

# New South Wales Population Health Survey

2009 Report  
on  
Adult Health



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**CENTRE FOR EPIDEMIOLOGY AND RESEARCH**

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# Contents

<b>FOREWORD</b>	4
<b>ACKNOWLEDGEMENTS</b>	5
<b>EXECUTIVE SUMMARY</b>	6
<b>METHODS</b>	11
Outcomes of telephone calls	14
Completed interviews and response rates by area health service	14
Completed interviews by language	14
<b>REPRESENTATIVENESS OF SAMPLE</b>	15
Survey sample size and NSW population by age group and sex	15
Age distribution of unweighted survey sample versus NSW population by sex	16
Socioeconomic Index (SEIFA) quintile	16
Accessibility-Remoteness Index of Australia Plus (ARIA+)	17
Survey conducted in languages other than English	17
Aboriginal or Torres Strait Islander origin	18
Country of birth	18
Formal marital status	19
Household income	19
<b>HEALTH BEHAVIOURS</b>	20
<b>Alcohol and cannabis</b>	21
Risk alcohol drinking	23
More than 2 standard drinks on a day when drinking alcohol	24
Current cannabis smoking	25
<b>Cancer screening: colorectal</b>	27
Types of bowel investigation ever had	29
Had a faecal occult blood test to screen for colorectal cancer in the last 2 years	29
<b>Environmental health</b>	31
Usual source of drinking water	33
Type of water treatment	33
Use public water as usual source of water	34
Exposure to road traffic noise	36
Types of road traffic noise	37
Effects of road traffic noise	38
<b>Food handling</b>	39
Washes hands with soap after preparing raw meat	40
<b>Immunisation</b>	42
Vaccinated against influenza in the last 12 months	45
Vaccinated against influenza in the last 12 months	47
Vaccinated against H1N1 influenza since 1 October 2009	49
Last pneumococcal disease vaccination	50
Vaccinated against pneumococcal disease in the last 5 years	51
Vaccinated against pneumococcal disease in the last 5 years	53
<b>Injury prevention</b>	55
Smoke alarm or detector in the home	57
Live in homes with a smoke alarm or detector	57
Last tested battery operated smoke alarm	59
Last tested hard wired operated smoke alarm	60
Lives in home with an emergency escape plan and most recent practice of plan	60
Lives in home with an emergency escape plan practiced in the last 12 months	61
<b>Nutrition</b>	63
Daily number of serves of fruit	69
Two or more serves of fruit a day	69
Daily number of serves of vegetables	71
Five or more serves of vegetables a day	72
Frequency of consuming bread	74
Consumes bread once a day or more	74
Frequency of consuming pasta, rice, noodles, or other cooked cereal	76
Consumes pasta, rice, noodles, or other cooked cereals 7 times a week or more	77
Frequency of consuming breakfast cereals	79
Consumes breakfast cereals 2 times a week or more	79
Frequency of consuming red meat	81

Type of milk usually consumed	82
Usually consumes lower fat or skim milk	82
Frequency of consuming hot fried potatoes	84
Frequency of consuming potato crisps or salty snacks	85
Frequency of consuming processed meat products	85
Cups of soft drinks or cordials or sports drinks consumed a week	86
Frequency of consuming takeaway food	86
Food insecurity in the last 12 months	87
<b>Physical activity</b>	89
Adequate physical activity	91
Usual transport to work	93
<b>Smoking</b>	94
Smoking status	98
Current smoking	98
Daily smoking	100
Doctor advised to quit smoking	102
Exposure to tobacco smoke in household	104
Live in smoke-free households	105
Bans smoking in car	107
<b>HEALTH STATUS</b>	109
<b>Health-related quality of life</b>	110
Self-rated health	112
Excellent, very good, or good self-rated health status	112
<b>Asthma</b>	115
Ever diagnosed with asthma	117
Current asthma	119
Written asthma action plan	121
Current smoking	122
<b>Diabetes or high blood glucose</b>	125
Diabetes or high blood glucose	126
<b>Urinary incontinence</b>	128
Incontinence status in the last 4 weeks	129
Urinary incontinence in the last 4 weeks	129
<b>Mental health</b>	132
Psychological distress by Kessler 10 categories	134
High and very high psychological distress	134
Times that physical health problems have been the main cause of psychological distress in last 4 weeks	136
Effect of psychological stress on daily activities	137
<b>Oral health</b>	138
All natural teeth missing	141
Time since last dental visit	143
Visited a dental professional in the last 12 months	143
Type of dental service last visited	145
Has private health insurance for dental expenses	146
Payment for last dental visit	147
Cost of last dental visit before any insurance rebate	148
Patient paid for some or all of last dental visit	148
<b>Population weight status</b>	150
Body Mass Index categories	153
Overweight	153
Obese	155
Overweight or obese	157
<b>HEALTH SERVICES</b>	160
<b>Health service use and access</b>	161
Health services attended in last 12 months	163
Private health insurance	163
Difficulties getting health care when needing it	165
Types of difficulties getting health care when needing it	167
<b>Emergency department presentations</b>	168
Emergency department presentation in the last 12 months	170
Emergency department care ratings	172
Emergency department care rated as excellent, very good or good	172
Reason for rating most recent emergency visit as fair or poor	174

<b>Hospital admissions</b>	175
Hospital admission in the last 12 months	176
Hospital care ratings	178
Hospital care rated as excellent, very good or good	178
Reason for rating most recent overnight hospital stay as fair or poor	180
<b>General practice visits</b>	181
When last visited a general practice	183
Visited a general practice in the last 2 weeks	183
Visited a general practice in the last 12 months	185
General practice care ratings	187
General practice care rated as excellent, very good or good	188
Reason for rating most recent general practice visit as fair or poor	190
<b>Public dental service attendances</b>	191
Public dental service attendance in the last 12 months	192
Public dental service care rating	194
Public dental service care rated as excellent, very good, or good	194
<b>Community health centre attendances</b>	197
Community health centre attendance in the last 12 months	198
Community health centre care ratings	200
Community health centre care rated as excellent, very good, or good	200
<b>SOCIAL CAPITAL</b>	203
<b>Social capital</b>	204
Most people can be trusted	209
Feels safe walking down their street after dark	211
Area has a reputation for being a safe place	213
Visited neighbours in the last week	215
Ran into friends and acquaintances when shopping in local area	217
Would feel sad to leave their neighbourhood	219
Participated in group recreational, cultural, sporting, artistic, or religious activity in the last 12 months	221
Participated in a group recreational, cultural, or religious activity	221
Participated in a sport or physical activity	223
<b>CONCLUSION</b>	226
<b>Trends in adult health</b>	227
Trends in health behaviours	229
Trends in health status	234
Trends in health services	236
Trends in social capital	238
<b>QUESTION MODULES</b>	239

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# Foreword

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I am pleased to present the 2009 Report on Adult Health from the New South Wales Population Health Survey, which provides information on health behaviours, health status, health service use and access, and social capital, for adults aged 16 years and over.

In 2009, data for the New South Wales Population Health Survey were collected from February to December.

After describing the survey methods, this report presents information on health behaviours including: alcohol and cannabis, cancer screening (colorectal), environmental health (usual source of drinking water and exposure to road traffic noise), food handling (handwashing when preparing raw meat), immunisation (influenza, swine flu, and pneumococcal), injury prevention (fire safety in the home), nutrition, physical activity, and tobacco smoking (including passive smoking). This is followed by a chapter on health status including: health-related quality of life (self-rated health), asthma, diabetes or high blood glucose, urinary incontinence, mental health (psychological distress), oral health, and population weight status. Next there is a chapter on health services including: health service use and access, private health insurance, difficulties getting health care, emergency department presentations, hospital admissions, general practice visits, public dental service attendances, and community health centre attendances. Finally, there is a chapter on social capital.

These indicators 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 area health service, 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](http://www.health.nsw.gov.au/publichealth/surveys/index.asp).

This is a descriptive report and there is a wealth of other information in the survey dataset that may be of specific interest. For these reasons we encourage as many people as possible to analyse the data further. For further analysis within an area health service, data can be accessed through the Health Outcomes Information Statistical Toolkit (HOIST). For further analysis among area health services, or at a statewide level, a data request needs to be lodged with the NSW Department of Health.

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 2009.



**Kerry Chant**  
Chief Health Officer and Deputy Director-General, Population Health  
November 2010

# Acknowledgements

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# Executive summary

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## Introduction

In 2009, the NSW Department of Health, in conjunction with the 8 area health services, completed the eighth 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). The main aims of the survey are to: provide information on the health of the people of New South Wales; support the planning, implementation and evaluation of health services and programs in New South Wales.

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 reporting plan for the continuous survey includes an annual report on adult health for the whole state and annual reports on adult health for selected indicators by area health service.

This 2009 Report on Adult Health from the New South Wales Population Health Survey reports the health of NSW residents aged 16 years and over.

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 2009, and questions developed specifically for some of the 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.

Interviews were carried out continuously between February and December. The target population for the adult report was all New South Wales residents aged 16 years and over living in households with private telephones. Households were sampled using list-assisted random digit dialling. When a household was contacted, one person was randomly selected for interview. Information for the report was collected on 10,719 adults in 2009.

## Health behaviours

In 2009, the New South Wales Population Health Survey collected information on a range of health behaviours including: alcohol and cannabis, cancer screening (colorectal), environmental health (usual source of drinking water and exposure to road traffic noise), food handling (handwashing when preparing raw meat), immunisation (influenza, swine flu, and pneumococcal), injury prevention (fire safety in the home), nutrition, physical activity, and tobacco smoking (including passive smoking).

Over 3 in 10 adults (30.4 per cent) engaged in any risk drinking behaviour as defined by the 2009 guidelines. A significantly higher proportion of males (41.4 per cent) than females (19.8 per cent) engaged in any risk drinking behaviour. A significantly higher proportion of adults in rural health areas (35.5 per cent) than urban health areas (28.2 per cent) engaged in any risk drinking behaviour.

Over 1 in 20 adults aged 16-34 years (5.1 per cent) currently smoked cannabis. A significantly higher proportion of males (6.7 per cent) than females (3.4 per cent) currently smoked cannabis. There was no significant difference between urban and rural health areas.

Under 2 in 10 adults aged 50 years and over (19.4 per cent) had a faecal occult blood test (FOBT) in the last 2 years for bowel cancer screening and not as part of follow-up treatment. There was no significant difference between males and females. A significantly higher proportion of adults in rural health areas (22.5 per cent) than urban health areas (17.9 per cent) had a screening FOBT in the last 2 years.

Over 8 in 10 adults (85.6 per cent) used a public water supply as their usual source of drinking water. A significantly higher proportion of adults in urban health areas (91.2 per cent) than rural health areas (72.5 per cent) used a public water supply as their usual source of drinking water.

Under 5 in 10 adults (45.8 per cent) were exposed to road traffic noise when they stood in their home or yard. A significantly higher proportion of adults in urban health areas (46.9 per cent) than rural health areas (42.8 per cent) were exposed to road traffic noise when they stood in their home or yard. Among those adults who were exposed to road traffic noise when they stood in their home or yard, there were multiple effects



which included: no disturbance (66.8 per cent), annoyance (27.0 per cent), disturbed sleep (18.5 per cent), stress (7.3 per cent), difficulty reading or studying (7.1 per cent), anxiety (4.3 per cent), headache (4.0 per cent), and depression (1.7 per cent).

Over 7 in 10 adults (71.7 per cent) washed their hands with soap after preparing raw meat. A significantly lower proportion of males (67.8 per cent) than females (74.8 per cent) washed their hands with soap after preparing raw meat. A significantly lower proportion of adults in rural areas (68.7 per cent) than urban areas (73.0 per cent) washed their hands with soap after preparing raw meat.

Over 7 in 10 adults aged 65 years and over (72.6 per cent) were immunised against influenza in the last 12 months. A significantly lower proportion of males (70.0 per cent) than females (74.8 per cent) were immunised against influenza in the last 12 months. There was no significant difference between urban and rural health areas.

Under 2 in 10 adults aged 16 years and over (15.6 per cent) were vaccinated against H1N1 influenza since 1 October 2009. There was no significant difference between males and females or between urban and rural health areas.

Under 6 in 10 adults aged 65 years and over (56.0 per cent) were immunised against pneumococcal disease in the last 5 years. A significantly lower proportion of males (53.7 per cent) than females (57.9 per cent) were immunised against pneumococcal disease. A significantly higher proportion of adults in rural health areas (61.6 per cent) than urban health areas (52.7 per cent) were immunised against pneumococcal disease in the last 5 years.

Over 9 in 10 adults (93.7 per cent) lived in homes with a smoke alarm or detector, whether battery operated or hard wired or both. A significantly higher proportion of adults in rural health areas (95.2 per cent) than urban health areas (93.1 per cent) lived in homes with a smoke alarm or detector.

Under 1 in 20 adults (4.9 per cent) lived in homes with an emergency escape plan practised in the last 12 months. A significantly higher proportion of adults in rural health areas (7.4 per cent) than urban health areas (3.8 per cent) lived in homes with an emergency escape plan practised in the last 12 months.

Under 6 in 10 adults (56.8 per cent) consumed 2 or more serves of fruit a day. A significantly lower proportion of males (52.5 per cent) than females (60.9 per cent) consumed 2 or more serves of fruit a day. There was no significant difference between rural and urban health areas.

Over 1 in 10 adults (10.4 per cent) consumed 5 or more serves of vegetables a day. A significantly lower proportion of males (7.5 per cent) than females (13.2 per cent) consumed 5 or more serves of vegetables a day. A significantly higher proportion of adults in rural health areas (14.1 per cent) than urban health areas (8.8 per cent) consumed 5 or more serves of vegetables a day.

Over 7 in 10 adults (74.5 per cent) consumed bread once a day or more. A significantly higher proportion of males (78.9 per cent) than females (70.2 per cent) consumed bread once a day or more. There was no significant difference between urban and rural health areas.

Under 2 in 10 adults (16.3 per cent) consumed pasta, rice, noodles, or other cooked cereals 7 times a week or more. There was no significant difference between males and females. A significantly lower proportion of adults in rural health areas (6.3 per cent) than urban health areas (20.5 per cent) consumed pasta, rice, noodles, or other cooked cereals 7 times a week or more.

Over 6 in 10 adults (64.7 per cent) consumed breakfast cereal 2 times a week or more. There was no significant difference between males and females. A significantly higher proportion of adults in rural health areas (67.1 per cent) than urban health areas (63.7 per cent) consumed breakfast cereal 2 times a week or more.

Under 5 in 10 adults (48.2 per cent) usually consumed low or reduced fat or skim milk. A significantly lower proportion of males (42.3 per cent) than females (53.9 per cent) usually consumed low or reduced fat or skim milk. There was no significant difference between urban and rural health areas.

In 2009, 29.3 per cent of adults rarely or never consumed fried potatoes (hot chips, french fries, wedges, or fried potatoes), 46.4 per cent rarely or never consumed potato crisps or other salty snacks, 23.4 per cent of adults rarely or never consumed processed meat products (sausages, frankfurts, devon, salami, meat pies, bacon, or ham), 47.8 per cent never consumed soft drinks or cordials or sports drinks, and 39.1 per cent of adults rarely or never consumed takeaway foods (such as burgers, pizza, chicken or chips from takeaway places).

Under 1 in 20 adults (4.8 per cent) experienced some food insecurity in the last 12 months. A significantly lower proportion of males (3.7 per cent) than females (5.8 per cent) experienced some food insecurity in the last 12 months. There was no significant difference between urban and rural health areas.

Over 5 in 10 adults (55.2 per cent) undertook adequate levels of physical activity. A significantly higher proportion of males (60.7 per cent) than females (49.8 per cent) undertook adequate levels of physical activity. There was no significant difference between urban and rural health areas.

Among adults who were employed, the usual form of transport to work was: car as driver (70.9 per cent), train (10.5 per cent), work at home (7.2 per cent), walk only (5.9 per cent), bus (5.1 per cent), car as passenger (4.5 per cent), bicycle (1.7 per cent), walk part of the way (1.5 per cent), motorbike or motor scooter (0.9 per cent), truck (0.5 per cent), ferry (0.5 per cent), taxi (0.3 per cent), and tram including light rail (0.1 per cent).

Under 2 in 10 adults (17.2 per cent) were current (daily or occasional) smokers. A significantly higher proportion of males (20.3 per cent) than females (14.2 per cent) were current smokers. A significantly higher proportion of adults in rural areas (18.7 per cent) than urban areas (16.6 per cent) were current smokers.

Under 5 in 10 adults who smoked (46.2 per cent) were advised to quit smoking the last time they visited their general practitioner. There was no significant difference between males and females, or between rural and urban health areas.

Over 9 in 10 adults (91.9 per cent) lived in homes that were smoke-free. There was no significant difference between rural and urban health areas.

Over 9 in 10 adults with cars (91.4 per cent) said smoking was not allowed in their car. There was no significant difference between rural and urban health areas.

## Health status

In 2009, 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, urinary incontinence, mental health (psychological distress), oral health, and population weight status.

Under 8 in 10 adults (79.9 per cent) rated their health positively (as excellent, very good, or good). A significantly higher proportion of males (81.4 per cent) than females (78.4 per cent) rated their health positively. There was no significant difference between urban health areas and rural health areas.

Under 2 in 10 adults (19.6 per cent) had ever been told by a doctor or hospital they had asthma. A significantly lower proportion of males (17.2 per cent) than females (22.0 per cent) ever had asthma. A significantly higher proportion of adults in rural health areas (22.7 per cent) than urban health areas (18.3 per cent) ever had asthma.

Over 1 in 10 adults (10.5 per cent) have current asthma; that is, doctor diagnosed asthma with recent symptoms or treatment. A significantly lower proportion of males (8.5 per cent) than females (12.5 per cent) have current asthma. A significantly higher proportion of adults in rural health areas (11.8 per cent) than urban health areas (9.9 per cent) have current asthma.

Under 3 in 10 adults with current asthma (29.0 per cent) have a written asthma action plan; that is, written instructions of what to do if their asthma is worse or out of control. A significantly lower proportion of males (23.8 per cent) than females (32.5 per cent) with current asthma have a written asthma action plan. There was no significant difference between urban and rural health areas.

Under 2 in 10 adults with current asthma (19.0 per cent) were current smokers. There was no significant difference between males and females. A significantly higher proportion of adults in rural health areas (23.9 per cent) than urban health areas (16.5 per cent) with current asthma were current smokers.

Under 1 in 10 adults (8.2 per cent) had ever been told by a doctor or hospital they had diabetes or high blood glucose. A significantly higher proportion of males (9.4 per cent) than females (7.0 per cent) had ever been told by a doctor or hospital they had diabetes or high blood glucose. There was no significant difference between urban and rural health areas.

Under 2 in 10 adults aged 40 years and over (19.8 per cent) experienced urinary incontinence some or most of the time in the last 4 weeks. A significantly lower proportion of males (11.0 per cent) than females (28.1 per cent) experienced urinary incontinence in the last 4 weeks. There was no significant difference between urban and rural health areas.

Over 1 in 10 adults (11.5 per cent) experienced high or very high levels of psychological distress in the last 4 weeks. There was no significant difference between males and females, or between urban and rural health areas.

Over 1 in 20 adults (5.3 per cent) had all their natural teeth missing (edentulism). A significantly lower proportion of males (4.5 per cent) than females (6.0 per cent) had all their natural teeth missing. A significantly higher proportion of adults in rural health areas (7.4 per cent) than urban health areas (4.5 per cent) had all their natural teeth missing.

Under 6 in 10 adults (59.6 per cent) visited a dental professional less than 12 months ago. A significantly lower proportion of males (57.5 per cent) than females (61.7 per cent) visited a dental professional less than 12 months ago. A significantly lower proportion of adults in rural health areas (55.6 per cent) than urban health areas (61.1 per cent) visited a dental professional less than 12 months ago.

Under 5 in 10 adults (49.4 per cent) have private health insurance for dental expenses. There was no significant difference between males and females. A significantly lower proportion of adults in rural health areas (41.2 per cent) than urban health areas (52.5 per cent) has private health insurance for dental expenses.

Over 8 in 10 adults (82.2 per cent) who visited a dental professional in the last 12 months paid for some or all of their last dental visit. There was no significant difference between males and females. A significantly higher proportion of adults in rural health areas (84.5 per cent) than urban health areas (81.4 per cent) who visited a dental professional in the last 12 months paid for some or all of their last dental visit.

Among those adults 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 (52.7 per cent), \$200 to \$399 (26.3 per cent), \$400 to \$599 (7.6 per cent), \$600 to \$799 (2.1 per cent), \$800 to \$999 (2.0 per cent), and \$1,000 or over (9.2 per cent).

Over 3 in 10 adults (33.1 per cent) were overweight: that is, had a BMI between 25 to 30. A significantly higher proportion of males (40.1 per cent) than females (26.0 per cent) were overweight. There was no significant difference between urban and rural health areas.

Under 2 in 10 adults (19.4 per cent) were obese: that is, had a BMI of 30 or over. There was no significant difference between males and females. A significantly higher proportion of adults in rural health areas (22.5 per cent) than urban health areas (18.1 per cent) were obese.

Over 5 in 10 adults (52.5 per cent) were overweight or obese: that is, had a BMI of 25 or over. A significantly higher proportion of males (59.5 per cent) than females (45.4 per cent) were overweight or obese. A significantly higher proportion of adults in rural health areas (57.2 per cent) than urban health areas (50.5 per cent) were overweight or obese.

## Health service use and access

In 2009, the New South Wales Population Health Survey collected information on: health service use and access, private health insurance, difficulties getting health care, emergency department presentations, hospital admissions, general practice visits, public dental service attendances, and community health centre attendances.

Under 6 in 10 adults (56.3 per cent) were covered by private health insurance. There was no significant difference between males and females. A significantly higher proportion of adults in urban health areas (59.5 per cent) than rural health areas (48.8 per cent) were covered by private health insurance.

Excluding those who did not need health care, under 2 in 10 adults (17.6 per cent) experienced difficulties getting health care. A significantly lower proportion of males (15.9 per cent) than females (19.2 per cent) experienced difficulties getting health care. A significantly higher proportion of adults in rural health areas (27.6 per cent) than urban health areas (13.2 per cent) experienced difficulties getting health care. Among those who experienced difficulties getting health care, the main difficulties were: waiting time for an appointment with a general practitioner (47.9 per cent), shortage of health services (15.0 per cent), shortage

of general practitioners in area (14.2 per cent), quality of treatment (13.7 per cent), and difficulty in accessing specialists (11.3 per cent).

Overall, 17.9 per cent of adults presented to an emergency department in the last 12 months. Of these, 79.1 per cent rated the care received as excellent, very good, or good.

Overall, 14.7 per cent of adults were admitted to hospital in the last 12 months. Of these, 90.4 per cent rated the care received as excellent, very good, or good.

Overall, 85.5 per cent of adults visited a general practice in the last 12 months. Of these, 93.5 per cent rated the care received at their last visit as excellent, very good, or good.

Overall, 23.5 per cent of adults visited a general practitioner in the last 2 weeks.

Overall, 5.3 per cent of adults attended a public dental service in the last 12 months. Of these, 88.5 per cent rated the care received as excellent, very good, or good.

Overall, 7.9 per cent of adults attended a community health centre in the last 12 months. Of these, 89.7 per cent rated the care received as excellent, very good, or good.

## Social capital

The term social capital refers to the relationships and conventions that shape social networks, foster trust, and facilitate cooperation for mutual benefit. In 2009, the New South Wales Population Health Survey included questions on feelings of trust and safety, participation in the local community, and building harmonious communities.

Overall, 71.4 per cent agreed that most people can be trusted, 73.1 per cent felt safe walking down their street after dark, with more males than females feeling safe, and 75.0 per cent felt their area had a reputation for being safe.

Overall, 61.0 per cent of adults visited neighbours in the last week, 81.9 per cent ran into friends and acquaintances when shopping in their local area, and 71.9 per cent said they would feel sad if they had to leave their neighbourhood.

Overall, 54.0 per cent of adults took part in a group recreational, cultural, or religious activity in the last 12 months, and 51.3 per cent of adults took part in a sport or physical activity in the last 12 months.

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# Methods

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## Introduction

In 2009, the NSW Department of Health, in conjunction with the 8 area health services, completed the eighth 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). The main aims of the survey are to: provide information on the health of the people of New South Wales; support the planning, implementation and evaluation of health services and programs in New South Wales.

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 reporting plan for the continuous survey includes an annual report on adult health for the whole state and annual reports on adult health for selected indicators by area health service.

This section describes the methods used for the 2009 Report on Adult Health from the New South Wales Population Health Survey, which reports the health of residents aged 16 years and over.

## Survey instrument

The survey instrument for the New South Wales Population Health Survey was developed by the Health Survey Program in consultation with key stakeholders, area health services, other government departments, and a range of experts.

The survey instrument included: questions used in previous surveys, new questions developed specifically for 2009, and questions developed specifically for some area health services. 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 prior to inclusion in the survey. The survey instrument was translated into 5 languages: Arabic, Chinese, Greek, Italian and Vietnamese.

## Survey sample

In 2009, the target population for the New South Wales Population Health Survey was all residents living in households with private telephones. The target sample comprised approximately 1,500 people in each of the 8 area health services (a total sample of 12,000).

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.<sup>[1,2]</sup> The geo-coded telephone numbers were assigned to statistical local areas and area health services. The proportion of numbers for each telephone prefix by area health service was calculated. 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 2009, interviews were carried out continuously between February and December. Selected households with addresses in the electronic phone book were sent a letter describing the aims and methods of the survey 2 weeks prior to initial attempts at telephone contact. An 1800 freecall contact number was provided for potential respondents to verify the authenticity of the survey and to 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.

## Call outcomes and response rates

In 2009, a total of 12,707 interviews were conducted, with at least 1,260 interviews in each area health service and 10,719 with adults aged 16 years or over. The overall participation rate was 58.7 per cent (the number of completed interviews divided by the sum of the number of completed interviews and the number of refusals).

## 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 2007 mid-year population estimates (excluding residents of institutions) for each area health service. Further information on the methods and weighting process is provided elsewhere.[3-4]

Call and interview data were manipulated and analysed using SAS version 9.2.[5] 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.[5]

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.[5]

In the online HTML version of the report, the bottom of each table contains 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 that indicator.

## Indices of geographic remoteness and socioeconomic disadvantage: ARIA and SEIFA

The Accessibility-Remoteness Index of Australia Plus (ARIA+) is the standard Australian Bureau of Statistics (ABS) endorsed measure of remoteness.[6] 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.[7] The SEIFA index used to provide breakdowns of the New South Wales Population Health Survey data in 2009 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 to the respondents in 2009 based on respondents' postcode of residence. Rates for each SEIFA quintile were calculated for several health indicators included in this report to enable socioeconomic comparisons.

## Definition of urban and rural

In this report, the term urban means the respondent lived in 1 of the 4 area health services designated as metropolitan: Northern Sydney & Central Coast, South Eastern Sydney and Illawarra, Sydney South West, and Sydney West. The term rural means the respondent lived in 1 of the 4 area health services designated as rural: Greater Southern, Greater Western, Hunter & New England, and North Coast.

## References

1. Australia on Disk [software]. Sydney: Australia on Disk, 2004.
2. MapInfo [software]. Troy, NY: MapInfo Corporation, 1997.
3. Barr M, Baker D, Gorringer 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](http://www.health.nsw.gov.au/resources/publichealth/surveys/health_survey_method.asp) (accessed 27 August 2010).
4. Steel D. *NSW Population Health Survey: Review of the Weighting Procedures*. Available online at [www.health.nsw.gov.au/pubs/2006/review\\_weighting.html](http://www.health.nsw.gov.au/pubs/2006/review_weighting.html) (accessed 27 August 2010).
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6. Australian Bureau of Statistics. *ASGC Remoteness Classification: Purpose and Use*. Census Paper No. 03/01. Commonwealth of Australia, 2003.
7. Australian Bureau of Statistics. *1996 Census of Population and Housing: Socio-Economic Indexes for Areas*, Information Paper, Catalogue no. 2039.0. Canberra: ABS, 1998.

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Please check HealthStats NSW for latest estimates

## Outcomes of telephone calls, NSW, 2009

Outcome	Number of telephone numbers
Unable to contact	13145
Not connected	33884
Business/institution telephone	6057
Fax number	4174
Household not in NSW or holiday house	436
Respondent away for duration of survey	1200
Respondents confused or deaf	1196
Non-translated language	1879
Refusal	8934
Complete	12707
Total	83612

**Note:** Operational data for the survey were downloaded using SAWTOOTH WinCati version 4.2. The data included the following information for each attempted 'telephone' number, including connected and non-connected numbers: the number dialled; the number of attempts of dialling to that number; the starting and ending time for each dialling attempt to the number; whether or not the number is listed in the Electronic White Pages; and whether the number dialled has led to a completed interview, or no answer, or a refusal, or a non-connected number, or any kind of out of scope number (including non-connected numbers, fax machines, unusual tones, business-institution numbers, and households not eligible).

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

## Completed interviews and response rates by area health service, NSW, 2009

Health Area	Adult respondents	Child respondents	Total respondents	Response rate (%)
Sydney South West	1457	267	1724	54.4
South Eastern Sydney & Illawarra	1335	237	1572	52.9
Sydney West	1264	301	1565	56.6
Northern Sydney & Central Coast	1307	233	1540	58.4
Hunter & New England	1353	237	1590	60
North Coast	1430	236	1666	63.7
Greater Southern	1291	241	1532	63.9
Greater Western	1282	236	1518	62.4
NSW	10719	1988	12707	58.7

**Note:** Operational data for the survey were downloaded using SAWTOOTH WinCati version 4.2. Response rates were calculated as the number of completed interviews divided by the sum of the number of completed interviews and number of refusals.

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

## Completed interviews by language, NSW, 2009

Language	Number of respondents
English	12310
Arabic	98
Chinese	168
Greek	38
Italian	28
Vietnamese	65
All	12707

**Note:** Operational data for the survey were downloaded using SAWTOOTH WinCati version 4.2.

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.



# Representativeness of sample

In 2009, adult males were under-represented in the New South Wales Population Health Survey, making up 40.0 per cent of the survey sample, compared with 49.6 per cent of the overall residential population of New South Wales. Conversely, females were over-represented, making up 60.0 per cent of the survey sample, compared with 50.4 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 New South Wales 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 2.1 per cent of the weighted survey 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 70.2 per cent of the survey sample, which is slightly higher than their representation in the overall residential population of New South Wales (69.0 per cent).[3]

## References

1. ABS estimated residential population for mid-year 2007 (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](http://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](http://www.abs.gov.au).

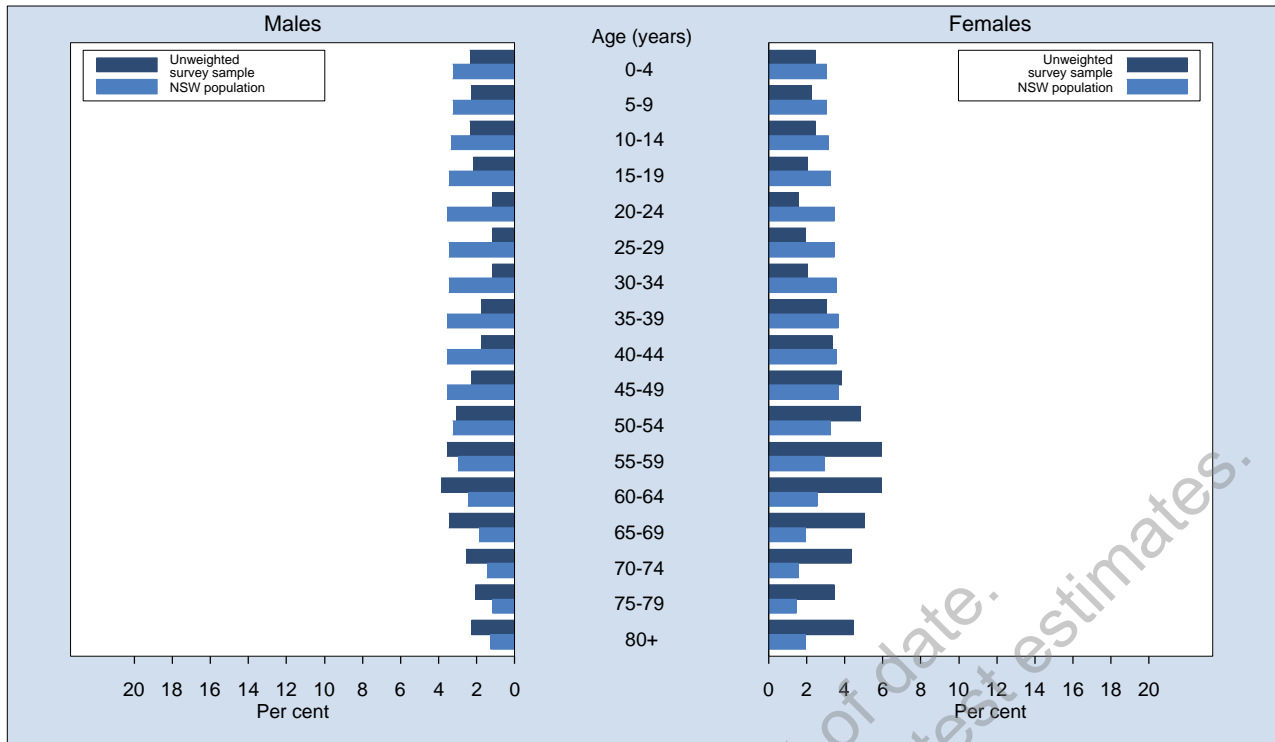
**Survey sample size and NSW population by age group and sex, NSW, 2009**

Age Group	Survey sample (unweighted)					
	Males		Females		Persons	
	n	%	n	%	n	%
0-4	308	2.4	316	2.5	624	4.9
5-9	293	2.3	297	2.3	590	4.6
10-14	311	2.4	318	2.5	629	5
15-19	281	2.2	267	2.1	548	4.3
20-24	154	1.2	206	1.6	360	2.8
25-29	149	1.2	259	2	408	3.2
30-34	156	1.2	273	2.1	429	3.4
35-39	228	1.8	394	3.1	622	4.9
40-44	227	1.8	428	3.4	655	5.2
45-49	293	2.3	499	3.9	792	6.2
50-54	392	3.1	618	4.9	1010	7.9
55-59	454	3.6	764	6	1218	9.6
60-64	494	3.9	767	6	1261	9.9
65-69	451	3.5	643	5.1	1094	8.6
70-74	325	2.6	555	4.4	880	6.9
75-79	273	2.1	451	3.5	724	5.7
80+	291	2.3	572	4.5	863	6.8
All	5080	40	7627	60	12707	100

**Note:** Table compares the survey sample with the Australian Bureau of Statistics 2007 mid-year population estimates (excluding residents of institutions)

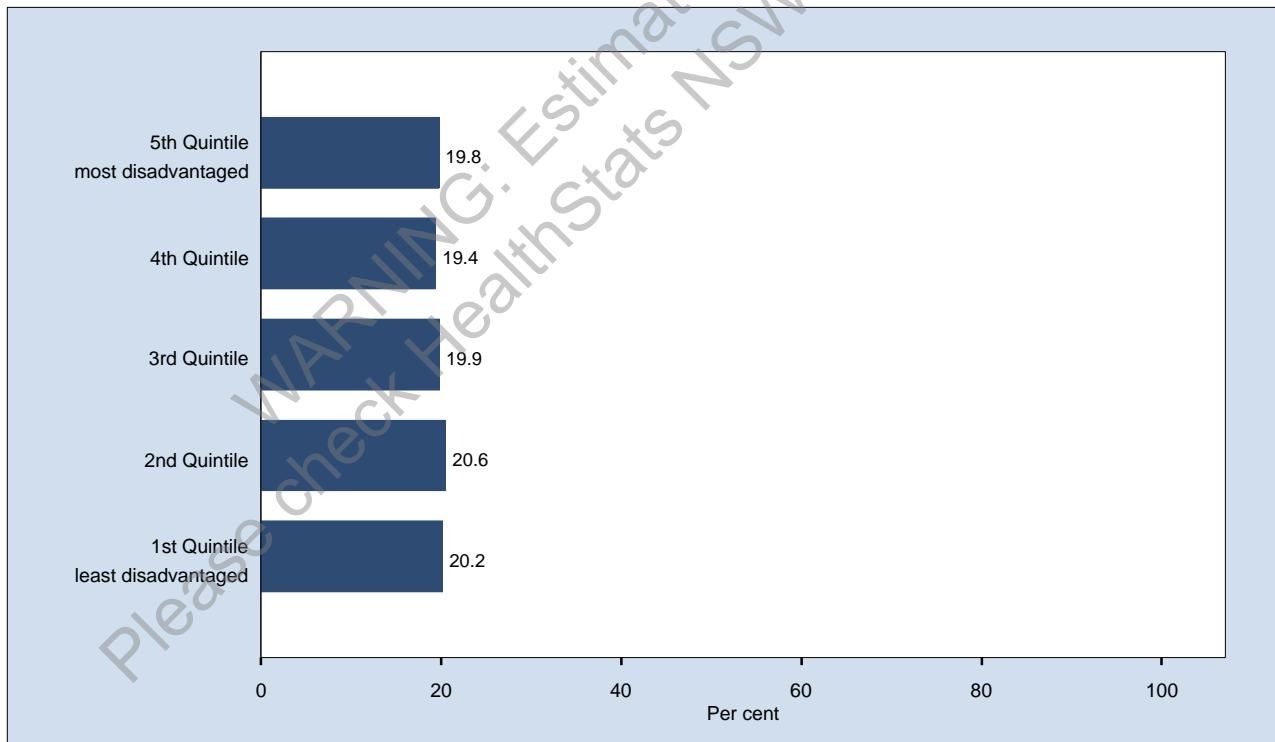
**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

### Age distribution of unweighted survey sample versus NSW population by sex, NSW, 2009



**Note:** Graph compares the survey sample with the Australian Bureau of Statistics 2007 mid-year population estimates (excluding residents of institutions)  
**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

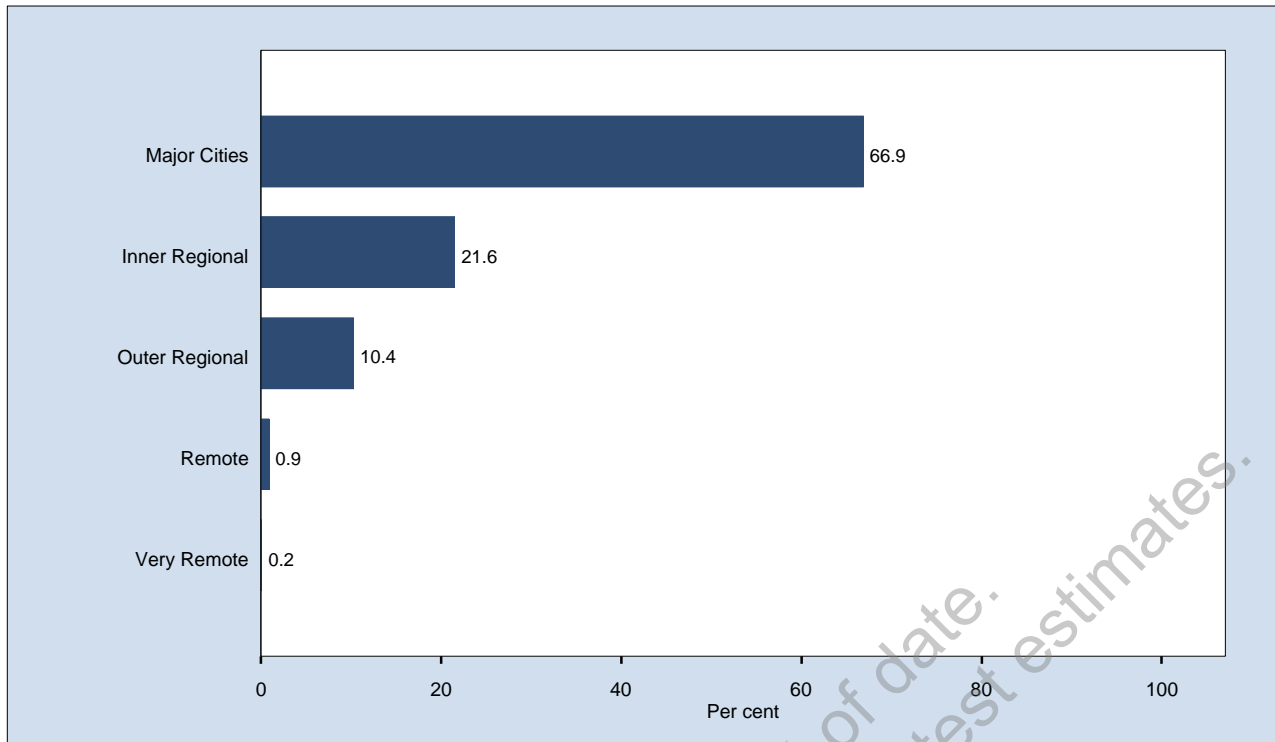
### Socioeconomic Index (SEIFA) quintile, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 10,572 respondents in NSW. For this indicator 147 (1.37%) were not stated (Don't know or Refused) in NSW. 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. The SEIFA index used to provide breakdowns of the New South Wales Population Health Survey data in 2007 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.

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

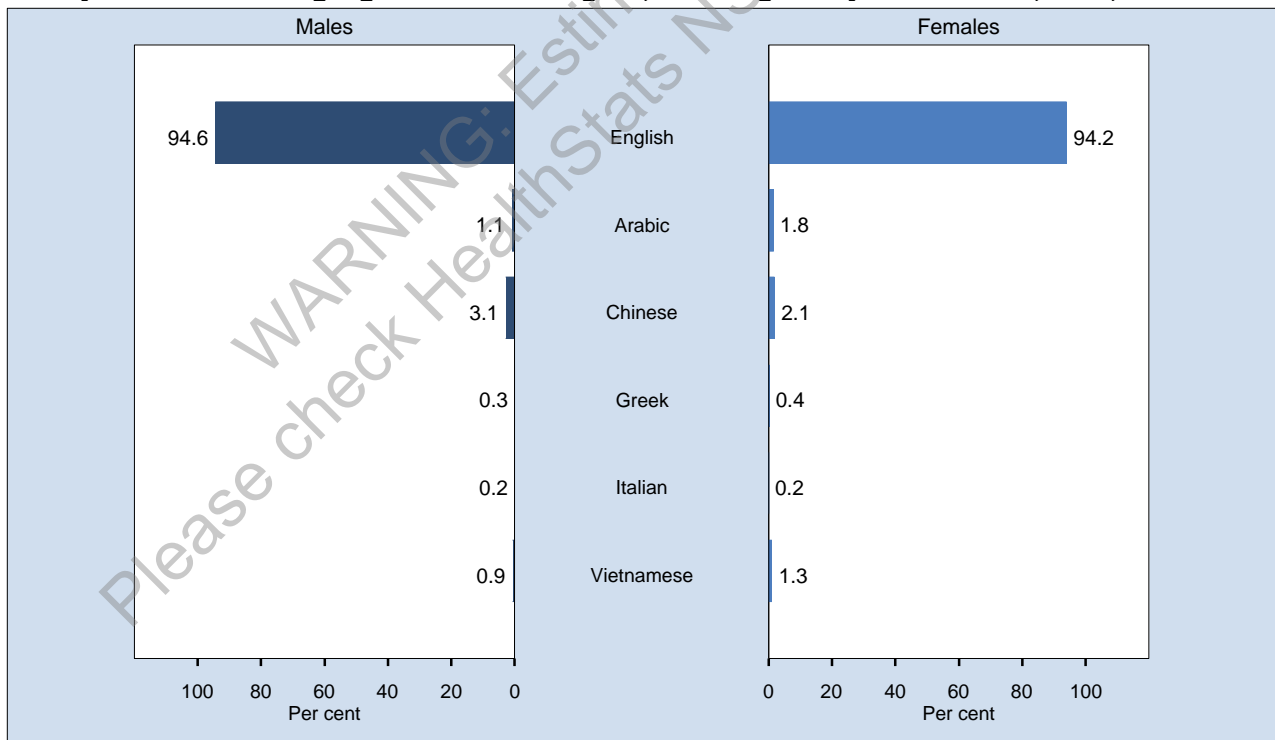
**Accessibility-Remoteness Index of Australia Plus (ARIA+), adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 10,587 respondents in NSW. For this indicator 132 (1.23%) 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. Because of small numbers in the remote and very remote categories, these categories have been combined in the analysis.

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

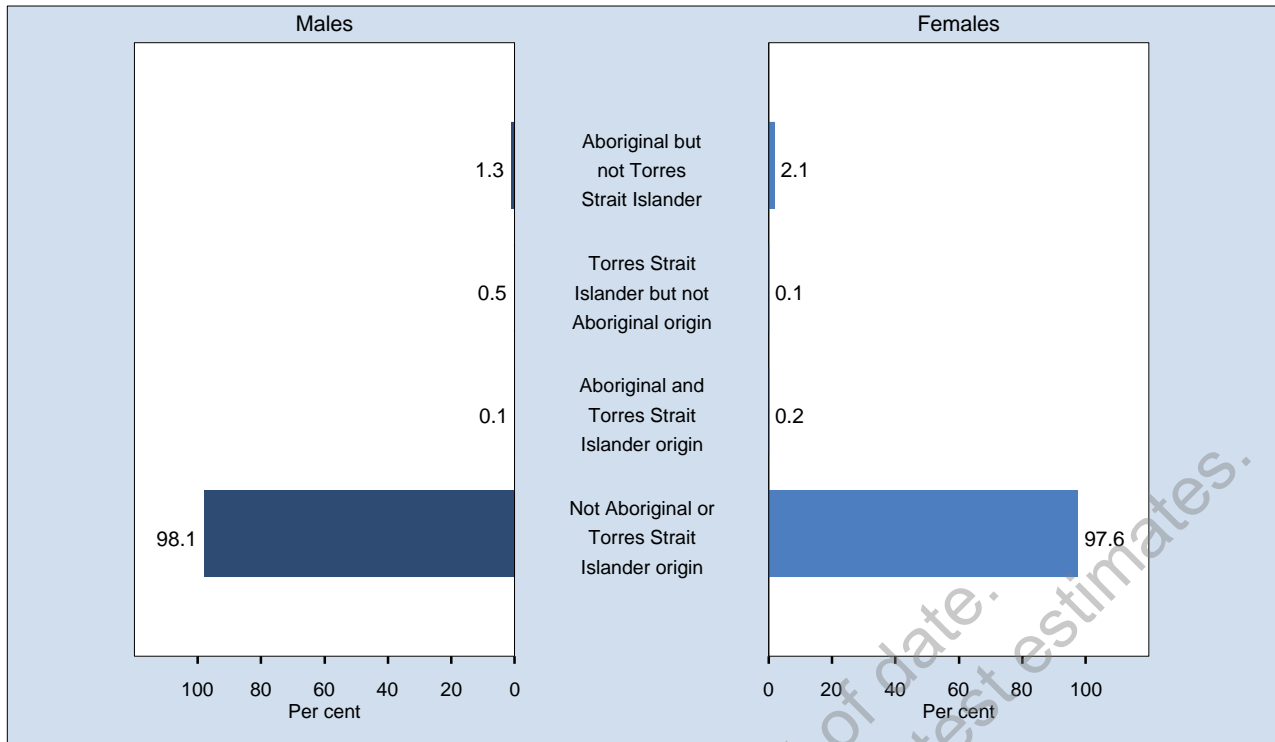
**Survey conducted in languages other than English, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 10,719 respondents in NSW. For this indicator 0 (0.00%) were not stated (Don't know or Refused) in NSW. Recorded language of interview.

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

### Aboriginal or Torres Strait Islander origin, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 10,669 respondents in NSW. For this indicator 50 (0.47%) were not stated (Don't know or Refused) in NSW. The question used was: Are you of Aboriginal and/or Torres Strait Islander origin?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

### Country of birth, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 10,715 respondents in NSW. For this indicator 4 (0.04%) were not stated (Don't know or Refused) in NSW. The question used was: In which country were you born?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

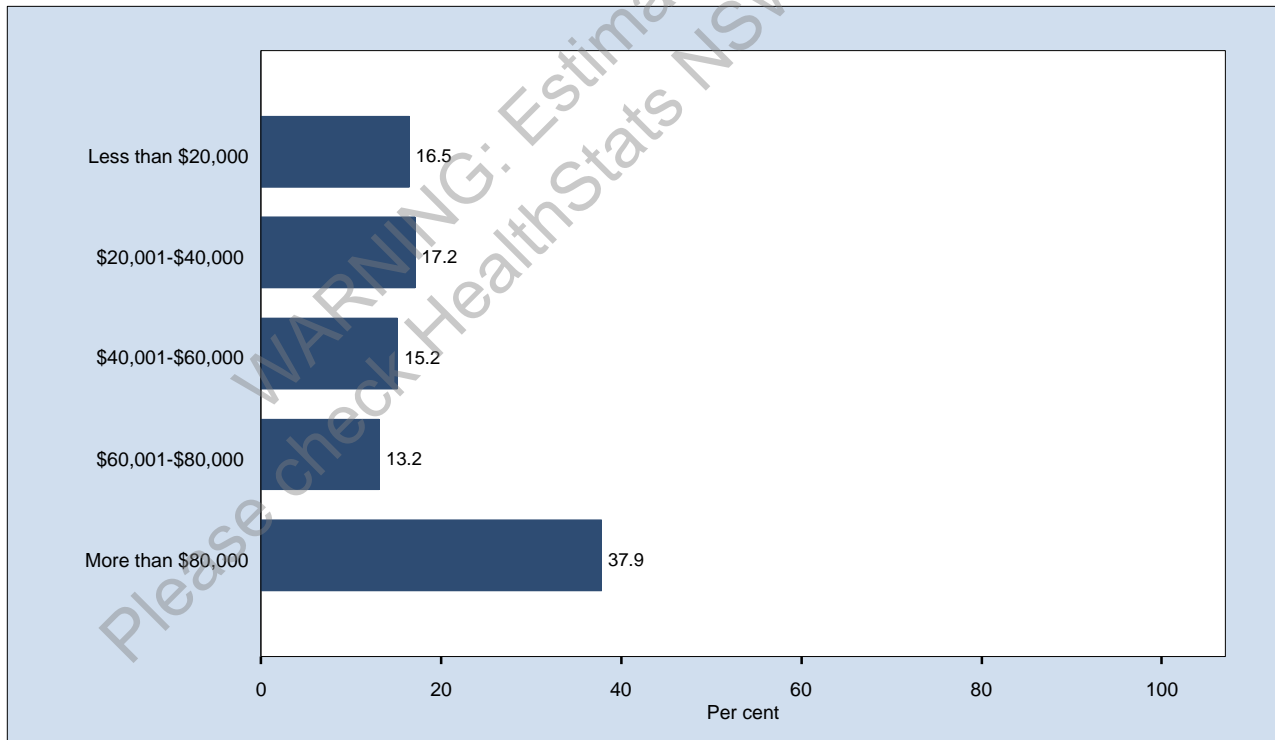
### Formal marital status, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 10,665 respondents in NSW. For this indicator 54 (0.50%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

### Household income, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 8,792 respondents in NSW. For this indicator 1,927 (17.98%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

# Health behaviours

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Health behaviours directly influence preventable morbidity and mortality throughout adulthood. This section reports on alcohol and cannabis, cancer screening (colorectal), environmental health (usual source of drinking water, water treatment, and exposure to road traffic noise), food handling (handwashing when preparing raw meat), immunisation (influenza, swine flu, and pneumococcal), injury prevention (fire safety in the home and home escape plans), nutrition, physical activity, and tobacco smoking (including passive smoking).

