to 19.2 per cent). The increase has been significant in males and females, and in rural-regional and metropolitan health districts.

- **Rating of emergency department care**

Since 1997, there has been a significant decrease in the proportion of adults aged 16 years and over who gave a positive rating to the emergency department care they received (80.1 per cent to 75.7 per cent). The decrease has been significant in females.

- **Hospital admissions**

Since 1997, there has been a significant increase in the proportion of adults aged 16 years and over who were admitted to hospital on 1 or more occasions in the last 12 months (13.0 per cent to 16.1 per cent). The increase has been significant in males and females, and in rural-regional and metropolitan health districts.

- **Rating of hospital care**

Since 1997, there has been no significant change in the proportion of adults aged 16 years and over who gave a positive rating to the hospital care they received.

- **General practice visits**

Since 1997, there has been a significant increase in the proportion of adults aged 16 years and over who visited a general practice in the last 12 months (87.8 per cent to 96.3 per cent). The increase has been significant in males and females, and in rural-regional and metropolitan health districts.

- **Rating of general practice care**

Since 2007, there has been a significant increase in the proportion of adults aged 16 years and over who gave a positive rating to the general practice care they received (93.3 per cent to 94.7 per cent). The increase has been significant in females, and in rural-regional and metropolitan health districts.

- **Public dental service attendances**

Since 2002, there has been a significant increase in the proportion of adults aged 16 years and over who attended a public dental service in the last 12 months (4.6 per cent to 6.6 per cent). The increase has been significant in males and females, and in rural-regional and metropolitan health districts.

- **Rating of public dental service care**

Since 2002, there has been a significant increase in the proportion of adults aged 16 years and over who gave a positive rating to the public dental care they received (81.6 per cent to 89.9 per cent). The increase has been significant in males, and in metropolitan health districts.

- **Community health centre attendances**

Since 2002, there has been a significant increase in the proportion of adults aged 16 years and over who attended a community health centre in the last 12 months (6.9 per cent to 9.3 per cent). The increase has been significant in males and females, and in rural-regional and metropolitan health districts.

- **Rating of community health centre care**

Since 2002, there has been no significant change in the proportion of adults aged 16 years and over who gave a positive rating to the community health centre care they received.

Trends in health services NSW, 2010

Indicator	Year	Males % (95% CI)	Females % (95% CI)	Metropolitan % (95% CI)	Rural-regional % (95% CI)	All % (95% CI)
Private health insurance	1997	42.7 (41.2-44.1)	41.4 (40.1-42.7)	44.2 (43.0-45.5)	37.1 (35.7-38.4)	42.0 (41.1-43.0)
	1998	40.5 (39.0-42.0)	41.3 (40.0-42.6)	43.6 (42.3-44.9)	34.8 (33.5-36.2)	40.9 (39.9-41.9)
	2002	52.1 (50.2-54.1)	54.1 (52.4-55.7)	57.0 (55.3-58.7)	43.9 (42.1-45.7)	53.1 (51.8-54.4)
	2003	53.2 (51.3-55.1)	54.2 (52.6-55.8)	57.3 (55.7-59.0)	45.1 (43.4-46.8)	52.5 (51.5-55.0)
	2004	54.8 (52.4-57.1)	54.3 (52.4-56.2)	57.9 (56.0-59.8)	46.7 (44.7-48.7)	54.5 (53.0-56.0)
	2005	54.3 (52.3-56.3)	54.9 (53.3-56.5)	58.6 (56.9-60.3)	45.4 (43.7-47.1)	54.6 (53.3-55.9)
	2006	53.2 (50.9-55.6)	55.9 (54.0-57.8)	58.3 (56.4-60.3)	45.9 (43.8-48.0)	54.6 (53.1-56.1)
	2007	55.8 (53.9-57.7)	54.4 (52.9-55.9)	57.8 (56.3-59.4)	48.7 (46.9-50.4)	55.1 (53.9-56.3)
	2008	56.8 (54.6-58.9)	57.0 (55.3-58.8)	60.5 (58.8-62.3)	48.5 (46.6-50.5)	56.9 (55.5-58.3)
	2009	56.4 (54.2-58.6)	56.2 (54.5-57.9)	59.6 (57.8-61.3)	48.5 (46.6-50.4)	56.3 (54.9-57.7)
	2010	57.3 (54.9-59.7)	58.8 (57.0-60.6)	61.8 (59.8-63.7)	49.7 (47.7-51.8)	58.1 (56.6-59.5)
Difficulties getting health care when needing it	1997	8.8 (8.0-9.6)	11.0 (10.3-11.8)	8.1 (7.4-8.8)	14.1 (13.2-14.9)	9.9 (9.4-10.5)
	1998	8.5 (7.8-9.3)	11.8 (11.0-12.5)	8.1 (7.4-8.7)	15.3 (14.4-16.2)	10.2 (9.6-10.7)
	2002	10.8 (9.6-11.9)	14.3 (13.2-15.4)	9.6 (8.6-10.6)	19.4 (18.0-20.8)	12.6 (11.8-13.4)
	2003	11.4 (10.3-12.5)	15.0 (14.0-16.1)	10.0 (9.1-10.9)	21.1 (19.7-22.5)	13.3 (12.5-14.0)
	2004	12.6 (11.2-14.0)	15.1 (13.8-16.3)	10.2 (9.1-11.3)	22.6 (20.9-24.3)	13.9 (12.9-14.8)
	2005	11.1 (10.0-12.3)	15.0 (13.9-16.1)	9.8 (8.8-10.8)	20.6 (19.2-22.0)	13.1 (12.3-13.9)
	2006	11.9 (10.5-13.3)	14.6 (13.3-15.9)	9.5 (8.4-10.6)	21.8 (20.1-23.6)	13.2 (12.3-14.2)
	2007	14.7 (13.4-16.0)	19.2 (18.1-20.4)	12.4 (11.4-13.5)	27.5 (26.0-29.1)	17.0 (16.2-17.9)
	2008	13.9 (12.5-15.3)	21.6 (20.2-23.0)	13.7 (12.5-14.9)	27.2 (25.5-28.9)	17.8 (16.8-18.8)
	2009	15.9 (14.3-17.4)	19.2 (18.0-20.5)	13.2 (12.0-14.4)	27.7 (26.0-29.5)	17.6 (16.6-18.6)
	2010	15.3 (13.6-17.0)	20.7 (19.3-22.2)	13.7 (12.4-15.1)	28.3 (26.4-30.2)	18.1 (17.0-19.2)
Emergency department presentation in the last 12 months	1997	15.8 (14.8-16.8)	12.0 (11.2-12.9)	11.7 (10.9-12.5)	18.8 (17.7-19.9)	13.9 (13.2-14.6)
	1998	13.9 (12.9-14.9)	12.0 (11.2-12.8)	11.3 (10.5-12.1)	16.9 (15.8-17.9)	13.0 (12.3-13.6)