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# Alcohol and cannabis

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## Introduction

Excessive alcohol consumption is associated with a variety of adverse health consequences including cirrhosis of the liver, mental illness, several types of cancer, pancreatitis, and fetal growth retardation. Adverse social effects include aggressive behaviour, family disruption, and reduced productivity. In general, higher levels of consumption are associated with higher levels of harm; however, high rates of harm have been found among low to moderate drinkers on the occasions they drink to intoxication.[1-2]

The NSW Department of Health is the lead agency for the "healthy communities" priorities described in the NSW State Plan, which includes a target to reduce risk drinking.[3] To assist this target, the NSW Health Drug and Alcohol Plan 2006-2010 operationalises the NSW Government's commitment to reducing the problems caused by alcohol use.[4]

The 2001 Guidelines that define risk drinking were revoked and replaced with new Guidelines in February 2009. For the period 1997-2008, any risk drinking behaviour is defined as per Guideline 1 of the Australian Alcohol Guidelines (2001).[5] From 2009 onwards, risk drinking behaviour is defined as per Guideline 1 of the Australian Guidelines to Reduce Health Risks from Drinking Alcohol (2009), which is based on modelling that provides information on the lifetime risk of harm from drinking.[6] Changes in the trend in risk drinking behaviour between 2008 and 2009 reflect changes in the guideline not in alcohol consumption. To measure trends in alcohol consumption, a new indicator has been included in this report: the proportion of adults who drink more than 2 standard drinks on a day when they drink alcohol.

The "healthy communities" priorities described in the NSW State Plan also includes a target to reduce illicit drug use.[3] To assist monitoring this target, the New South Wales Population Health Survey collects information about cannabis consumption among adults aged 16-34 years.

## Results

### *Risk drinking behaviour*

In 2009, just under one-third of adults (30.4 per cent) engaged in risk drinking behaviour. A significantly higher proportion of males (41.4 per cent) than females (19.8 per cent) engaged in risk drinking behaviour. Among males, a significantly higher proportion of those aged 16-24 years (50.7 per cent) and 25-34 years (52.5 per cent), and a significantly lower proportion of those aged 55-64 years (36.8 per cent), 65-74 years (28.0 per cent), and 75 years and over (18.2 per cent), engaged in risk drinking behaviour, compared with the overall adult male population. Among females, a significantly higher proportion of those aged 16-24 years (37.0 per cent) and 25-34 years (23.8 per cent), and a significantly lower proportion of those aged 55-64 years (11.6 per cent), 65-74 years (6.3 per cent), and 75 years and over (2.0 per cent), engaged in risk drinking behaviour, compared with the overall adult female population.

A significantly higher proportion of adults in the fourth quintile of disadvantage (35.2 per cent), and a significantly lower proportion of adults in the fifth or most disadvantaged quintile (26.0 per cent), engaged in risk drinking behaviour, compared with the overall adult population.

A significantly higher proportion of adults in rural health areas (35.5 per cent) than urban health areas (28.2 per cent) engaged in risk drinking behaviour. A significantly higher proportion of adults in the Hunter & New England (36.4 per cent), Greater Southern (36.5 per cent), and Greater Western (35.8 per cent) Area Health Services, and a significantly lower proportion of adults in the Sydney South West (27.5 per cent) and Sydney West (22.3 per cent) Area Health Services, engaged in risk drinking behaviour, compared with the overall adult population.

Since 1997, there has been a significant decrease in the proportion of adults who engaged in risk drinking behaviour (42.3 per cent to 30.4 per cent), as defined by the 2001 Guidelines for 1997-2008 and the 2009 Guidelines for 2009 onwards. The decrease has been significant in males and females, and in urban and rural health areas.

## **Consumes more than 2 standard drinks on a day when drinking alcohol**

Since 2002 there has been no significant change in the proportion of adults who drink more than 2 standard drinks on a day when they drink alcohol: however, there has been a significant decrease in urban health areas (30.7 per cent to 28.2 per cent).

Since 2008, there has been no significant change in the proportion of adults who drink more than 2 standard drinks on a day when they drink alcohol.

## **Cannabis consumption**

In 2009, just over 1 in 20 adults aged 16-34 years (5.1 per cent) currently smoked cannabis. A significantly higher proportion of males (6.7 per cent) than females (3.4 per cent) currently smoked cannabis.

There was no significant difference among quintiles of disadvantage, or between urban and rural health areas, or among area health services.

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

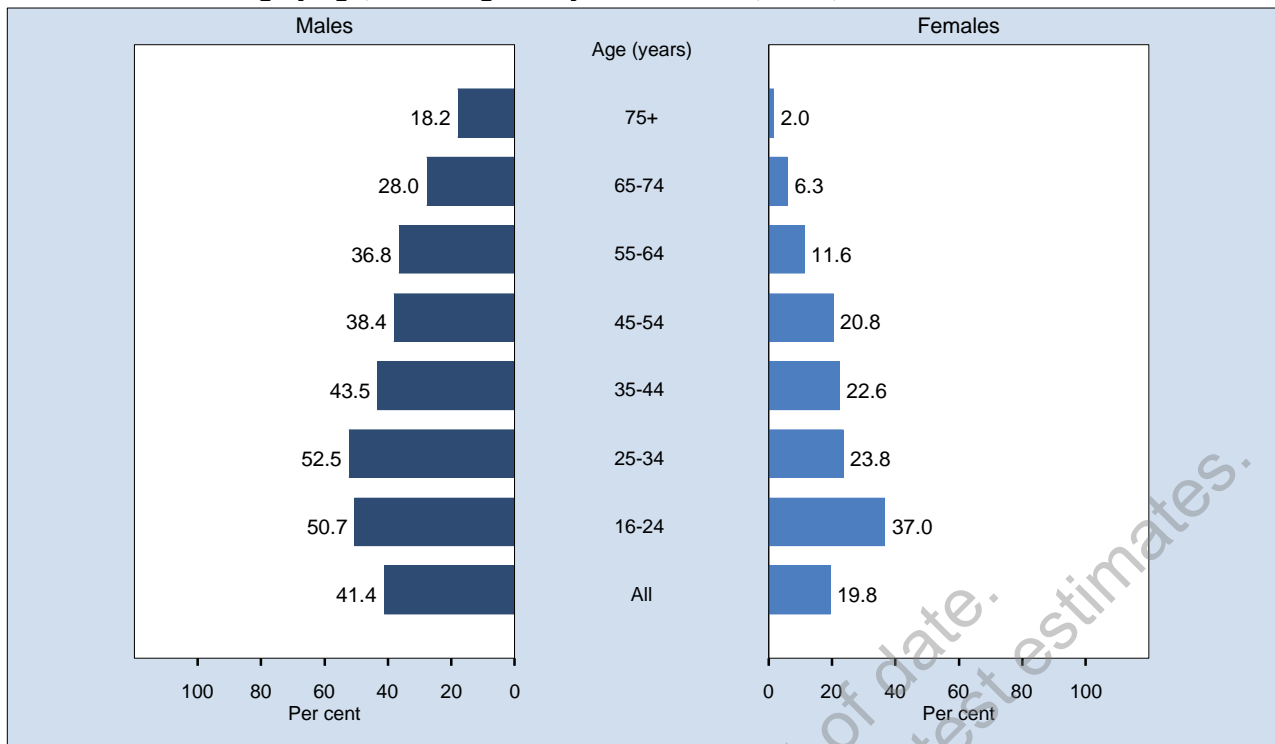
## **References**

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6. 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. Available online at [www.nhmrc.gov.au/publications/synopses/ds10syn.htm](http://www.nhmrc.gov.au/publications/synopses/ds10syn.htm) (accessed 30 August 2010).

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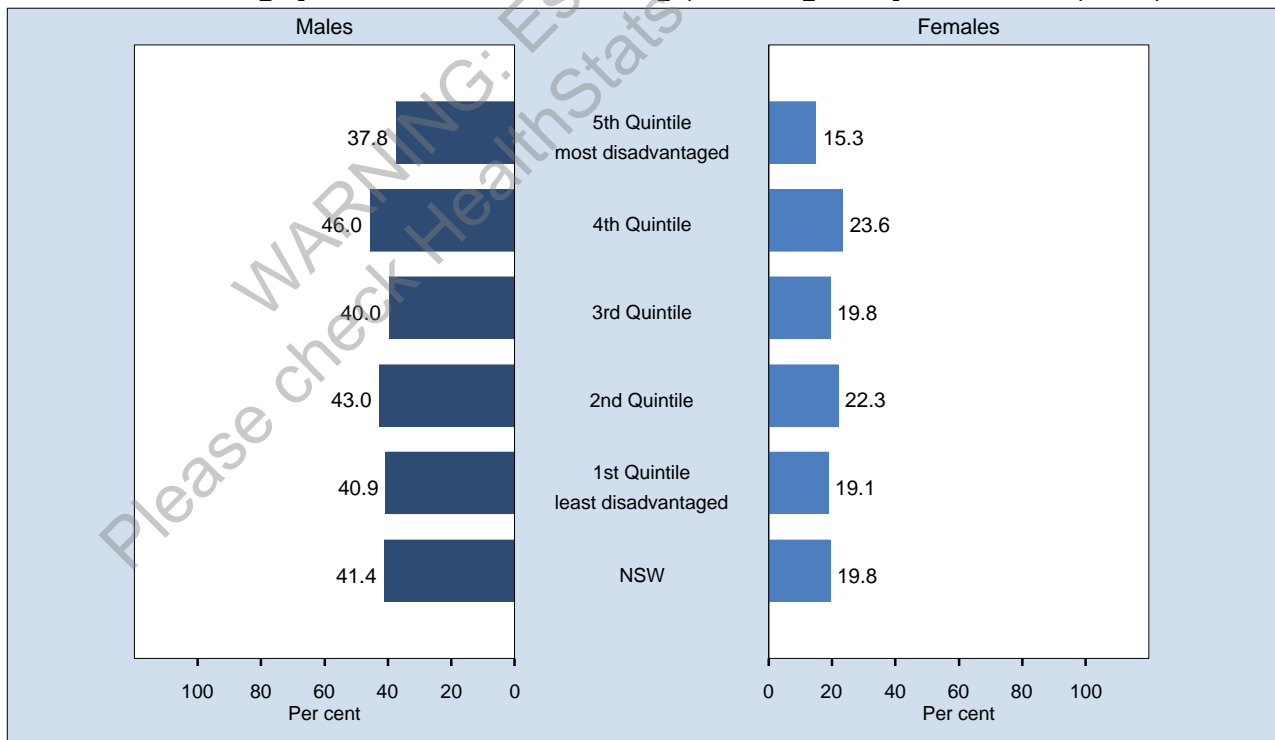
### Risk alcohol drinking by age, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 10,638 respondents in NSW. For this indicator 81 (0.76%) were not stated (Don't know or Refused) in NSW. The indicator includes those who exceeded the 2001 Australian Alcohol Guidelines prior to 2009 and exceeded the 2009 Australian Alcohol Guidelines from 2009 onwards. The questions used to define the indicators were: Since 2009, How often do you usually drink alcohol? On a day when you drink alcohol, how many standard drinks do you usually have? Between 2002 and 2008: How often do you usually drink alcohol? On a day when you drink alcohol, how many standard drinks do you usually have? In the last 4 weeks have you had more than [7-10 if male/5-6 if female] drinks in a day? In the last 4 weeks how often have you had [11+ if male/7+ if female] drinks in a day? In 1997-1998: How often do you have an alcoholic drink of any kind? On a day when you have alcoholic drinks, how many standard drinks do you usually have? On the last occasion you had more than [4 if male/2 if female] drinks in a day, how many drinks did you actually have?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

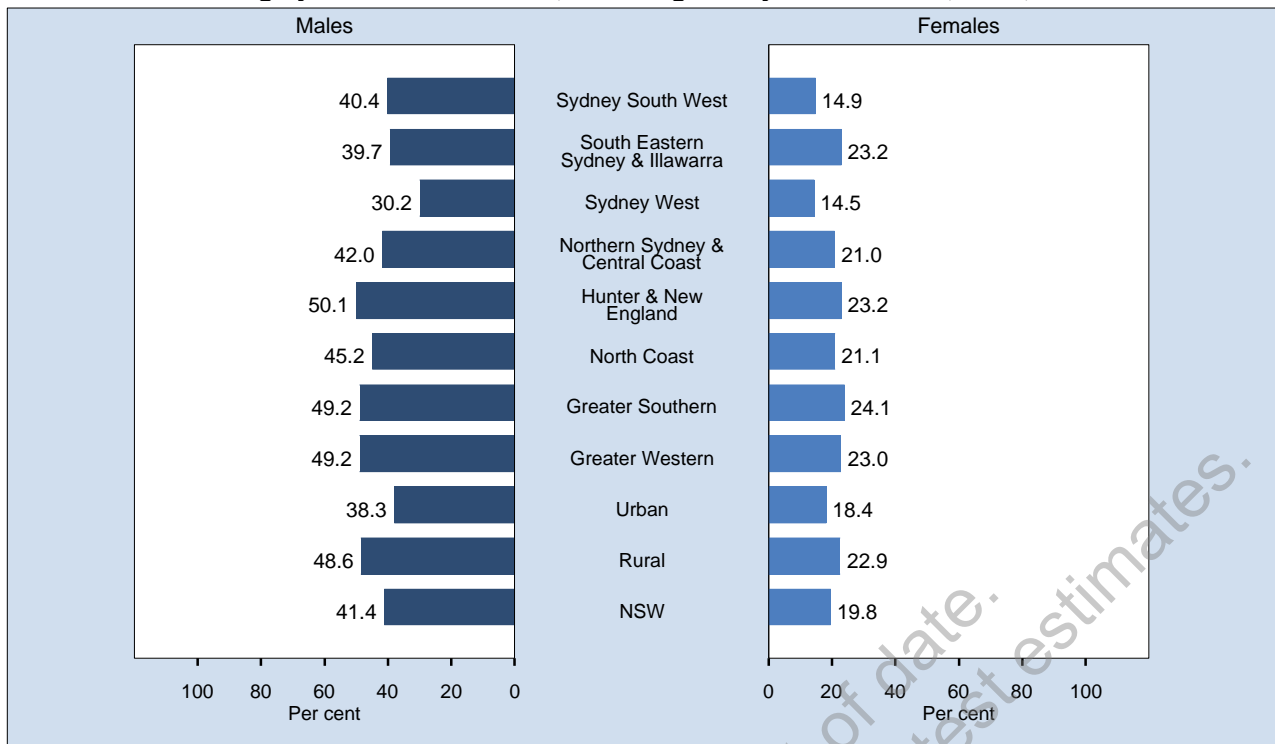
### Risk alcohol drinking by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 10,638 respondents in NSW. For this indicator 81 (0.76%) were not stated (Don't know or Refused) in NSW. The indicator includes those who exceeded the 2001 Australian Alcohol Guidelines prior to 2009 and exceeded the 2009 Australian Alcohol Guidelines from 2009 onwards. The questions used to define the indicators were: Since 2009, How often do you usually drink alcohol? On a day when you drink alcohol, how many standard drinks do you usually have? Between 2002 and 2008: How often do you usually drink alcohol? On a day when you drink alcohol, how many standard drinks do you usually have? In the last 4 weeks have you had more than [7-10 if male/5-6 if female] drinks in a day? In the last 4 weeks how often have you had [11+ if male/7+ if female] drinks in a day? In 1997-1998: How often do you have an alcoholic drink of any kind? On a day when you have alcoholic drinks, how many standard drinks do you usually have? On the last occasion you had more than [4 if male/2 if female] drinks in a day, how many drinks did you actually have?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

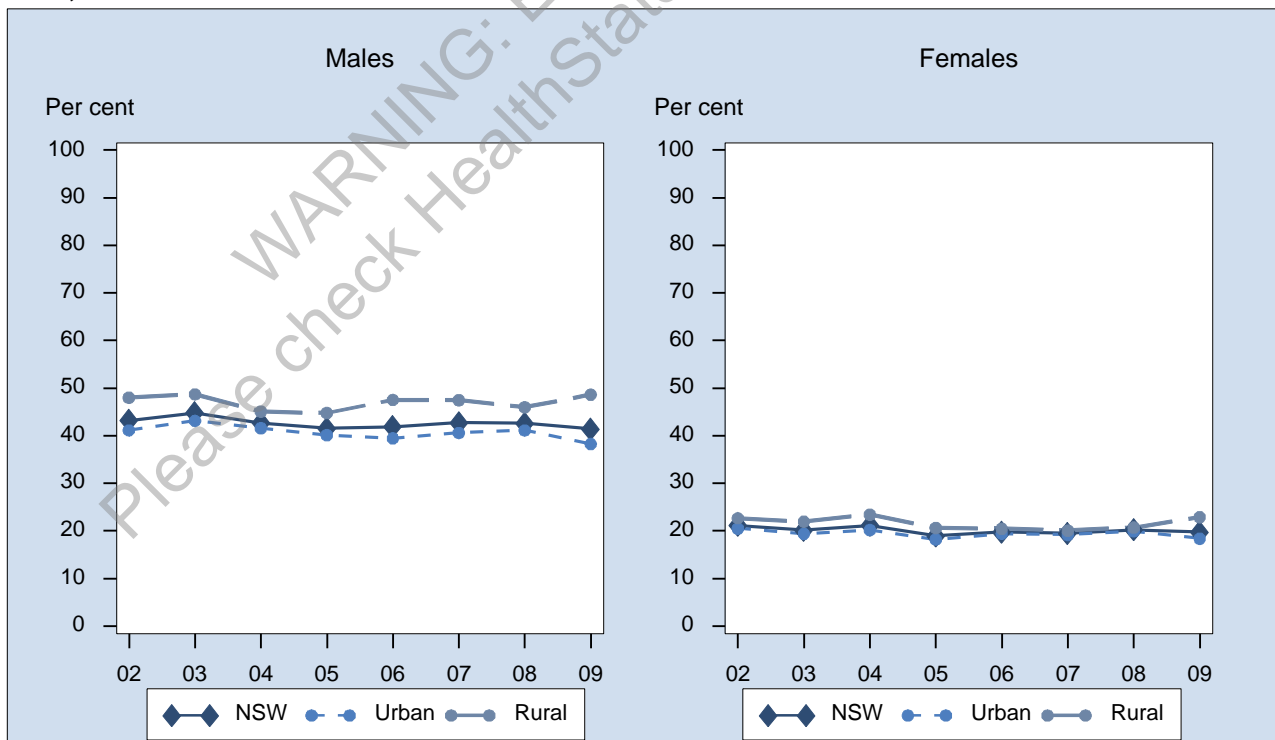
### Risk alcohol drinking by area health service, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 10,638 respondents in NSW. For this indicator 81 (0.76%) were not stated (Don't know or Refused) in NSW. The indicator includes those who exceeded the 2001 Australian Alcohol Guidelines prior to 2009 and exceeded the 2009 Australian Alcohol Guidelines from 2009 onwards. The questions used to define the indicators were: Since 2009, How often do you usually drink alcohol? On a day when you drink alcohol, how many standard drinks do you usually have? Between 2002 and 2008: How often do you usually drink alcohol? On a day when you drink alcohol, how many standard drinks do you usually have? In the last 4 weeks have you had more than [7-10 if male/5-6 if female] drinks in a day? In the last 4 weeks how often have you had [11+ if male/7+ if female] drinks in a day? In 1997-1998: How often do you have an alcoholic drink of any kind? On a day when you have alcoholic drinks, how many standard drinks do you usually have? On the last occasion you had more than [4 if male/2 if female] drinks in a day, how many drinks did you actually have?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

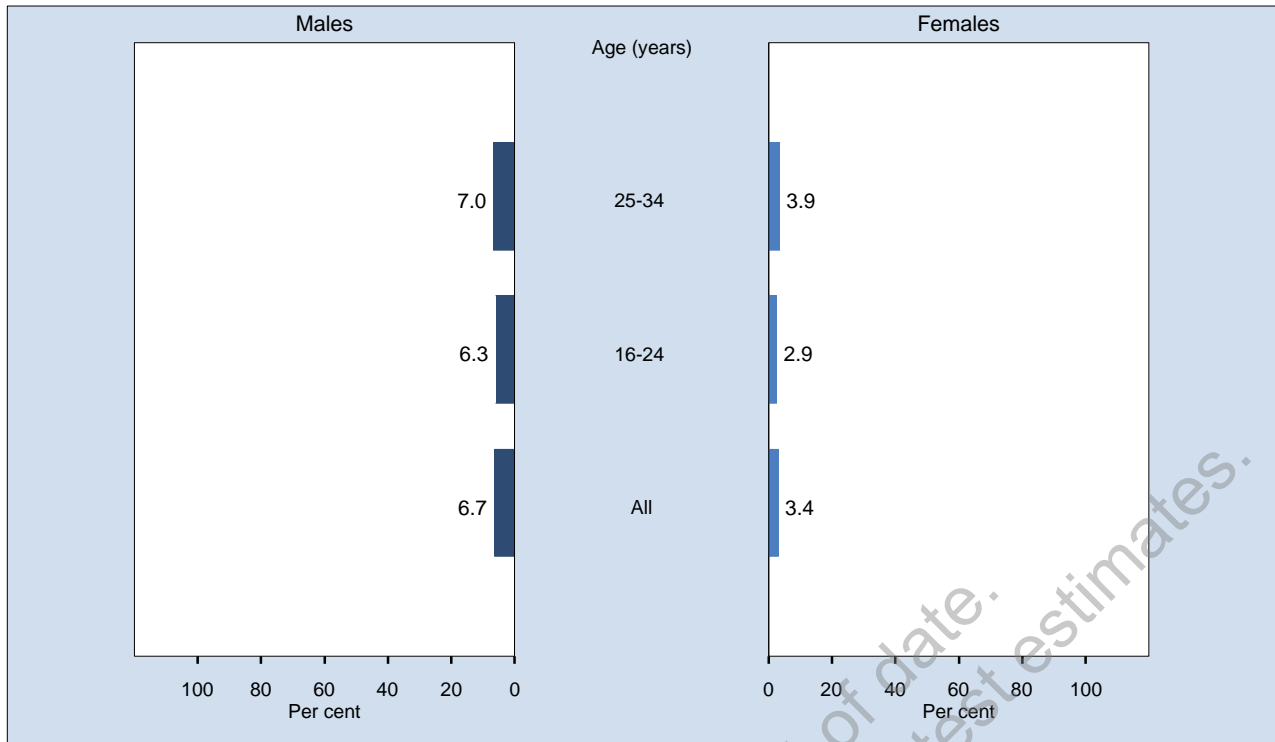
### More than 2 standard drinks on a day when drinking alcohol by year, adults aged 16 years and over, NSW, 2002-2009



**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). 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?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

### Current cannabis smoking by age, adults aged 16 to 34 years, NSW, 2009



**Note:** Estimates are based on 1,593 respondents in NSW. For this indicator 7 (0.44%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

### Current cannabis smoking by socioeconomic disadvantage, adults aged 16 to 34 years, NSW, 2009



**Note:** Estimates are based on 1,593 respondents in NSW. For this indicator 7 (0.44%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

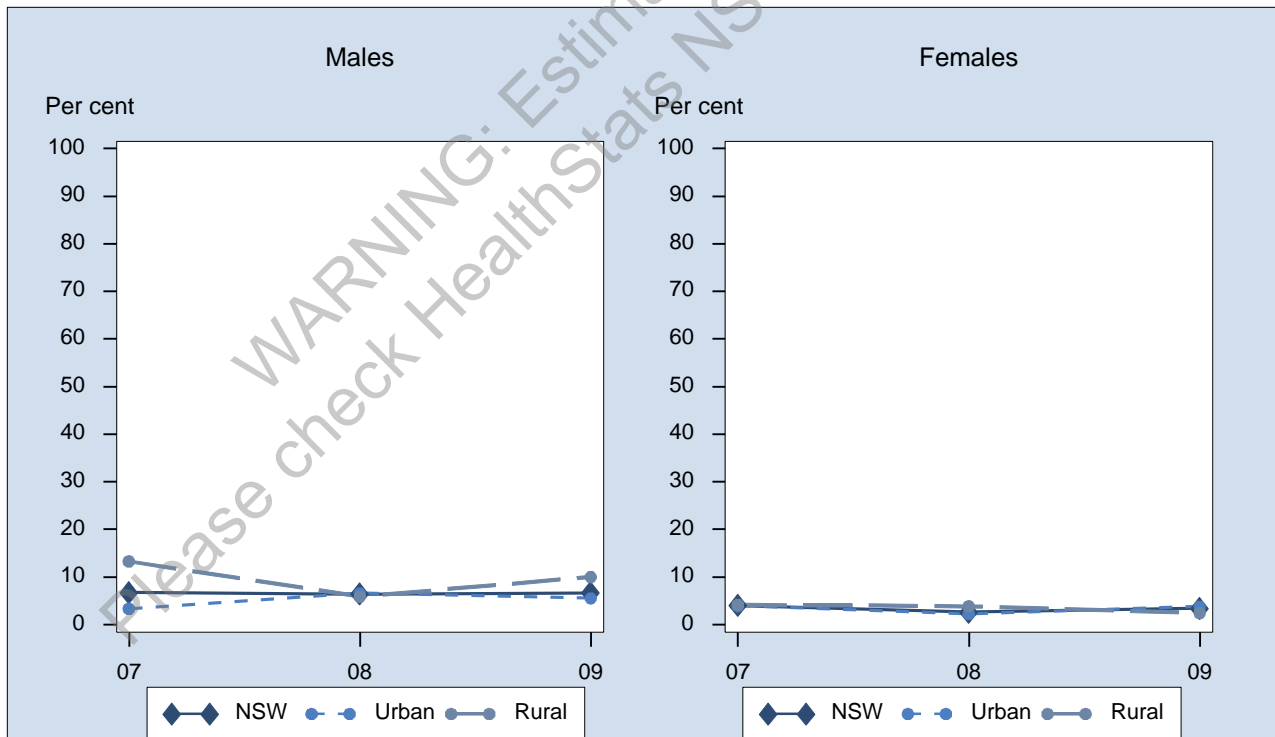
### Current cannabis smoking by area health service, adults aged 16 to 34 years, NSW, 2009



**Note:** Estimates are based on 1,593 respondents in NSW. For this indicator 7 (0.44%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

### Current cannabis smoking by year, adults aged 16 to 34 years, NSW, 2007-2009



**Note:** Estimates are based on the following numbers of respondents for NSW: 2007 (530), 2008 (1,386), 2009 (1,593). 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

# Cancer screening: colorectal

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## Introduction

In Australia, colorectal cancer is the second most commonly diagnosed cancer, after prostate cancer. It is less common in people under 50 years of age; however, risk increases with age and is also greater among persons with a family history of the disease. Long-term adherence to a healthy lifestyle, including adequate physical activity, following dietary recommendations, maintaining healthy body weight, avoiding or limiting alcohol consumption, and not smoking, may lower the risk of colorectal cancer; however, the degree of risk reduction has yet to be quantified.[1-3]

Individuals can be placed in 1 of 3 categories of risk, based on their family history. Category 1, those at or slightly above average risk, covers about 98 per cent of the population. Screening recommendations for this category are: a faecal occult blood test (FOBT) at least every 2 years for all adults over the age of 50, with a full examination of the large bowel, preferably by colonoscopy, for those shown to have a positive FOBT; sigmoidoscopy (preferably flexible) every 5 years from the age of 50. Category 2, those at moderately increased risk, covers 1 to 2 per cent of the population. Screening recommendations for this category are: colonoscopy every 5 years starting at 50 years of age, or at an age 10 years younger than the age of first diagnosis of colorectal cancer in the family, whichever comes first; flexible sigmoidoscopy plus double-contrast barium enema or CT colonography may be offered if colonoscopy is contraindicated for some reason; consideration of FOBT in the intervening years. Category 3, those at potentially high risk, covers less than 1 per cent of the population. Screening recommendations for this category are: referral to a familial cancer service for further risk assessment and possible genetic testing; referral to a bowel cancer specialist to plan appropriate surveillance and management.[1-3]

Types of bowel investigations in the above recommendations were surveyed and the frequency of a screening FOBT (that is, an FOBT for bowel cancer screening and not as part of follow-up treatment) is reported.

## Results

### ***Types of bowel investigation ever had***

In 2009, among adults aged 50 years and over, 34.4 per cent had ever had a faecal occult blood test, 41.0 per cent had ever had a colonoscopy, 4.3 per cent had ever had a sigmoidoscopy, 4.0 per cent had ever had a CT colonography, 13.5 per cent had ever had a barium enema, and 38.6 had never had any of these. Respondents could mention more than 1 type of bowel investigation.

### ***Screening FOBT in the last 2 years***

In 2009, 19.4 per cent of adults aged 50 years and over had a screening FOBT in the last 2 years. There was no significant difference between males and females. A significantly higher proportion of adults aged 55-59 years (27.7 per cent) and 65-69 years (30.3 per cent), and a significantly lower proportion of adults aged 60-64 years (14.5 per cent), 70-74 years (12.8 per cent), and 80 years and over (10.7 per cent), had a screening FOBT in the last 2 years.

There was no significant difference among quintiles of disadvantage.

A significantly higher proportion of adults in rural health areas (22.5 per cent) than urban health areas (17.9 per cent) had a screening FOBT in the last 2 years. A significantly higher proportion of adults in the Hunter & New England Area Health Service (25.2 per cent) had a screening FOBT in the last 2 years, compared with the overall adult population aged 50 years and over who had a screening FOBT in the last 2 years.

## References

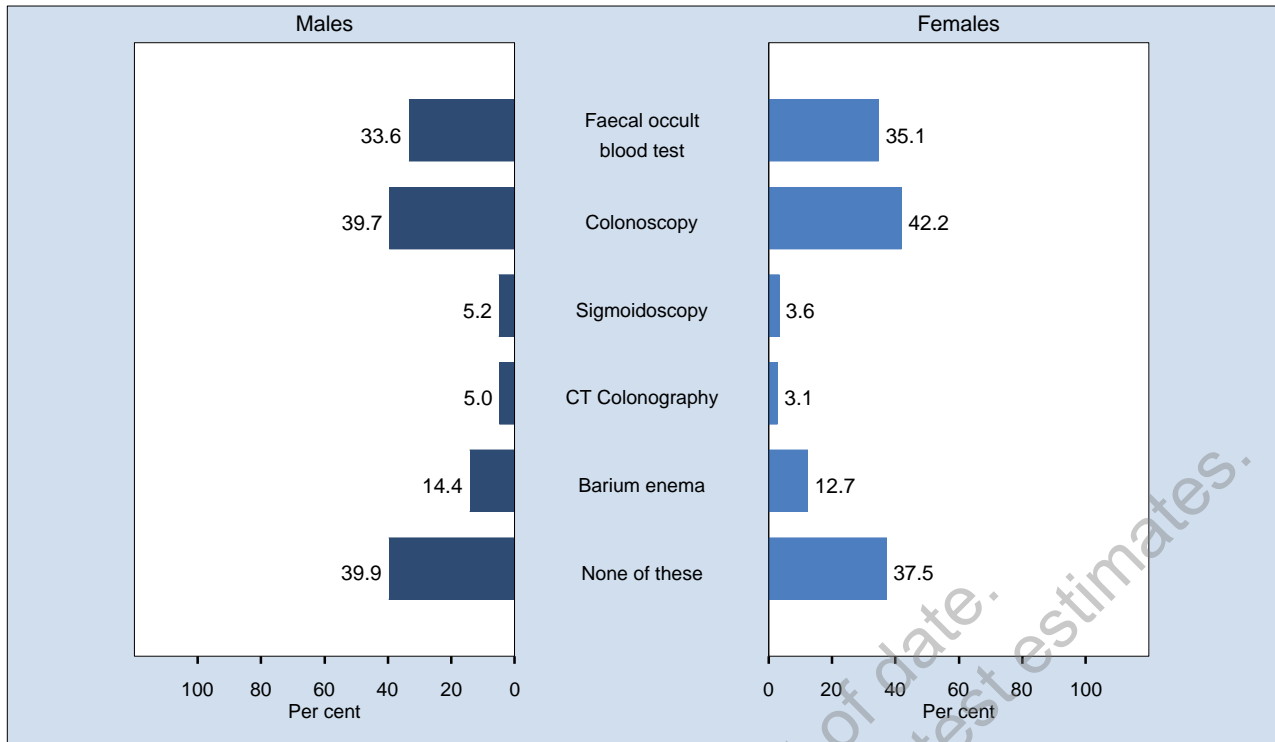
1. Australian Institute of Health and Welfare. *Cancer in Australia: an overview, 2008*. Canberra: AIHW, 2008. Available online at [www.aihw.gov.au/publications/index.cfm/title/10607](http://www.aihw.gov.au/publications/index.cfm/title/10607) (accessed 20 October 2010).
2. National Health and Medical Research Council. *Clinical practice guidelines for the prevention, early detection and management of colorectal cancer: A guide for general practitioners*. Canberra: NHMRC, 2008. Available online at [www.health.gov.au/internet/screening/publishing.nsf/Content/bw-gp-crc-guide](http://www.health.gov.au/internet/screening/publishing.nsf/Content/bw-gp-crc-guide)

(accessed 30 August 2010).

3. National Bowel Cancer Screening Program website at [www.cancerscreening.gov.au](http://www.cancerscreening.gov.au) (accessed 30 August 2010).

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

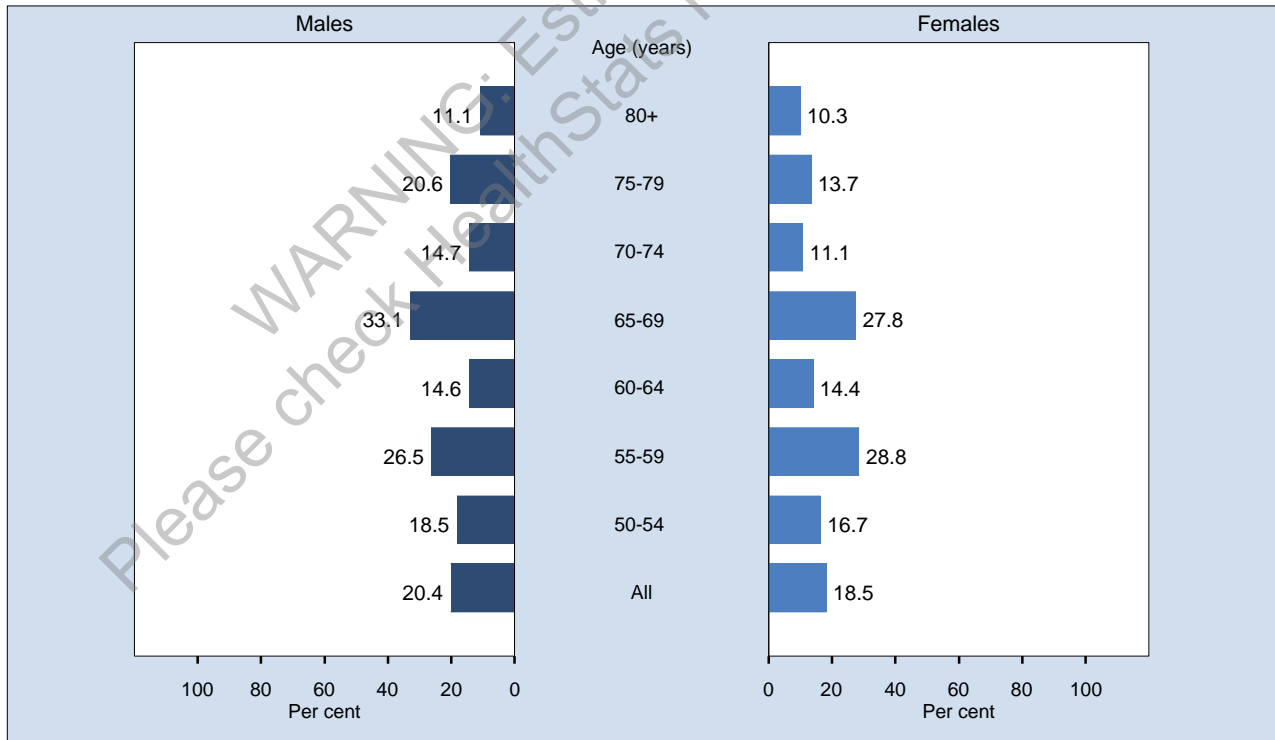
### Types of bowel investigation ever had, adults aged 50 years and over, NSW, 2009



**Note:** Estimates are based on 2,527 respondents in NSW. For this indicator 30 (1.17%) were not stated (Don't know or Refused) in NSW. The indicator includes those people 50 years or over. The questions used to define the indicator were: Bowel cancer may be detected by using several different types of investigations. Have you ever had: a faecal occult blood test, a colonoscopy, a sigmoidoscopy, a CT colonography, a barium enema. None of these. Respondents could mention more than 1 response. Percentages may total more than 100%.

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

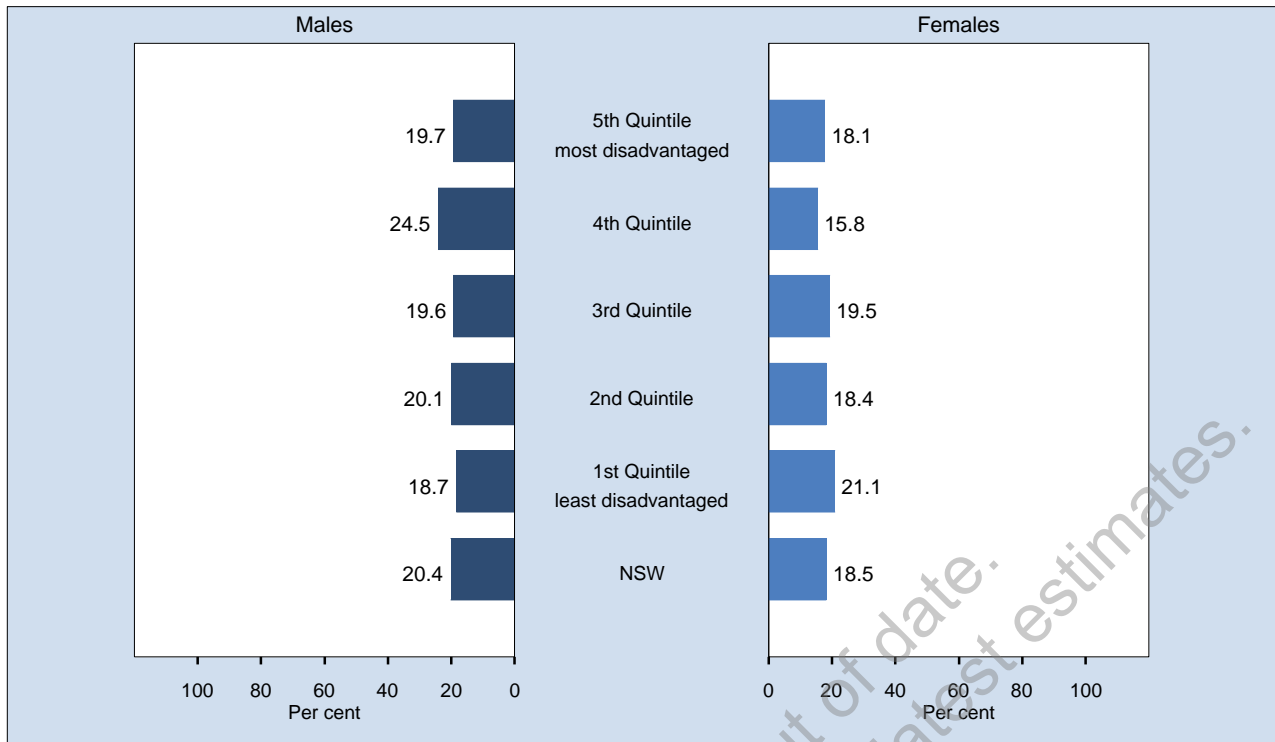
### Had a faecal occult blood test to screen for colorectal cancer in the last 2 years by age, adults aged 50 years and over, NSW, 2009



**Note:** Estimates are based on 2,468 respondents in NSW. For this indicator 89 (3.48%) were not stated (Don't know or Refused) in NSW. The indicator includes those people 50 years or over who had a faecal occult blood test to screen for colorectal cancer in the last 2 years. The questions used to define the indicator were: Bowel cancer may be detected by using several different types of investigations. Have you ever had: a faecal occult blood test, a colonoscopy, a sigmoidoscopy, a CT colonography, a barium enema. None of these. When did you have your last faecal occult blood test? Can you tell me all the reasons why you had [this/these] investigation[s] for bowel cancer?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

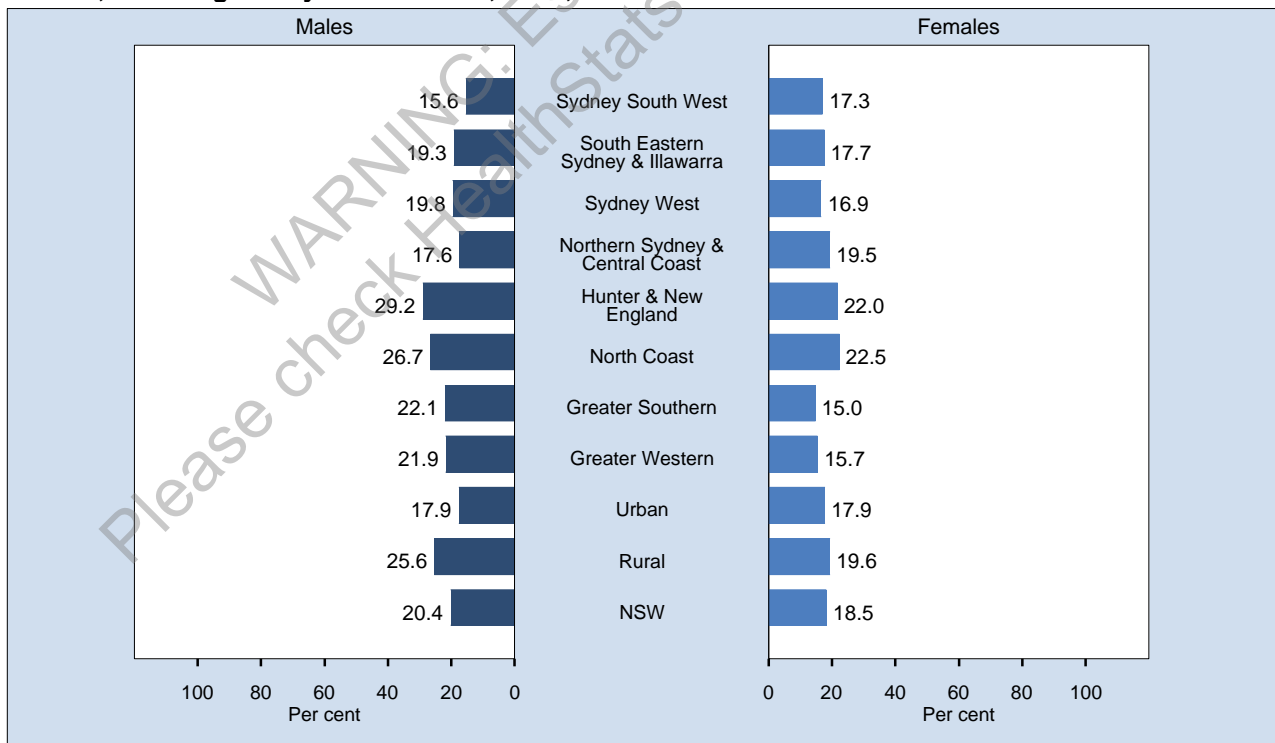
**Had a faecal occult blood test to screen for colorectal cancer in the last 2 years by socioeconomic disadvantage, adults aged 50 years and over, NSW, 2009**



**Note:** Estimates are based on 2,468 respondents in NSW. For this indicator 89 (3.48%) were not stated (Don't know or Refused) in NSW. The indicator includes those people 50 years or over who had a faecal occult blood test to screen for colorectal cancer in the last 2 years. The questions used to define the indicator were: Bowel cancer may be detected by using several different types of investigations. Have you ever had: a faecal occult blood test, a colonoscopy, a sigmoidoscopy, a CT colonography, a barium enema. None of these. When did you have your last faecal occult blood test? Can you tell me all the reasons why you had [this/these] investigation[s] for bowel cancer?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

**Had a faecal occult blood test to screen for colorectal cancer in the last 2 years by area health service, adults aged 50 years and over, NSW, 2009**



**Note:** Estimates are based on 2,468 respondents in NSW. For this indicator 89 (3.48%) were not stated (Don't know or Refused) in NSW. The indicator includes those people 50 years or over who had a faecal occult blood test to screen for colorectal cancer in the last 2 years. The questions used to define the indicator were: Bowel cancer may be detected by using several different types of investigations. Have you ever had: a faecal occult blood test, a colonoscopy, a sigmoidoscopy, a CT colonography, a barium enema. None of these. When did you have your last faecal occult blood test? Can you tell me all the reasons why you had [this/these] investigation[s] for bowel cancer?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.



# Environmental health

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## Introduction

Safe and good quality drinking water is essential to sustain life; also, drinking water should be aesthetically pleasing. Guidance on what constitutes safe and good quality drinking water is provided by the 2004 Australian Drinking Water Guidelines. These guidelines are intended for use by the Australian community, including all agencies with responsibilities associated with the supply of drinking water: catchment and water resource managers, drinking water suppliers, water regulators, and health authorities.[1]

Noise can be annoying, interfere with speech, disturb sleep, or interfere with work. Prolonged exposure to loud noise can also result in increased heart rate, anxiety, hearing loss, and other health effects. The effects of noise depend both on the noise level and its characteristics and how it is perceived by the person affected.[2] The NSW Population Health Survey is collecting information on road traffic noise to assist the NSW Department of Environment, Climate Change and Water in developing a new Road Noise Policy.[3]

## Results

### *Source of drinking water*

In 2009, 85.6 per cent of adults used a public water supply as their usual source of drinking water. The next most prevalent sources of drinking water were rain water (6.4 per cent) and bottled water (5.6 per cent). A significantly higher proportion of adults aged 75 years and over (87.9 per cent), and a significantly lower proportion of adults aged 55-64 years (81.5 per cent), used a public water supply as their usual source of drinking water, compared with the overall adult population.

A significantly higher proportion of adults in the first or least disadvantaged quintile (93.1 per cent), and a significantly lower proportion of adults in the fourth disadvantaged quintile (80.6 per cent) and fifth or most disadvantaged quintile (82.6 per cent) used a public water supply as their usual source of drinking water, compared with the overall adult population.

A significantly higher proportion of adults in urban health areas (91.2 per cent) than rural health areas (72.5 per cent) used a public water supply as their usual source of drinking water. A significantly higher proportion of adults in the Sydney South West (91.0 per cent), South Eastern Sydney & Illawarra (91.9 per cent), Sydney West (88.5 per cent), and Northern Sydney & Central Coast (93.4 per cent) Area Health Services, and a significantly lower proportion of adults in the Hunter & New England (80.0 per cent), North Coast (76.2 per cent), Greater Southern (66.2 per cent), and Greater Western (55.6 per cent) Area Health Services, used a public water supply as their usual source of drinking water, compared with the overall adult population.

Since 2002, there has been a significant increase in the proportion of adults who obtained their drinking water from a public water supply (80.9 per cent to 85.6 per cent). The increase has been significant in urban and rural health areas.

Since 2008, there has been a significant increase in the proportion of adults who obtained their drinking water from a public water supply (82.7 per cent to 85.6 per cent). The increase has been significant in urban and rural health areas.

Of those whose usual source of drinking water was a public water supply, 60.5 per cent did not treat their drinking water, 2.2 per cent treated their drinking water sometimes, 9.3 per cent boiled their drinking water, 26.7 per cent filtered their drinking water, and 1.1 per cent boiled and filtered their drinking water.

### *Exposed to road traffic noise*

In 2009, 45.8 per cent of adults were exposed to road traffic noise when they stood in their home or yard. A significantly higher proportion of adults aged 25-34 years (53.4 per cent) and 35-44 years (51.6 per cent), and a significantly lower proportion of adults aged 16-24 years (38.6 per cent), 65-74 years (41.1 per cent), and 75 years and over (38.5 per cent), were exposed to road traffic noise when they stood in their home or yard.