	2002	14.7 (13.4-16.0)	13.8 (12.7-14.9)	12.6 (11.5-13.6)	18.1 (16.8-19.5)	14.3 (13.4-15.1)
	2003	14.0 (12.7-15.2)	13.2 (12.2-14.2)	11.8 (10.8-12.8)	17.6 (16.3-18.9)	13.6 (12.7-14.4)
	2004	15.4 (13.9-17.0)	13.6 (12.3-14.9)	13.4 (12.1-14.7)	17.0 (15.5-18.5)	14.5 (13.5-15.5)
	2005	14.0 (12.7-15.3)	13.3 (12.2-14.4)	12.3 (11.2-13.4)	16.6 (15.3-17.9)	13.9 (12.8-14.5)
	2006	14.1 (12.5-15.7)	14.0 (12.8-15.3)	12.4 (11.1-13.7)	18.0 (16.4-19.6)	14.1 (13.0-15.1)
	2007	16.5 (15.1-17.9)	14.6 (13.6-15.6)	13.8 (12.8-14.9)	19.3 (17.9-20.7)	15.5 (14.7-16.4)
	2008	17.5 (15.9-19.1)	17.0 (15.7-18.3)	15.3 (14.0-16.6)	21.7 (20.0-23.3)	17.3 (16.2-18.3)
	2009	19.4 (17.7-21.1)	16.4 (15.2-17.7)	16.3 (15.0-17.7)	21.4 (19.8-23.0)	17.9 (16.8-18.9)
	2010	20.5 (18.5-22.5)	18.1 (16.6-19.6)	16.5 (14.9-18.0)	25.5 (23.5-27.4)	19.2 (18.0-20.5)
Emergency department care rated as excellent, very good or good	1997	80.4 (77.5-83.3)	79.6 (76.6-82.7)	77.3 (74.1-80.5)	84.0 (81.7-86.4)	80.1 (78.0-82.2)
	1998	82.5 (79.5-85.5)	78.6 (75.7-81.5)	77.5 (74.4-80.7)	85.7 (83.4-88.0)	80.7 (78.6-82.8)
	2002	79.8 (75.8-83.7)	72.6 (68.7-76.6)	75.6 (71.7-79.5)	77.3 (73.4-81.1)	76.3 (73.5-79.1)
	2003	80.2 (76.1-84.3)	77.9 (74.2-81.5)	74.1 (70.0-78.3)	86.8 (84.4-89.3)	79.1 (76.3-81.8)
	2004	76.9 (71.9-81.8)	81.1 (77.3-85.0)	76.2 (71.8-80.7)	83.5 (79.7-87.4)	78.9 (75.7-82.1)
	2005	85.7 (82.0-89.3)	75.6 (71.5-79.8)	77.2 (73.1-81.3)	86.6 (83.7-89.5)	80.7 (77.9-83.5)
	2006	84.0 (79.6-88.3)	78.4 (73.9-82.8)	78.3 (73.7-83.0)	85.5 (82.0-89.0)	81.1 (78.0-84.3)
	2007	81.1 (77.3-84.9)	77.5 (74.2-80.8)	78.0 (74.4-81.6)	81.6 (78.3-84.8)	79.4 (76.9-81.9)
	2008	77.3 (73.1-81.5)	78.3 (74.5-82.1)	75.3 (71.3-79.3)	81.4 (77.8-85.0)	77.8 (75.0-80.6)
	2009	81.3 (77.5-85.1)	76.6 (73.2-80.1)	78.5 (75.0-82.1)	80.1 (76.6-83.6)	79.1 (76.5-81.7)
	2010	77.9 (73.2-82.6)	73.6 (68.8-78.3)	72.8 (67.9-77.6)	80.5 (76.3-84.7)	75.7 (72.4-79.1)
Hospital admission in the last 12 months	1997	11.3 (10.4-12.1)	14.6 (13.7-15.5)	12.1 (11.3-12.9)	15.0 (14.1-15.9)	13.0 (12.3-13.6)
	1998	11.4 (10.5-12.4)	15.3 (14.4-16.2)	12.7 (11.8-13.5)	14.9 (14.0-15.8)	13.4 (12.7-14.0)
	2002	11.0 (9.9-12.2)	16.0 (14.8-17.3)	13.0 (12.0-14.1)	14.7 (13.4-15.9)	13.6 (12.7-14.4)
	2003	12.3 (11.1-13.5)	14.9 (13.8-16.0)	12.9 (11.9-14.0)	15.2 (14.0-16.4)	13.6 (12.8-14.4)
	2004	12.3 (10.9-13.7)	14.6 (13.2-16.0)	12.8 (11.5-14.1)	15.1 (13.7-16.4)	13.5 (12.5-14.5)