A significantly higher proportion of adults in the fifth or most disadvantaged quintile (50.7 per cent), and a significantly lower proportion of adults in the fourth quintile of disadvantage (41.8 per cent), were exposed to road traffic noise when they stood in their home or yard, compared with the overall adult population.

A significantly higher proportion of adults in urban health areas (46.9 per cent) than rural health areas (42.8 per cent) were exposed to road traffic noise when they stood in their home or yard. A significantly higher proportion of adults in the Sydney West Area Health Service (53.0 per cent), and a significantly lower proportion of adults in the Greater Western Area Health Service (36.8 per cent), were exposed to road traffic noise when they stood in their home or yard, compared with the overall adult population.

In 2009, among those adults who were exposed to road traffic noise when they stood in their home or yard, 44.9 per cent were exposed to car noise, 12.5 per cent were exposed to hoon car noise, 30.5 per cent were exposed to truck noise, 7.1 per cent were exposed to motorbike noise, and 2.6 per cent were exposed to sirens or horns.

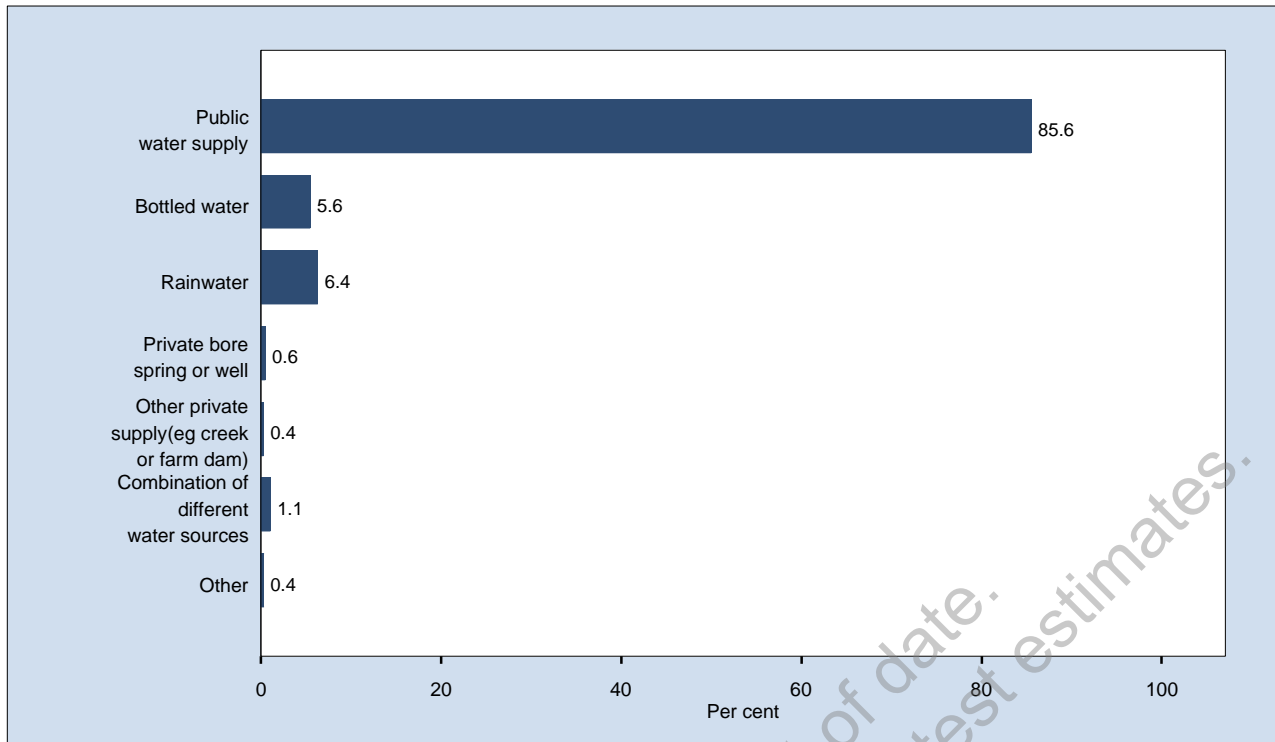
In 2009, among those adults who were exposed to road traffic noise when they stood in their home or yard, there were multiple effects which included: no disturbance (66.8 per cent), annoyance (27.0 per cent), disturbed sleep (18.5 per cent), stress (7.3 per cent), difficulty reading or studying (7.1 per cent), anxiety (4.3 per cent), headache (4.0 per cent), and depression (1.7 per cent). Respondents could mention more than 1 effect.

## References

1. National Health and Medical Research Council. *Australian Drinking Water Guidelines*. Canberra: National Health and Medical Research Council, 2004. Available online at [www.nhmrc.gov.au/publications/synopses/eh19syn.htm](http://www.nhmrc.gov.au/publications/synopses/eh19syn.htm) (accessed 30 August 2010).
2. NSW Department of Environment, Climate Change and Water. *Noise webpage*. Sydney: NSW Department of Environment, Climate Change and Water, 2009. Available online at [www.environment.nsw.gov.au/noise](http://www.environment.nsw.gov.au/noise) (accessed 30 August 2010).
3. NSW Department of Environment, Climate Change and Water. *Road noise webpage*. Sydney: NSW Department of Environment, Climate Change and Water, 2010. Available online at [www.environment.nsw.gov.au/noise/traffic.htm](http://www.environment.nsw.gov.au/noise/traffic.htm) (accessed 30 August 2010).

WARNING: Estimates are preliminary and subject to change without notice.  
Please check HealthStats NSW for latest estimates.

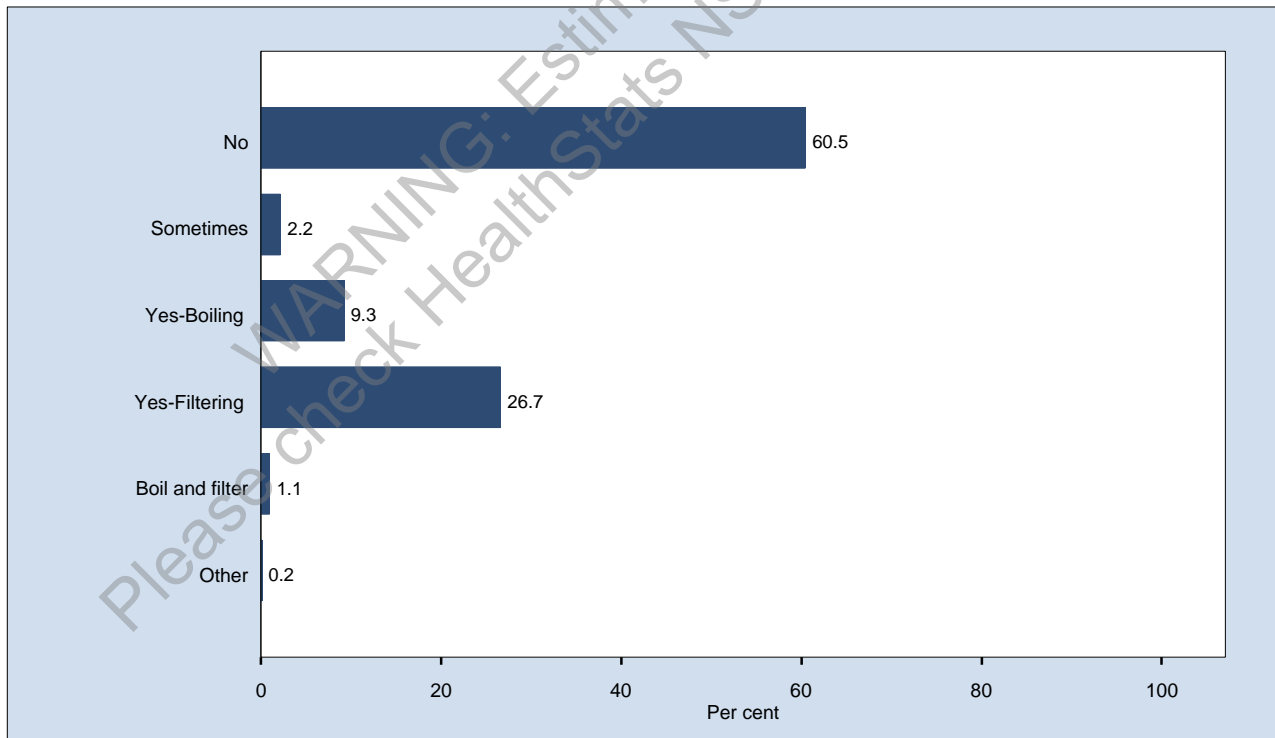
**Usual source of drinking water, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 8,029 respondents in NSW. For this indicator 17 (0.21%) were not stated (Don't know or Refused) in NSW. The question used was: What is your normal source of drinking water?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

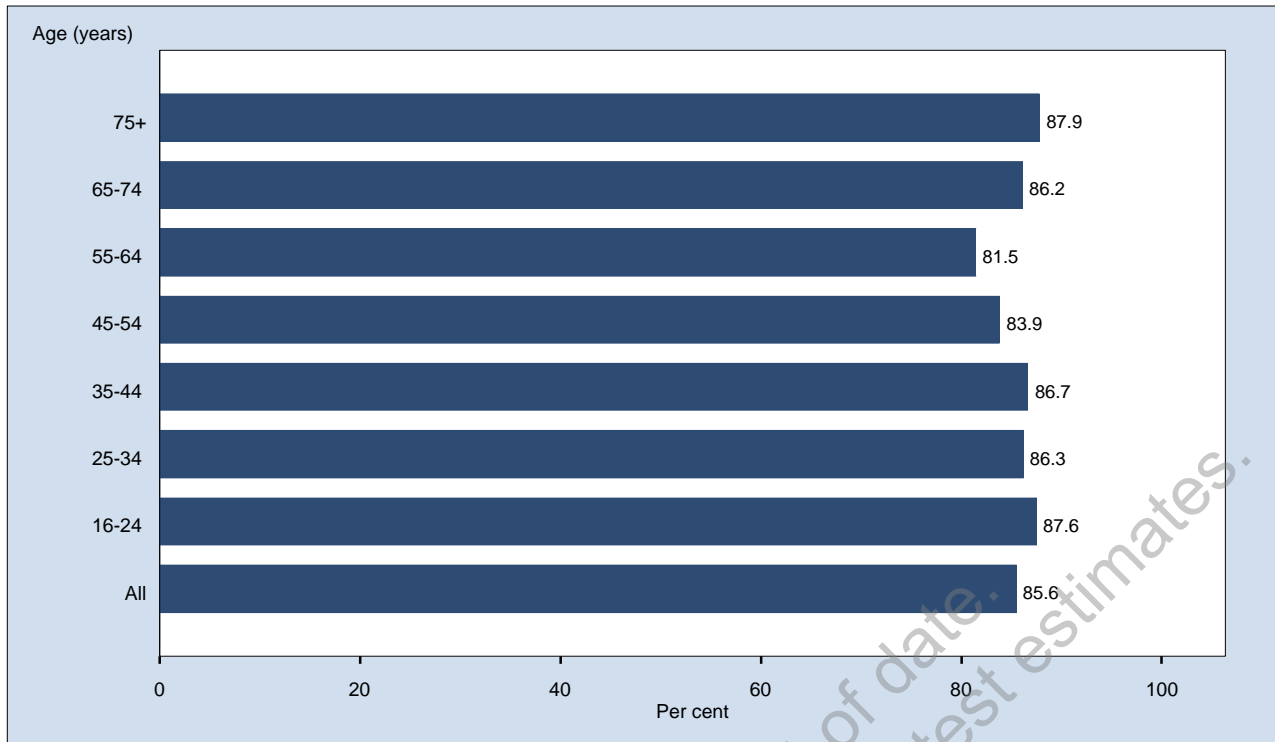
**Type of water treatment, adults aged 16 years and over who usually use a public water supply for their drinking water, NSW, 2009**



**Note:** Estimates are based on 7,598 respondents in NSW. For this indicator 6 (0.08%) were not stated (Don't know or Refused) in NSW. The questions used were: What is your normal source of drinking water? Do you treat your water before drinking? If Yes How do you treat your water?

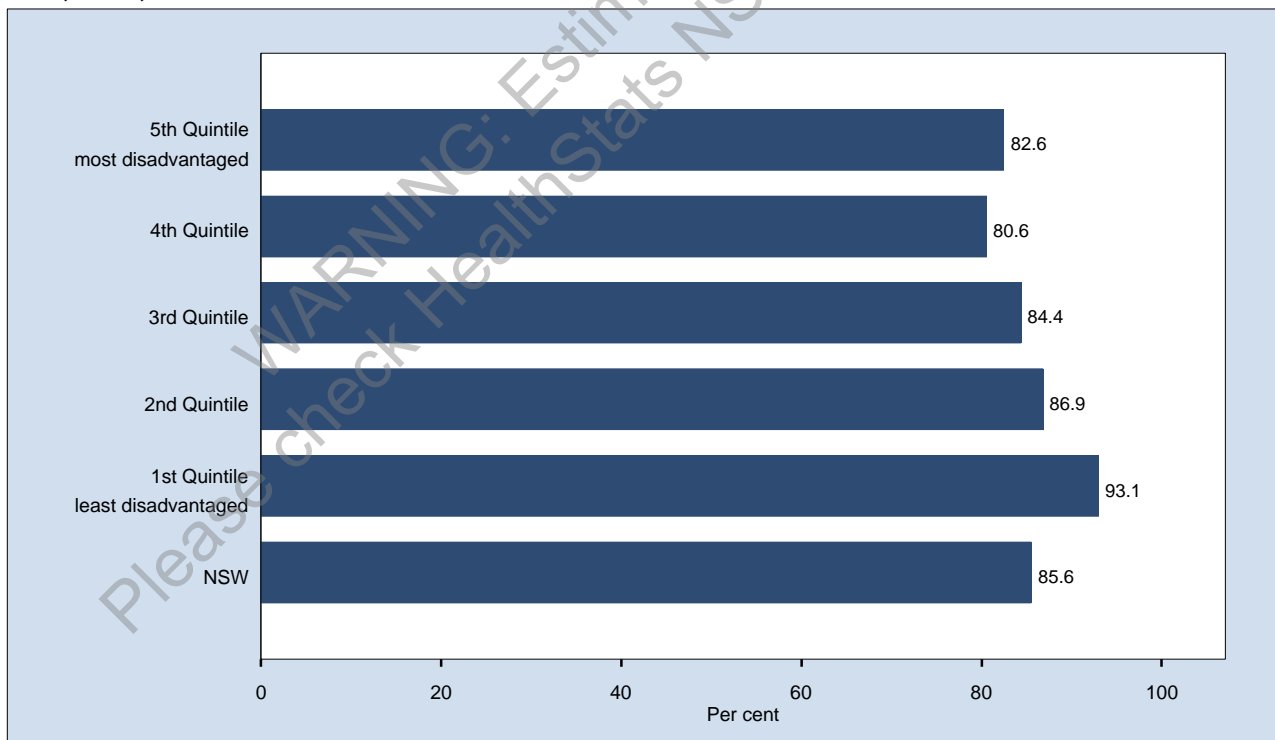
**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

**Use public water as usual source of water by age, adults aged 16 years and over, NSW, 2009**



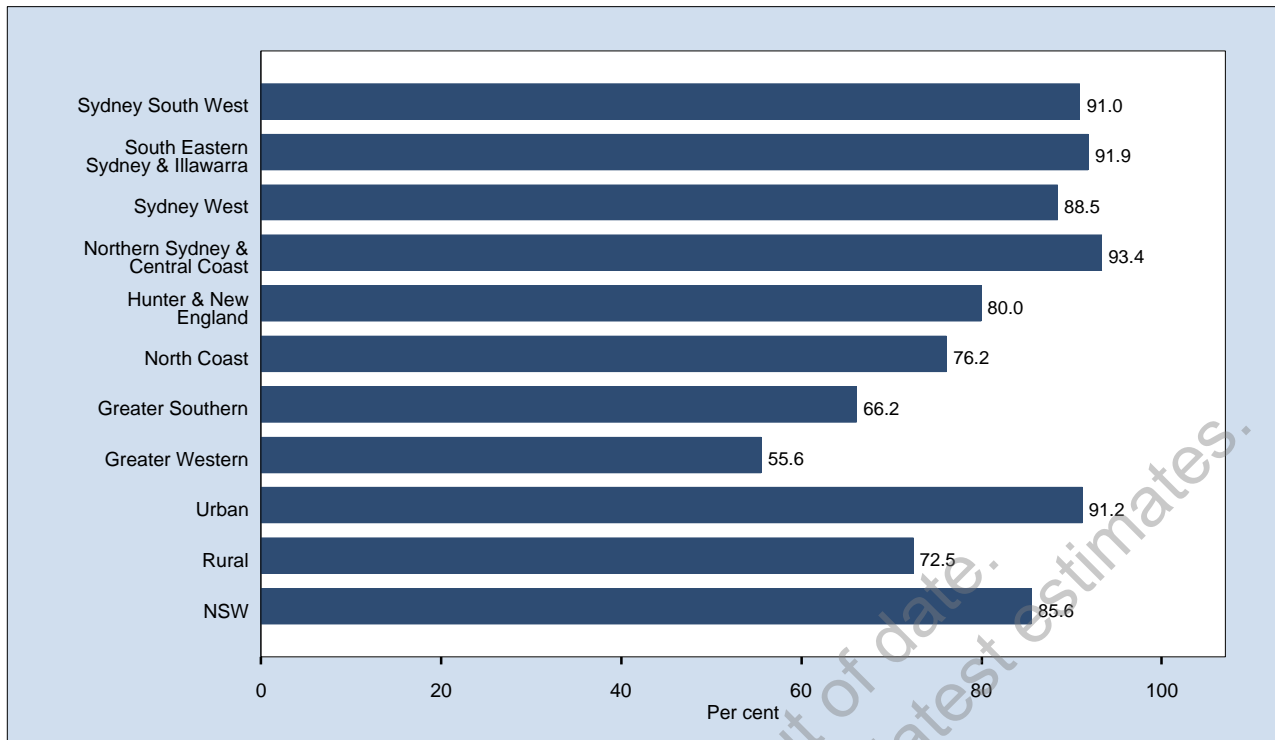
**Note:** Estimates are based on 8,029 respondents in NSW. For this indicator 17 (0.21%) were not stated (Don't know or Refused) in NSW. The indicator includes those who use public water as their usual source of drinking water. The question used to define the indicator was: What is your normal source of drinking water?  
**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

**Use public water as usual source of water by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2009**



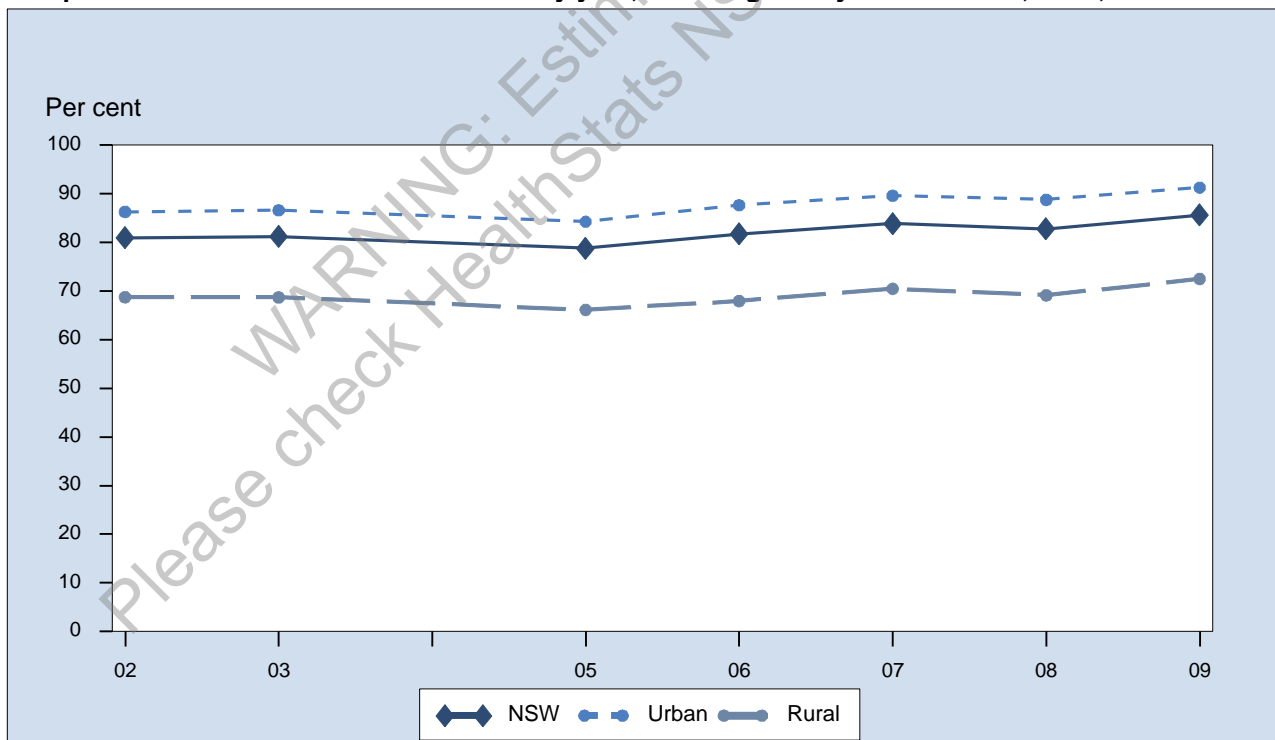
**Note:** Estimates are based on 8,029 respondents in NSW. For this indicator 17 (0.21%) were not stated (Don't know or Refused) in NSW. The indicator includes those who use public water as their usual source of drinking water. The question used to define the indicator was: What is your normal source of drinking water?  
**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

**Use public water as usual source of water by area health service, adults aged 16 years and over, NSW, 2009**



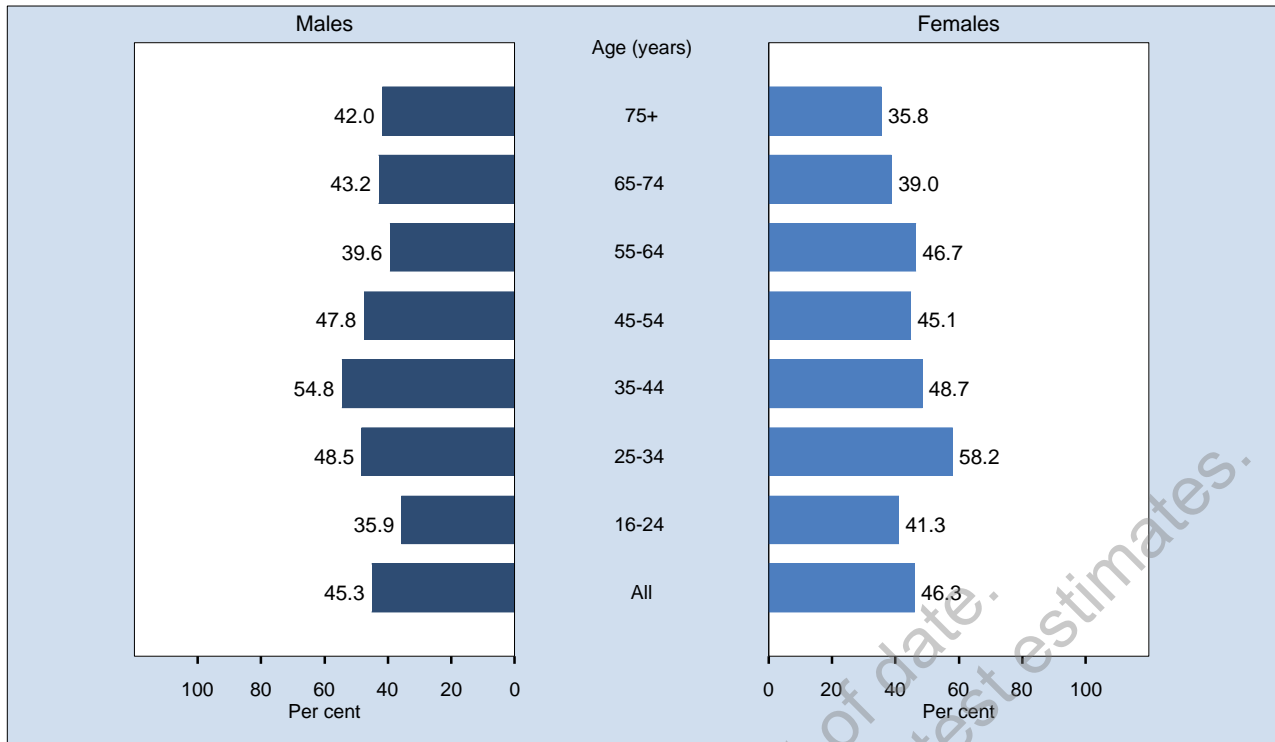
**Note:** Estimates are based on 8,029 respondents in NSW. For this indicator 17 (0.21%) were not stated (Don't know or Refused) in NSW. The indicator includes those who use public water as their usual source of drinking water. The question used to define the indicator was: What is your normal source of drinking water?  
**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

**Use public water as usual source of water by year, adults aged 16 years and over, NSW, 2002-2009**



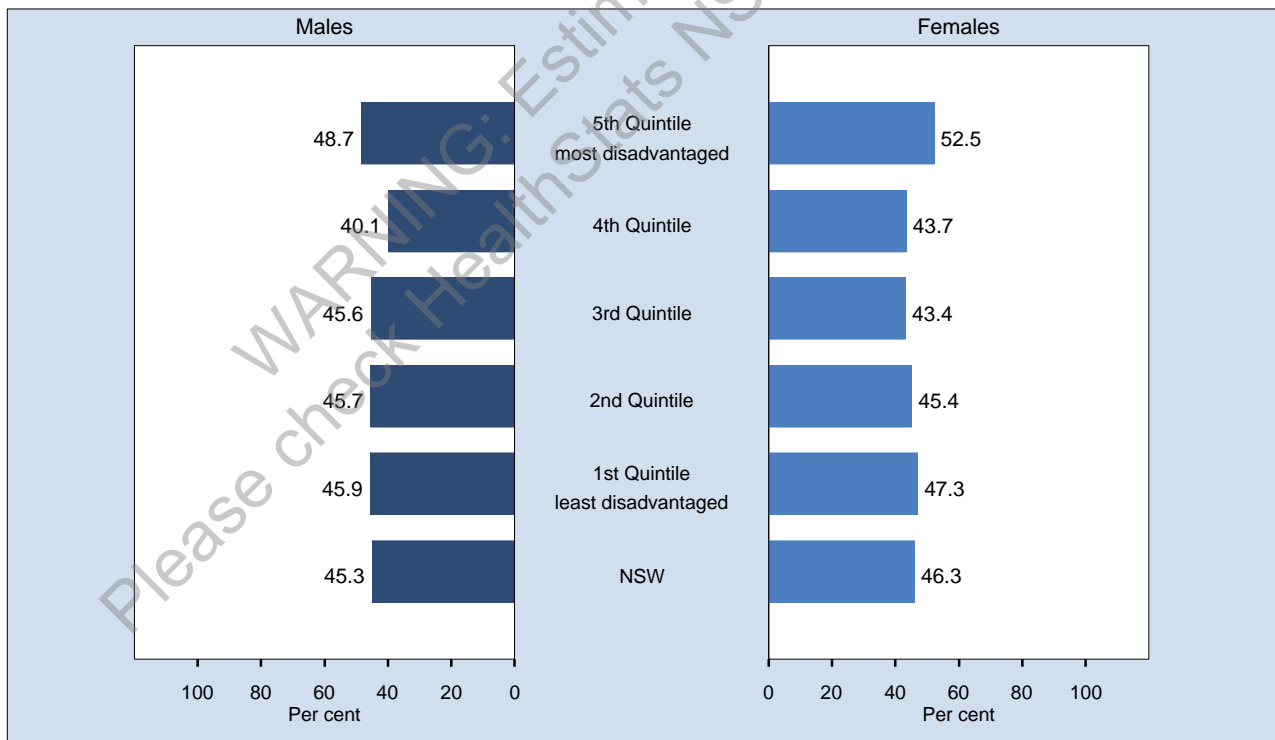
**Note:** Estimates are based on the following numbers of respondents for NSW: 2002 (3,759), 2003 (13,005), 2005 (11,462), 2006 (7,939), 2007 (7,486), 2008 (8,575), 2009 (8,029). The indicator includes those who use public water as their usual source of drinking water. The question used to define the indicator was: What is your normal source of drinking water?  
**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

### Exposure to road traffic noise by age, adults aged 16 years and over, NSW, 2009



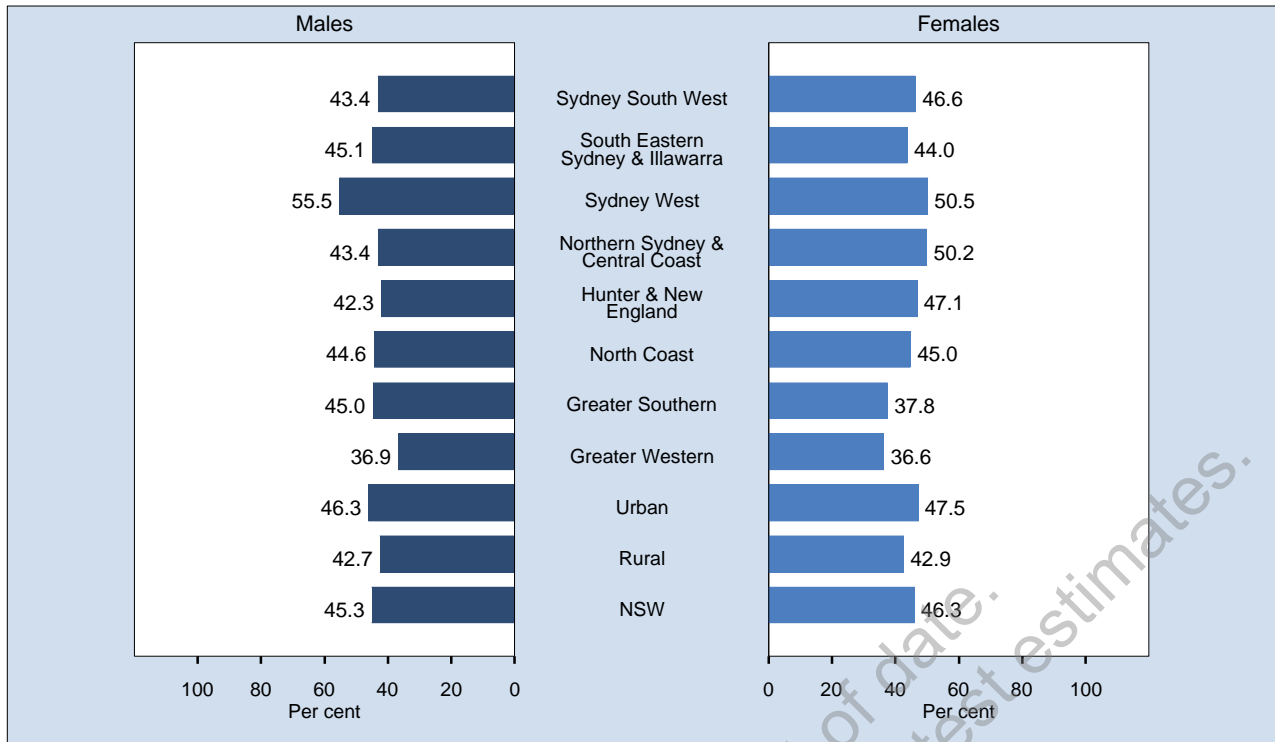
**Note:** Estimates are based on 5,899 respondents in NSW. For this indicator 22 (0.37%) were not stated (Don't know or Refused) in NSW. The indicator includes those who are exposed to road traffic noise. The question used to define the indicator was: When you are in your home or yard, are you exposed to road traffic noise?  
**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

### Exposure to road traffic noise by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2009



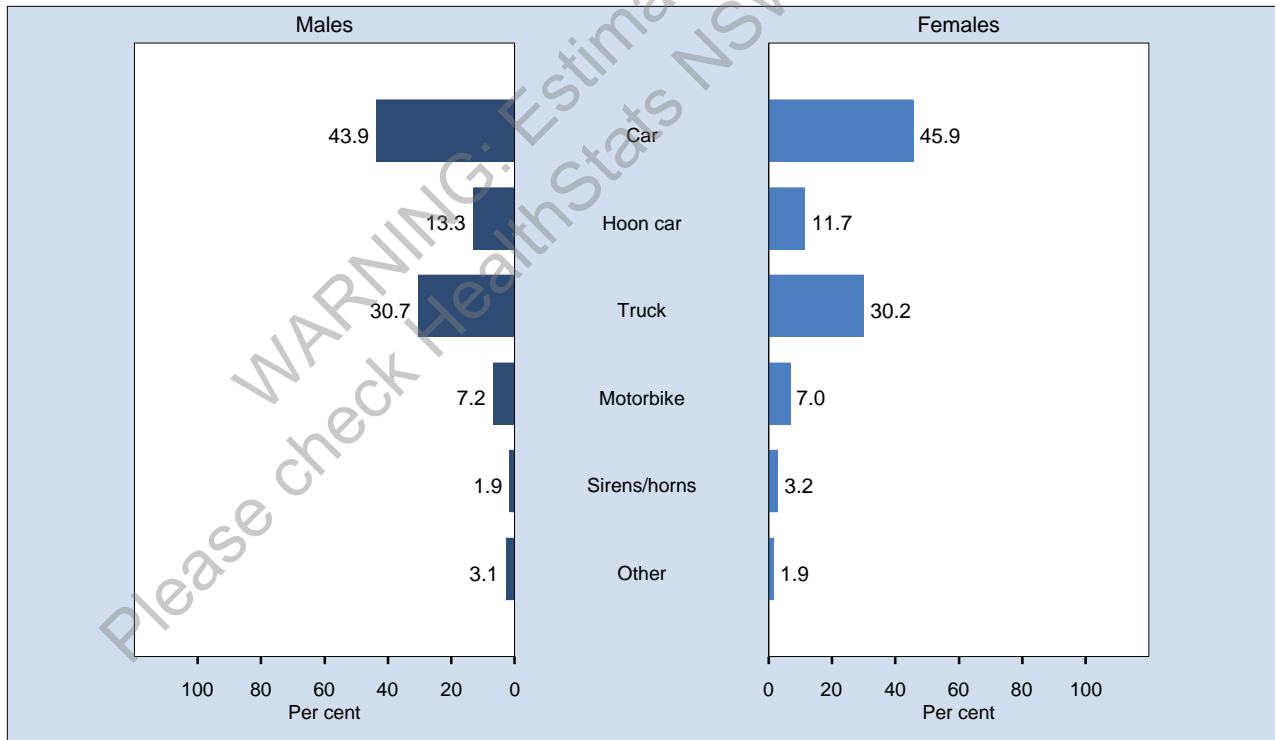
**Note:** Estimates are based on 5,899 respondents in NSW. For this indicator 22 (0.37%) were not stated (Don't know or Refused) in NSW. The indicator includes those who are exposed to road traffic noise. The question used to define the indicator was: When you are in your home or yard, are you exposed to road traffic noise?  
**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

### Exposure to road traffic noise by area health service, adults aged 16 years and over, NSW, 2009



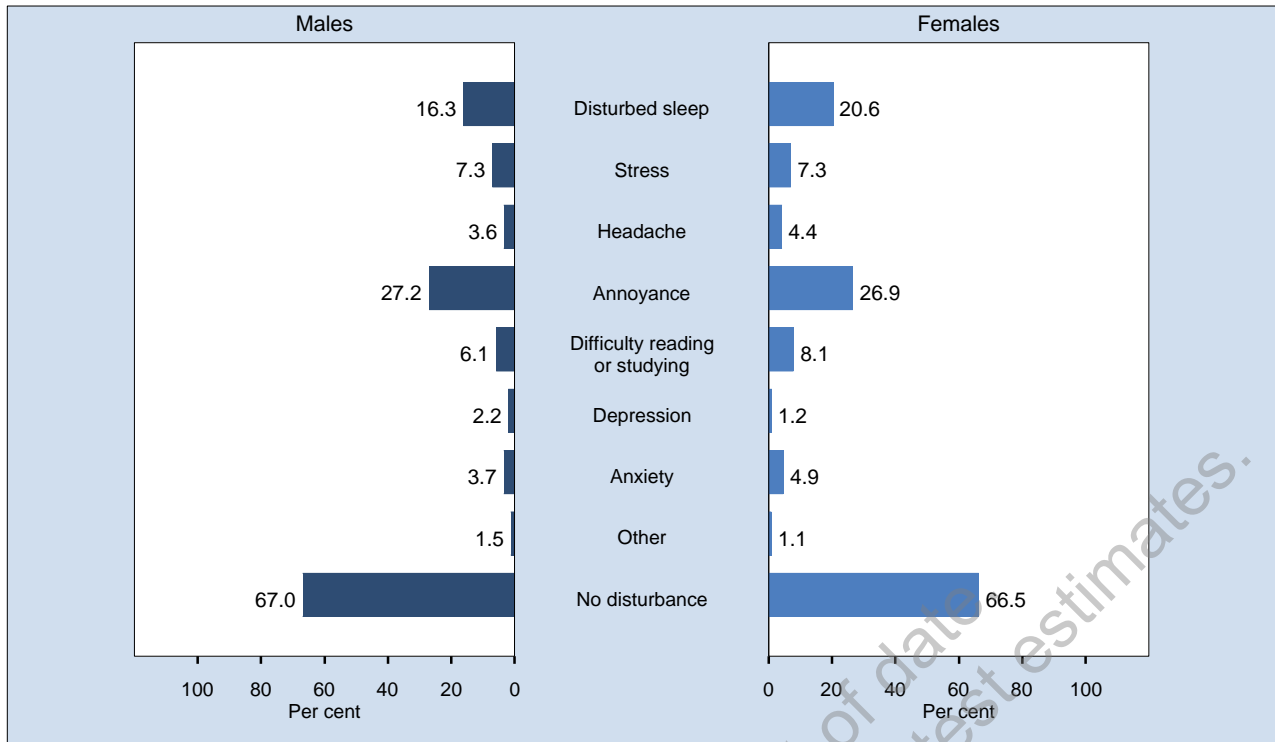
**Note:** Estimates are based on 5,899 respondents in NSW. For this indicator 22 (0.37%) were not stated (Don't know or Refused) in NSW. The indicator includes those who are exposed to road traffic noise. The question used to define the indicator was: When you are in your home or yard, are you exposed to road traffic noise?  
**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

### Types of road traffic noise, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 2,518 respondents in NSW. For this indicator 35 (1.37%) were not stated (Don't know or Refused) in NSW. The questions used were: When you are in your home or yard, are you exposed to road traffic noise? What type of vehicle is the source of most road traffic noise in your home or yard?  
**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

**Effects of road traffic noise, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 2,536 respondents in NSW. For this indicator 17 (0.67%) were not stated (Don't know or Refused) in NSW. The questions used were: When you are in your home or yard, are you exposed to road traffic noise? Does road traffic noise cause you disturbed sleep, stress, headache, annoyance, difficulty reading or studying, depression, anxiety, other impacts, you can hear road traffic noise but it does not disturb you. Respondents could mention more than 1 response. Percentages may total more than 100%.

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

WARNING: Estimates of data are not final estimates.  
Please check HealthStats NSW for latest estimates.



# Food handling

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## Introduction

Among the most frequently encountered hazards associated with outbreaks of foodborne illness are contamination, inadequate handling, and inappropriate temperature. Those involved in food preparation are advised to always wash their hands with soap before handling food; wash hands, knives and chopping boards carefully after using them; keep uncooked meat and poultry separate from cooked food in the refrigerator; wash vegetables thoroughly before use; and prepare, cook and store perishable foods at appropriate temperatures.[1-5]

## Results

In 2009, 71.7 per cent of adults washed their hands with soap after preparing raw meat. A significantly lower proportion of males (67.8 per cent) than females (74.8 per cent) washed their hands with soap after preparing raw meat. Among males, there was no significant difference among age groups. Among females, a significantly higher proportion of those aged 25-34 years (82.2 per cent) and 35-44 years (79.9 per cent), and a significantly lower proportion of those aged 55-64 years (71.3 per cent), 65-74 years (68.1 per cent), and 75 years and over (67.0 per cent), washed their hands with soap after preparing raw meat, compared with the overall adult female population.

A significantly higher proportion of adults in the fifth or most disadvantaged quintile (75.9 per cent) washed their hands with soap after preparing raw meat, compared with the overall adult population.

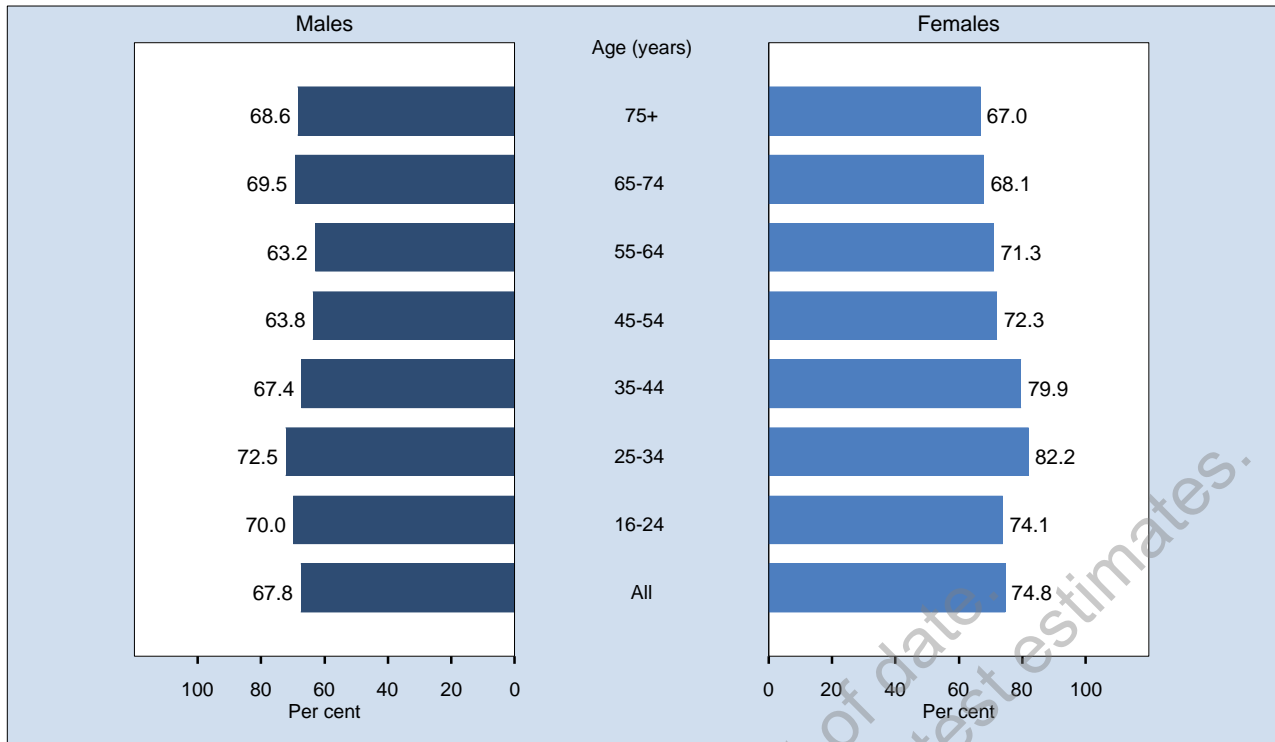
A significantly lower proportion of adults in rural areas (68.7 per cent) than urban areas (73.0 per cent) washed their hands with soap after preparing raw meat. A significantly higher proportion of adults in the Sydney South West Area Health Service (75.4 per cent), and a significantly lower proportion of adults in the North Coast (67.8 per cent) and Greater Southern (64.8 per cent) Area Health Services, washed their hands with soap after preparing raw meat, compared with the overall adult population.

There has been a significant increase in the proportion of adults who washed their hands with soap after preparing raw meat between 2003 (60.7 per cent) and 2009 (71.7 per cent). The increase was significant in males and females, and in urban and rural health areas.

## References

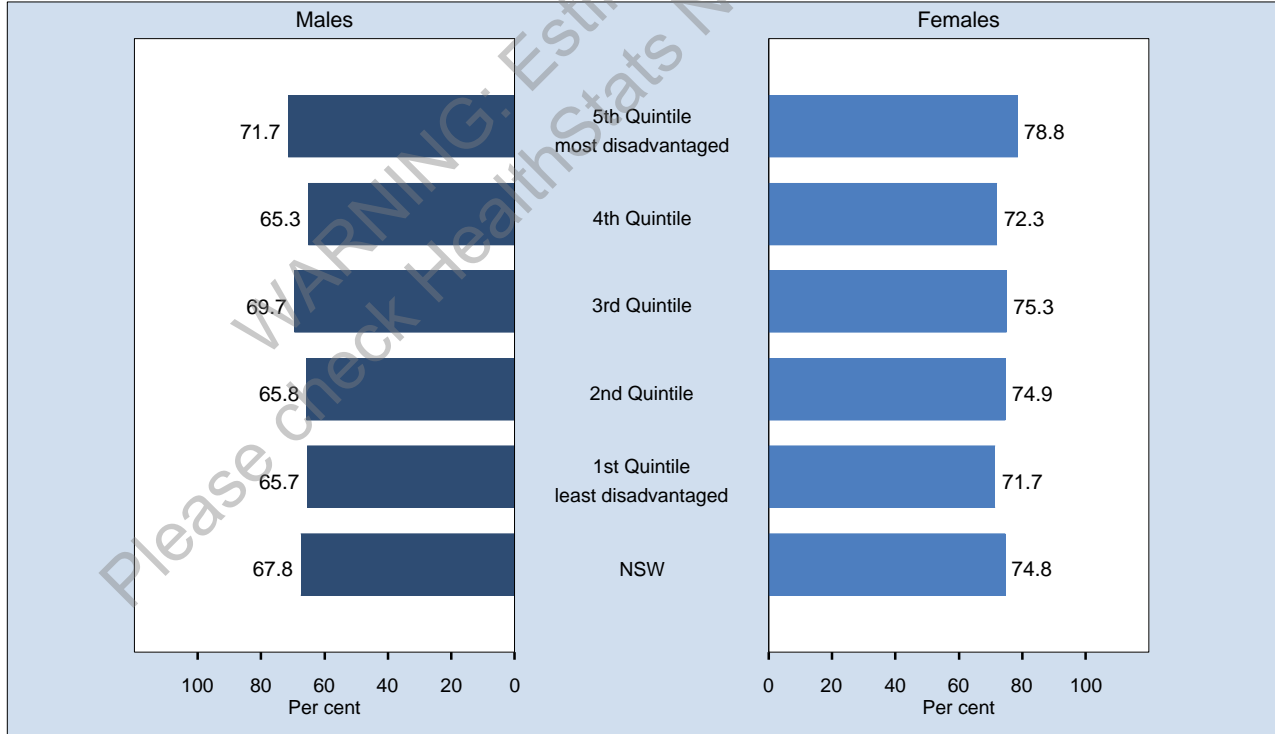
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**Washes hands with soap after preparing raw meat by age, adults aged 16 years and over, NSW, 2009**



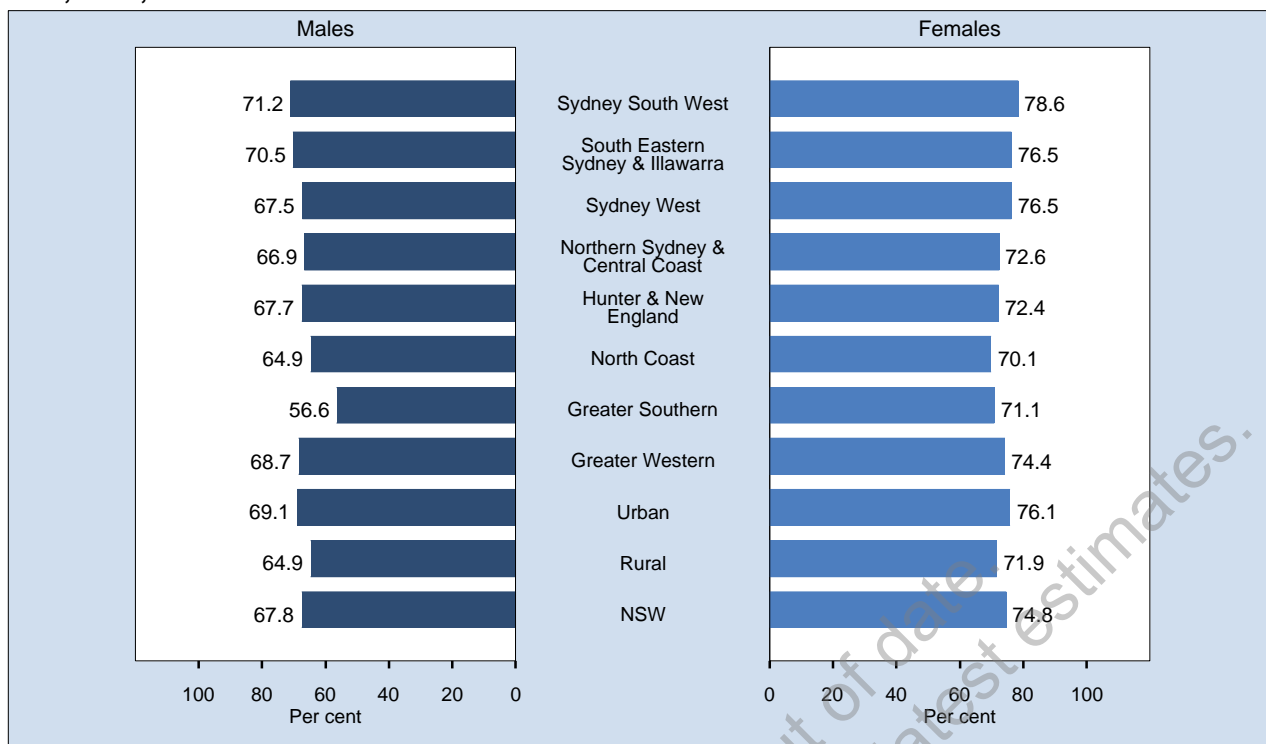
**Note:** Estimates are based on 7,032 respondents in NSW. For this indicator 109 (1.53%) were not stated (Don't know or Refused) in NSW. The indicator includes those who wash their hands with soap when preparing raw meat. The question used to define the indicator was: Thinking about the last time you prepared raw meat or chicken when cooking, after preparing it did you wipe your hands or rinse them without using soap, or wash your hands with soap, or continue cooking without washing your hands?  
**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

**Washes hands with soap after preparing raw meat by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 7,032 respondents in NSW. For this indicator 109 (1.53%) were not stated (Don't know or Refused) in NSW. The indicator includes those who wash their hands with soap when preparing raw meat. The question used to define the indicator was: Thinking about the last time you prepared raw meat or chicken when cooking, after preparing it did you wipe your hands or rinse them without using soap, or wash your hands with soap, or continue cooking without washing your hands?  
**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

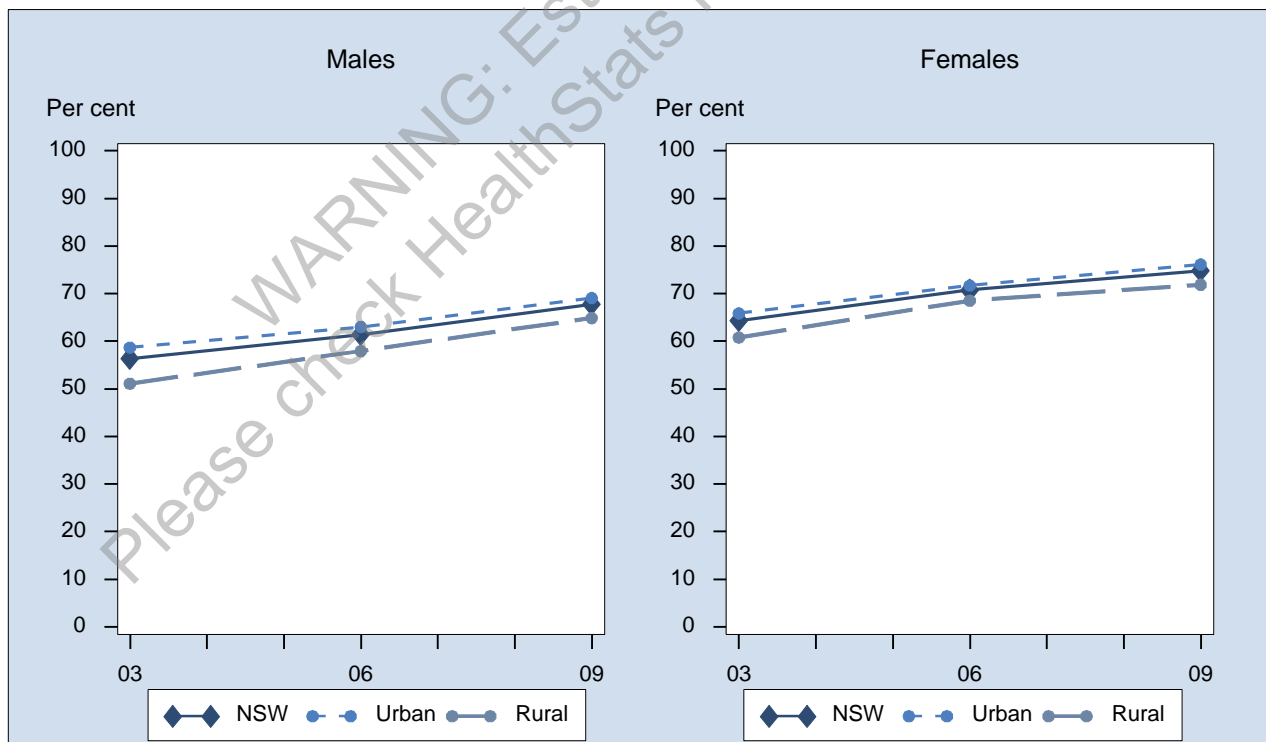
### Washes hands with soap after preparing raw meat by area health service, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 7,032 respondents in NSW. For this indicator 109 (1.53%) were not stated (Don't know or Refused) in NSW. The indicator includes those who wash their hands with soap when preparing raw meat. The question used to define the indicator was: Thinking about the last time you prepared raw meat or chicken when cooking, after preparing it did you wipe your hands or rinse them without using soap, or wash your hands with soap, or continue cooking without washing your hands?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

### Washes hands with soap after preparing raw meat by year, adults aged 16 years and over, NSW, 2003-2009



**Note:** Estimates are based on the following numbers of respondents for NSW: 2003 (11,388), 2006 (7,081), 2009 (7,032). The indicator includes those who wash their hands with soap when preparing raw meat. The question used to define the indicator was: Thinking about the last time you prepared raw meat or chicken when cooking, after preparing it did you wipe your hands or rinse them without using soap, or wash your hands with soap, or continue cooking without washing your hands?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

# Immunisation

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## Introduction

Influenza (flu) is characterised by abrupt onset of fever, myalgia, headache, sore throat, acute cough, and can cause extreme malaise lasting several days. Because immunisation against the influenza virus has been shown to significantly reduce morbidity and preventable mortality, it is strongly recommended for people aged 65 years and over, Aboriginal and Torres Strait Islander people aged 15 years and over, people aged 6 months or over with conditions predisposing to severe influenza, as well as for people who: may transmit influenza to those at high risk, provide essential services, work in particular industries, travel, or are involved in the poultry industry during periods of avian influenza activity.[1]

H1N1 influenza 09 (also known as human swine flu) is a new virus causing illness in people, which will continue spreading, along with other influenza viruses seen each year. The virus produces a mild illness in most people, a severe illness in some, and is a moderate illness overall.[2] A vaccine for the virus became available in October 2009.[3]

Invasive pneumococcal disease is an isolation of *Streptococcus pneumoniae* from a normally sterile site, most commonly the blood. It is a major cause of pneumonia, meningitis, and bacteraemia without focus. The 23-valent pneumococcal polysaccharide vaccine is recommended for all people aged 65 years and over, tobacco smokers, all people aged 10 years and over who have underlying chronic illnesses that place them at increased risk, and 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 vaccination: 50 years and over***

In 2009, just under one-half of adults aged 50 years and over (47.6 per cent) were immunised against influenza in the last 12 months. A significantly lower proportion of males (43.5 per cent) than females (51.3 per cent) were immunised against influenza in the last 12 months.

Among males, a significantly lower proportion of those aged 50-54 years (19.5 per cent), 55-59 years (24.2 per cent), and 60-64 years (35.1 per cent), and a significantly higher proportion of those aged 65-69 years (53.6 per cent), 70-74 years (71.8 per cent), 75-79 years (78.2 per cent), and 80 years and over (84.0 per cent) were immunised against influenza in the last 12 months, compared with the overall male population aged 50 years and over. Among females, a significantly lower proportion of those aged 50-54 years (28.9 per cent), 55-59 years (30.2 per cent), and 60-64 years (39.7 per cent), and a significantly higher proportion of those aged 65-69 years (66.8 per cent), 70-74 years (78.2 per cent), 75-79 years (76.2 per cent), and 80 years and over (78.7 per cent) were immunised against influenza in the last 12 months, compared with the overall female population aged 50 years and over.

There was no significant difference among quintiles of disadvantage, or between urban and rural health areas. A significantly higher proportion of adults in the Hunter & New England Area Health Service (52.7 per cent), and a significantly lower proportion of adults in the Sydney West (43.0 per cent) and North Coast (43.4 per cent) Area Health Services, were immunised against influenza in the last 12 months, compared with the overall adult population aged 50 years and over.

Since 1997, there has been a significant increase in the proportion of adults aged 50 years and over who were immunised against influenza in the last 12 months (34.6 per cent to 47.6 per cent). The increase has been significant in males and females, and in urban and rural health areas.

However, since 2008, there has been no significant change in the proportion of adults aged 50 years and over who were immunised against influenza in the last 12 months.

### ***Influenza vaccination: 65 years and over***

In 2009, just over 7 in 10 adults aged 65 years and over (72.6 per cent) were immunised against influenza in the last 12 months. A significantly lower proportion of males (70.0 per cent) than females (74.8 per cent) were immunised against influenza in the last 12 months.

Among males, a significantly lower proportion of those aged 65-69 years (53.6 per cent), and a significantly higher proportion of those aged 75-79 years (78.2 per cent) and 80 years and over (84.0 per cent), were immunised against influenza in the last 12 months, compared with the overall male population aged 65 years and over. Among females, a significantly lower proportion of those aged 65-69 years (66.8 per cent), and a significantly higher proportion of those aged 80 years and over (78.7 per cent), were immunised against influenza in the last 12 months, compared with the overall female population aged 65 years and over.

There was no significant difference among quintiles of disadvantage, or between urban and rural health areas. A significantly higher proportion of adults in the Hunter & New England Area Health Service (76.6 per cent) were 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 were immunised against influenza in the last 12 months (57.1 per cent to 72.6 per cent). The increase has been significant in males and females, and in urban and rural health areas.

However, since 2008, there has been no significant change in the proportion of adults aged 65 years and over who were immunised against influenza in the last 12 months.

### ***Vaccinated against H1N1 influenza since 1 October 2009***

In 2009, 15.6 per cent of adults aged 16 years and over were vaccinated against H1N1 influenza since 1 October 2009. There was no significant difference between males and females. A significantly lower proportion of adults aged 35-44 years (5.9 per cent) and 45-54 years (10.6 per cent), and a significantly higher proportion of adults aged 65-74 years (32.0 per cent) and 75 years and over (46.9 per cent), were vaccinated against H1N1 influenza since 1 October 2009, compared with the overall adult population who were vaccinated against H1N1 influenza since 1 October 2009.

A significantly higher proportion of adults in the fifth or most disadvantaged quintile (23.6 per cent) were vaccinated against H1N1 influenza since 1 October 2009, compared with the overall adult population who were vaccinated against H1N1 influenza since 1 October 2009.

There was no significant difference between urban and rural health areas, or among area health services.

### ***Pneumococcal vaccination: 50 years and over***

In 2009, just under one-third of adults aged 50 years and over (29.1 per cent) were immunised against pneumococcal disease in the last 5 years. A significantly lower proportion of males (25.9 per cent) than females (32.0 per cent) were immunised against pneumococcal disease in the last 5 years.

Among males, a significantly lower proportion of those aged 50-54 years (4.8 per cent), 55-59 years (5.6 per cent), and 60-64 years (10.1 per cent), and a significantly higher proportion of those aged 65-69 years (34.1 per cent), 70-74 years (57.3 per cent), 75-79 years (69.2 per cent), and 80 years and over (63.3 per cent) were immunised against pneumococcal disease in the last 5 years, compared with the overall male population aged 50 years and over. Among females, a significantly lower proportion of those aged 50-54 years (8.3 per cent), 55-59 years (8.5 per cent), and 60-64 years (18.4 per cent), and a significantly higher proportion of those aged 65-69 years (41.7 per cent), 70-74 years (60.1 per cent), 75-79 years (66.3 per cent), and 80 years and over (66.3 per cent) were immunised against pneumococcal disease in the last 5 years, compared with the overall female population aged 50 years and over.

A significantly higher proportion of adults in the fourth disadvantaged quintile (31.8 per cent), and a significantly lower proportion of adults in the first or least disadvantaged quintile (26.4 per cent), were immunised against pneumococcal disease in the last 5 years, compared with the overall adult population aged 50 years and over.

A significantly higher proportion of adults in rural health areas (33.1 per cent) than urban health areas (27.0 per cent) were immunised against pneumococcal disease in the last 5 years. A significantly higher proportion of adults in the Hunter & New England (33.2 per cent), North Coast (33.3 per cent), and Greater Western (34.5 per cent) Area Health Services, and a significantly lower proportion of adults in the Sydney South West (25.0 per cent) and Sydney West (22.1 per cent) Area Health Services, were immunised against pneumococcal disease in the last 5 years, compared with the overall adult population aged 50 years and over.

Since 2002, there has been a significant increase in the proportion of adults aged 50 years and over who were immunised against pneumococcal disease in the last 5 years (19.2 per cent to 29.1 per cent). The increase has been significant in males and females, and in urban and rural health areas.

However, since 2008, there has been a significant decrease in the proportion of adults aged 50 years and over who were immunised against pneumococcal disease in the last 5 years (31.4 per cent to 29.1 per cent).

### ***Pneumococcal vaccination: 65 years and over***

In 2009, just under 6 in 10 adults aged 65 years and over (56.0 per cent) were immunised against pneumococcal disease in the last 5 years. A significantly lower proportion of males (53.7 per cent) than females (57.9 per cent) were immunised against pneumococcal disease.

Among males, a significantly lower proportion of those aged 65-69 years (34.1 per cent), and a significantly higher proportion of those aged 75-79 years (69.2 per cent) and 80 years and over (63.3 per cent) were 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 (66.3 per cent) and 80 years and over (66.3 per cent) were 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.

A significantly higher proportion of adults in rural health areas (61.6 per cent) than urban health areas (52.7 per cent) were immunised against pneumococcal disease in the last 5 years. A significantly higher proportion of adults in the Hunter & New England (63.1 per cent), North Coast (61.2 per cent), and Greater Western (61.6 per cent) Area Health Services, and a significantly lower proportion of adults in Sydney West Area Health Service (47.1 per cent), were immunised against pneumococcal disease in the last 5 years, compared with the overall adult population aged 65 years and over.

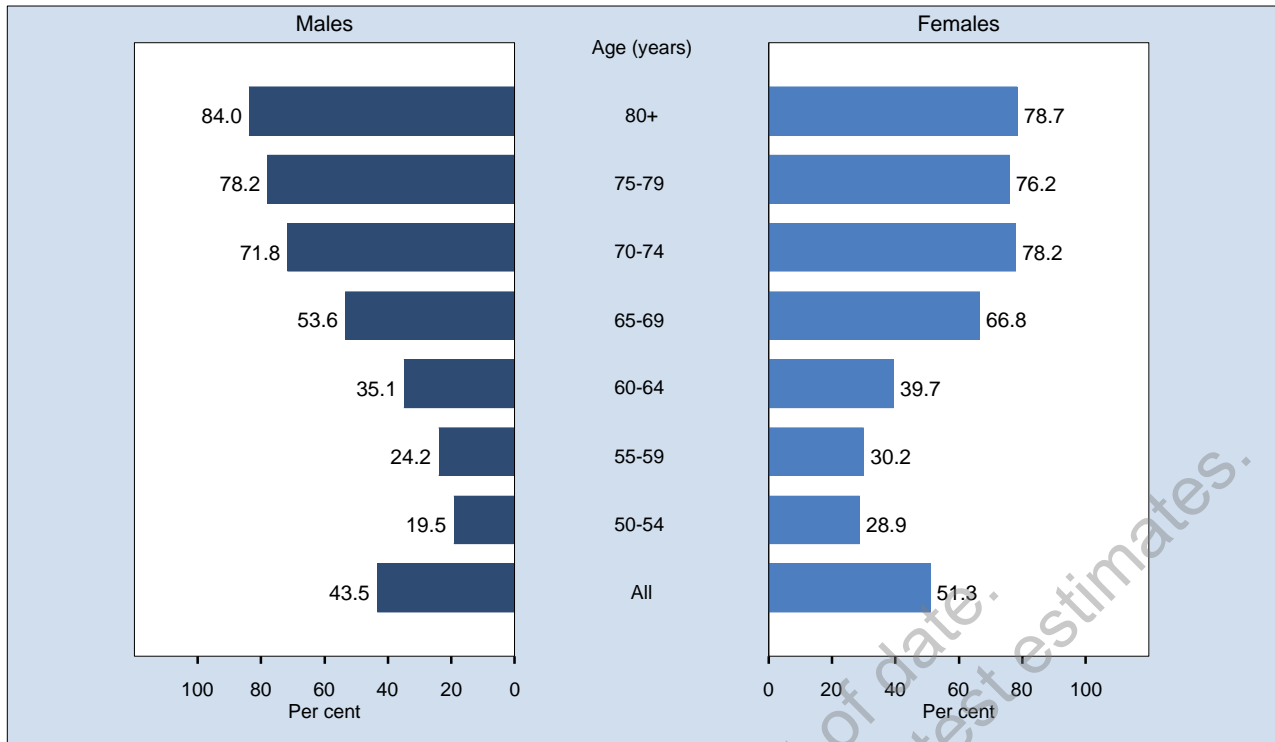
Since 2002, there has been a significant increase in the proportion of adults aged 65 years and over who were immunised against pneumococcal disease in the last 5 years (38.6 per cent to 56.0 per cent). The increase has been significant in males and females, and in urban and rural health areas.

Since 2008, there has been no significant change in the proportion of adults aged 65 years and over who were immunised against pneumococcal disease in the last 5 years; however, there has been a significant decrease in females.

## **References**

1. National Health and Medical Research Council. *The Australian Immunisation Handbook, 9th Edition*, Canberra: National Health and Medical Research Council, 2009. Available online at [www.immunise.health.gov.au](http://www.immunise.health.gov.au) (accessed 31 August 2010).
2. NSW Department of Health. *H1N1 influenza 09 Infection: Fact Sheet*. Sydney NSW Department of Health, 2009. Available online at [www.health.nsw.gov.au/factsheets/infectious/swine\\_flu.html](http://www.health.nsw.gov.au/factsheets/infectious/swine_flu.html) (accessed 31 August 2010).
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**Vaccinated against influenza in the last 12 months by age, adults aged 50 years and over, NSW, 2009**



**Note:** Estimates are based on 7,027 respondents in NSW. For this indicator 23 (0.33%) were not stated (Don't know or Refused) in NSW. The indicator includes those aged 50 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

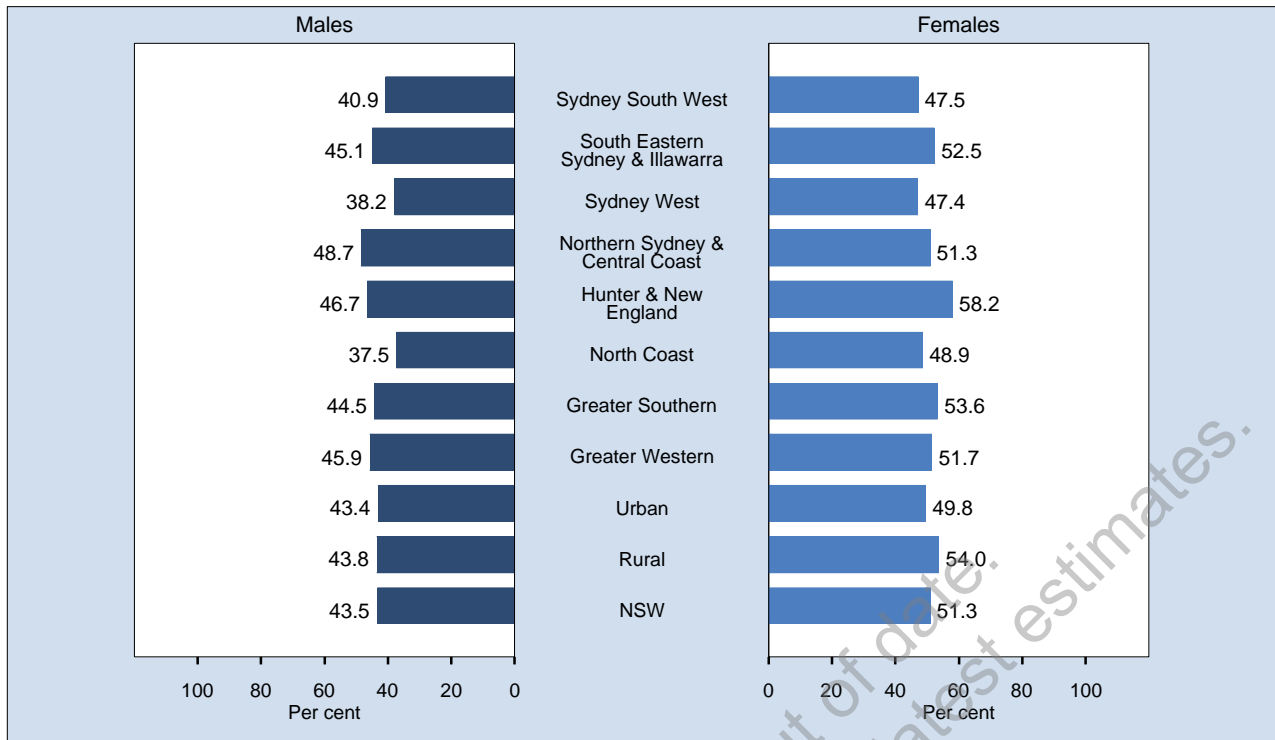
**Vaccinated against influenza in the last 12 months by socioeconomic disadvantage, adults aged 50 years and over, NSW, 2009**



**Note:** Estimates are based on 7,027 respondents in NSW. For this indicator 23 (0.33%) were not stated (Don't know or Refused) in NSW. The indicator includes those aged 50 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

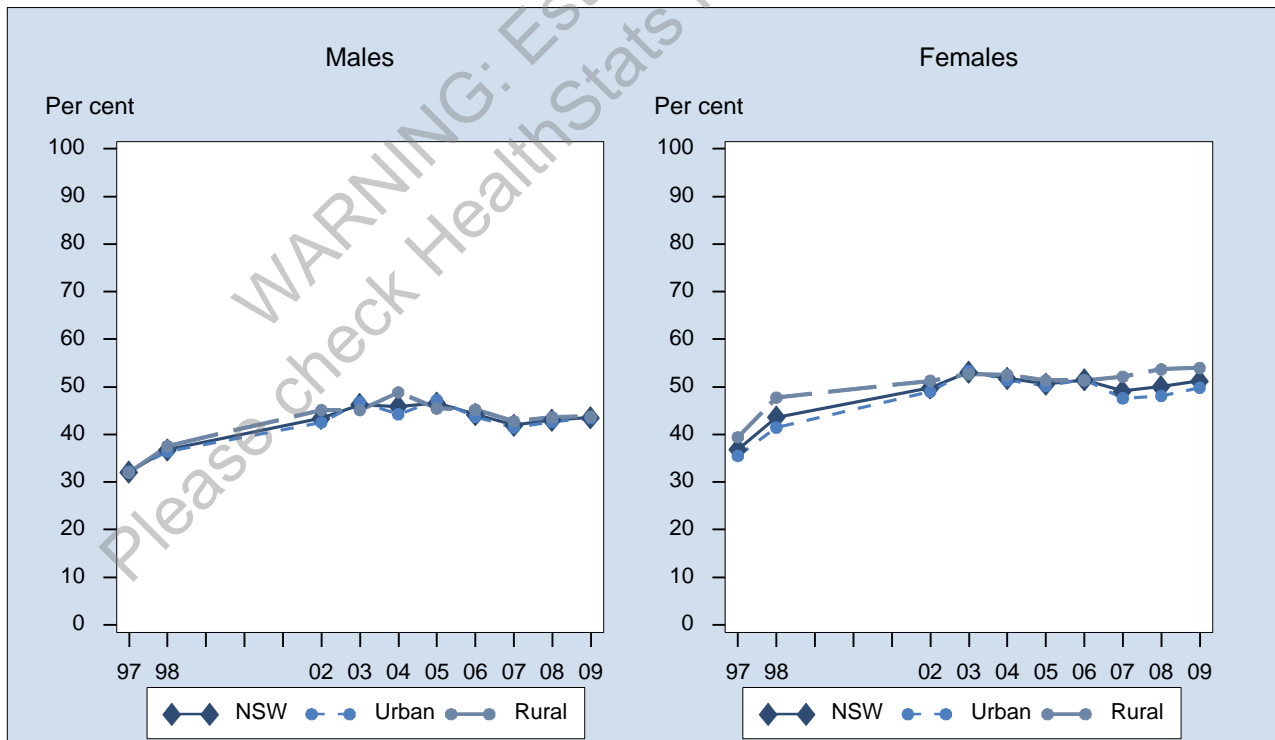
**Vaccinated against influenza in the last 12 months by area health service, adults aged 50 years and over, NSW, 2009**



**Note:** Estimates are based on 7,027 respondents in NSW. For this indicator 23 (0.33%) were not stated (Don't know or Refused) in NSW. The indicator includes those aged 50 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

**Vaccinated against influenza in the last 12 months by year, adults aged 50 years and over, NSW, 1997-2009**

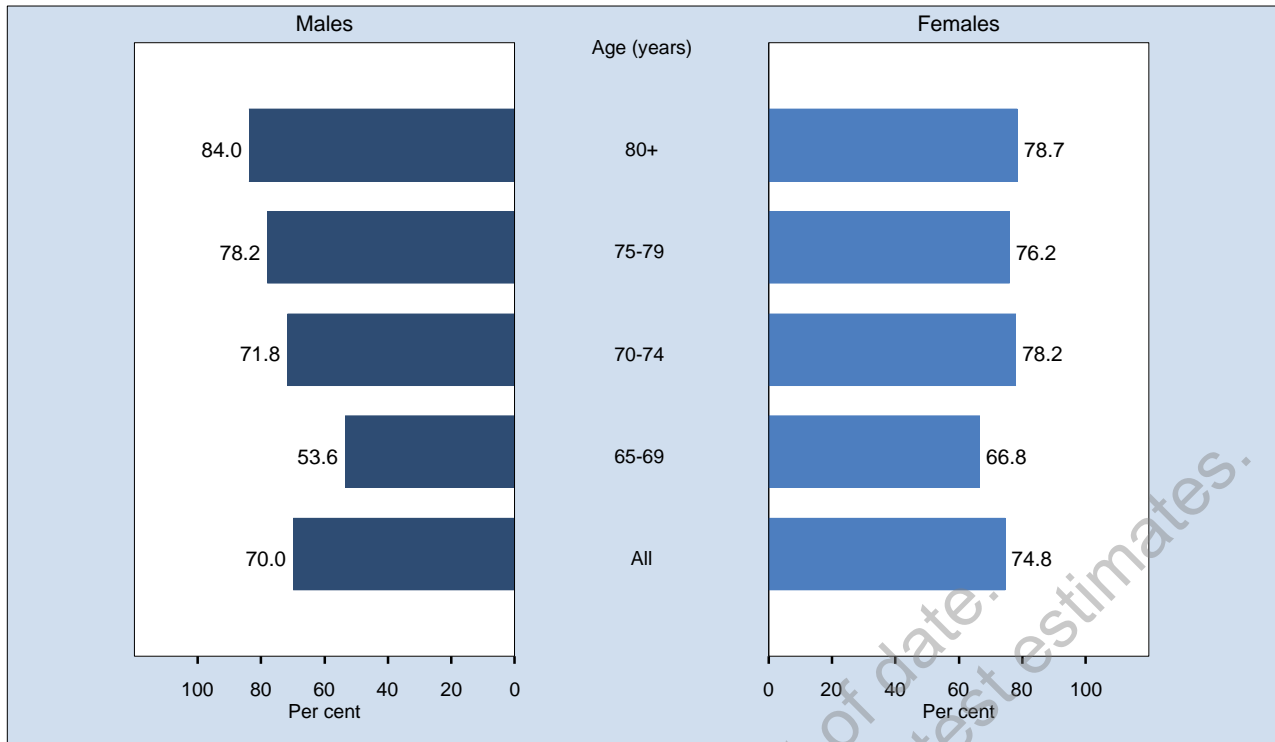


**Note:** Estimates are based on the following numbers of respondents for NSW: 1997 (6,938), 1998 (7,242), 2002 (7,014), 2003 (7,135), 2004 (5,320), 2005 (6,777), 2006 (4,760), 2007 (4,684), 2008 (5,455), 2009 (7,027). The indicator includes those aged 50 years and over who were vaccinated or immunised 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.



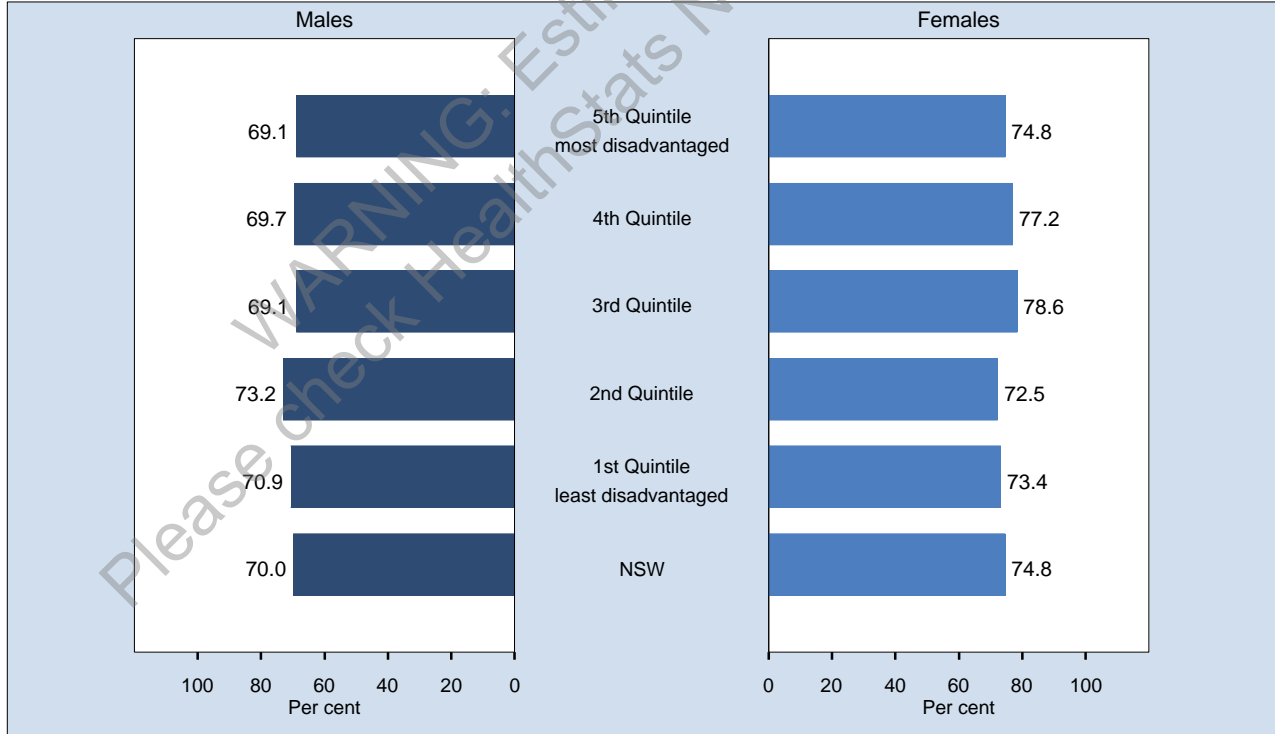
**Vaccinated against influenza in the last 12 months by age, adults aged 65 years and over, NSW, 2009**



**Note:** Estimates are based on 3,546 respondents in NSW. For this indicator 15 (0.42%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

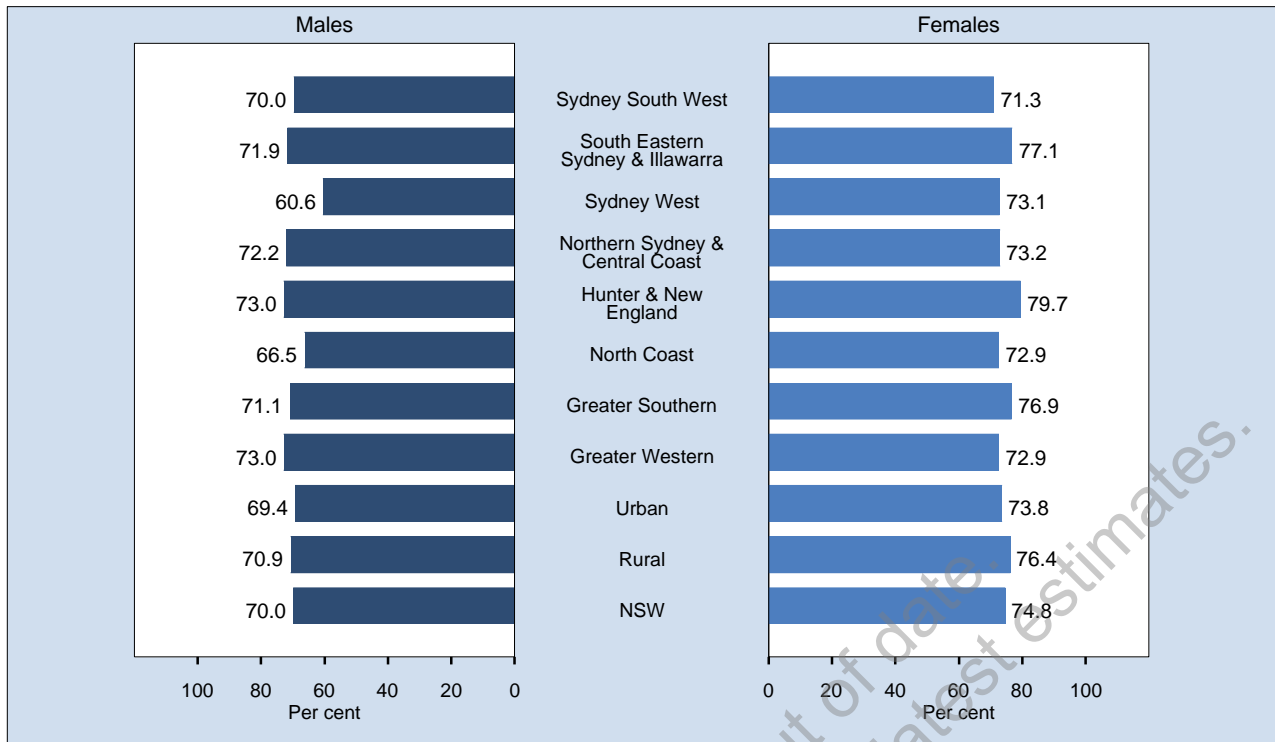
**Vaccinated against influenza in the last 12 months by socioeconomic disadvantage, adults aged 65 years and over, NSW, 2009**



**Note:** Estimates are based on 3,546 respondents in NSW. For this indicator 15 (0.42%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

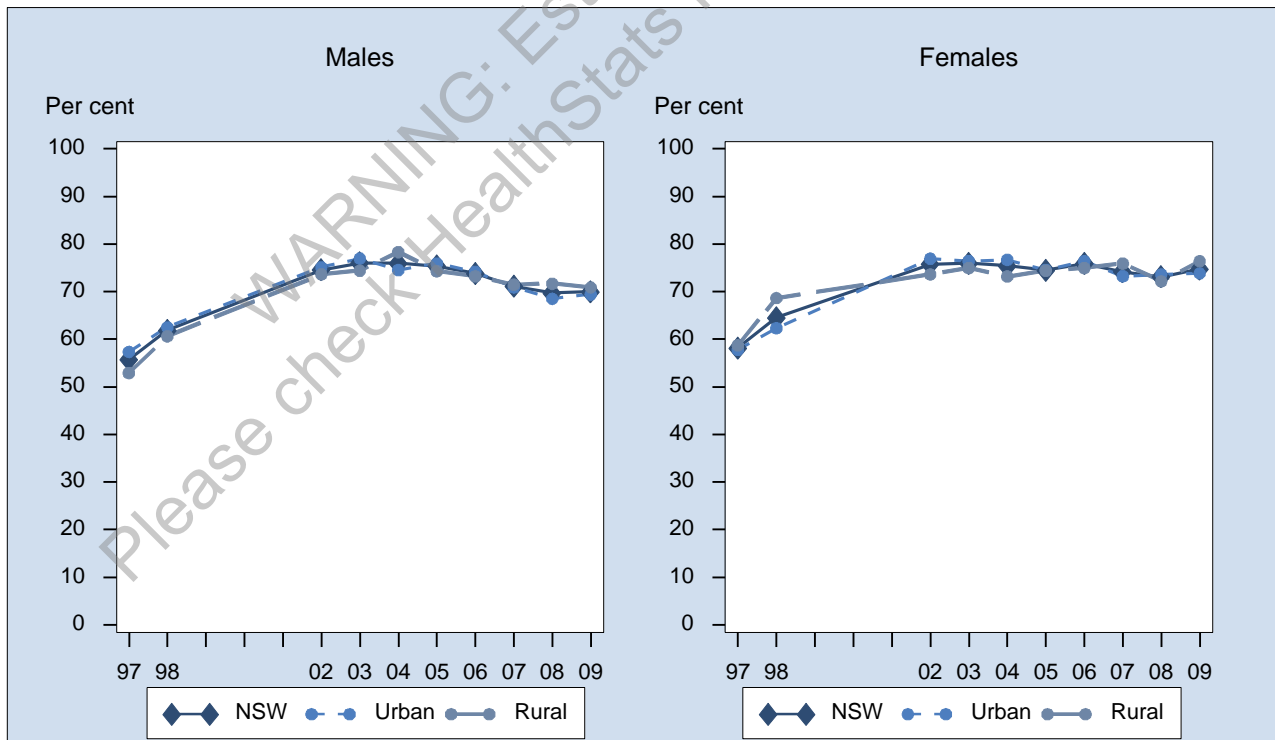
**Vaccinated against influenza in the last 12 months by area health service, adults aged 65 years and over, NSW, 2009**



**Note:** Estimates are based on 3,546 respondents in NSW. For this indicator 15 (0.42%) 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 2009 (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, 1997-2009**



**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 (2,585), 2005 (3,380), 2006 (2,382), 2007 (2,340), 2008 (2,730), 2009 (3,546). 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

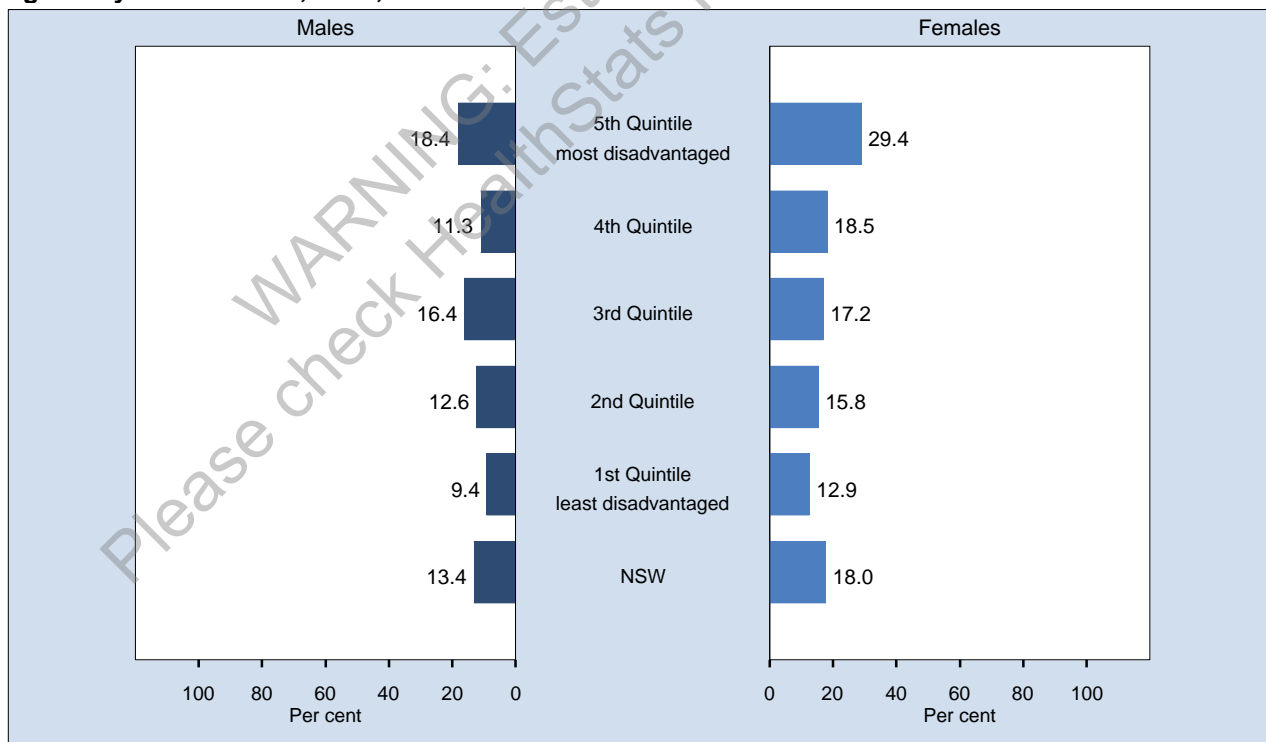
**Vaccinated against H1N1 influenza since 1 October 2009 by age, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 977 respondents in NSW. For this indicator 4 (0.41%) were not stated (Don't know or Refused) in NSW. The indicator includes those aged 16 years and over who were vaccinated or immunised against H1N1 influenza since 1 October 2009. The question used to define the indicator was: Have you been vaccinated against human swine flu?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

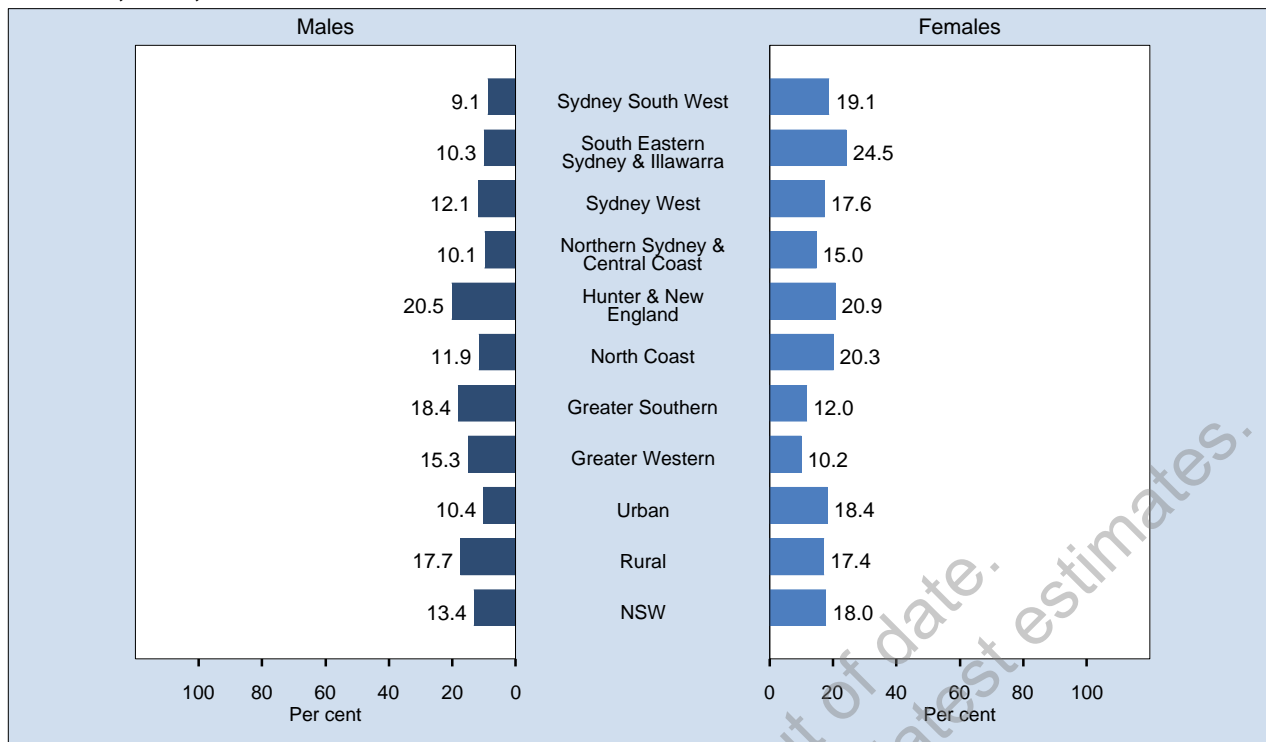
**Vaccinated against H1N1 influenza since 1 October 2009 by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 977 respondents in NSW. For this indicator 4 (0.41%) were not stated (Don't know or Refused) in NSW. The indicator includes those aged 16 years and over who were vaccinated or immunised against H1N1 influenza since 1 October 2009. The question used to define the indicator was: Have you been vaccinated against human swine flu?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

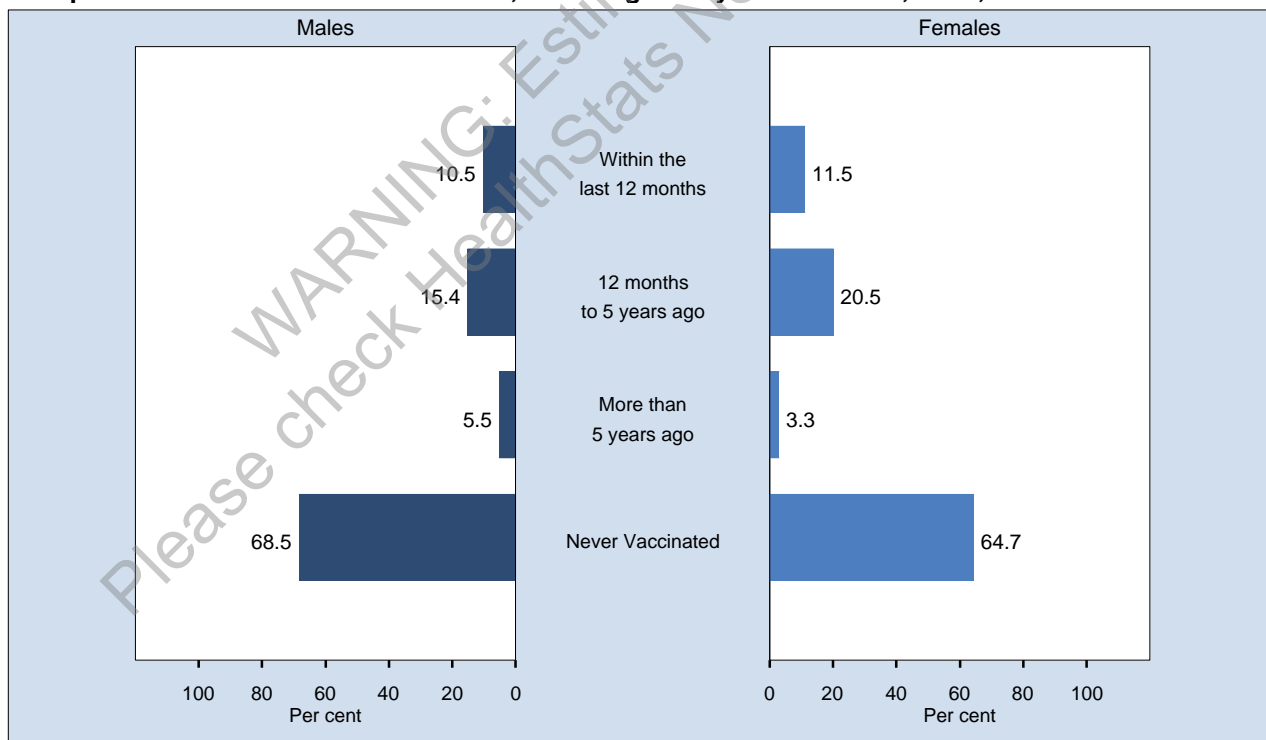
**Vaccinated against H1N1 influenza since 1 October 2009 by area health service, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 977 respondents in NSW. For this indicator 4 (0.41%) were not stated (Don't know or Refused) in NSW. The indicator includes those aged 16 years and over who were vaccinated or immunised against H1N1 influenza since 1 October 2009. The question used to define the indicator was: Have you been vaccinated against human swine flu?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

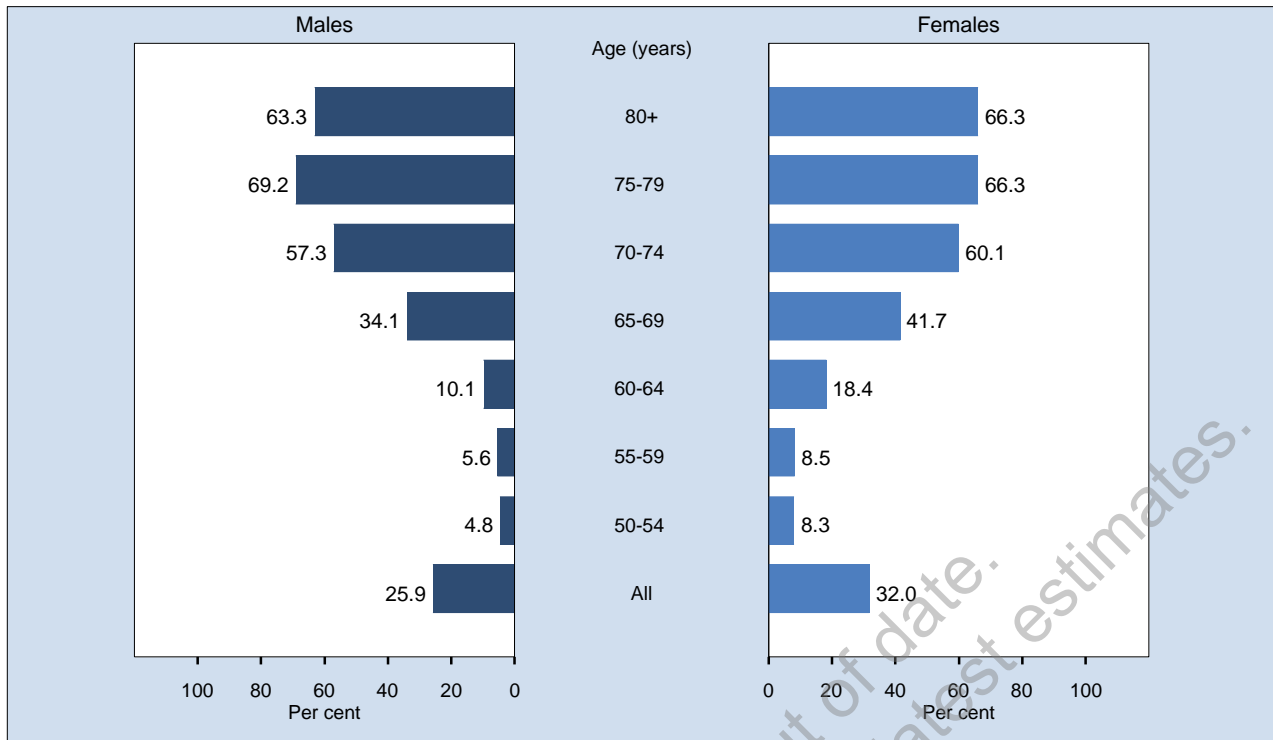
**Last pneumococcal disease vaccination, adults aged 50 years and over, NSW, 2009**