	2005	11.5 (10.4-12.7)	15.7 (14.6-16.9)	13.4 (12.3-14.4)	14.4 (13.2-15.6)	13.7 (12.9-14.5)
	2006	12.7 (11.3-14.1)	15.4 (14.1-16.8)	13.7 (12.4-15.0)	14.8 (13.4-16.3)	14.1 (13.1-15.1)
	2007	12.0 (10.9-13.1)	16.1 (15.0-17.2)	13.5 (12.5-14.5)	15.3 (14.1-16.5)	14.1 (13.3-14.9)
	2008	11.1 (9.9-12.4)	17.1 (15.8-18.4)	13.5 (12.3-14.7)	15.5 (14.2-16.9)	14.2 (13.3-15.1)
	2009	13.0 (11.7-14.3)	16.4 (15.1-17.7)	14.4 (13.2-15.6)	15.6 (14.2-16.9)	14.7 (13.8-15.7)
	2010	15.0 (13.4-16.7)	17.1 (15.7-18.6)	15.3 (13.8-16.7)	18.1 (16.6-19.6)	16.1 (15.1-17.2)
Hospital care rated as excellent, very good or good	1997	90.2 (87.8-92.7)	89.9 (87.9-91.9)	89.3 (87.1-91.6)	91.3 (89.5-93.1)	90.0 (88.5-91.6)
	1998	92.6 (90.4-94.7)	89.9 (88.0-91.8)	90.7 (88.8-92.6)	91.6 (89.7-93.6)	91.0 (89.6-92.5)
	2002	93.4 (90.6-96.2)	88.9 (85.9-91.9)	90.5 (87.8-93.3)	90.9 (87.5-94.2)	90.7 (88.6-92.9)
	2003	92.9 (90.2-95.7)	89.9 (87.6-92.3)	90.9 (88.5-93.3)	92.0 (89.7-94.3)	91.3 (89.5-93.0)
	2004	91.7 (88.5-94.9)	90.4 (87.5-93.4)	90.9 (88.0-93.9)	91.0 (88.2-93.8)	91.0 (88.8-93.2)
	2005	93.6 (91.1-96.1)	90.5 (88.0-93.0)	92.0 (89.7-94.3)	91.6 (88.8-94.3)	91.8 (90.0-93.6)
	2006	91.0 (87.5-94.6)	89.5 (86.5-92.5)	89.7 (86.6-92.8)	91.3 (88.4-94.1)	90.2 (87.9-92.5)
	2007	91.3 (88.7-93.8)	88.3 (85.9-90.7)	89.3 (86.9-91.6)	90.4 (88.2-92.7)	89.6 (87.8-91.3)
	2008	91.7 (88.4-94.9)	86.3 (83.1-89.5)	88.2 (85.1-91.3)	89.2 (86.0-92.5)	88.4 (86.0-90.7)
	2009	92.0 (89.2-94.8)	89.2 (86.6-91.8)	89.8 (87.3-92.4)	91.6 (89.4-93.9)	90.4 (88.5-92.3)
	2010	89.6 (85.1-94.1)	86.4 (82.5-90.4)	86.4 (82.3-90.6)	90.3 (87.0-93.5)	87.8 (84.9-90.8)
Visited a general practice in the last 12 months	1997	85.0 (83.9-86.0)	90.6 (89.8-91.3)	87.6 (86.8-88.5)	88.2 (87.3-89.1)	87.8 (87.2-88.4)
	1998	82.7 (81.5-83.8)	89.7 (88.9-90.5)	87.4 (86.5-88.3)	83.5 (82.5-84.6)	86.2 (85.5-86.9)
	2007	78.8 (77.2-80.4)	87.3 (86.3-88.4)	83.5 (82.2-84.7)	82.5 (81.1-84.0)	83.2 (82.2-84.1)
	2008	81.7 (79.9-83.4)	90.5 (89.5-91.6)	86.8 (85.5-88.1)	84.6 (83.0-86.2)	86.2 (85.1-87.2)
	2009	80.9 (79.0-82.7)	89.9 (88.9-91.0)	86.4 (85.0-87.8)	83.4 (81.8-85.0)	85.5 (84.4-86.5)
	2010	95.1 (94.0-96.2)	97.4 (96.8-98.0)	96.9 (96.2-97.6)	95.0 (93.9-96.2)	96.3 (95.7-96.9)
General practice care rated as excellent, very good or good	2007	93.1 (92.0-94.1)	93.5 (92.7-94.3)	93.1 (92.2-93.9)	93.9 (93.0-94.8)	93.3 (92.7-94.0)
	2008	94.1 (93.0-95.3)	93.2 (92.3-94.2)	93.5 (92.5-94.5)	94.1 (93.1-95.1)	93.7 (92.9-94.4)