**Note:** Estimates are based on 6,549 respondents in NSW. For this indicator 501 (7.11%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

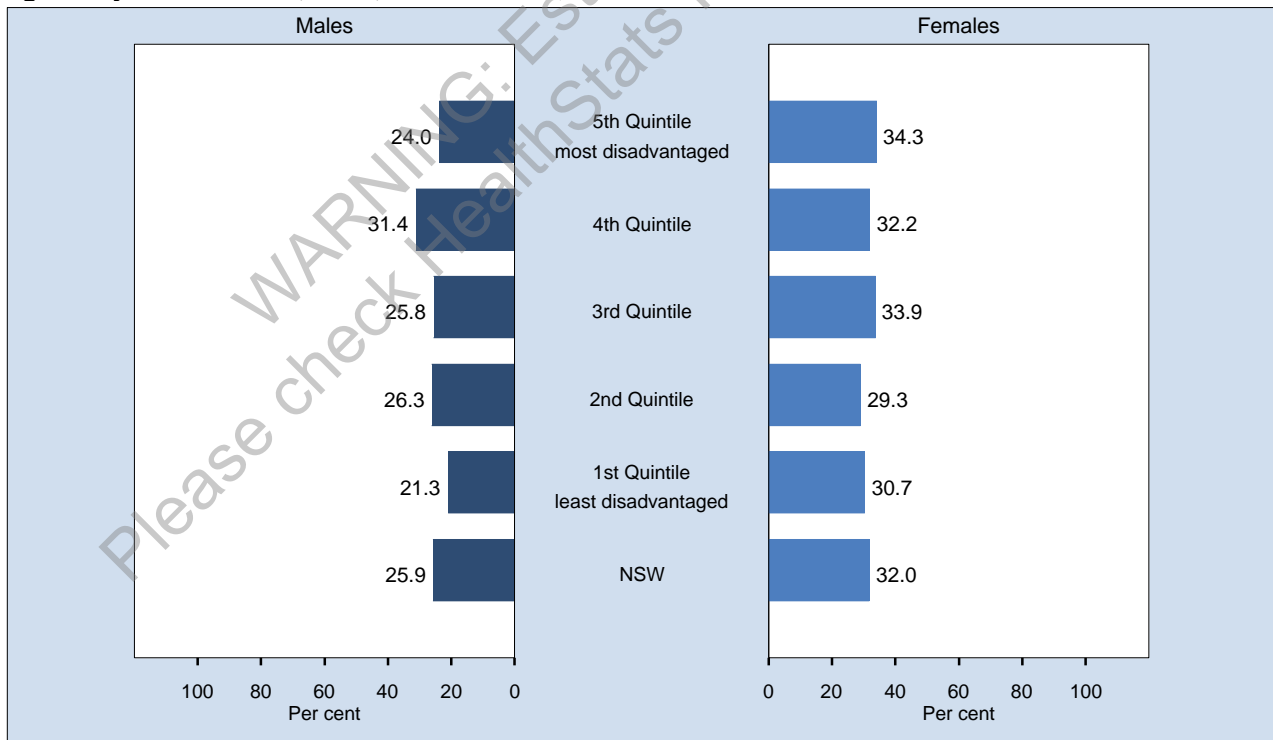
**Vaccinated against pneumococcal disease in the last 5 years by age, adults aged 50 years and over, NSW, 2009**



**Note:** Estimates are based on 6,549 respondents in NSW. For this indicator 501 (7.11%) were not stated (Don't know or Refused) in NSW. The indicator includes those aged 50 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

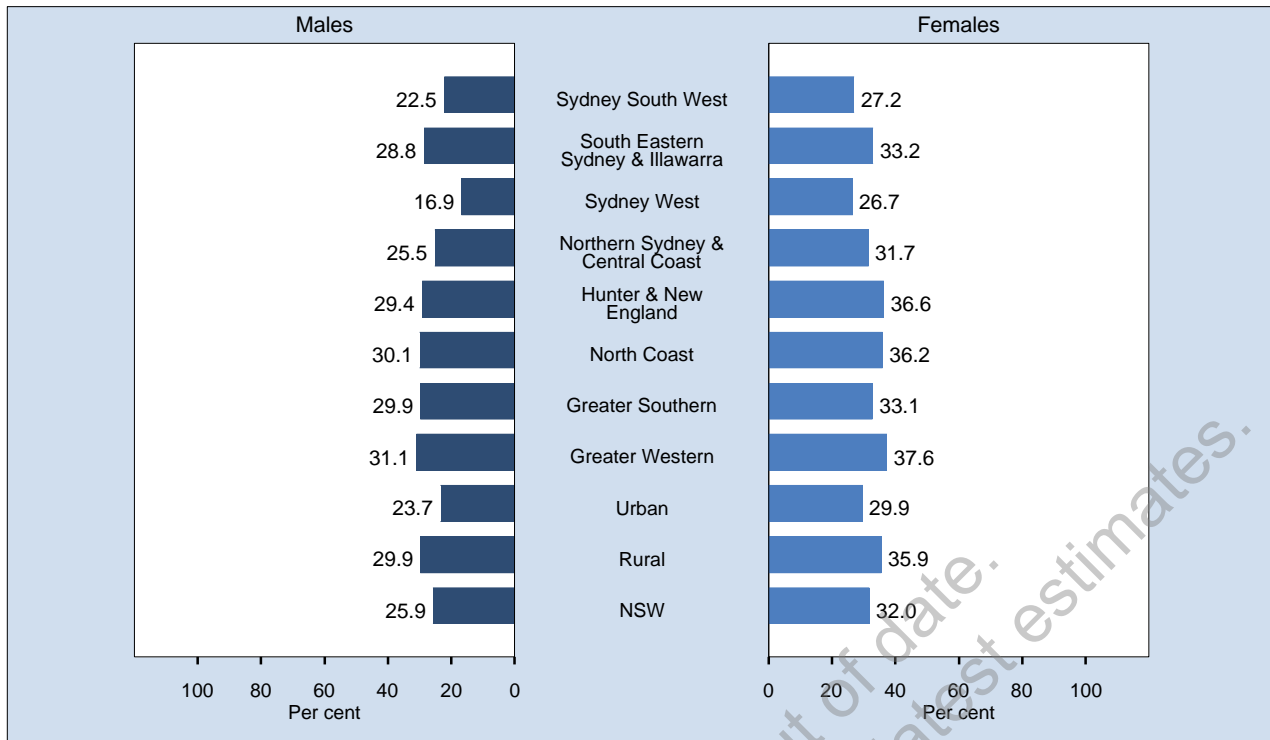
**Vaccinated against pneumococcal disease in the last 5 years by socioeconomic disadvantage, adults aged 50 years and over, NSW, 2009**



**Note:** Estimates are based on 6,549 respondents in NSW. For this indicator 501 (7.11%) were not stated (Don't know or Refused) in NSW. The indicator includes those aged 50 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

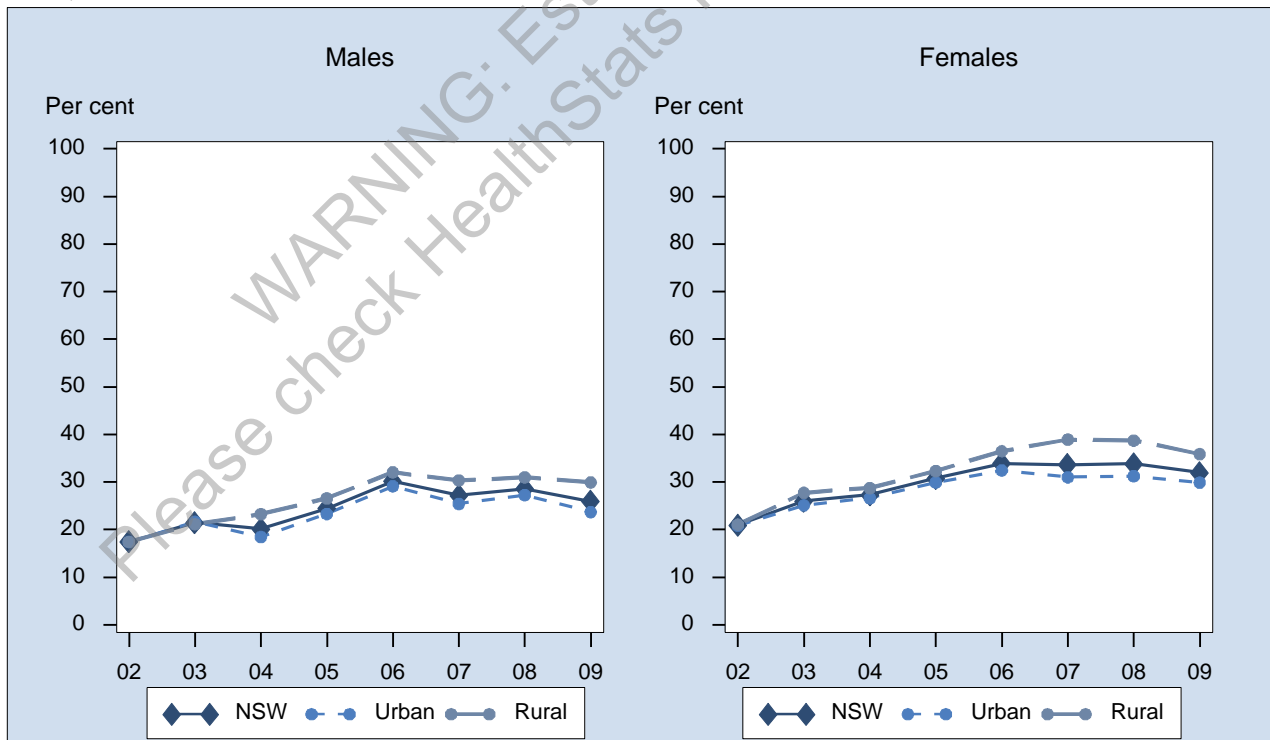
**Vaccinated against pneumococcal disease in the last 5 years by area health service, adults aged 50 years and over, NSW, 2009**



**Note:** Estimates are based on 6,549 respondents in NSW. For this indicator 501 (7.11%) were not stated (Don't know or Refused) in NSW. The indicator includes those aged 50 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

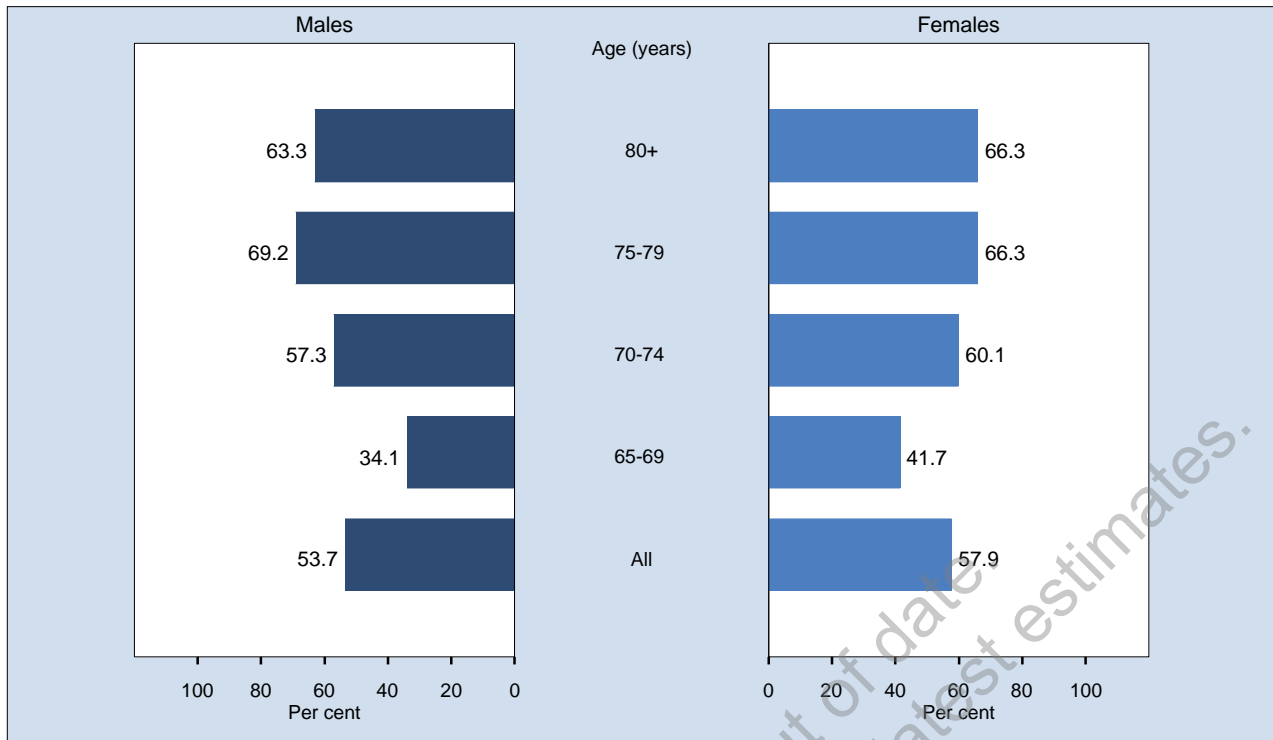
**Vaccinated against pneumococcal disease in the last 5 years by year, adults aged 50 years and over, NSW, 2002-2009**



**Note:** Estimates are based on the following numbers of respondents for NSW: 2002 (6,852), 2003 (6,999), 2004 (5,166), 2005 (6,625), 2006 (4,602), 2007 (4,452), 2008 (5,115), 2009 (6,549). The indicator includes those aged 50 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

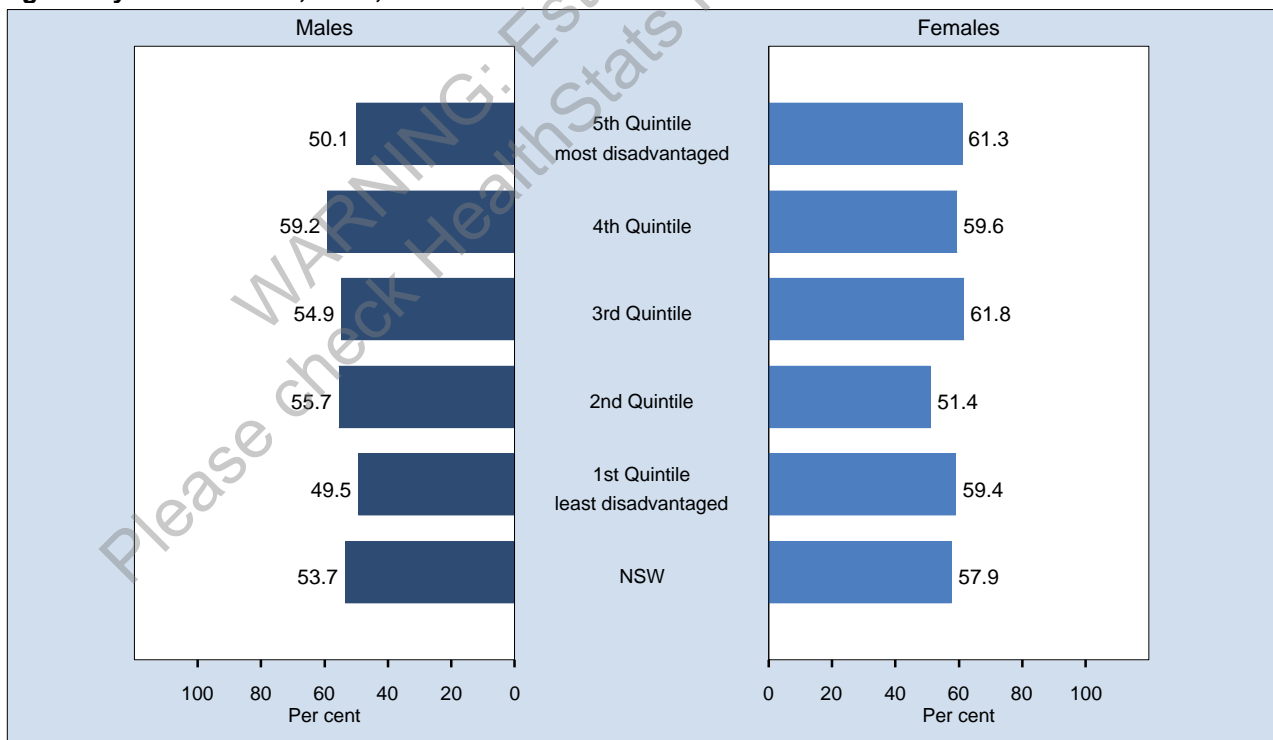
**Vaccinated against pneumococcal disease in the last 5 years by age, adults aged 65 years and over, NSW, 2009**



**Note:** Estimates are based on 3,324 respondents in NSW. For this indicator 237 (6.66%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

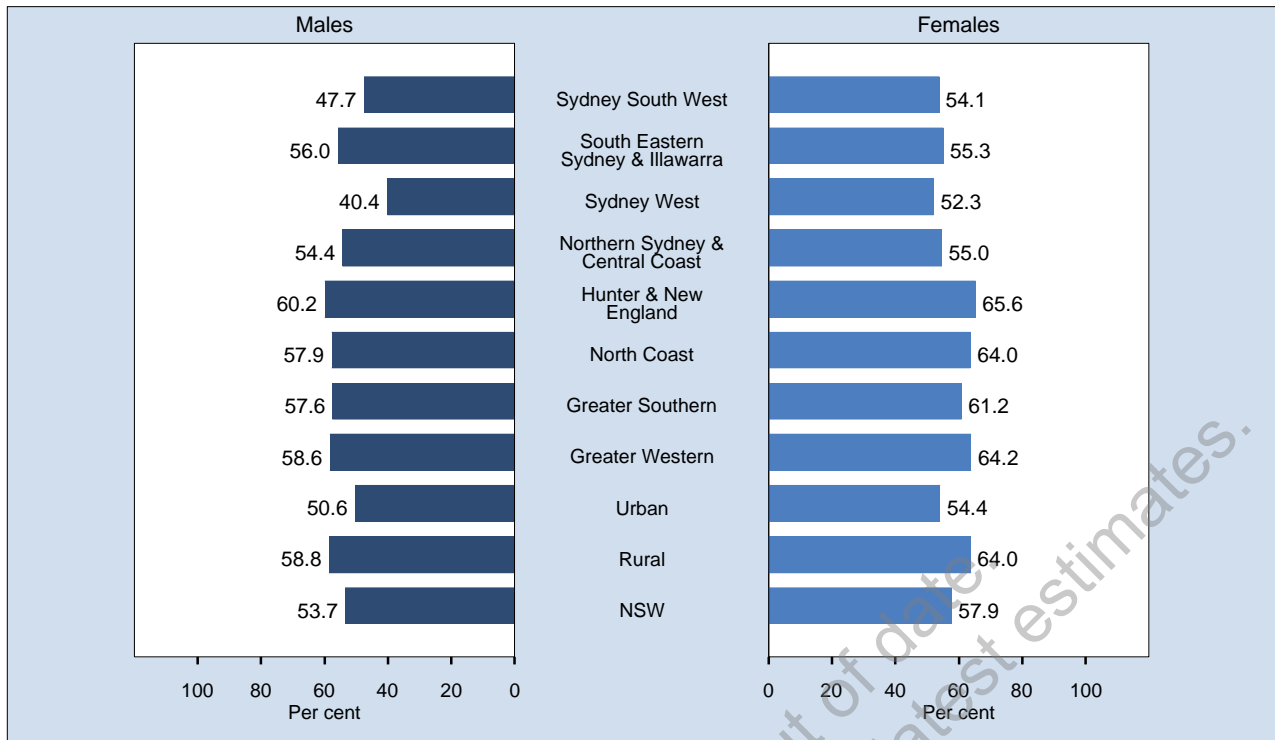
**Vaccinated against pneumococcal disease in the last 5 years by socioeconomic disadvantage, adults aged 65 years and over, NSW, 2009**



**Note:** Estimates are based on 3,324 respondents in NSW. For this indicator 237 (6.66%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

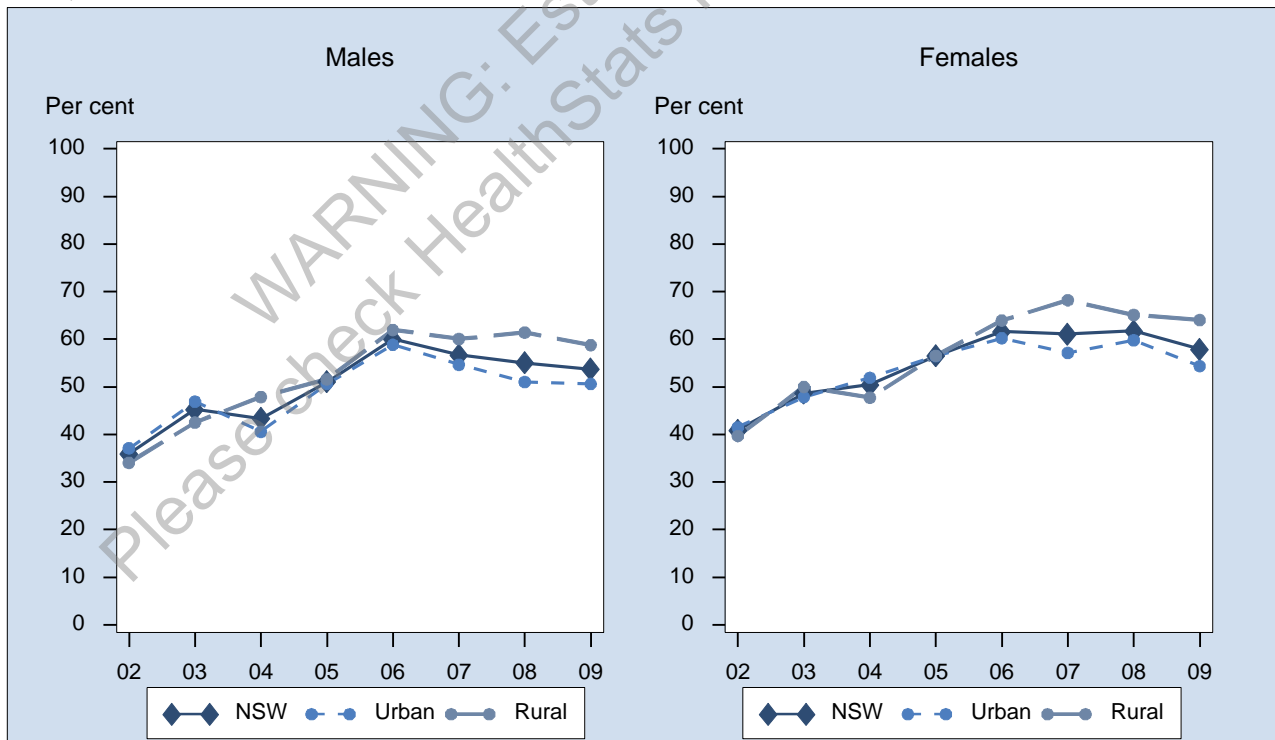
**Vaccinated against pneumococcal disease in the last 5 years by area health service, adults aged 65 years and over, NSW, 2009**



**Note:** Estimates are based on 3,324 respondents in NSW. For this indicator 237 (6.66%) 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 2009 (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, 2002-2009**



**Note:** Estimates are based on the following numbers of respondents for NSW: 2002 (3,324), 2003 (3,497), 2004 (2,504), 2005 (3,303), 2006 (2,315), 2007 (2,234), 2008 (2,588), 2009 (3,324). 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.



# Injury prevention

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## Introduction

In Australia, injury is the principal cause of death in people under 45; a leading cause of mortality, morbidity and permanent disability; and a major source of health care costs. Injury causes a range of physical, cognitive and psychological disabilities that seriously affect the quality of life of individuals, people, and their families. However, as injury is preventable and there are significant opportunities for reducing the burden of injury by implementing effective prevention strategies, injury prevention and control has been made a National Health Priority Area.[1]

The likelihood of being injured, and the types of injury that are common, differ between periods of life, reflecting people's changing capabilities, activities, circumstances and knowledge. A life stage approach to injury prevention recognises and responds to the differing injury risks confronting different age groups now, and the particular opportunities available to these groups to influence safety now and in the future. This approach recognises the value of seeing injury prevention as part of a comprehensive approach to enhancing health and quality of life.[2]

In New South Wales, a high proportion of the mortality and morbidity caused by house fires happens at night while people are sleeping. Functional and correctly situated smoke alarms detect low levels of smoke and sound an alarm before the smoke becomes too dense for people to escape. They dramatically reduce fatalities, injuries, and damage to property.[3]

The *NSW Building Legislation Amendment (Smoke Alarms) Act 2005* commenced on 1 May 2006. This legislation requires that 1 or more smoke alarms are installed in residential buildings where people sleep, smoke alarms are maintained in functional order, and people do not remove these alarms or interfere with their operation.[4]

In less than 30 seconds a small flame can get completely out of control and turn into a major fire. Because accidental home fires can catch people unaware, every home should have a fire escape plan, and everyone in the home should discuss and agree on what actions should be taken if a fire occurs. The NSW Fire Brigades provides information on how to draw up and practice home escape plans.[5]

## Results

### **Home smoke alarms**

In 2009, 93.7 per cent of New South Wales adults lived in homes with a smoke alarm or detector. Of these, 66.9 per cent had battery operated alarms, 18.5 per cent had hard wired alarms, and 8.3 per cent had both.

A significantly higher proportion of adults in the first or least disadvantaged quintile (95.2 per cent), and a significantly lower proportion of adults in the fifth or most disadvantaged quintile (90.9 per cent), lived in homes with a smoke alarm or detector, compared with the overall adult population.

A significantly higher proportion of adults in rural health areas (95.2 per cent) than urban health areas (93.1 per cent) lived in homes with a smoke alarm or detector. A significantly higher proportion of adults in the Greater Western Area Health Service (95.7 per cent), and a significantly lower proportion of adults in the Sydney South West Area Health Service (90.8 per cent), lived in homes with a smoke alarm or detector, compared with the overall adult population.

Since 1997, there has been a significant increase in the proportion of adults living in homes with a smoke alarm or detector (58.2 per cent to 93.7 per cent). The increase has been significant in urban and rural health areas.

Since 2008, there has been no significant change in the proportion of adults living in homes with a smoke alarm or detector.

Of those adults living in homes with a battery operated alarm, 32.0 per cent tested the alarm within the last month, 41.1 per cent tested the alarm 1-5 months ago, 17.0 per cent tested the alarm 6-12 months ago, 5.2 per cent tested the alarm more than a year ago, 4.2 per cent had never tested the alarm, and 0.4 per cent had no battery in the alarm. Of those adults living in homes with a hard wired alarm, 27.8 per cent tested the alarm within the last month, 36.8 per cent tested the alarm 1-5 months ago, 18.7 per cent tested the alarm

6-12 months ago, 7.0 per cent tested the alarm more than a year ago, and 9.8 per cent had never tested the alarm.

## ***Home emergency escape plans***

In 2009, 73.4 per cent of adults lived in homes with no emergency escape plan, 1.5 per cent lived in homes with an emergency escape plan practised in the last month, 2.0 per cent lived in homes with a plan practised 1-5 months ago, 1.3 per cent lived in homes with a plan practised 6 months to 1 year ago, 2.8 per cent lived in homes with a plan practised more than 1 year ago, and 18.9 per cent lived in homes with an emergency escape plan but had never practised the plan.

In 2009, 4.9 per cent of adults lived in homes with an emergency escape plan practised in the last 12 months. A significantly higher proportion of adults aged 35-44 years (7.9 per cent), and a significantly lower proportion of adults aged 65-74 years (3.4 per cent) and 75 years and over (3.2 per cent), lived in homes with an emergency escape plan practised in the last 12 months, compared with the overall adult population.

A significantly higher proportion of adults in the third disadvantaged quintile (7.1 per cent) and fourth disadvantaged quintile (7.2 per cent), and a significantly lower proportion of adults in the first or least disadvantaged quintile (2.7 per cent) and second disadvantaged quintile (3.2 per cent), lived in homes with an emergency escape plan practised in the last 12 months, compared with the overall adult population.

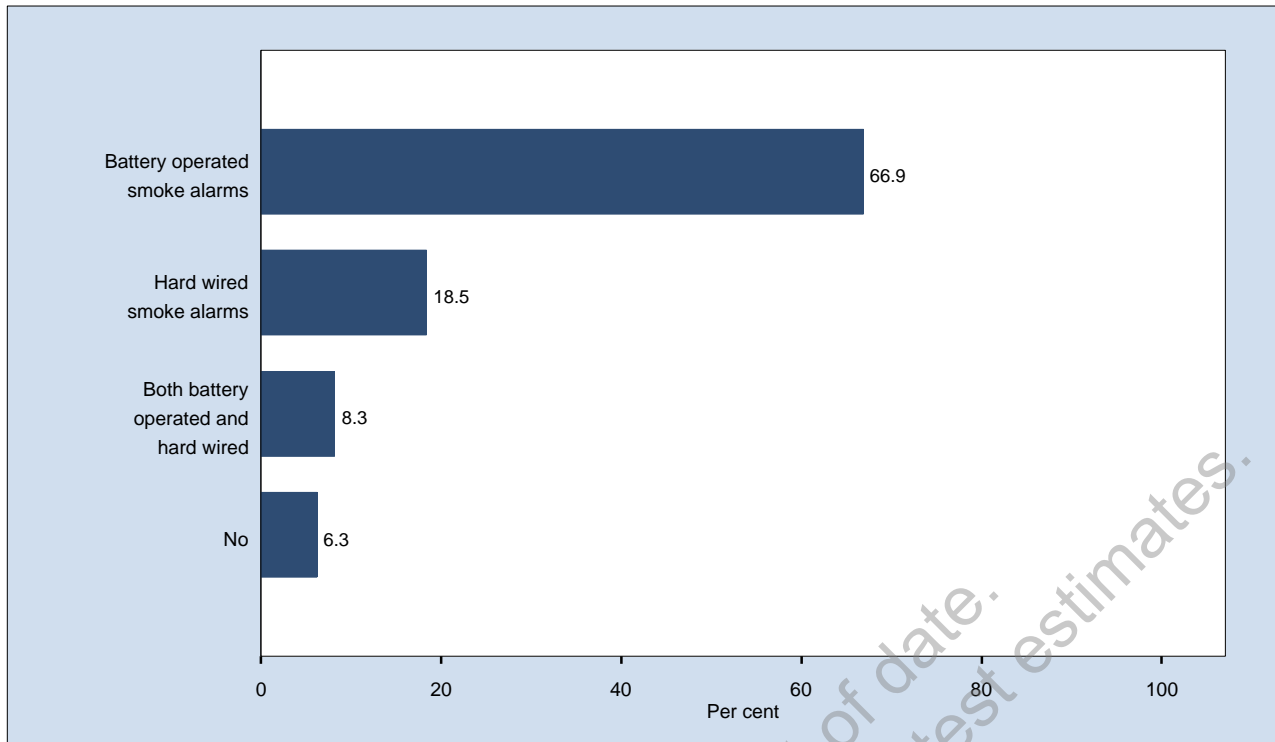
A significantly higher proportion of adults in rural health areas (7.4 per cent) than urban health areas (3.8 per cent) lived in homes with an emergency escape plan practised in the last 12 months. A significantly higher proportion of adults in the Greater Southern (9.8 per cent) and Greater Western (7.9 per cent) Area Health Services, and a significantly lower proportion of adults in the Sydney South West (3.5 per cent) and South Eastern Sydney & Illawarra (3.3 per cent) Area Health Services, lived in homes with an emergency escape plan practised in the last 12 months, compared with the overall population.

Since 2006, there has been no significant change in the proportion of adults living in homes with an emergency escape plan practised in the last 12 months.

## **References**

1. Australian Institute of Health and Welfare. *Health Priority Areas*. Canberra: Australian Institute of Health and Welfare, 2010. Available online at [www.aihw.gov.au/nhpa/index.cfm](http://www.aihw.gov.au/nhpa/index.cfm) (accessed 1 September 2010).
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3. NSW Fire Brigades. Smoke Alarm web page at [www.nswfb.nsw.gov.au](http://www.nswfb.nsw.gov.au) (accessed 1 September 2010).
4. NSW Fire Brigades. What Does The Legislation Mean? web page at [www.nswfb.nsw.gov.au](http://www.nswfb.nsw.gov.au) (accessed 1 September 2010).
5. NSW Fire Brigades. Escape Plan web page at [www.fire.nsw.gov.au](http://www.fire.nsw.gov.au) (accessed 1 September 2010).

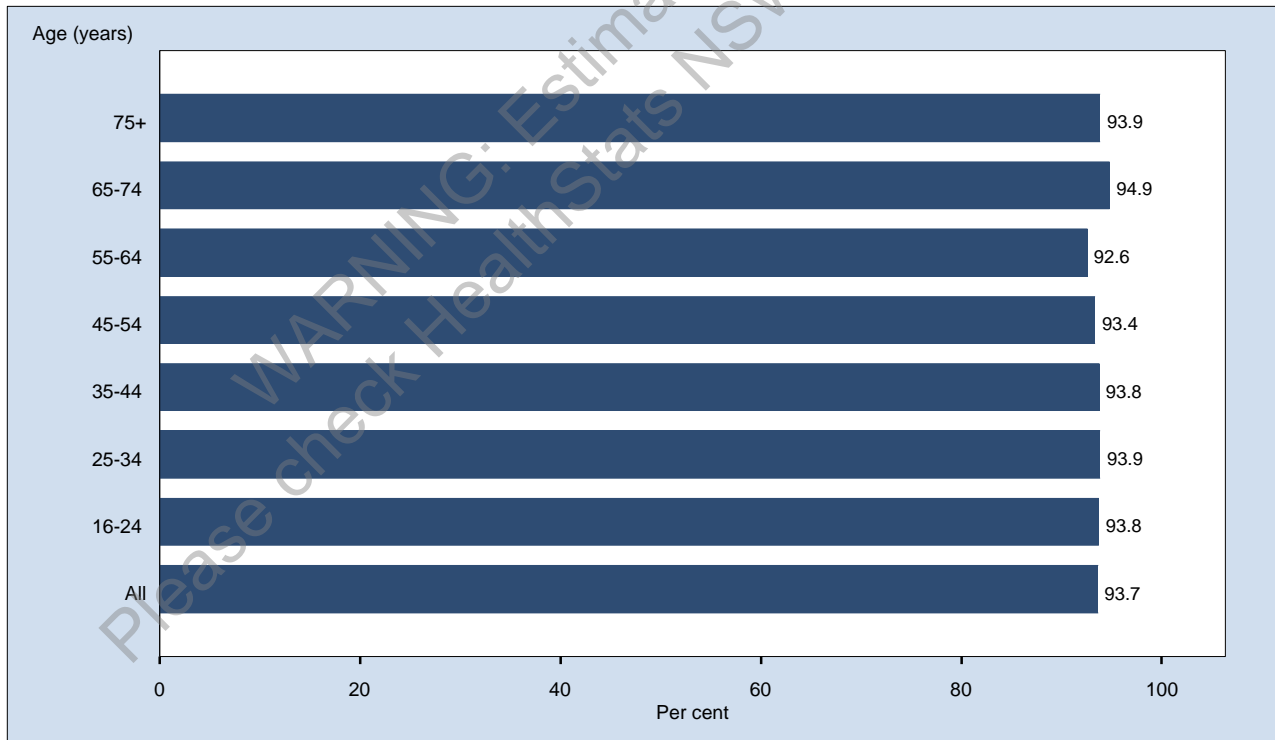
### Smoke alarm or detector in the home, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 7,846 respondents in NSW. For this indicator 219 (2.72%) were not stated (Don't know or Refused) in NSW. The questions used were: Do you have smoke alarms installed in your home? If yes ask battery operated, hard wired or both?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

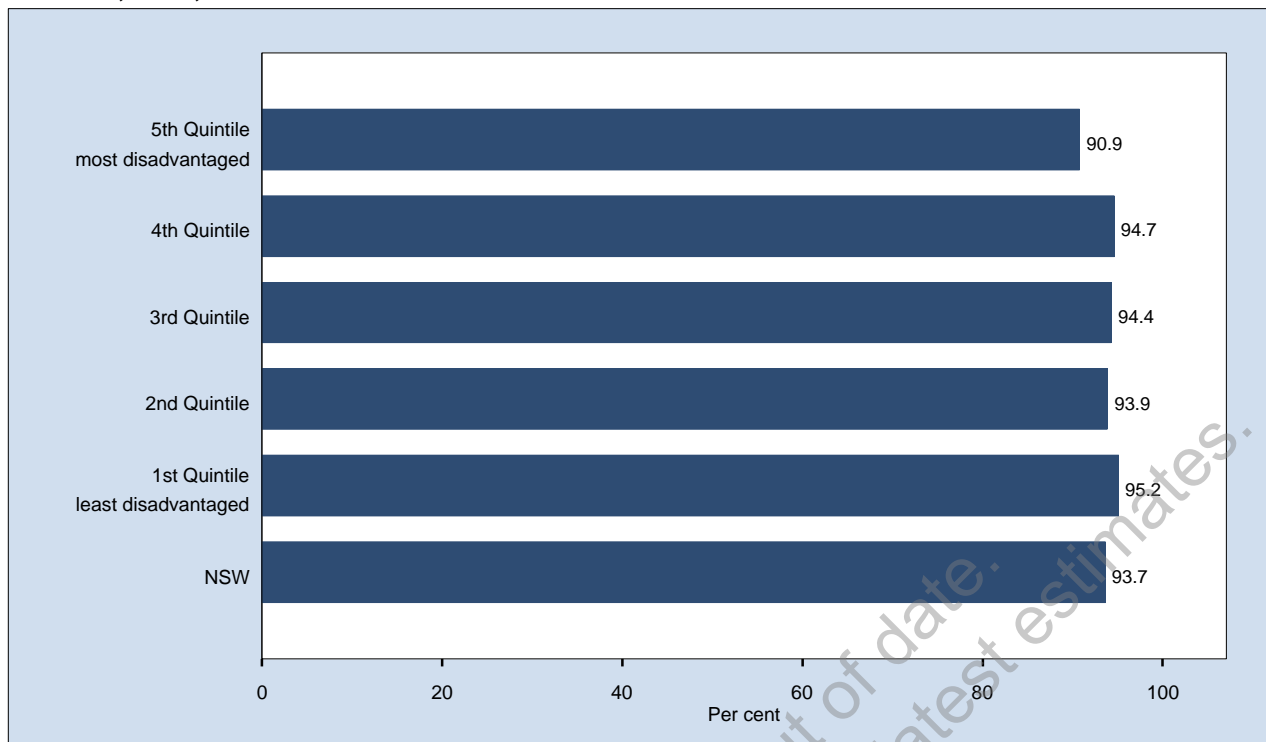
### Live in homes with a smoke alarm or detector by age, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 7,846 respondents in NSW. For this indicator 219 (2.72%) were not stated (Don't know or Refused) in NSW. The indicator includes those who have a smoke alarm or detector in their home. The question used to define the indicator was: Do you have smoke alarms installed in your home?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

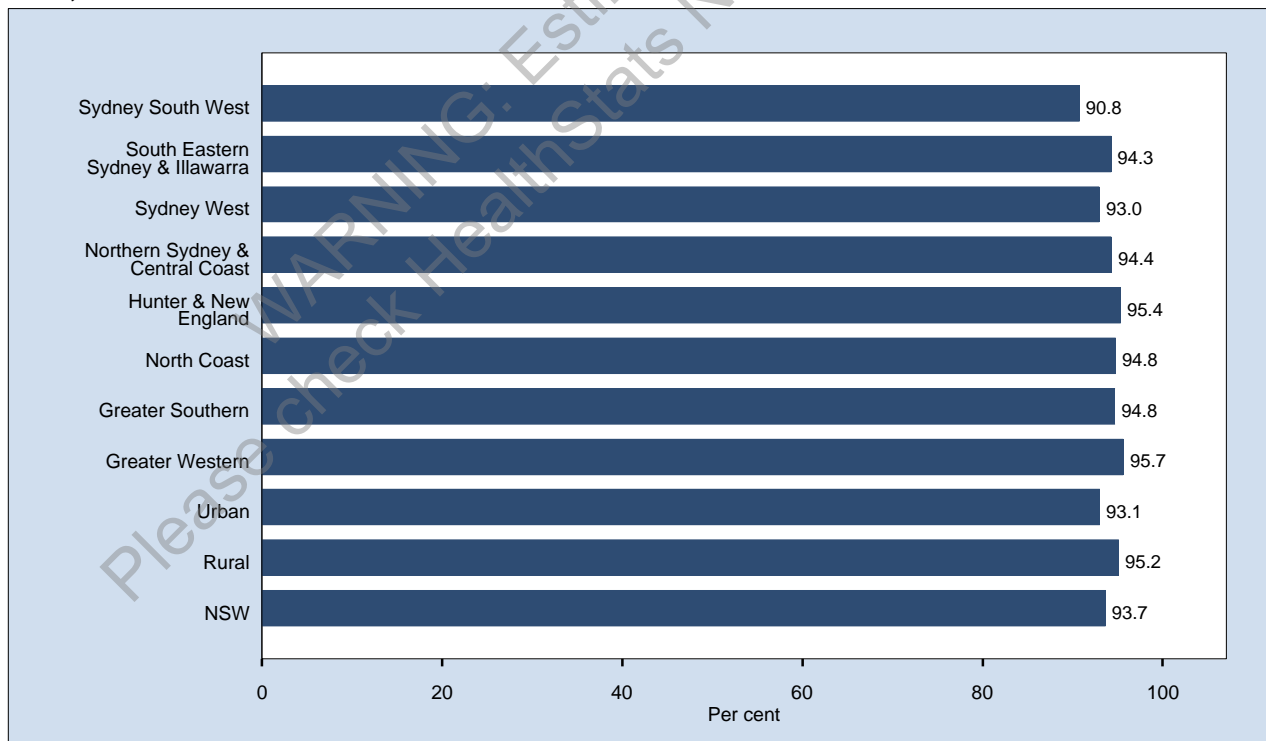
**Live in homes with a smoke alarm or detector by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 7,846 respondents in NSW. For this indicator 219 (2.72%) were not stated (Don't know or Refused) in NSW. The indicator includes those who have a smoke alarm or detector in their home. The question used to define the indicator was: Do you have smoke alarms installed in your home?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

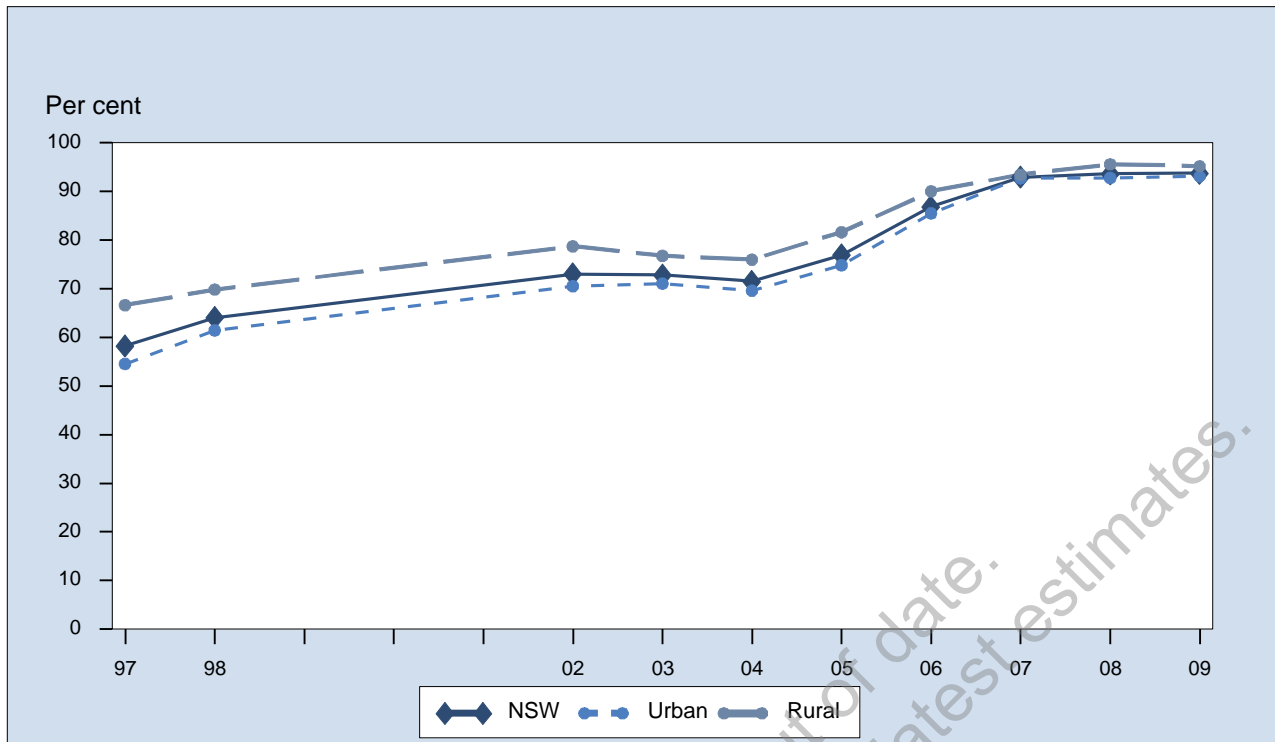
**Live in homes with a smoke alarm or detector by area health service, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 7,846 respondents in NSW. For this indicator 219 (2.72%) were not stated (Don't know or Refused) in NSW. The indicator includes those who have a smoke alarm or detector in their home. The question used to define the indicator was: Do you have smoke alarms installed in your home?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

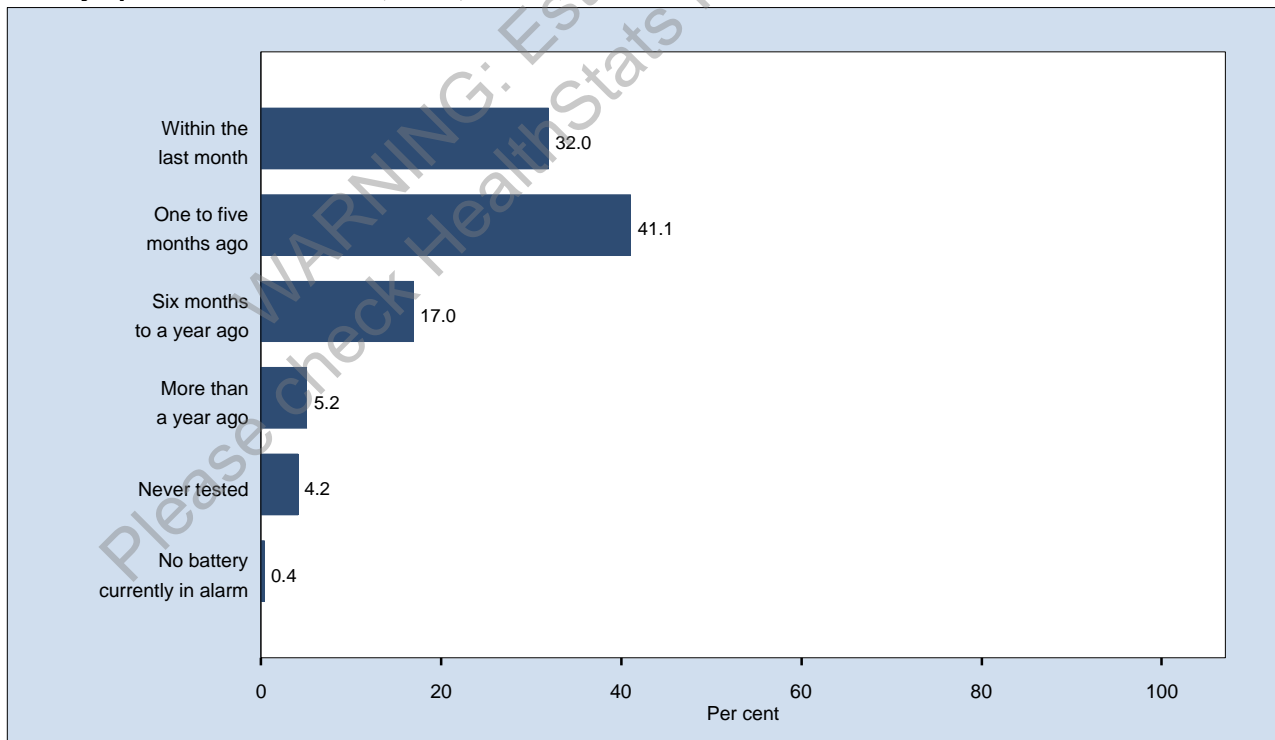
**Live in homes with a smoke alarm or detector by year, adults aged 16 years and over, NSW, 1997-2009**



**Note:** Estimates are based on the following numbers of respondents for NSW: 1997 (17,467), 1998 (17,416), 2002 (12,564), 2003 (13,008), 2004 (8,892), 2005 (10,687), 2006 (7,795), 2007 (7,301), 2008 (8,417), 2009 (7,846). The indicator includes those who have a smoke alarm or detector in their home. The question used to define the indicator was: Do you have smoke alarms installed in your home?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