Indicator	Year	Males % (95% CI)	Females % (95% CI)	Metropolitan % (95% CI)	Rural-regional % (95% CI)	All % (95% CI)
	2009	94.0 (92.8-95.1)	93.1 (92.2-94.1)	93.6 (92.7-94.6)	93.3 (92.2-94.3)	93.5 (92.8-94.3)
	2010	94.4 (93.2-95.6)	95.0 (94.0-95.9)	94.5 (93.6-95.5)	95.2 (94.3-96.0)	94.7 (93.9-95.4)
Public dental service attendance in the last 12 months	2002	3.9 (3.1-4.7)	5.3 (4.5-6.1)	4.3 (3.6-5.0)	5.5 (4.7-6.3)	4.6 (4.1-5.2)
	2003	3.8 (3.2-4.4)	4.7 (4.1-5.4)	3.8 (3.2-4.3)	5.5 (4.7-6.2)	4.3 (3.8-4.7)
	2004	5.3 (4.3-6.2)	5.7 (4.8-6.6)	5.1 (4.3-5.9)	6.5 (5.4-7.6)	5.5 (4.8-6.1)
	2005	4.9 (4.1-5.8)	5.4 (4.7-6.1)	4.7 (4.0-5.4)	6.2 (5.3-7.1)	5.2 (4.6-5.7)
	2006	3.9 (2.9-4.8)	4.6 (3.8-5.4)	4.1 (3.3-4.9)	4.5 (3.6-5.4)	4.2 (3.6-4.8)
	2007	5.1 (4.3-5.9)	5.1 (4.5-5.8)	4.8 (4.1-5.4)	5.9 (5.1-6.8)	5.1 (4.6-5.6)
	2008	5.2 (4.2-6.2)	5.8 (5.0-6.6)	5.5 (4.6-6.3)	5.7 (4.8-6.6)	5.5 (4.9-6.1)
	2009	4.8 (3.9-5.7)	5.9 (5.1-6.7)	4.9 (4.2-5.7)	6.3 (5.4-7.3)	5.3 (4.7-5.9)
	2010	6.0 (4.9-7.1)	7.1 (6.0-8.2)	6.2 (5.2-7.2)	7.6 (6.4-8.8)	6.6 (5.8-7.4)
Public dental service care rated as excellent, very good, or good	2002	82.2 (75.0-89.5)	81.1 (75.5-86.6)	82.4 (76.5-88.4)	79.6 (73.0-86.1)	81.6 (77.1-86.0)
	2003	85.8 (80.5-91.2)	85.1 (80.1-90.0)	87.0 (82.1-91.9)	83.3 (78.0-88.5)	85.4 (81.8-89.0)
	2004	81.7 (73.9-89.6)	88.3 (83.6-93.0)	85.2 (78.9-91.4)	85.2 (79.2-91.3)	85.2 (80.6-89.7)
	2006	86.4 (77.5-95.2)	82.4 (76.0-88.9)	83.6 (76.4-90.8)	85.3 (78.4-92.1)	84.2 (78.9-89.5)
	2007	88.5 (83.2-93.9)	85.6 (81.6-89.5)	86.8 (82.1-91.4)	87.8 (84.0-91.6)	87.0 (83.7-90.3)
	2008	86.8 (79.0-94.5)	86.9 (82.5-91.3)	87.3 (81.7-93.0)	85.7 (79.6-91.7)	86.8 (82.5-91.1)
	2009	89.4 (83.3-95.5)	87.7 (83.1-92.4)	88.4 (83.2-93.7)	88.3 (83.7-92.9)	88.5 (84.7-92.2)