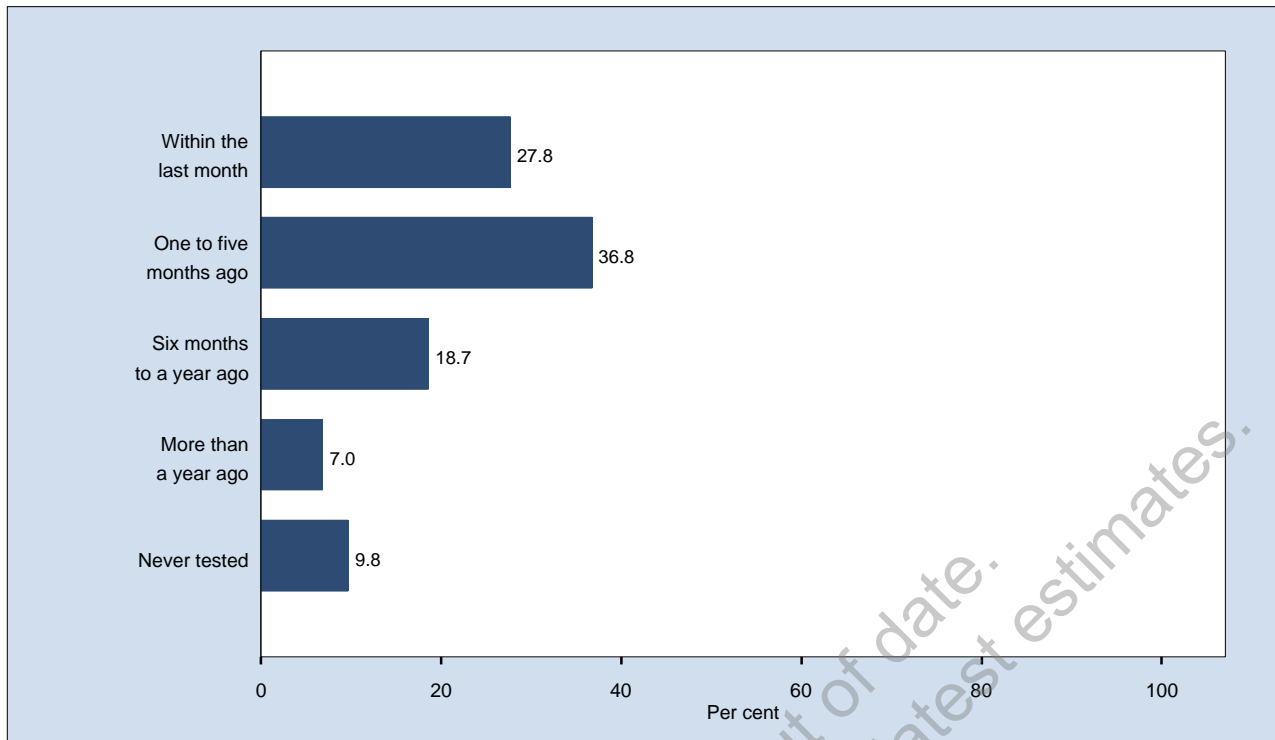
**Last tested battery operated smoke alarm, adults aged 16 years and over living in households with a battery operated smoke alarm, NSW, 2009**



**Note:** Estimates are based on 5,432 respondents in NSW. For this indicator 709 (11.55%) were not stated (Don't know or Refused) in NSW. The questions used were: Do you have smoke alarms installed in your home? If yes ask battery operated, hard wired or both? When did you last test the battery operated smoke alarm(s)?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

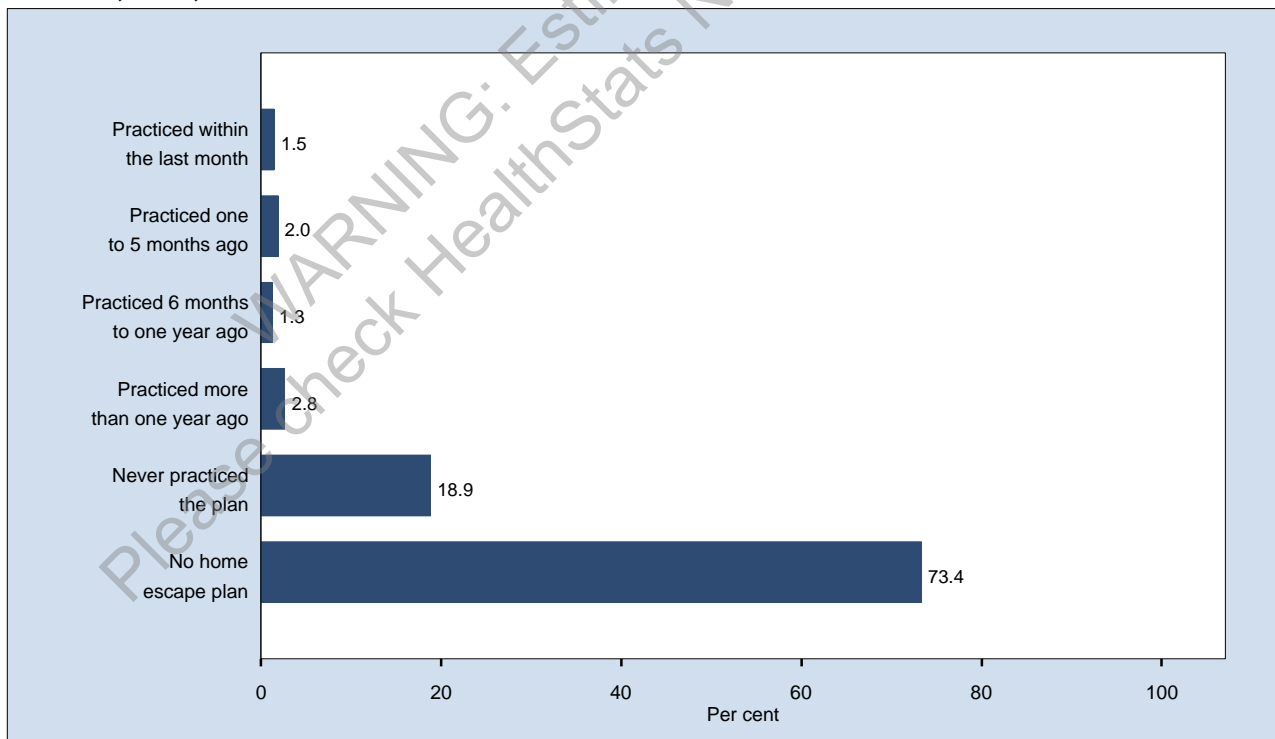
**Last tested hard wired operated smoke alarm, adults aged 16 years and over living in households with a hard wired smoke alarm, NSW, 2009**



**Note:** Estimates are based on 1,879 respondents in NSW. For this indicator 402 (17.62%) were not stated (Don't know or Refused) in NSW. The questions used were: Do you have smoke alarms installed in your home?, If yes ask battery operated, hard wired or both? When did you last test the hard wired smoke alarm(s)?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

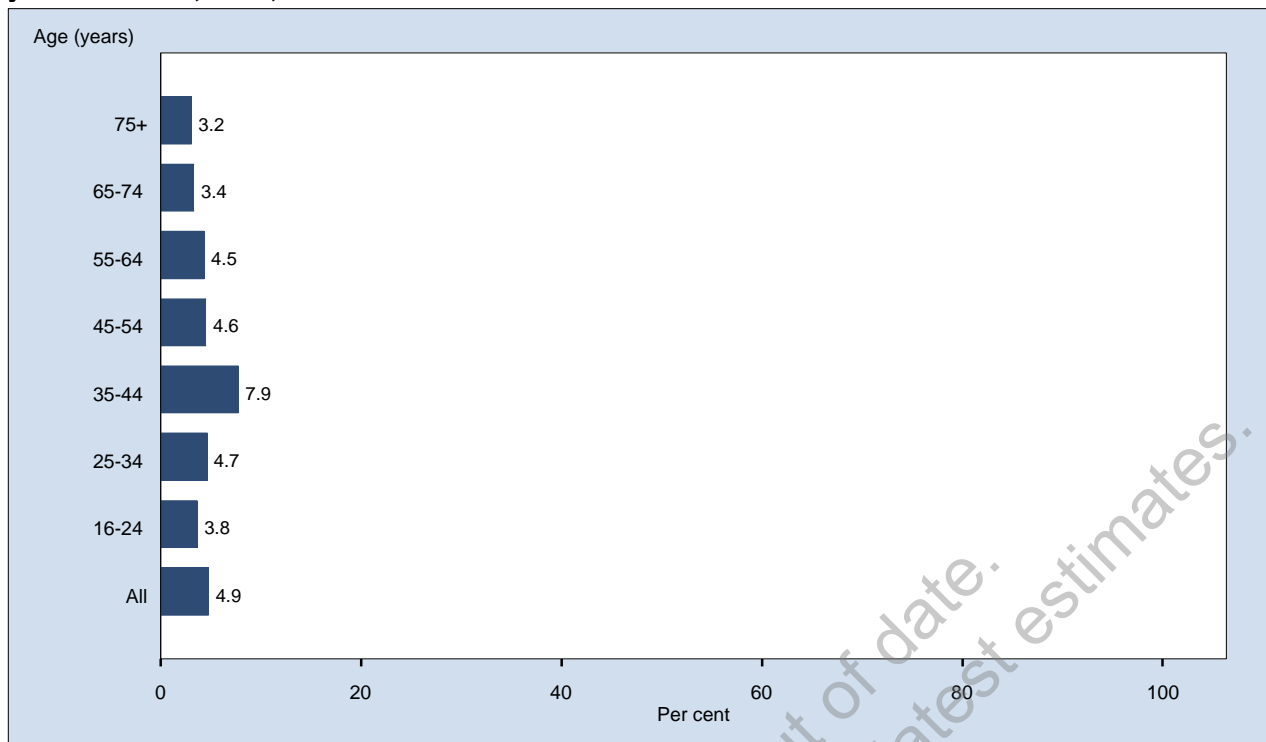
**Lives in home with an emergency escape plan and most recent practice of plan, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 7,837 respondents in NSW. For this indicator 228 (2.83%) were not stated (Don't know or Refused) in NSW. The questions used were: Does your household have a written home escape plan? When did your household last practice your home escape plan?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

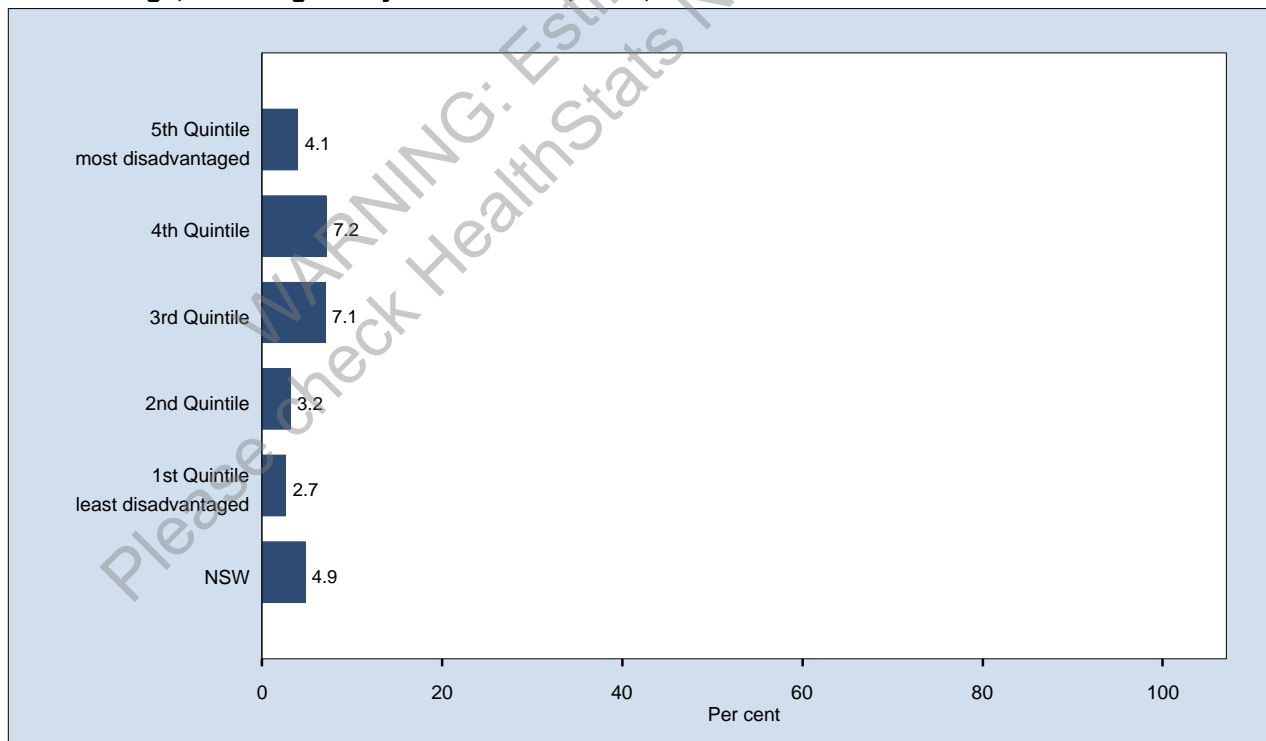
**Lives in home with an emergency escape plan practiced in the last 12 months by age, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 7,837 respondents in NSW. For this indicator 228 (2.83%) were not stated (Don't know or Refused) in NSW. The questions used to define the indicator were: Does your household have a written home escape plan? When did your household last practice your home escape plan?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

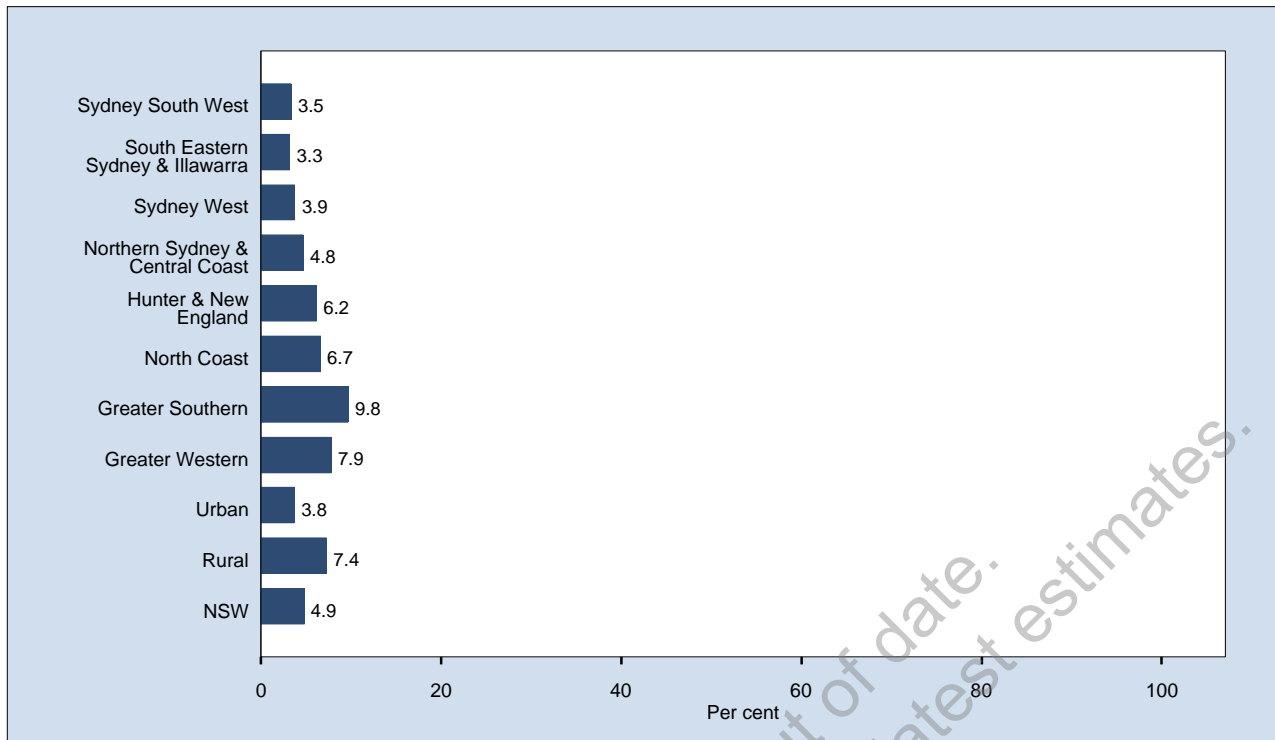
**Lives in home with an emergency escape plan practiced in the last 12 months by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 7,837 respondents in NSW. For this indicator 228 (2.83%) were not stated (Don't know or Refused) in NSW. The questions used to define the indicator were: Does your household have a written home escape plan? When did your household last practice your home escape plan?

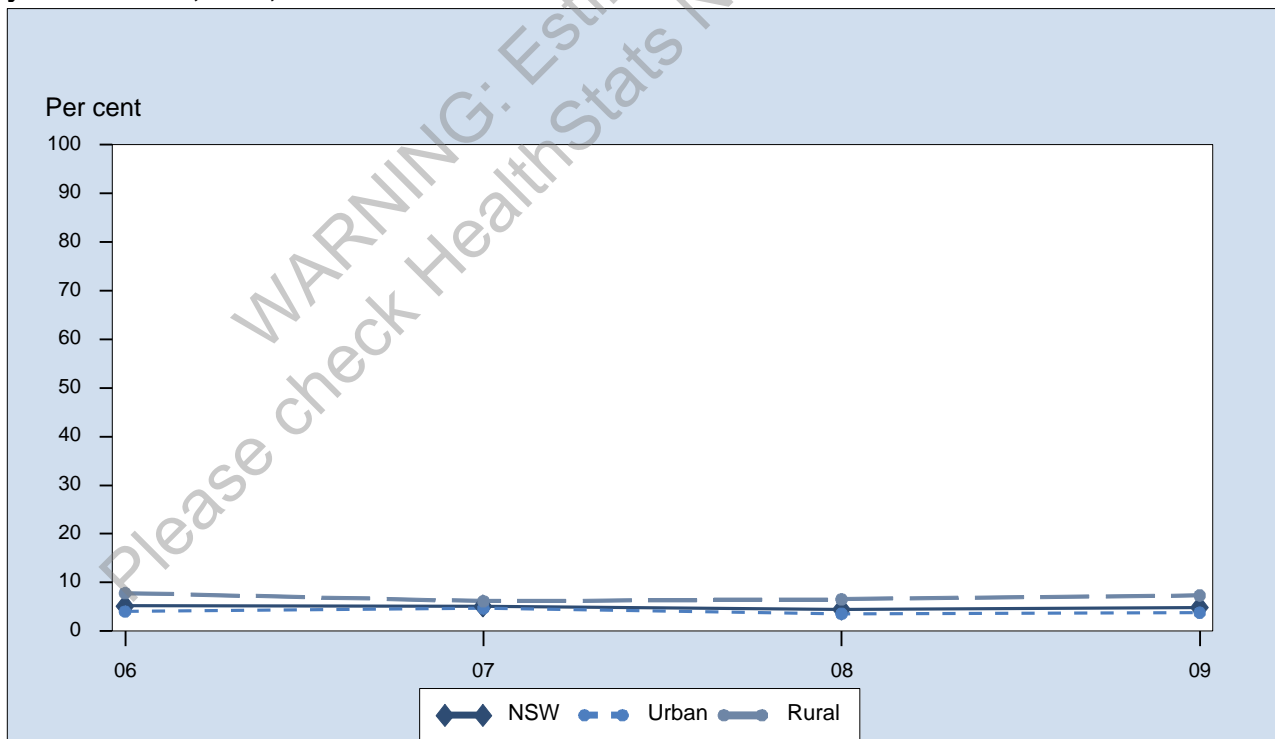
**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

**Lives in home with an emergency escape plan practiced in the last 12 months by area health service, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 7,837 respondents in NSW. For this indicator 228 (2.83%) were not stated (Don't know or Refused) in NSW. The questions used to define the indicator were: Does your household have a written home escape plan? When did your household last practice your home escape plan?  
**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

**Lives in home with an emergency escape plan practiced in the last 12 months by year, adults aged 16 years and over, NSW, 2006-2009**



**Note:** Estimates are based on the following numbers of respondents for NSW: 2006 (7,847), 2007 (7,255), 2008 (8,372), 2009 (7,837). The questions used to define the indicator were: Does your household have a written home escape plan? When did your household last practice your home escape plan?  
**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.



# Nutrition

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## Introduction

Good nutrition is important at all stages of life, and dietary factors are linked to health and disease, either as protective influences or as risk factors. Some of the diseases and conditions to which diet contributes substantially, either for protection or risk, include: coronary heart disease, stroke, some cancers, type-2 diabetes, overweight and obesity, osteoporosis, dental caries, gall bladder disease, and diverticular disease.[1-4]

The Dietary Guidelines for Australian Adults, which are based on the best available scientific evidence and provide information about healthy food choices, stresses the importance of eating plenty of vegetables, legumes, and fruits; eating plenty of cereals (including breads, rice, pasta and noodles), preferably wholegrain; including lean meat, fish, poultry, and/or protein alternatives in the diet; including reduced fat varieties of milks, yoghurts, cheeses, and/or dairy alternatives in the diet; drinking plenty of water; limiting saturated fat and moderating total fat intake; choosing foods low in salt; limiting alcohol intake; and consuming only moderate amounts of sugars and foods containing added sugars. 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.[5-8]

The New South Wales Population Health Survey includes a dietary questionnaire on usual consumption of fruit and vegetables, breads and cereals (including pasta, rice and noodles), type of milk consumed (including low fat, reduced fat, and skim milk), selected foods high in fats (fried potatoes, potato crisps and salty snacks, and processed meats), red meat (excluding pork or ham), soft drinks, fast foods, knowledge of recommended servings of fruit and vegetables, and food insecurity.[9] 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.[10]

Adequate fruit and vegetable consumption is defined in the Australian Guide to Healthy Eating and the Dietary Guidelines for Australian Adults. The *Go for 2 & 5* fruit and vegetable campaign provides a simplified message used as the basis for comparison in this survey.

The Dietary Guidelines for Australian Adults 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.[9] 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 for Australian Adults 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.[9] These recommendations are used as the basis for data collection and reporting.

Food security exists when all people, at all times, have physical and economic access to sufficient, safe, and nutritious food to meet their dietary needs and food preferences for an active and healthy life. Despite the good quality of the food supply, there are some groups who lack food security: that is, who do not have sufficient access at all times to sufficient food for an active and healthy life. Food insecurity is associated with socioeconomic disadvantage and is a likely contributor to ill health.[11-12]

## Results

## **Fruit consumption**

In 2009, 6.5 per cent of adults consumed no fruit a day, 9.7 per cent consumed less than 1 serve a day, 27.0 per cent consumed 1 serve a day, 32.2 per cent consumed 2 serves a day, 15.2 per cent consumed 3 serves a day, and 9.1 per cent consumed more than 3 serves a day.

Therefore, 56.8 per cent of adults consumed 2 or more serves of fruit a day. A significantly lower proportion of males (52.5 per cent) than females (60.9 per cent) consumed 2 or more serves of fruit a day. Among males, a significantly higher proportion of those aged 55-64 years (56.7 per cent) and 75 years and over (58.4 per cent), and a significantly lower proportion of those aged 35-44 years (46.9 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 (67.3 per cent), 65-74 years (69.8 per cent), and 75 years and over (68.7 per cent), and a significantly lower proportion of those aged 16-24 years (49.0 per cent) and 35-44 years (55.7 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 (62.3 per cent), and a significantly lower proportion of adults in the third quintile (53.4 per cent) and fifth or most disadvantaged quintile (53.9 per cent), consumed 2 or more serves of fruit a day, compared with the overall adult population.

There was no significant difference between rural and urban health areas. A significantly higher proportion of adults in the South Eastern Sydney & Illawarra (60.2 per cent) and Northern Sydney & Central Coast (60.0 per cent) Area Health Services, and a significantly lower proportion of adults in the Sydney South West (52.2 per cent), Greater Southern (51.4 per cent) and Greater Western (52.3 per cent) Area Health Services, 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 who consumed 2 or more serves of fruit a day (46.1 per cent to 56.8 per cent). The increase has been significant in males and females, and in urban and rural health areas.

However, since 2008, there has no significant change in the proportion of adults who consumed 2 or more serves of fruit a day.

## **Vegetable consumption**

In 2009, 1.6 per cent of adults consumed no vegetables a day, 4.3 per cent consumed less than 1 serve a day, 22.6 per cent consumed 1 serve a day, 28.0 per cent consumed 2 serves a day, 20.1 per cent consumed 3 serves a day, 12.9 per cent consumed 4 serves a day, 7.1 per cent consumed 5 serves a day, and 3.3 per cent consumed more than 5 serves a day.

Therefore, 10.4 per cent of adults consumed 5 or more serves of vegetables a day. A significantly lower proportion of males (7.5 per cent) than females (13.2 per cent) consumed 5 or more serves of vegetables a day. Among males, a significantly higher proportion of those aged 75 years and over (11.5 per cent), and a significantly lower proportion of those aged 35-44 years (5.0 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 45-54 years (15.9 per cent), 55-64 years (20.3 per cent), and 65-74 years (17.9 per cent), and a significantly lower proportion of those aged 16-24 years (4.8 per cent) and 25-34 years (9.3 per cent), consumed 5 or more serves of vegetables a day, compared with the overall adult female population.

A significantly higher proportion of adults in the fourth disadvantaged quintile (12.6 per cent) consumed 5 or more serves of vegetables a day, compared with the overall adult population.

A significantly higher proportion of adults in rural health areas (14.1 per cent) than urban health areas (8.8 per cent) consumed 5 or more serves of vegetables a day. A significantly higher proportion of adults in the Hunter & New England (14.8 per cent), North Coast (14.2 per cent), Greater Southern (12.9 per cent), and Greater Western (13.8 per cent) Area Health Services, and a significantly lower proportion of adults in the Sydney South West (6.9 per cent) and Sydney West (8.3 per cent) Area Health Services, consumed 5 or more serves of vegetables a day, compared with the overall adult population.

Since 1997, there has been a significant increase in the proportion of adults who consumed 5 or more serves of vegetables a day (8.9 per cent to 10.4 per cent). The increase has been significant in females, and in rural health areas.

However, since 2008, there has been no significant change in the proportion of adults who consumed 5 or more serves of vegetables a day; however, there has been a significant increase in rural health areas.

## ***Bread consumption***

In 2009, 4.6 per cent of adults rarely or never consumed bread, 20.9 per cent consumed bread less than once a day, 47.7 per cent once a day, 21.1 per cent twice a day, 4.3 per cent 3 times a day, 0.8 per cent 4 times a day, 0.2 per cent 5 times a day, and 0.4 per cent more than 5 times a day.

Therefore, 74.5 per cent of adults consumed bread once a day or more. A significantly higher proportion of males (78.9 per cent) than females (70.2 per cent) consumed bread once a day or more. Among males, a significantly higher proportion of those aged 16-24 years (86.6 per cent), 65-74 years (86.4 per cent), and 75 years and over (89.0 per cent), and a significantly lower proportion of those aged 25-34 years (70.7 per cent) and 45-54 years (74.2 per cent), consumed bread once a day or more, compared with the overall adult male population. Among females, a significantly higher proportion of those aged 65-74 years (77.0 per cent) and 75 years and over (84.3 per cent), and a significantly lower proportion of those aged 35-44 years (65.0 per cent) and 45-54 years (65.8 per cent), consumed bread once a day or more, compared with the overall adult female population.

A significantly higher proportion of adults in the third disadvantaged quintile (77.2 per cent), and a significantly lower proportion of adults in the fifth or most disadvantaged quintile (70.0 per cent), consumed bread once a day or more, compared with the overall adult population.

There was no significant difference between urban and rural health areas. A significantly higher proportion of adults in the Greater Western Area Health Service (80.6 per cent) consumed bread once a day or more, compared with the overall adult population.

Since 2002, there has been a significant decrease in the proportion of adults who consumed bread once a day or more (85.0 per cent to 74.5 per cent). The decrease has been significant in males and females, and in urban and rural health areas.

However, since 2008, there has been a significant decrease in the proportion of adults who consumed bread once a day or more (76.7 per cent to 74.5 per cent). The decrease has been significant in females, and in rural health areas.

## ***Pasta, rice, noodles, or other cooked cereal consumption***

In 2009, 6.3 per cent of adults rarely or never consumed pasta, rice, noodles, or other cooked cereals; 21.4 per cent consumed pasta, rice, noodles, or other cooked cereals less than 2 times a week; 42.1 per cent consumed pasta, rice, noodles, or other cooked cereals 2-3 times a week; 14.0 per cent consumed pasta, rice, noodles, or other cooked cereals 4-6 times a week; 12.2 per cent consumed pasta, rice, noodles, or other cooked cereals 7 times a week; and 4.1 per cent consumed pasta, rice, noodles, or other cooked cereals more than 7 times a week.

Therefore, 16.3 per cent of adults consumed pasta, rice, noodles, or other cooked cereals 7 times a week or more. There was no significant difference between males and females. A significantly higher proportion of adults aged 16-24 years (24.1 per cent) and 25-34 years (21.4 per cent), and a significantly lower proportion of adults aged 55-64 years (9.3 per cent), 65-74 years (7.0 per cent), and 75 years and over (6.0 per cent) consumed pasta, rice, noodles, or other cooked cereals 7 times a week or more, compared with the overall adult population.

A significantly lower proportion of adults in the fourth disadvantaged quintile (8.8 per cent), and a significantly higher proportion of adults in the fifth or most disadvantaged quintile (20.0 per cent), consumed pasta, rice, noodles, or other cooked cereals 7 times a week or more, compared with the overall adult population.

A significantly lower proportion of adults in rural health areas (6.3 per cent) than urban health areas (20.5 per cent) consumed pasta, rice, noodles, or other cooked cereals 7 times a week or more. A significantly lower proportion of adults in the Hunter & New England (6.9 per cent), North Coast (7.0 per cent), Greater Southern (4.4 per cent), and Greater Western (6.1 per cent) Area Health Services, and a significantly higher proportion of adults in the Sydney South West (24.5 per cent) and Sydney West (20.7 per cent) Area Health Services, consumed pasta, rice, noodles, or other cooked cereals 7 times a week or more, compared with the overall adult population.

Since 2002, there has been no significant change in the proportion of adults who consumed pasta, rice, noodles, or other cooked cereals 7 times a week or more; however, there has been a significant increase in urban health areas.

However, since 2008, there has been a significant increase in the proportion of adults who consumed pasta, rice, noodles, or other cooked cereals 7 times a week or more (14.3 per cent to 16.3 per cent). The increase has been significant in urban health areas.

### ***Breakfast cereal consumption***

In 2009, 27.8 per cent of adults rarely or never consumed breakfast cereal, 7.5 per cent consumed breakfast cereal less than 2 times a week, 13.7 per cent consumed breakfast cereal 2-3 times a week, 7.9 per cent consumed breakfast cereal 4-6 times a week, 42.3 per cent consumed breakfast cereal 7 times a week, and 0.8 per cent consumed breakfast cereal more than 7 times a week.

Therefore, 64.7 per cent of adults consumed breakfast cereal 2 times a week or more. There was no significant difference between males and females. A significantly lower proportion of adults aged 25-34 years (57.0 per cent), and a significantly higher proportion of adults aged 55-64 years (67.8 per cent), 65-74 years (75.4 per cent), and 75 years and over (81.4 per cent), consumed breakfast cereal 2 times a week or more, compared with the overall adult population.

A significantly lower proportion of adults in the fifth or most disadvantaged quintile (59.4 per cent) consumed breakfast cereal 2 times a week or more, compared with the overall adult population.

A significantly higher proportion of adults in rural health areas (67.1 per cent) than urban health areas (63.7 per cent) consumed breakfast cereal 2 times a week or more. A significantly lower proportion of adults in the Sydney South West Area Health Service (59.9 per cent) consumed breakfast cereal 2 times a week or more, compared with the overall adult population.

Since 2002, there has been no significant change in the proportion of adults who consumed breakfast cereal 2 times a week or more.

However, since 2008, there has been a significant decrease in the proportion of adults who consumed breakfast cereal 2 times a week or more (67.4 per cent to 64.7 per cent). The decrease has been significant in urban health areas.

### ***Red meat consumption***

In 2009, 7.5 per cent of adults rarely or never consumed red meat (beef, lamb, liver, and kidney but not pork or ham), 4.1 per cent consumed red meat less than once a week, 11.2 per cent consumed red meat once a week, 21.2 per cent consumed red meat twice a week, 26.2 per cent consumed red meat 3 times a week, 14.9 per cent consumed red meat 4 times a week, 5.9 per cent consumed red meat 5 times a week, and 8.8 per cent consumed red meat more than 5 times a week.

### ***Low fat, reduced fat, or skim milk consumption***

In 2009, 5.7 per cent of adults did not consume milk, 45.7 per cent consumed whole milk, 32.3 per cent consumed low or reduced fat milk, and 15.9 per cent consumed skim milk.

Therefore, 48.2 per cent of adults usually consumed low or reduced fat or skim milk. A significantly lower proportion of males (42.3 per cent) than females (53.9 per cent) usually consumed low or reduced fat or skim milk. Among males, a significantly lower proportion of those aged 16-24 years (31.8 per cent), and a significantly higher proportion of those aged 55-64 years (48.7 per cent), 65-74 years (53.8 per cent), and 75 years and over (50.6 per cent), usually consumed low or reduced fat or skim milk, compared with the overall adult male population. Among females, a significantly lower proportion of those aged 16-24 years (40.5 per cent) and 25-34 years (43.9 per cent), and a significantly higher proportion of those aged 45-54 years (59.0 per cent), 55-64 years (64.5 per cent), and 65-74 years (65.9 per cent), usually consumed low or reduced fat or skim milk, compared with the overall adult female population.

A significantly higher proportion of adults in the first or least disadvantaged quintile (56.8 per cent) and second disadvantaged quintile (52.4 per cent), and a significantly lower proportion of adults in the fifth or most disadvantaged quintile (38.8 per cent), usually consumed low or reduced fat or skim milk, compared with the overall adult population.

There was no significant difference between urban and rural health areas. A significantly higher proportion of adults in the Northern Sydney & Central Coast Area Health Service (55.8 per cent), and a significantly lower proportion of adults in the Sydney South West (42.8 per cent) and North Coast (43.4 per cent) Area Health Services, usually consumed low or reduced fat or skim milk, compared with the overall adult population.

Since 1997, there has been a significant increase in the proportion of adults who usually consumed low or reduced fat or skim milk (45.5 per cent to 48.2 per cent). The increase has been significant in males, and in rural health areas.

However, since 2008, there has been no significant change in the proportion of adults who usually consumed low or reduced fat or skim milk.

### ***Fried potato consumption***

In 2009, 29.3 per cent of adults rarely or never consumed fried potatoes (hot chips, french fries, wedges, or fried potatoes), 28.9 per cent consumed fried potatoes less than once a week, 23.6 per cent consumed fried potatoes once a week, 10.6 per cent consumed fried potatoes twice a week, 4.4 per cent consumed fried potatoes 3 times a week, 1.2 per cent consumed fried potatoes 4 times a week, 0.2 per cent consumed fried potatoes 5 times a week, and 1.8 per cent consumed fried potatoes more than 5 times a week.

### ***Salty snack consumption***

In 2009, 46.4 per cent of adults rarely or never consumed potato crisps or other salty snacks (such as Twisties or corn chips), 20.3 per cent consumed potato crisps or other salty snacks less than once a week, 15.2 per cent consumed potato crisps or other salty snacks once a week, 8.2 per cent consumed potato crisps or other salty snacks twice a week, 4.6 per cent consumed potato crisps or other salty snacks 3 times a week, 1.6 per cent consumed potato crisps or other salty snacks 4 times a week, 0.4 per cent consumed potato crisps or other salty snacks 5 times a week, and 3.3 per cent consumed potato crisps or other salty snacks more than 5 times a week.

### ***Processed meat consumption***

In 2009, 23.4 per cent of adults rarely or never consumed processed meat products (sausages, frankfurts, devon, salami, meat pies, bacon, or ham), 15.0 per cent consumed processed meat products less than once a week, 23.0 per cent consumed processed meat products once a week, 16.3 per cent consumed processed meat products twice a week, 8.9 per cent consumed processed meat products 3 times a week, 4.4 per cent consumed processed meat products 4 times a week, 2.1 per cent consumed processed meat products 5 times a week, and 7.0 per cent consumed processed meat products more than 5 times a week.

### ***Soft drink, cordial, or sports drink consumption***

In 2009, 47.8 per cent of adults did not consume soft drinks or cordials or sports drinks, 5.8 per cent consumed 1 cup a week, 5.9 per cent consumed 2 cups a week, 8.3 per cent consumed 3-5 cups a week, 14.9 per cent consumed 6-10 cups a week, and 17.3 per cent consumed 11 or more cups a week.

### ***Takeway food consumption***

In 2009, 39.1 per cent of adults rarely or never consumed takeway foods (such as burgers, pizza, chicken or chips from takeaway places), 31.3 per cent consumed takeway foods less than once a week, 19.0 per cent consumed takeway foods once a week, and 10.6 per cent consumed takeway foods twice a week or more.

### ***Food insecurity***

In 2009, 4.8 per cent of adults experienced some food insecurity in the last 12 months. A significantly lower proportion of males (3.7 per cent) than females (5.8 per cent) experienced some food insecurity in the last 12 months. Among males, a significantly lower proportion of those aged 65-74 years (1.6 per cent) and 75 years and over (1.1 per cent) experienced some food insecurity in the last 12 months, compared with the overall adult male population. Among females, a significantly higher proportion of those aged 35-44 years (8.8 per cent), and a significantly lower proportion of those aged 65-74 years (3.3 per cent) and 75 years and over (0.8 per cent), experienced some food insecurity in the last 12 months, compared with the overall adult female population.

There was no significant difference among quintiles of disadvantage or between urban and rural health areas. A significantly higher proportion of adults in the North Coast (8.2 per cent) and Greater Western (7.6 per cent) Area Health Services experienced some food insecurity in the last 12 months, compared with the overall adult population.

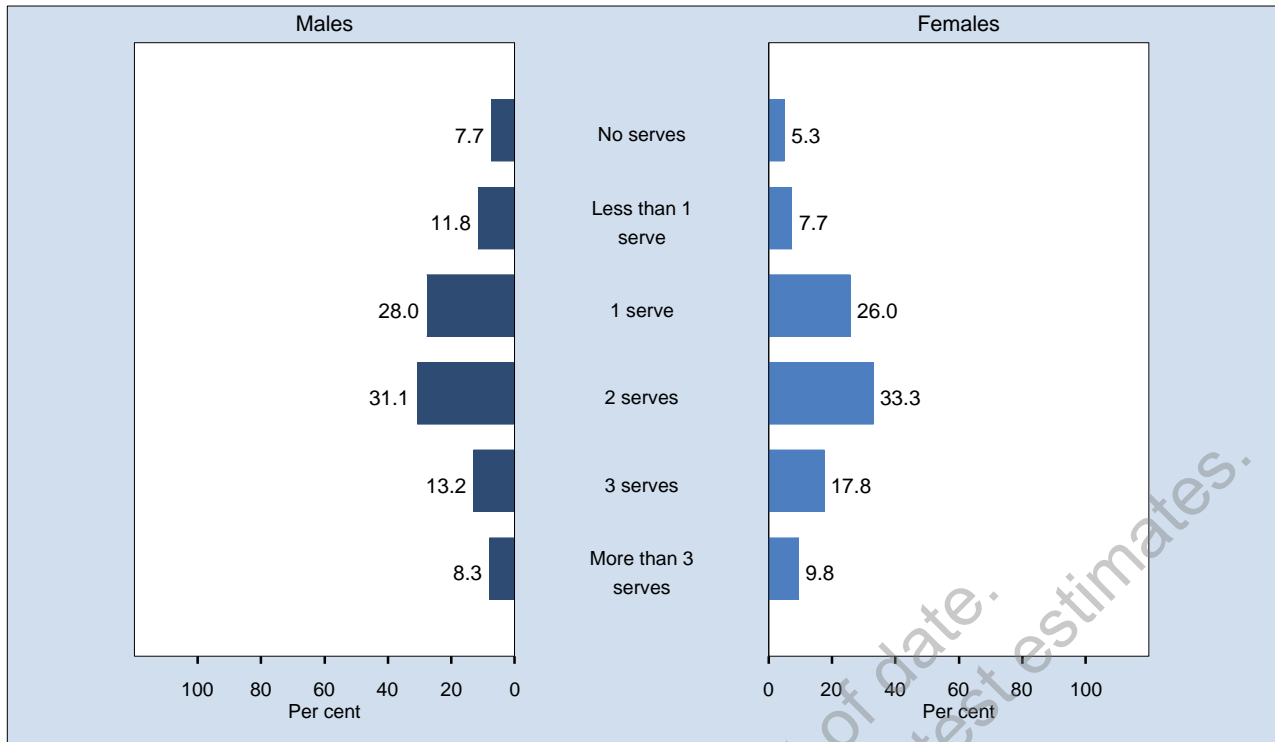
Since 2002, there has been a significant decrease in the proportion of adults who experienced some food insecurity in the last 12 months (5.7 per cent to 4.8 per cent). The decrease has been significant in males, and in rural health areas.

However, since 2008, there has been no significant change in the proportion of adults who experienced some food insecurity in the last 12 months.

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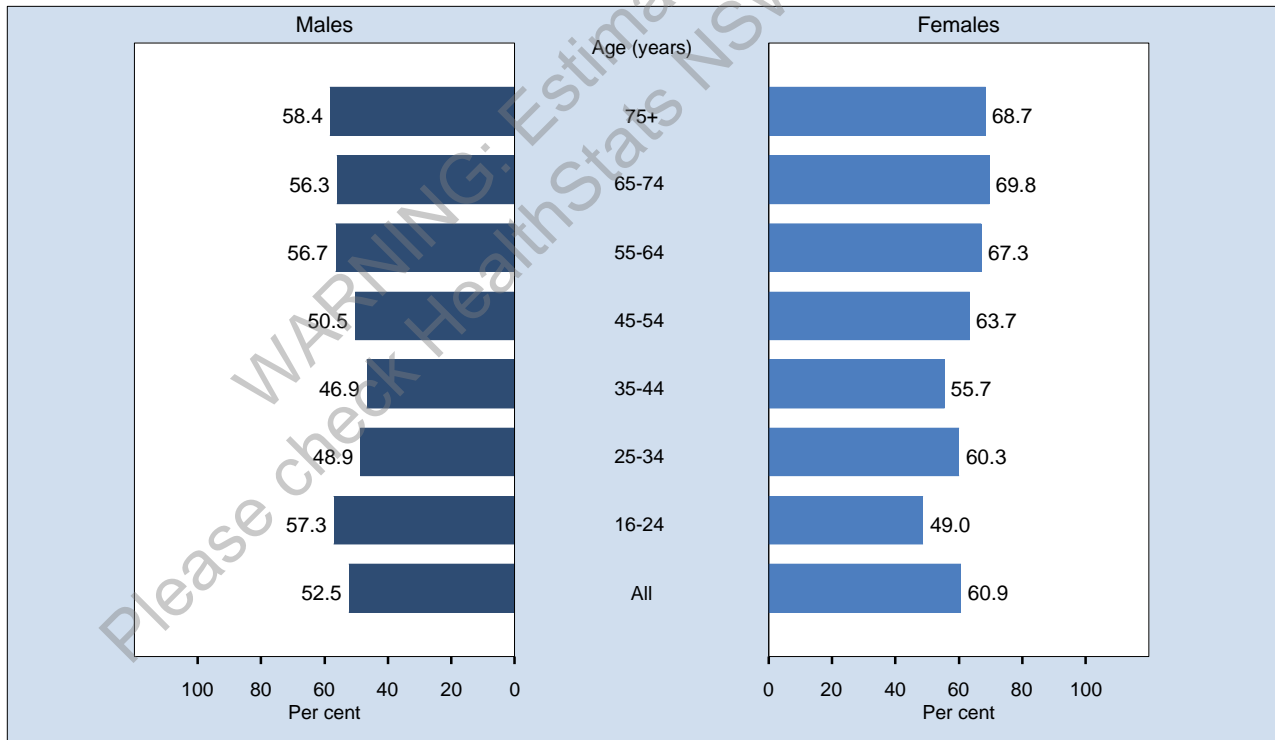
### Daily number of serves of fruit, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 10,614 respondents in NSW. For this indicator 105 (0.98%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

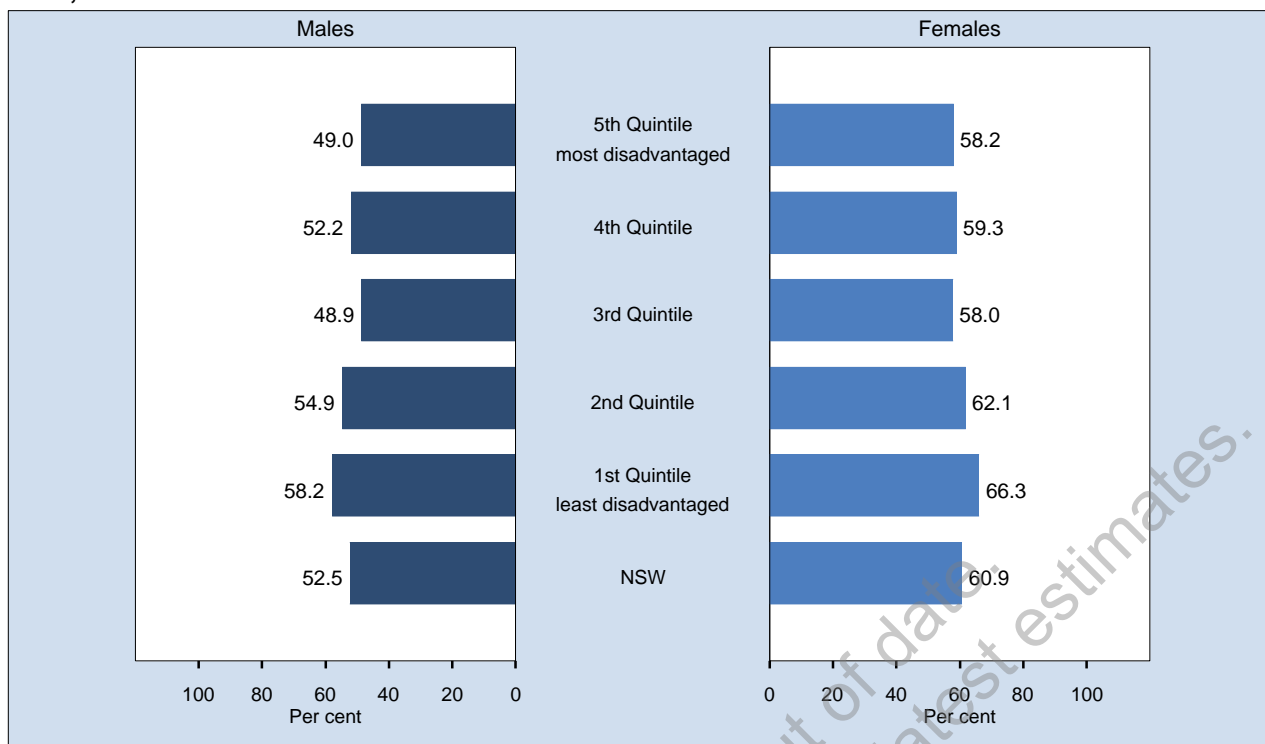
### Two or more serves of fruit a day by age, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 10,614 respondents in NSW. For this indicator 105 (0.98%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

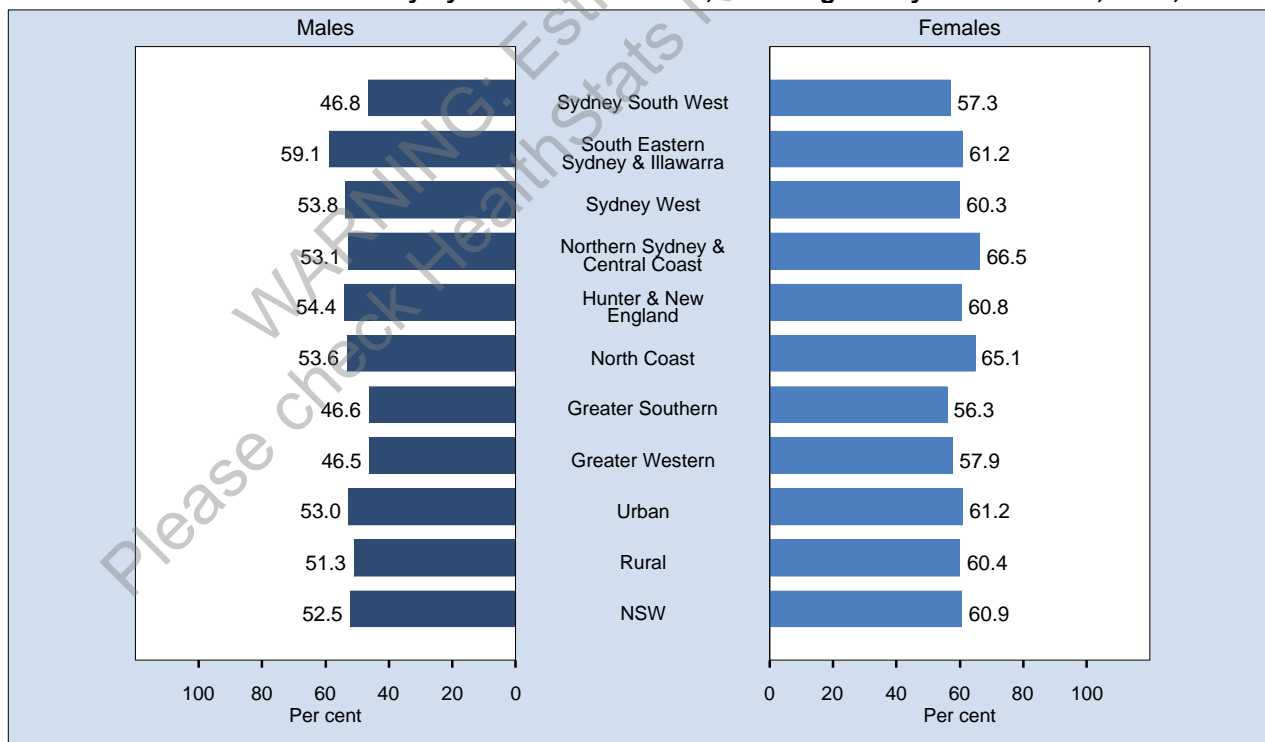
## Two or more serves of fruit a day by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 10,614 respondents in NSW. For this indicator 105 (0.98%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

## Two or more serves of fruit a day by area health service, adults aged 16 years and over, NSW, 2009

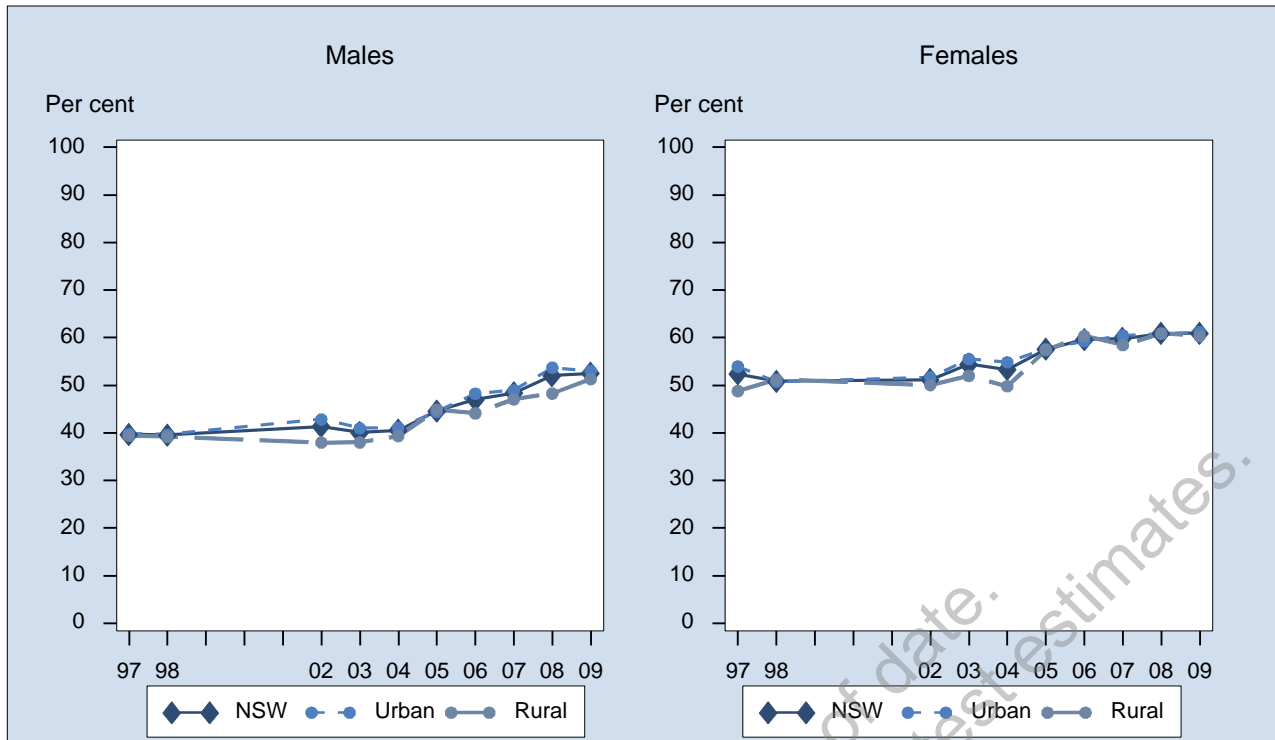


**Note:** Estimates are based on 10,614 respondents in NSW. For this indicator 105 (0.98%) were not stated (Don't know or Refused) in NSW. The indicator includes those who consumed 2 or more serves of fruit a day. The recommended fruit intake is at least 2 serves a day for persons aged 19 years and over, 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.