	2010	92.4 (88.6-96.2)	88.0 (83.3-92.8)	90.8 (86.8-94.7)	88.0 (82.7-93.3)	89.9 (86.7-93.1)
Community health centre attendance in the last 12 months	2002	4.8 (4.0-5.6)	8.9 (8.0-9.9)	6.1 (5.3-6.9)	8.8 (7.9-9.8)	6.9 (6.3-7.5)
	2003	3.6 (2.9-4.3)	6.5 (5.8-7.2)	4.3 (3.7-4.9)	6.9 (6.1-7.6)	5.1 (4.6-5.6)
	2004	5.9 (4.8-6.9)	7.9 (6.9-8.9)	6.3 (5.4-7.2)	8.4 (7.4-9.4)	6.9 (6.2-7.6)
	2005	6.2 (5.3-7.2)	8.8 (7.9-9.7)	7.1 (6.2-8.0)	8.4 (7.5-9.4)	7.5 (6.9-8.2)
	2006	5.7 (4.7-6.8)	8.8 (7.7-9.9)	6.8 (5.8-7.8)	8.5 (7.4-9.7)	7.3 (6.5-8.1)
	2007	5.8 (5.0-6.7)	9.7 (8.8-10.6)	7.0 (6.2-7.8)	9.7 (8.7-10.7)	7.8 (7.2-8.4)
	2008	6.0 (5.0-6.9)	10.0 (9.0-11.0)	6.7 (5.9-7.6)	11.1 (9.8-12.3)	8.0 (7.3-8.7)
	2009	6.2 (5.2-7.2)	9.5 (8.5-10.6)	6.8 (5.9-7.6)	10.3 (9.2-11.5)	7.9 (7.2-8.6)
	2010	7.6 (6.3-9.0)	10.9 (9.6-12.2)	8.2 (7.0-9.4)	11.9 (10.5-13.4)	9.3 (8.4-10.3)
Community health centre care rated as excellent, very good, or good	2002	91.7 (87.1-96.4)	93.6 (90.8-96.3)	91.9 (88.3-95.5)	94.5 (92.2-96.8)	92.9 (90.5-95.3)
	2003	94.2 (90.1-98.3)	93.3 (90.5-96.1)	93.0 (89.4-96.6)	94.4 (92.0-96.8)	93.6 (91.3-95.9)
	2004	86.6 (80.4-92.9)	94.7 (91.7-97.7)	89.3 (84.5-94.0)	95.0 (92.4-97.6)	91.4 (88.2-94.5)
	2006	92.4 (88.1-96.7)	90.8 (86.5-95.1)	90.7 (86.5-94.9)	92.6 (88.1-97.1)	91.4 (88.3-94.6)
	2008	91.1 (86.5-95.7)	92.2 (89.2-95.3)	90.5 (86.6-94.5)	94.2 (91.8-96.5)	91.8 (89.2-94.4)
	2009	86.3 (80.1-92.6)	91.8 (89.0-94.7)	88.5 (83.9-93.0)	91.6 (88.4-94.7)	89.7 (86.7-92.7)
	2010	92.1 (87.9-96.3)	91.8 (88.4-95.1)	90.1 (86.2-94.1)	94.6 (92.0-97.2)	91.9 (89.3-94.5)

Note: Indicators include adults 16 years and over unless specified.

Source: New South Wales Population Health Survey 2010 (HOIST), Centre for Epidemiology and Research, NSW Department of Health.