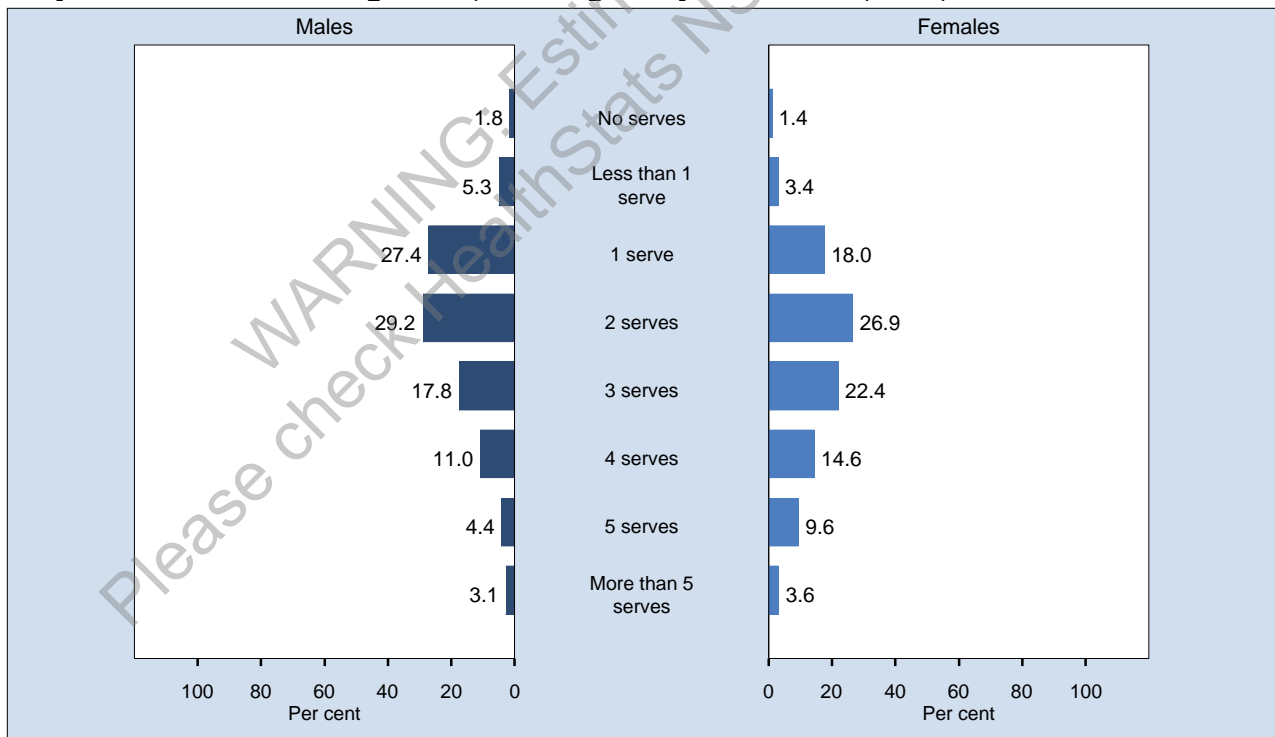
## Two or more serves of fruit a day by year, adults aged 16 years and over, NSW, 1997-2009



**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 (9,370), 2005 (11,426), 2006 (7,887), 2007 (7,332), 2008 (8,472), 2009 (10,614). 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

## Daily number of serves of vegetables, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 10,475 respondents in NSW. For this indicator 244 (2.28%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

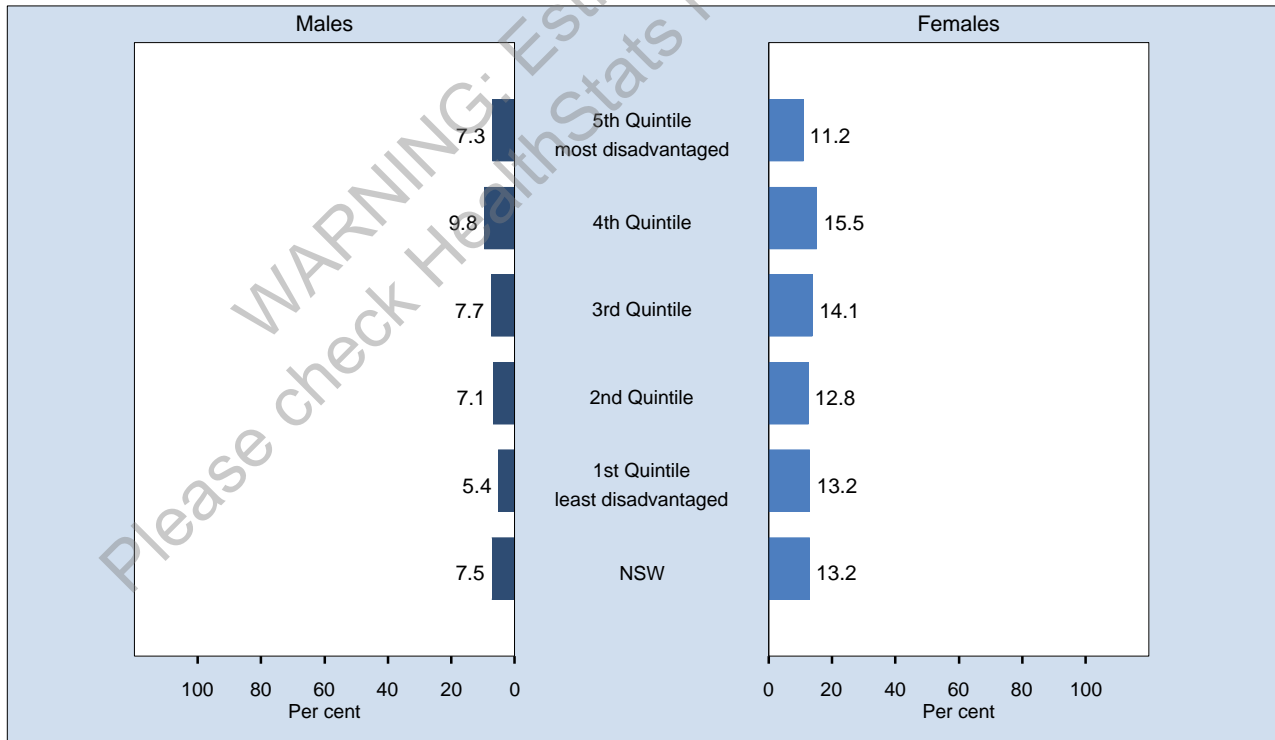
**Five or more serves of vegetables a day by age, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 10,475 respondents in NSW. For this indicator 244 (2.28%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

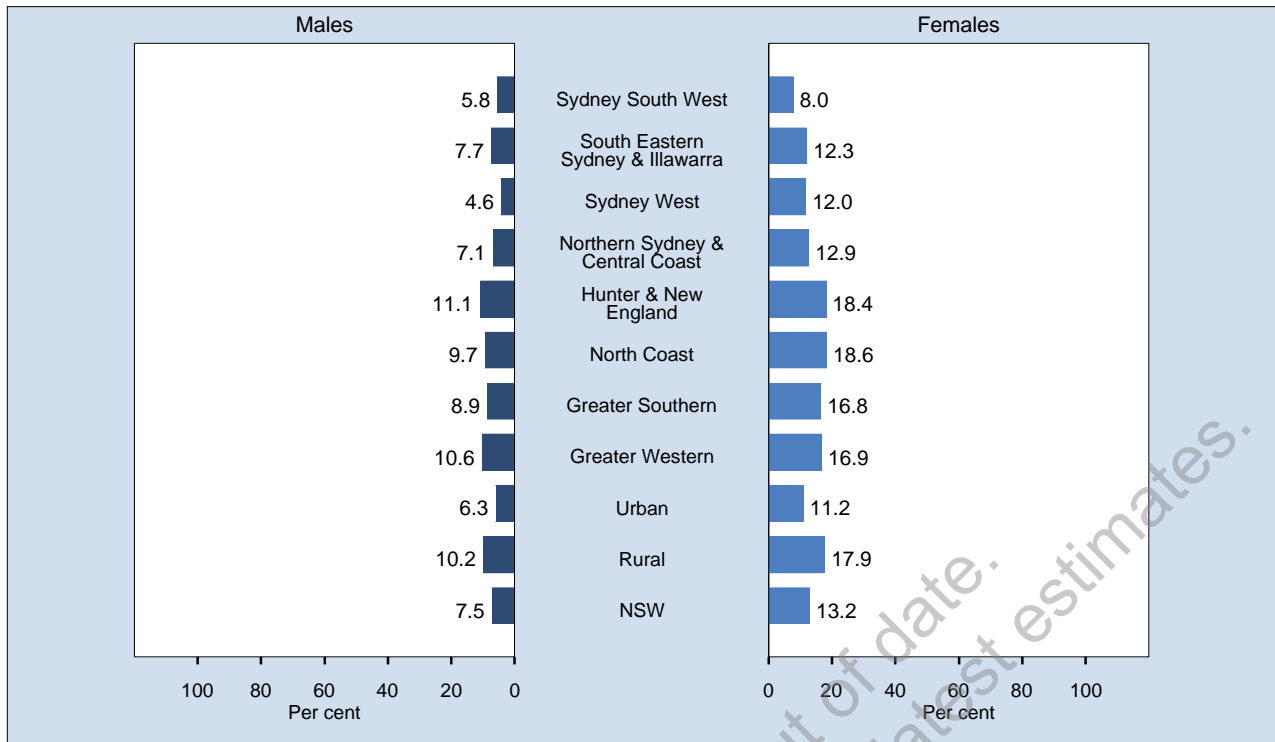
**Five or more serves of vegetables a day by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 10,475 respondents in NSW. For this indicator 244 (2.28%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

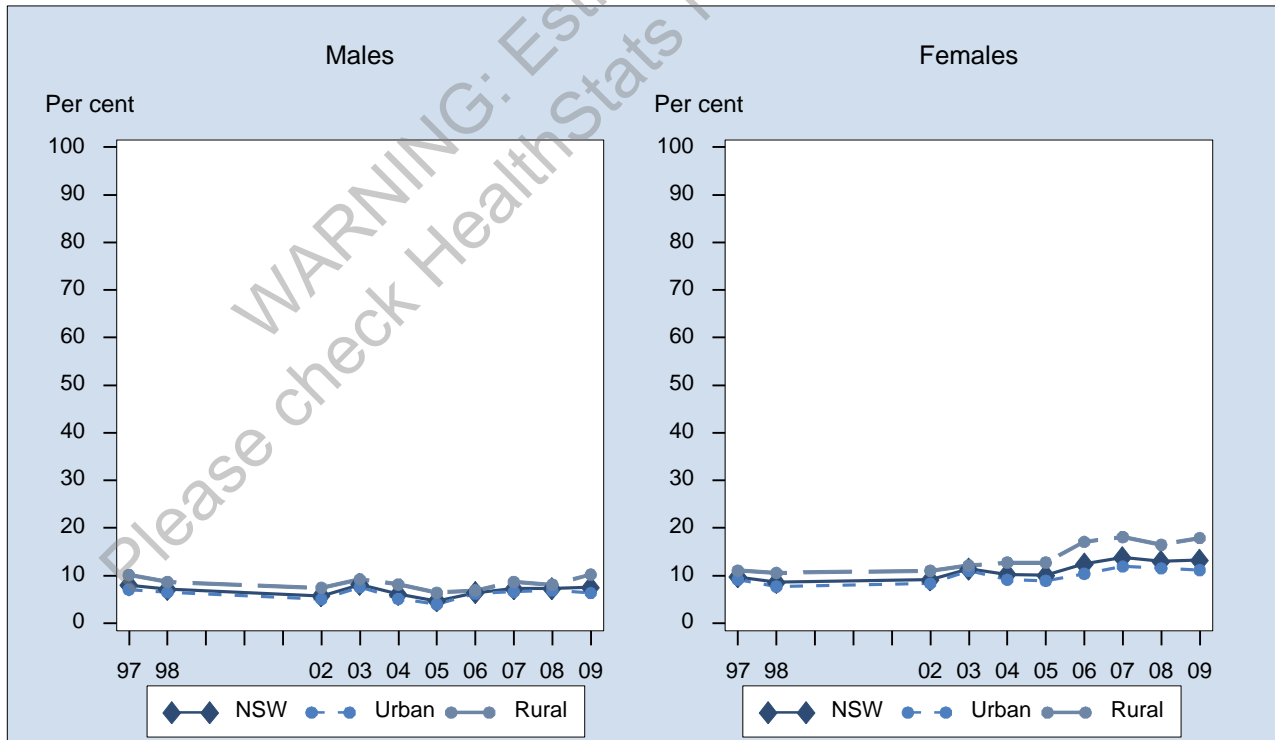
**Five or more serves of vegetables a day by area health service, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 10,475 respondents in NSW. For this indicator 244 (2.28%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

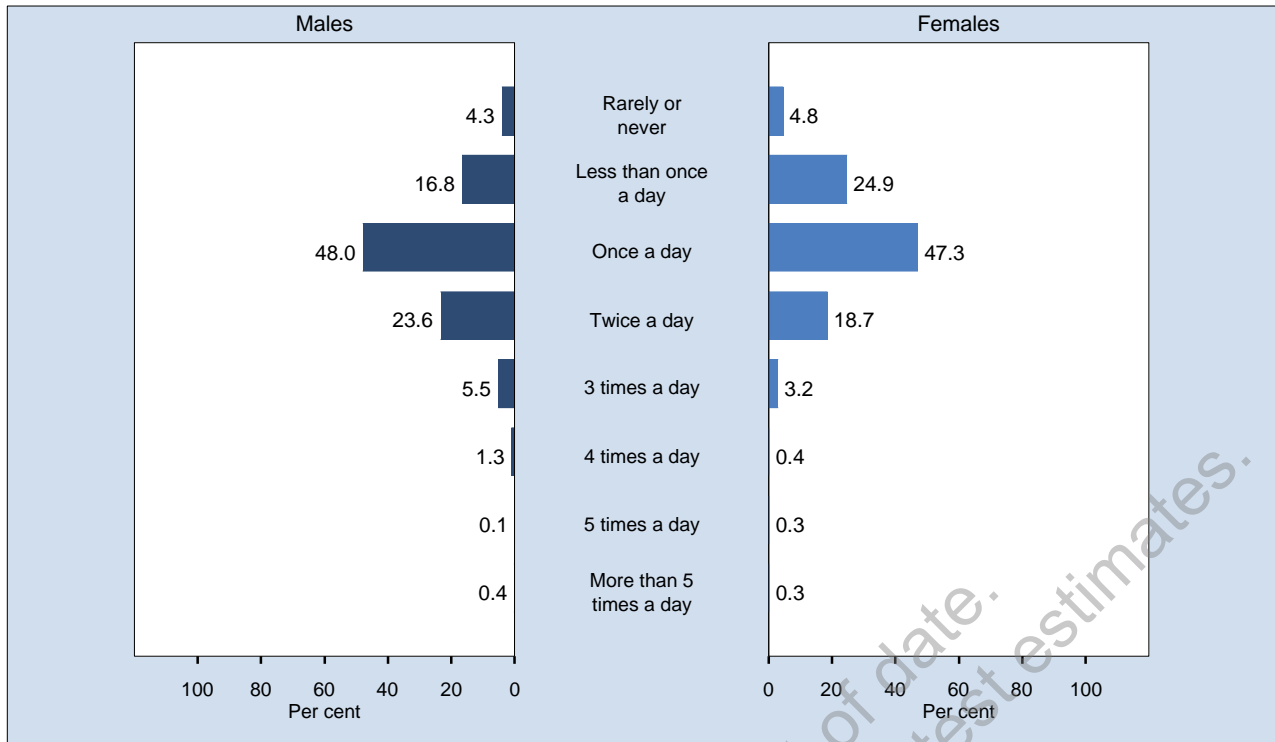
**Five or more serves of vegetables a day by year, adults aged 16 years and over, NSW, 1997-2009**



**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 (9,327), 2005 (11,416), 2006 (7,849), 2007 (7,300), 2008 (8,419), 2009 (10,475). 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

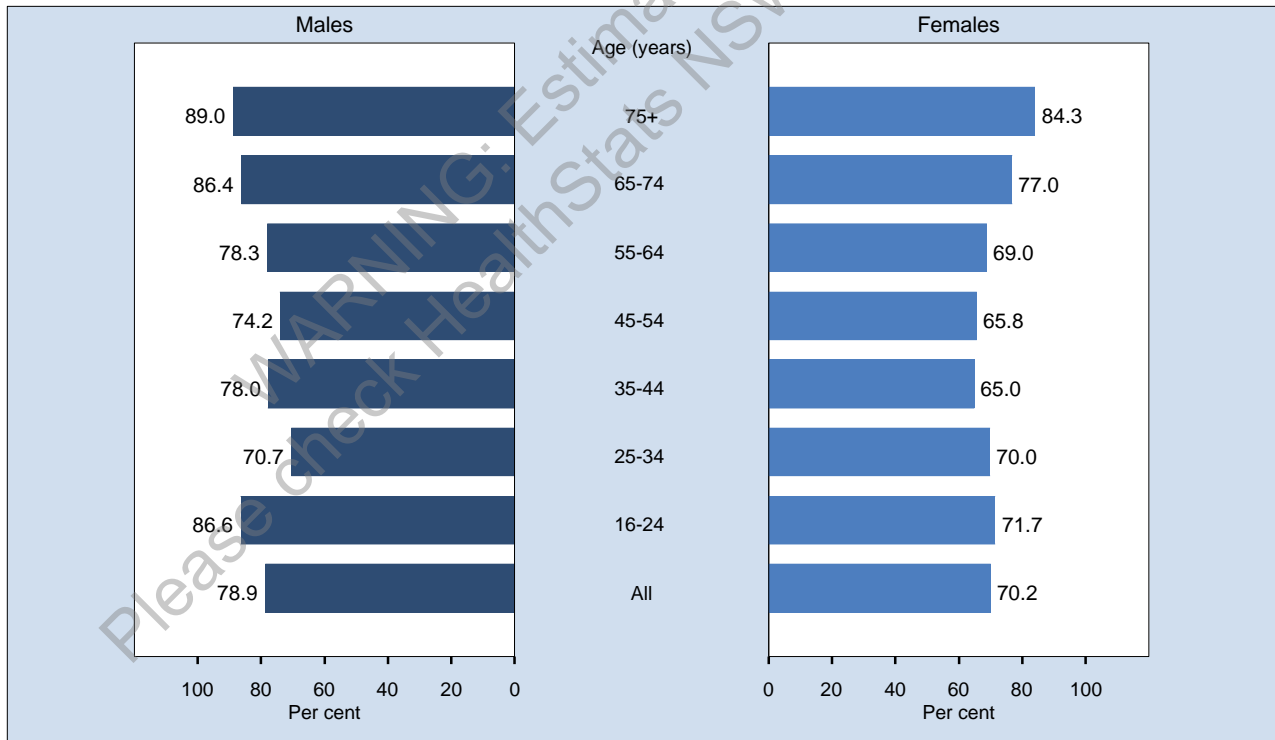
### Frequency of consuming bread, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 8,011 respondents in NSW. For this indicator 33 (0.41%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

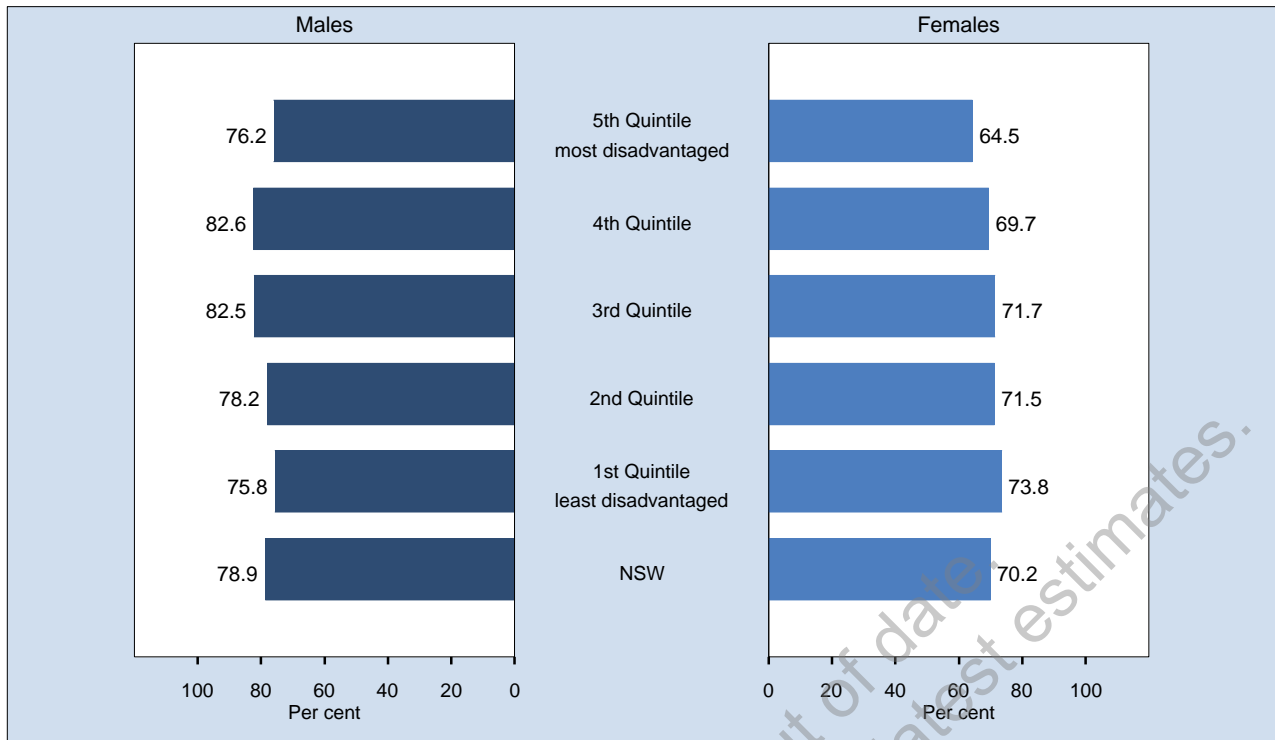
### Consumes bread once a day or more by age, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 8,011 respondents in NSW. For this indicator 33 (0.41%) were not stated (Don't know or Refused) in NSW. The indicator includes those who consumed bread once a day or more. The question used to define the indicator was: How often do you usually eat bread?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

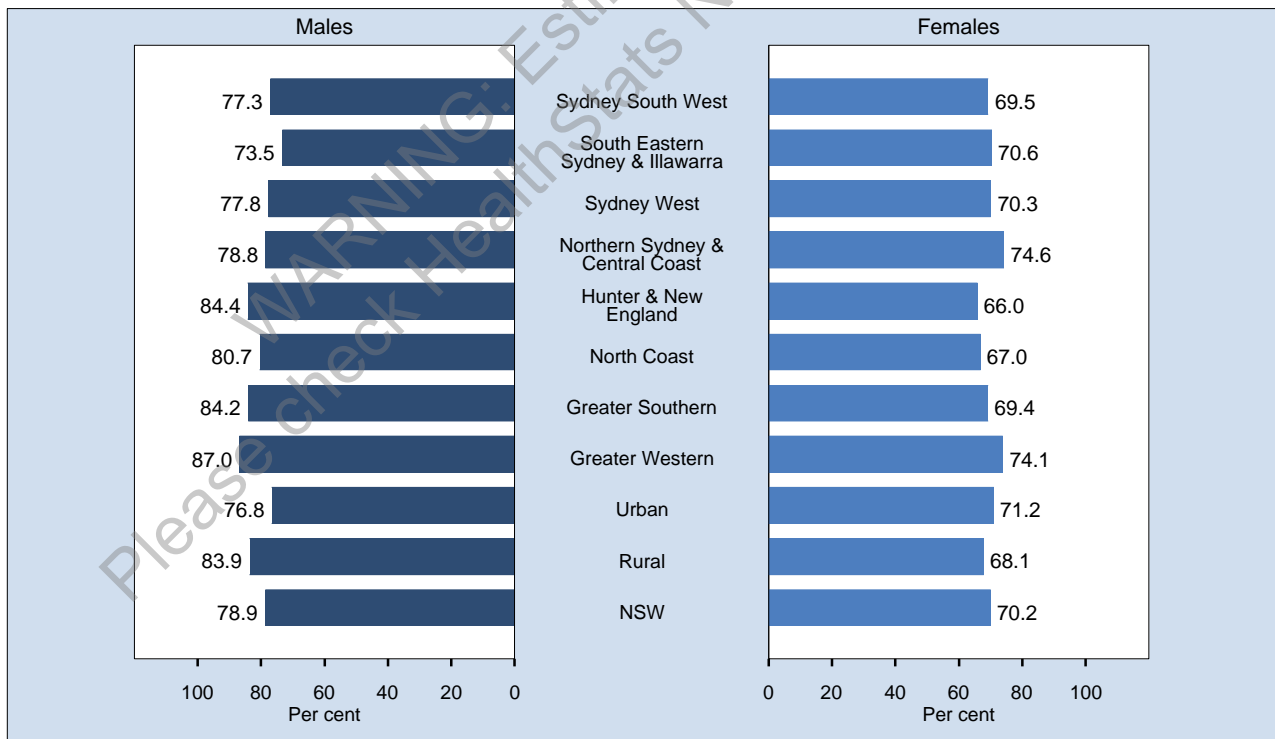
**Consumes bread once a day or more by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 8,011 respondents in NSW. For this indicator 33 (0.41%) were not stated (Don't know or Refused) in NSW. The indicator includes those who consumed bread once a day or more. The question used to define the indicator was: How often do you usually eat bread?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

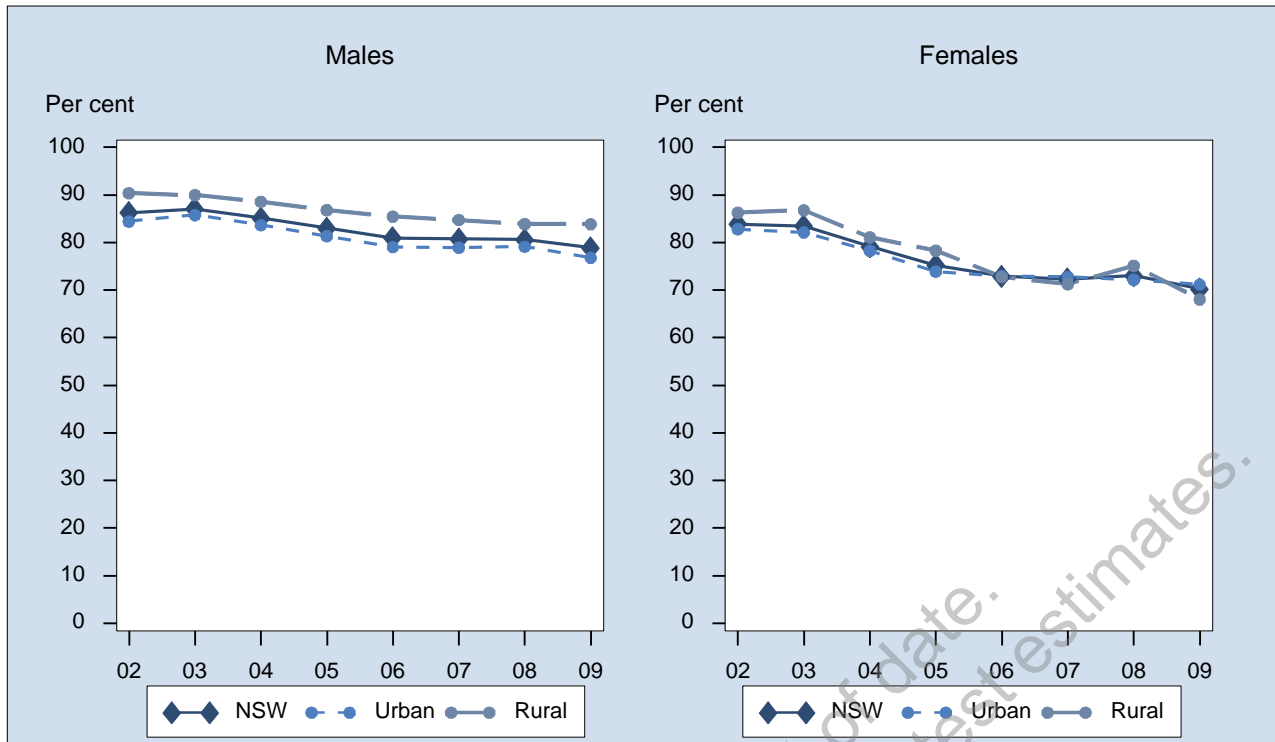
**Consumes bread once a day or more by area health service, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 8,011 respondents in NSW. For this indicator 33 (0.41%) were not stated (Don't know or Refused) in NSW. The indicator includes those who consumed bread once a day or more. The question used to define the indicator was: How often do you usually eat bread?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

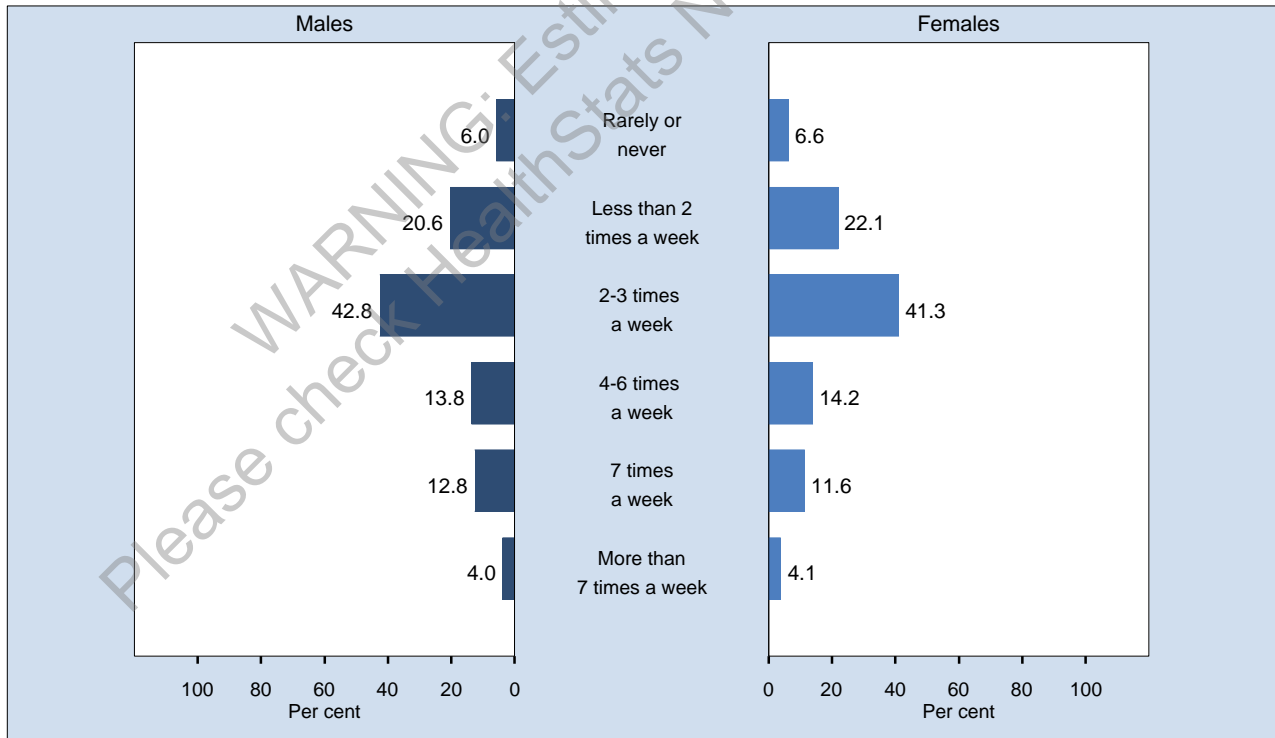
**Consumes bread once a day or more by year, adults aged 16 years and over, NSW, 2002-2009**



**Note:** Estimates are based on the following numbers of respondents for NSW: 2002 (12,595), 2003 (12,979), 2004 (9,406), 2005 (11,476), 2006 (7,942), 2007 (7,391), 2008 (8,538), 2009 (8,011). The indicator includes those who consumed bread once a day or more. The question used to define the indicator was: How often do you usually eat bread?

**Source:** New South Wales Population Health Survey 2009 (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, 2009**



**Note:** Estimates are based on 7,982 respondents in NSW. For this indicator 62 (0.77%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

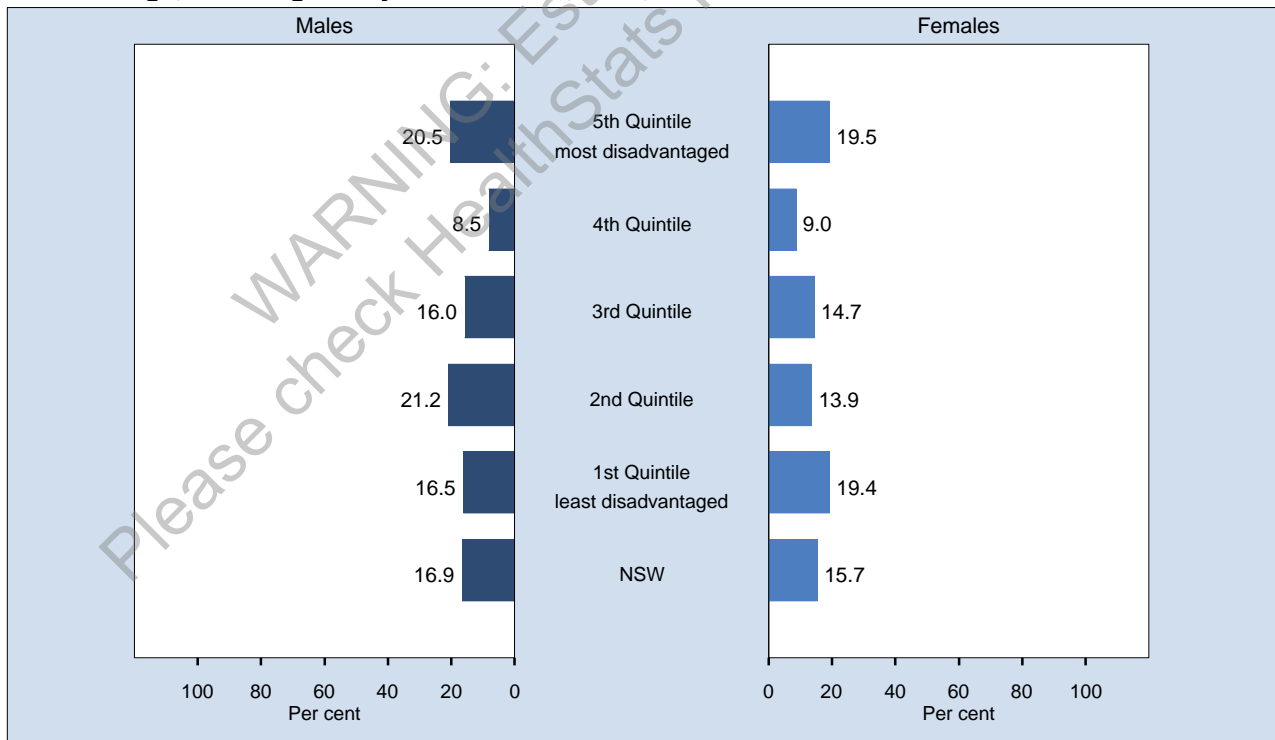
**Consumes pasta, rice, noodles, or other cooked cereals 7 times a week or more by age, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 7,982 respondents in NSW. For this indicator 62 (0.77%) were not stated (Don't know or Refused) in NSW. The indicator includes those who consumed pasta, rice, noodles, or other cooked cereals once a day or more. The question used to define the indicator was: How often do you eat pasta, rice, noodles or other cooked cereals?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

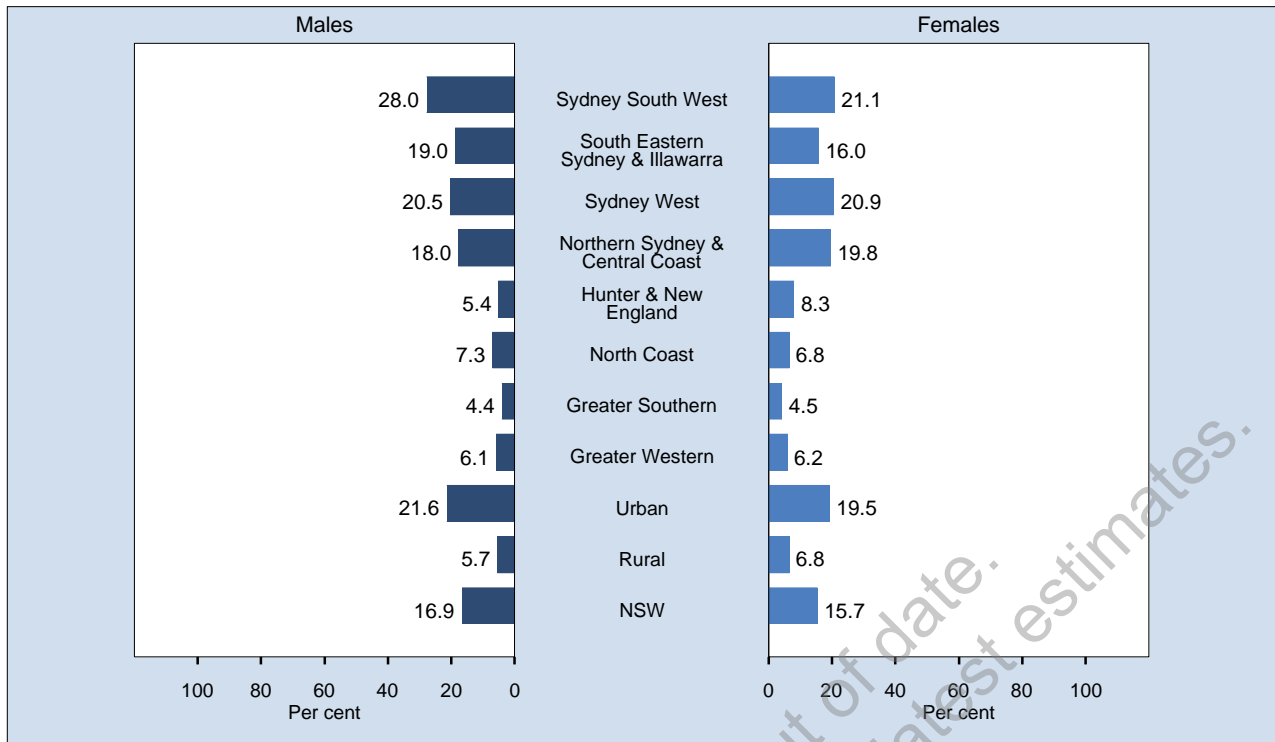
**Consumes pasta, rice, noodles, or other cooked cereals 7 times a week or more by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 7,982 respondents in NSW. For this indicator 62 (0.77%) were not stated (Don't know or Refused) in NSW. The indicator includes those who consumed pasta, rice, noodles, or other cooked cereals once a day or more. The question used to define the indicator was: How often do you eat pasta, rice, noodles or other cooked cereals?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

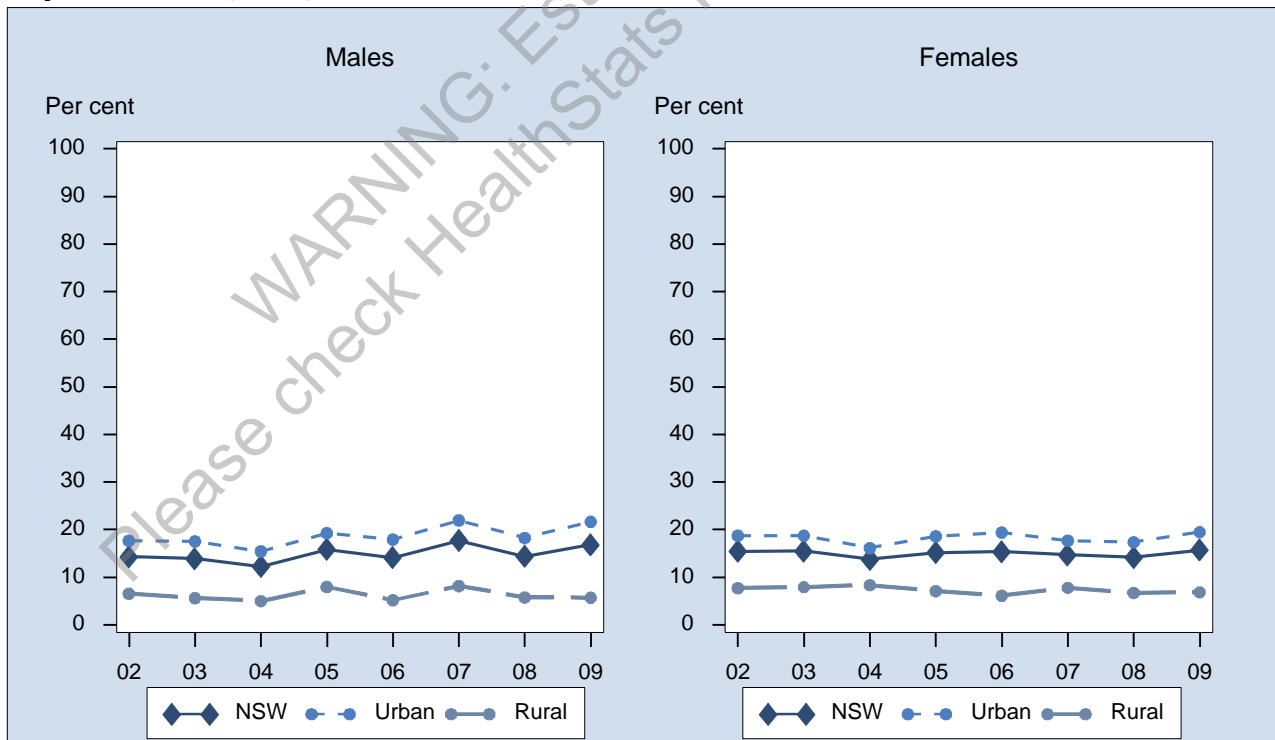
**Consumes pasta, rice, noodles, or other cooked cereals 7 times a week or more by area health service, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 7,982 respondents in NSW. For this indicator 62 (0.77%) were not stated (Don't know or Refused) in NSW. The indicator includes those who consumed pasta, rice, noodles, or other cooked cereals once a day or more. The question used to define the indicator was: How often do you eat pasta, rice, noodles or other cooked cereals?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

**Consumes pasta, rice, noodles, or other cooked cereals 7 times a week or more by year, adults aged 16 years and over, NSW, 2002-2009**

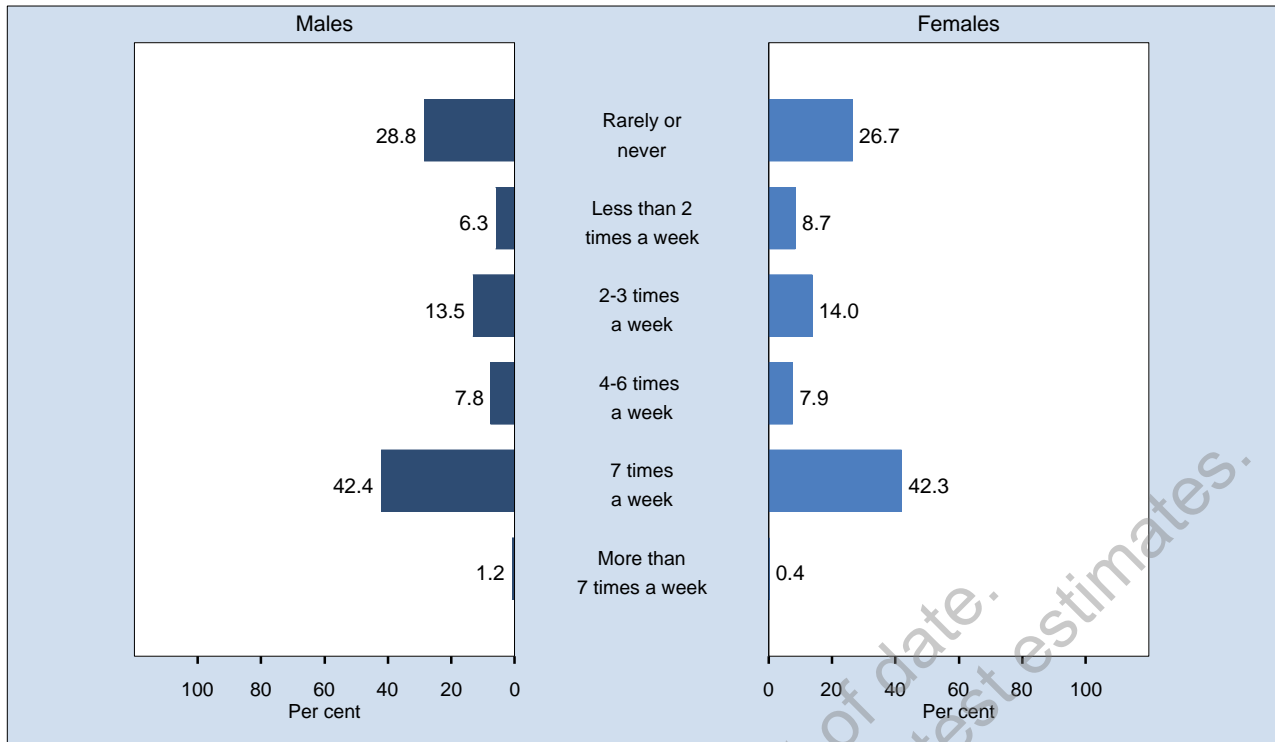


**Note:** Estimates are based on the following numbers of respondents for NSW: 2002 (12,568), 2003 (12,964), 2004 (9,385), 2005 (11,462), 2006 (7,928), 2007 (7,359), 2008 (8,512), 2009 (7,982). The indicator includes those who consumed pasta, rice, noodles, or other cooked cereals once a day or more. The question used to define the indicator was: How often do you eat pasta, rice, noodles or other cooked cereals?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.



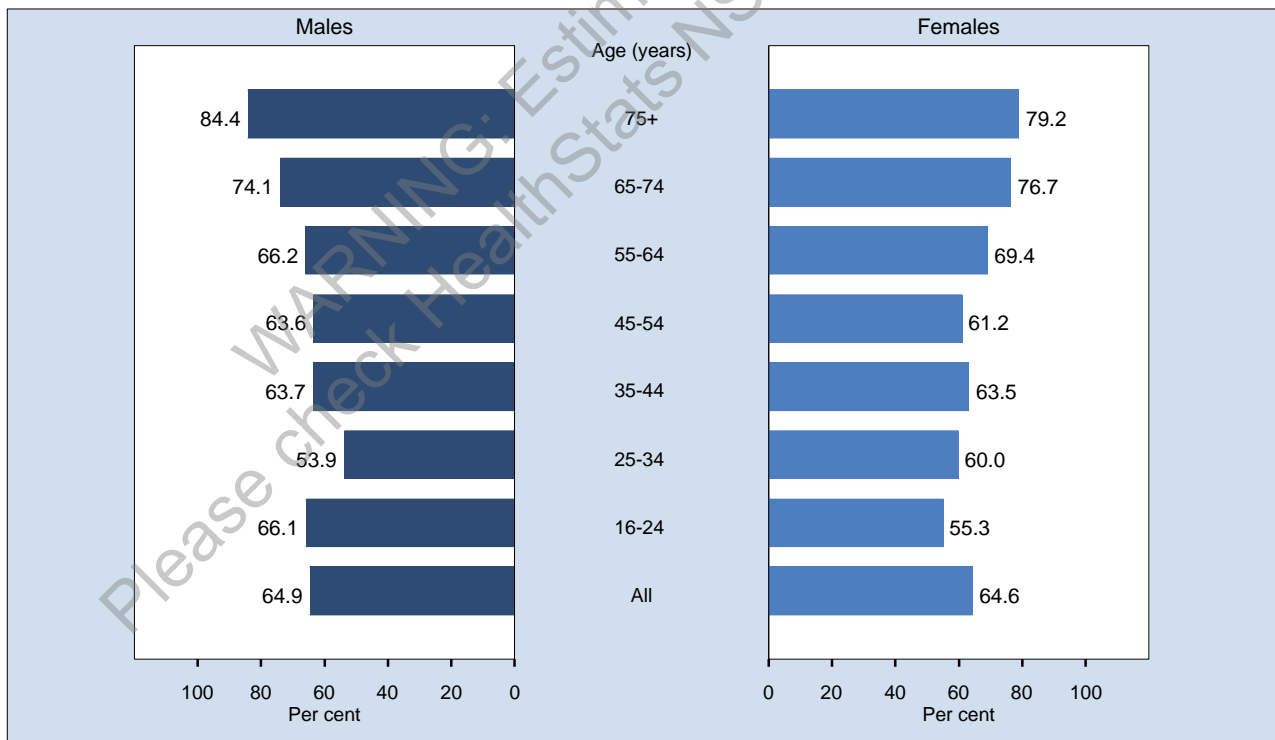
### Frequency of consuming breakfast cereals, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 8,012 respondents in NSW. For this indicator 32 (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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

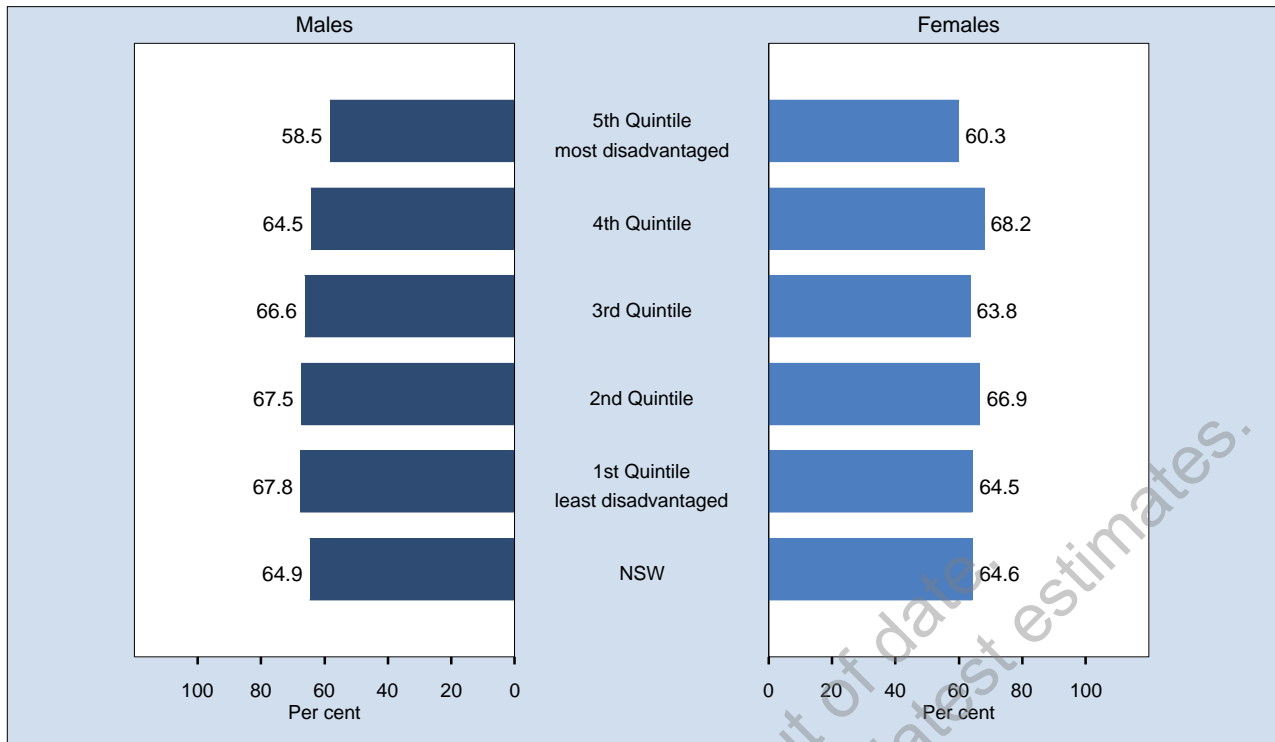
### Consumes breakfast cereals 2 times a week or more by age, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 8,012 respondents in NSW. For this indicator 32 (0.40%) were not stated (Don't know or Refused) in NSW. The indicator includes those who consumed breakfast cereals 2 times a week or more. The question used to define the indicator was: How often do you eat breakfast cereal?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

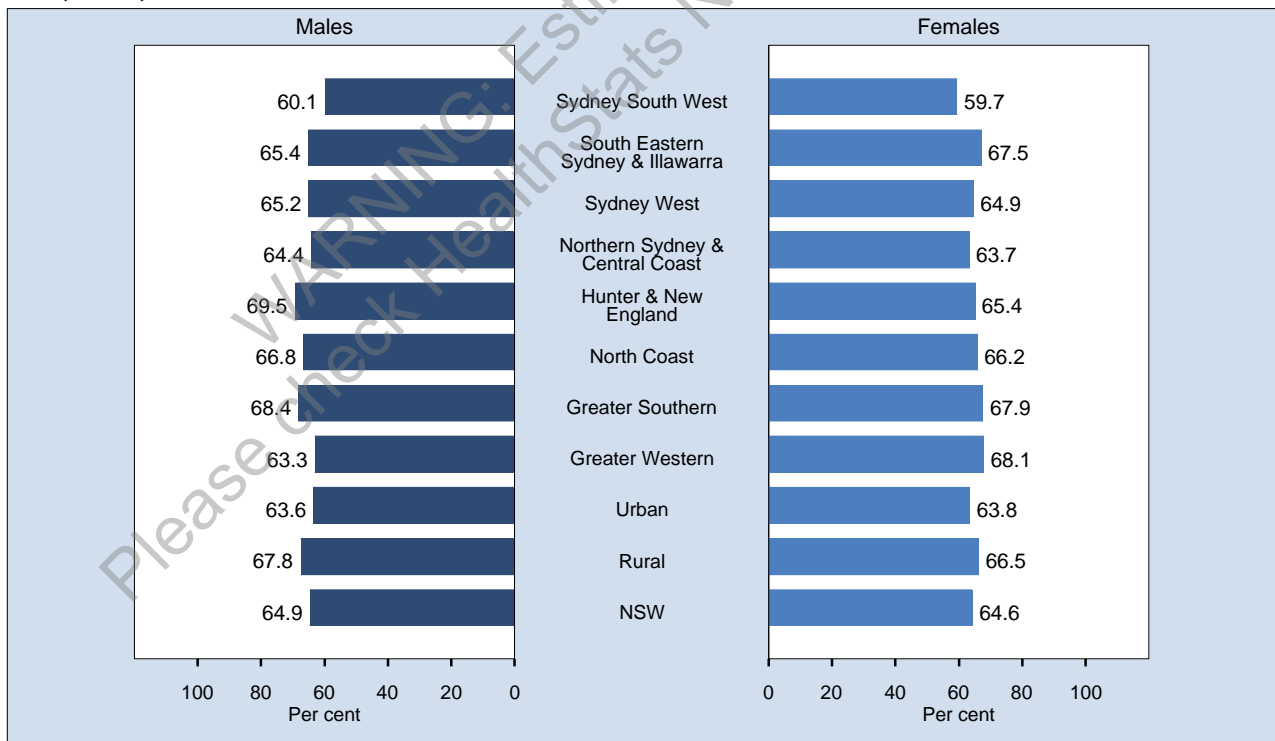
**Consumes breakfast cereals 2 times a week or more by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 8,012 respondents in NSW. For this indicator 32 (0.40%) were not stated (Don't know or Refused) in NSW. The indicator includes those who consumed breakfast cereals 2 times a week or more. The question used to define the indicator was: How often do you eat breakfast cereal?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

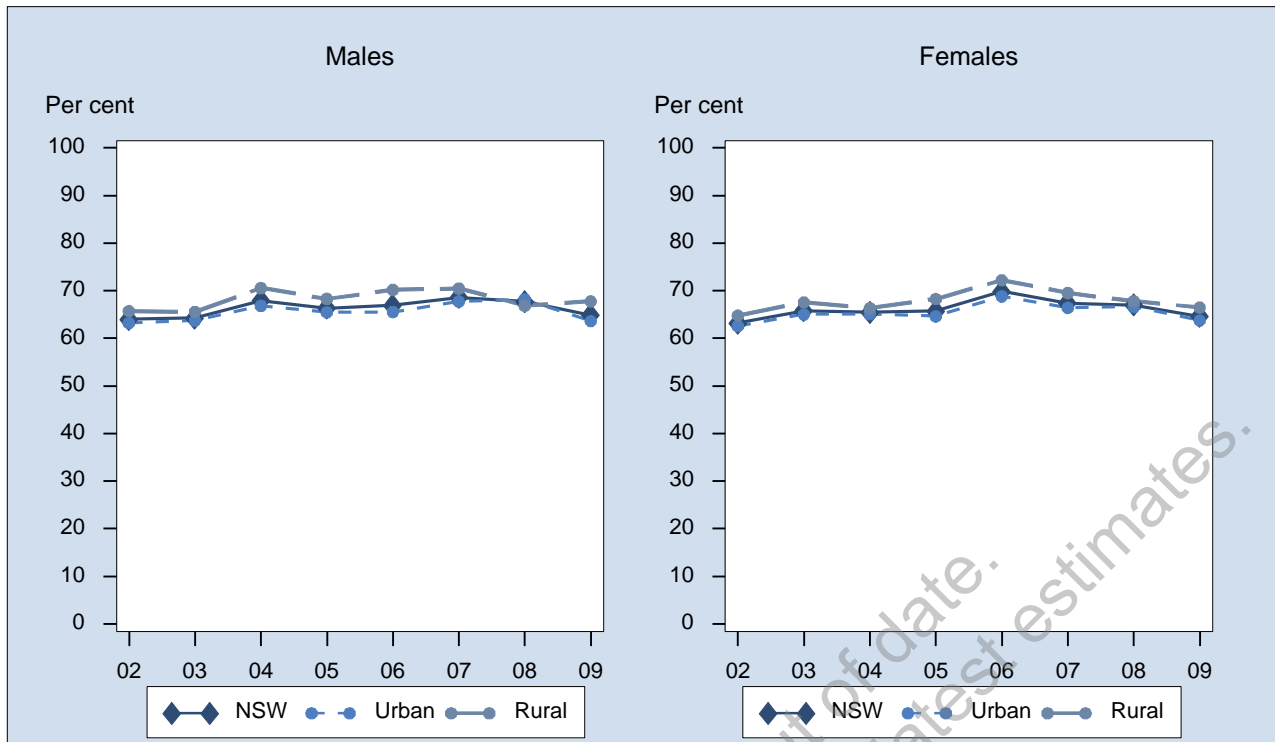
**Consumes breakfast cereals 2 times a week or more by area health service, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 8,012 respondents in NSW. For this indicator 32 (0.40%) were not stated (Don't know or Refused) in NSW. The indicator includes those who consumed breakfast cereals 2 times a week or more. The question used to define the indicator was: How often do you eat breakfast cereal?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

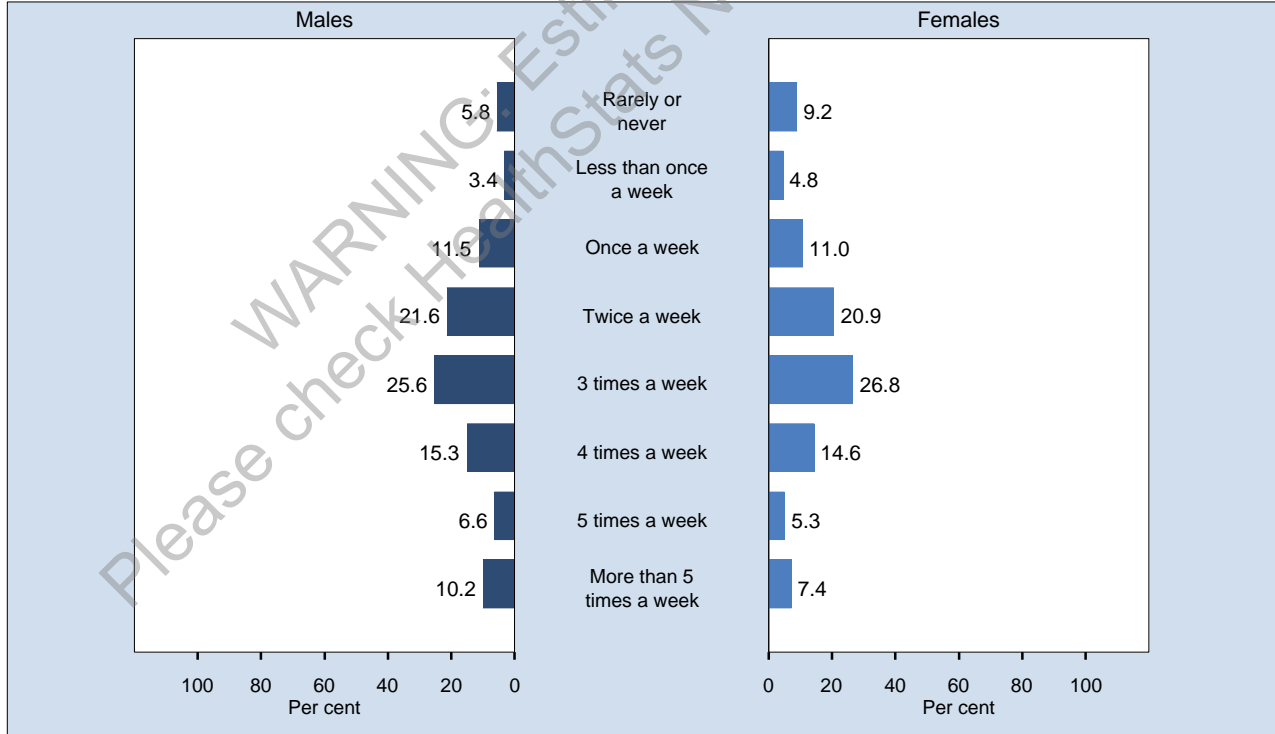
**Consumes breakfast cereals 2 times a week or more by year, adults aged 16 years and over, NSW, 2002-2009**



**Note:** Estimates are based on the following numbers of respondents for NSW: 2002 (12,587), 2003 (12,982), 2004 (9,401), 2005 (11,455), 2006 (7,940), 2007 (7,375), 2008 (8,513), 2009 (8,012). The indicator includes those who consumed breakfast cereals 2 times a week or more. The question used to define the indicator was: How often do you eat breakfast cereal?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

**Frequency of consuming red meat, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 7,991 respondents in NSW. For this indicator 53 (0.66%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

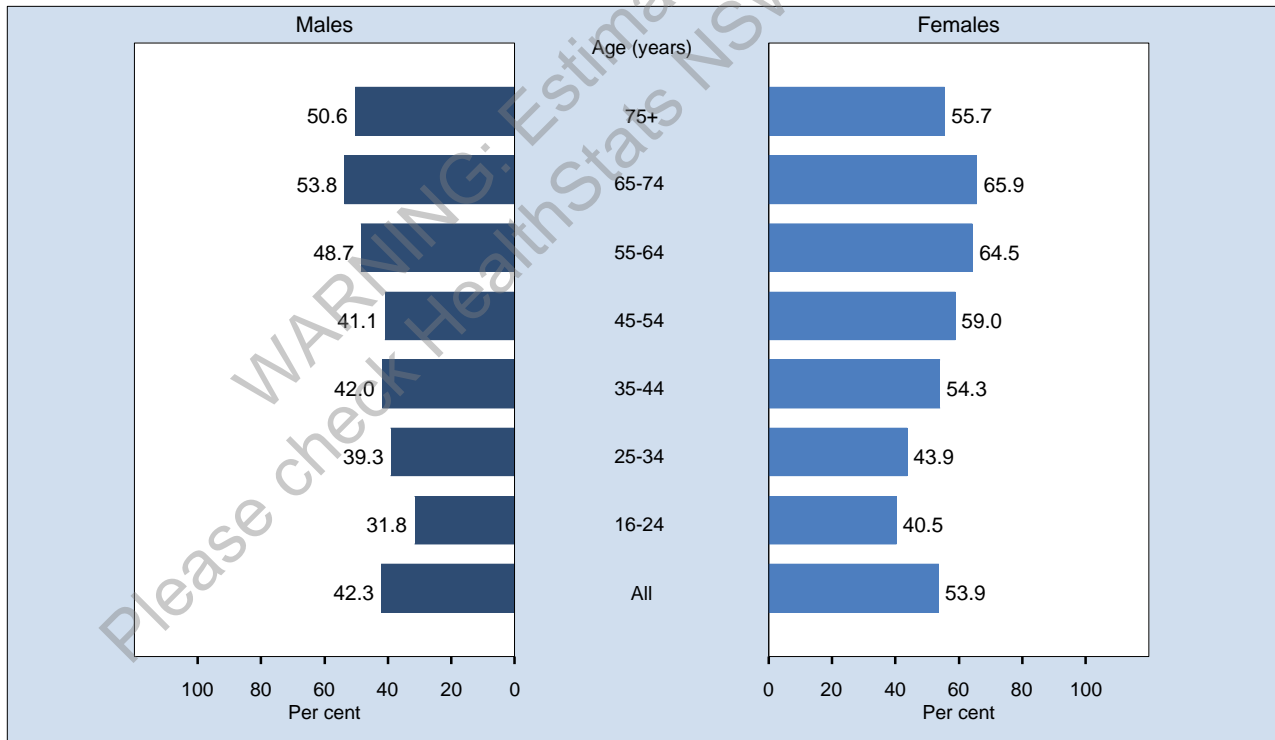
### Type of milk usually consumed, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 10,676 respondents in NSW. For this indicator 43 (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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

### Usually consumes lower fat or skim milk by age, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 10,676 respondents in NSW. For this indicator 43 (0.40%) were not stated (Don't know or Refused) in NSW. The indicator includes those who usually consume low fat, reduced fat, or skim milk. The question used to define the indicator was: What type of milk do you usually have?

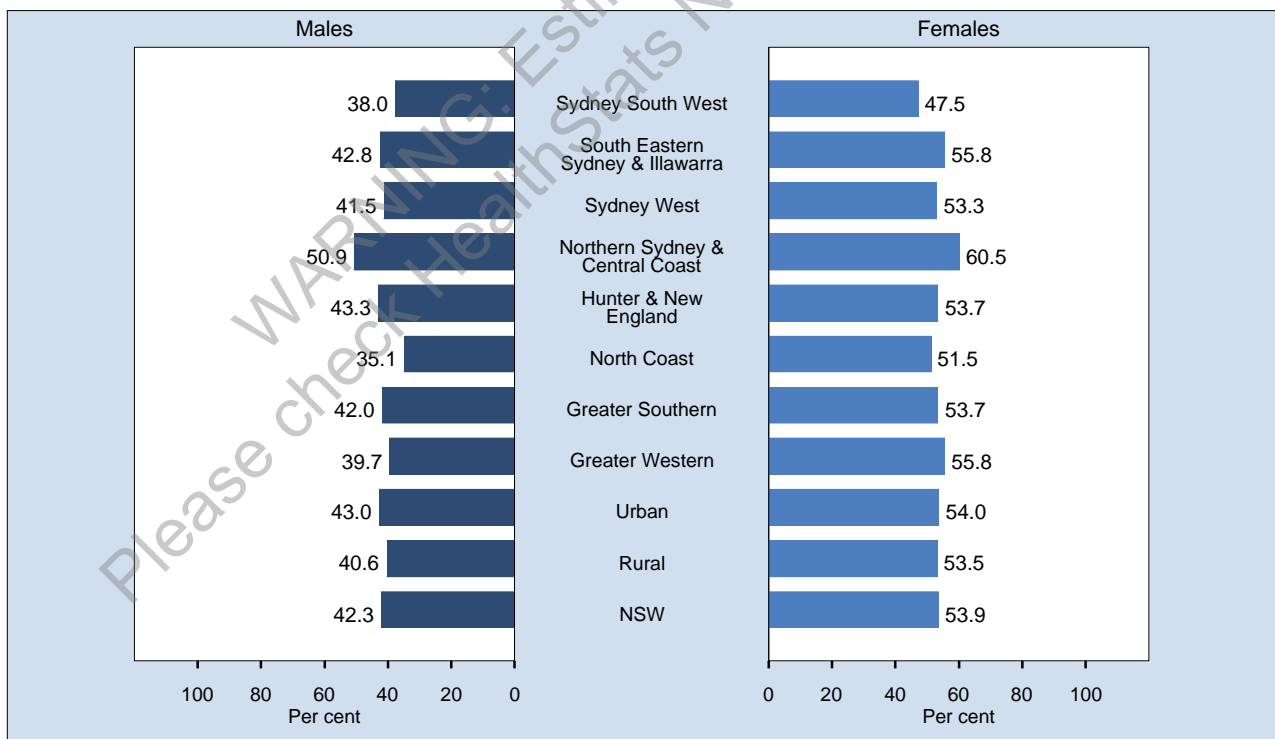
**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

**Usually consumes lower fat or skim milk by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2009**



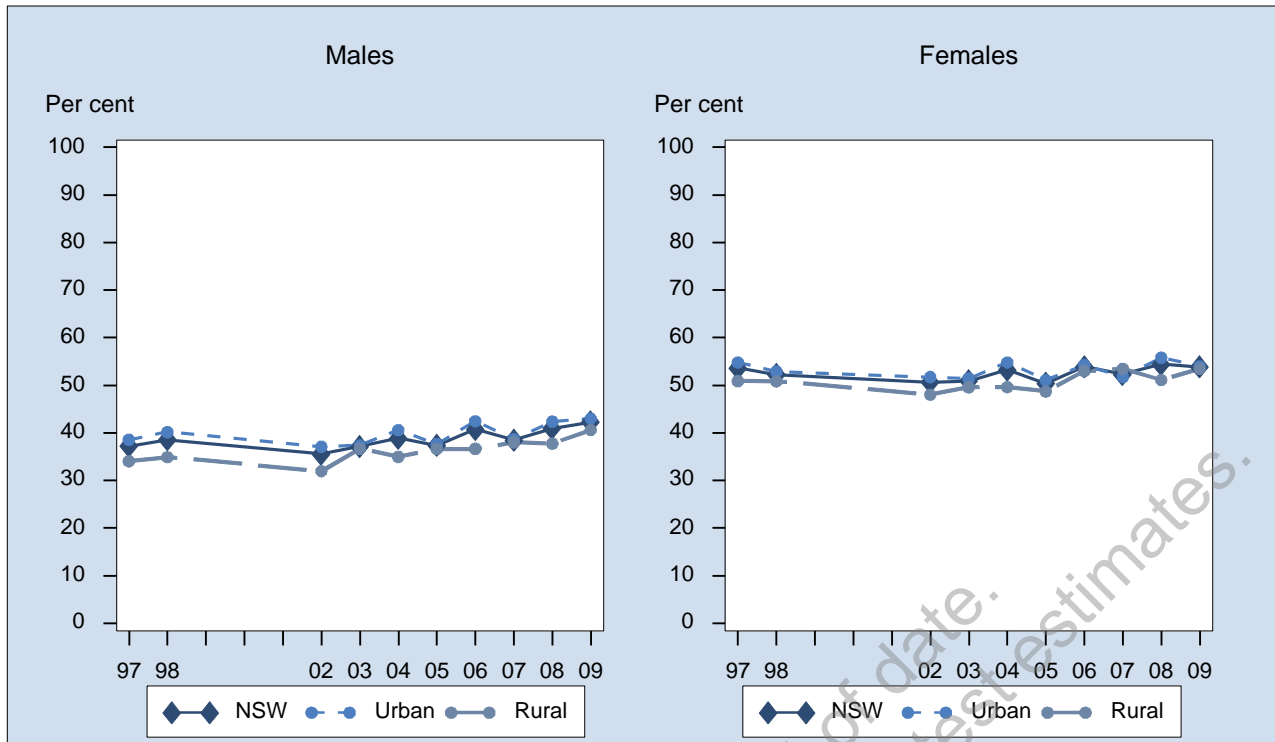
**Note:** Estimates are based on 10,676 respondents in NSW. For this indicator 43 (0.40%) were not stated (Don't know or Refused) in NSW. The indicator includes those who usually consume low fat, reduced fat, or skim milk. The question used to define the indicator was: What type of milk do you usually have?  
**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

**Usually consumes lower fat or skim milk by area health service, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 10,676 respondents in NSW. For this indicator 43 (0.40%) were not stated (Don't know or Refused) in NSW. The indicator includes those who usually consume low fat, reduced fat, or skim milk. The question used to define the indicator was: What type of milk do you usually have?  
**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

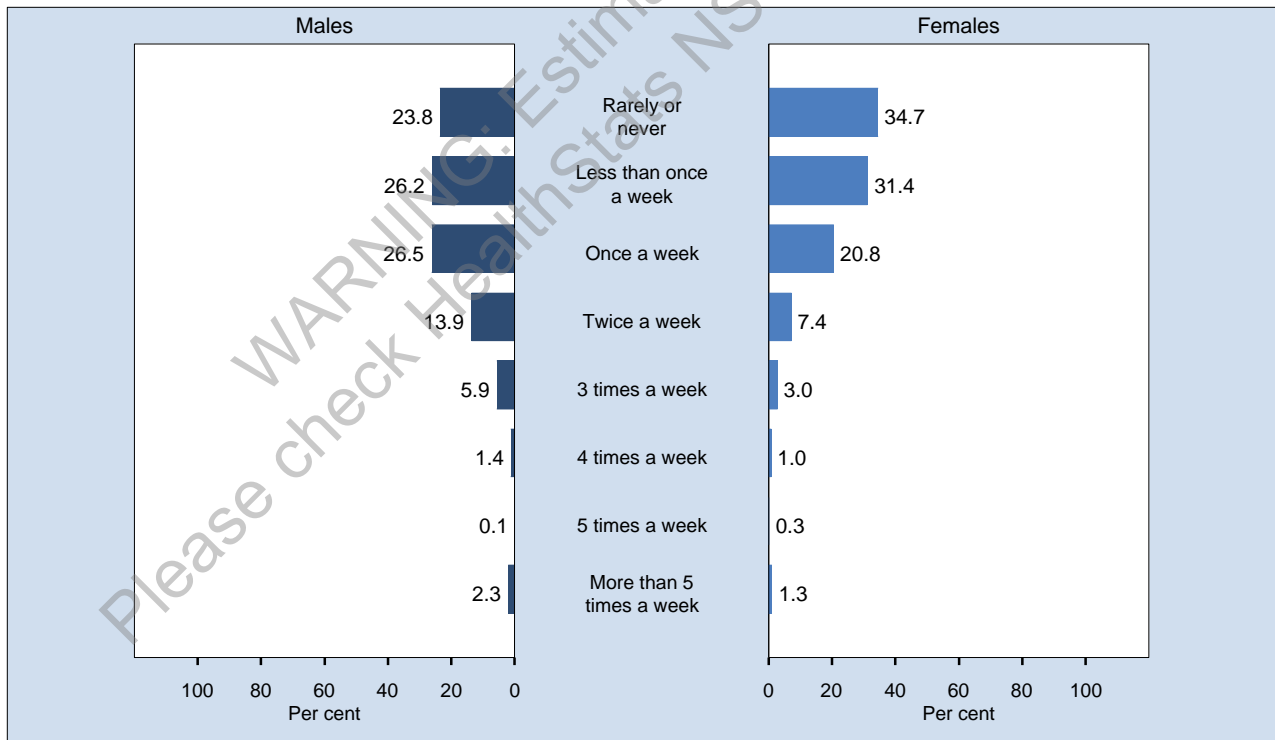
**Usually consumes lower fat or skim milk by year, adults aged 16 years and over, NSW, 1997-2009**



**Note:** Estimates are based on the following numbers of respondents for NSW: 1997 (16,624), 1998 (16,615), 2002 (12,598), 2003 (12,990), 2004 (9,402), 2005 (11,486), 2006 (7,940), 2007 (7,387), 2008 (8,534), 2009 (10,676). The indicator includes those who usually consume low fat, reduced fat, or skim milk. The question used to define the indicator was: What type of milk do you usually have?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

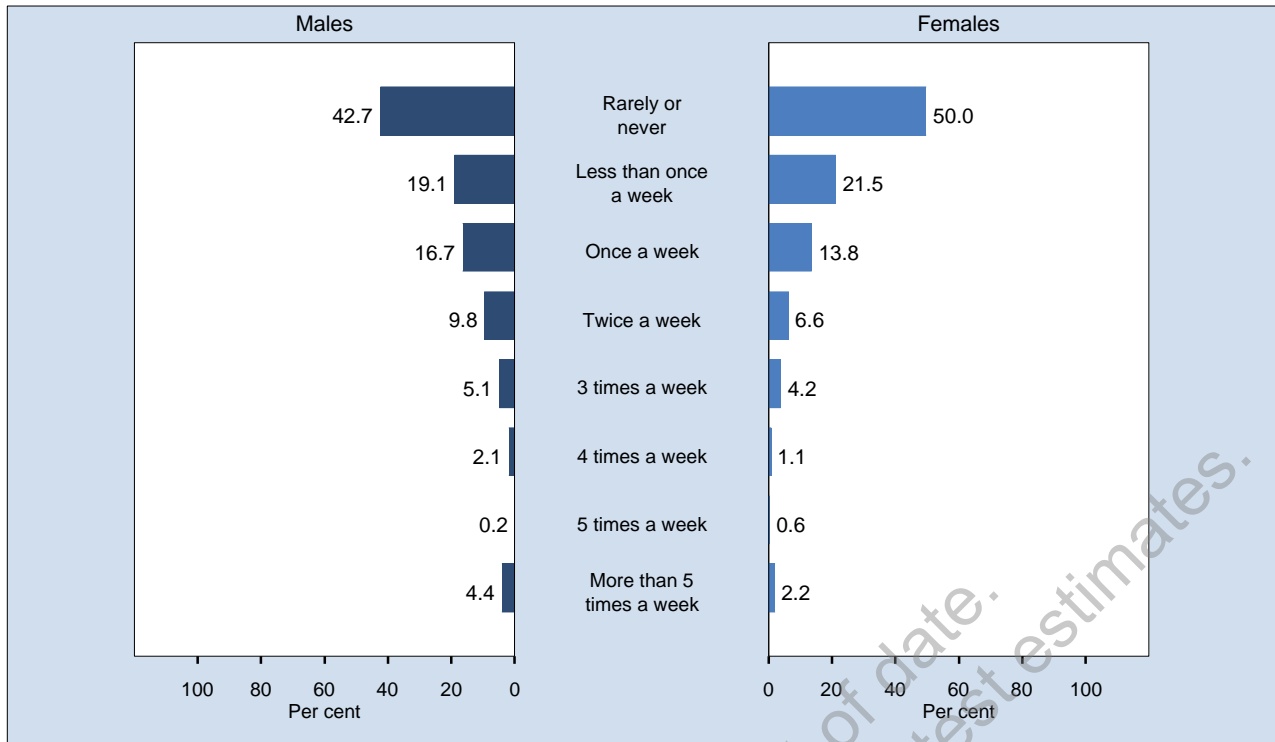
**Frequency of consuming hot fried potatoes, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 8,014 respondents in NSW. For this indicator 30 (0.37%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

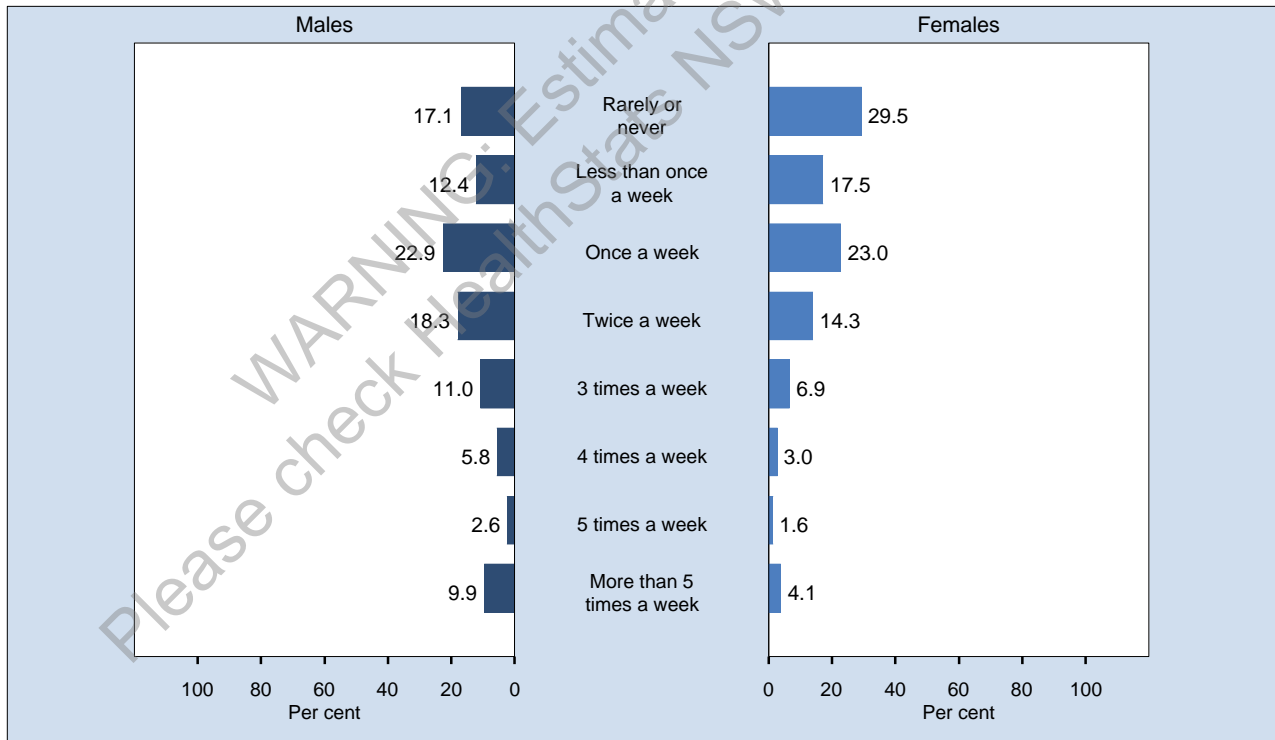
### Frequency of consuming potato crisps or salty snacks, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 8,011 respondents in NSW. For this indicator 33 (0.41%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

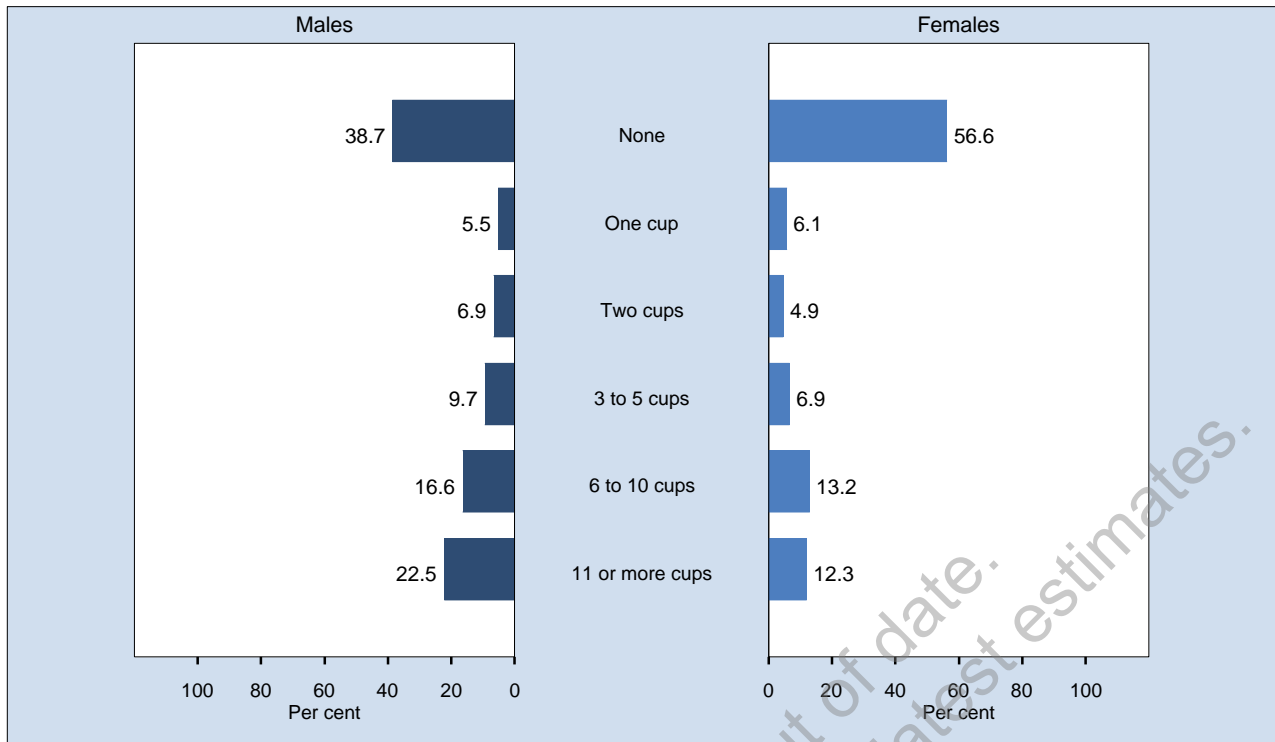
### Frequency of consuming processed meat products, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 7,992 respondents in NSW. For this indicator 52 (0.65%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

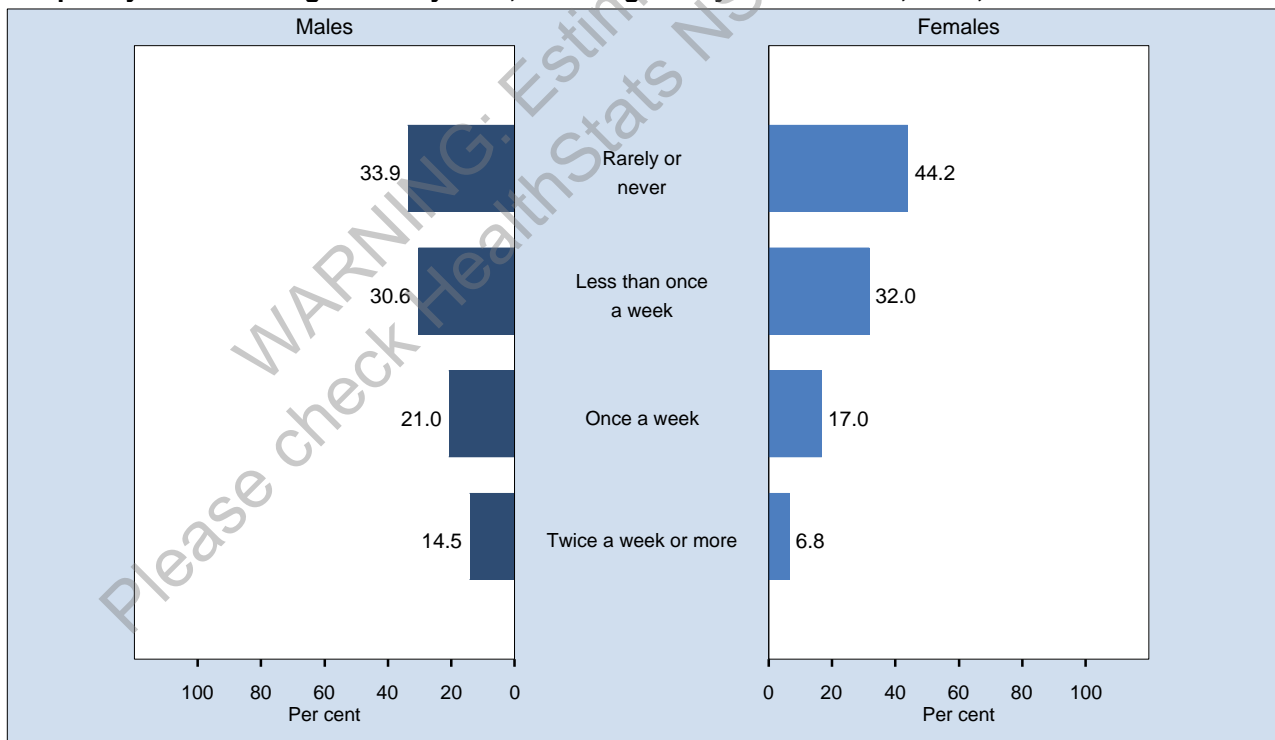
**Cups of soft drinks or cordials or sports drinks consumed a week, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 7,980 respondents in NSW. For this indicator 64 (0.80%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

**Frequency of consuming takeaway food, adults aged 16 years and over, NSW, 2009**

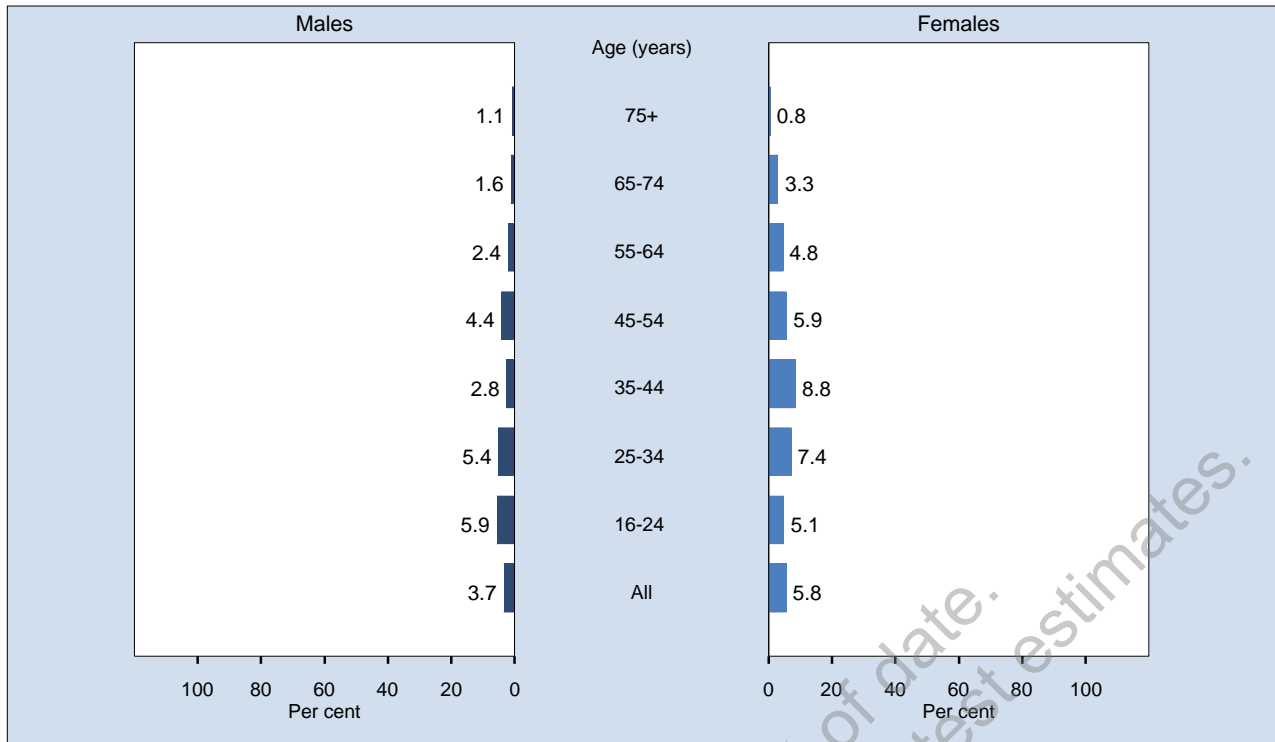


**Note:** Estimates are based on 8,027 respondents in NSW. For this indicator 17 (0.21%) were not stated (Don't know or Refused) in NSW. The question used was: How often did you have meals or snacks such as burgers, pizza, chicken or chips from places like McDonalds, Hungry Jacks, Pizza Hut, KFC, Red Rooster, or local take-away places?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.



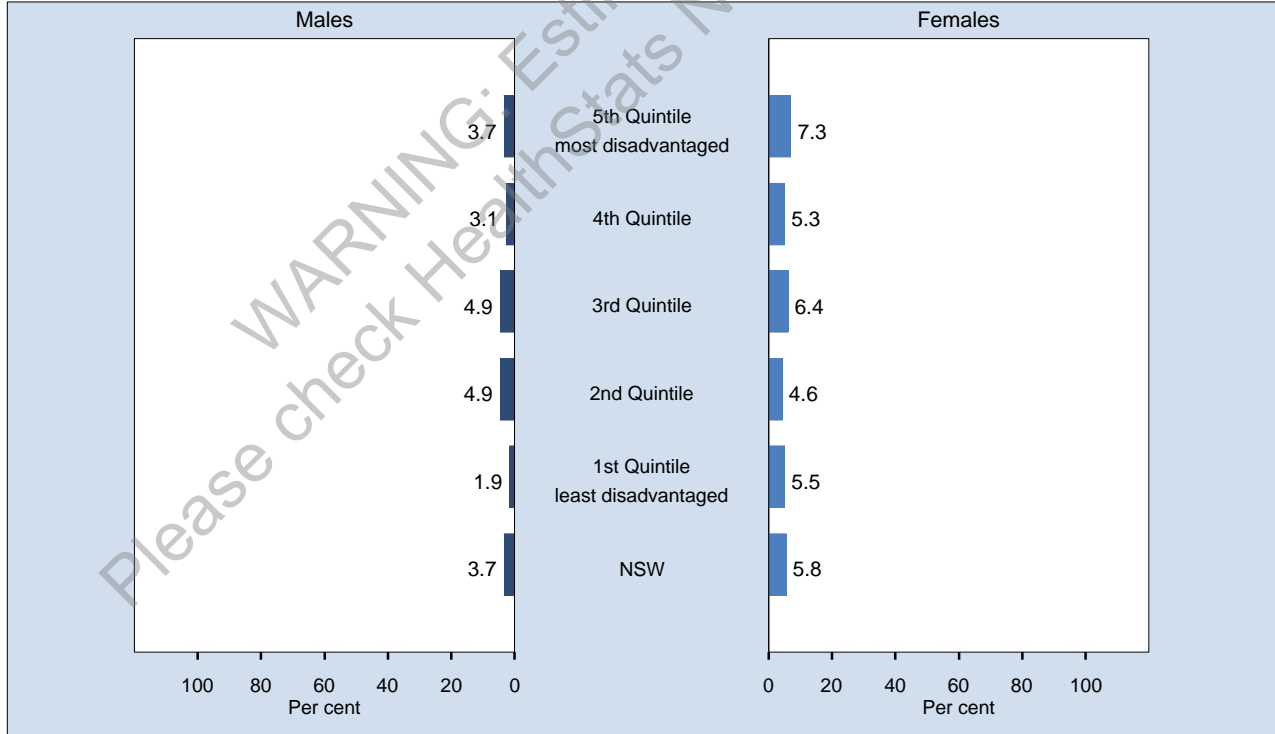
### Food insecurity in the last 12 months by age, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 7,973 respondents in NSW. For this indicator 22 (0.28%) were not stated (Don't know or Refused) in NSW. The indicator includes those who had suffered some food insecurity in the last 12 months. The question used to define the indicator was: In the last 12 months, were there any times you ran out of food and could not afford to buy more?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

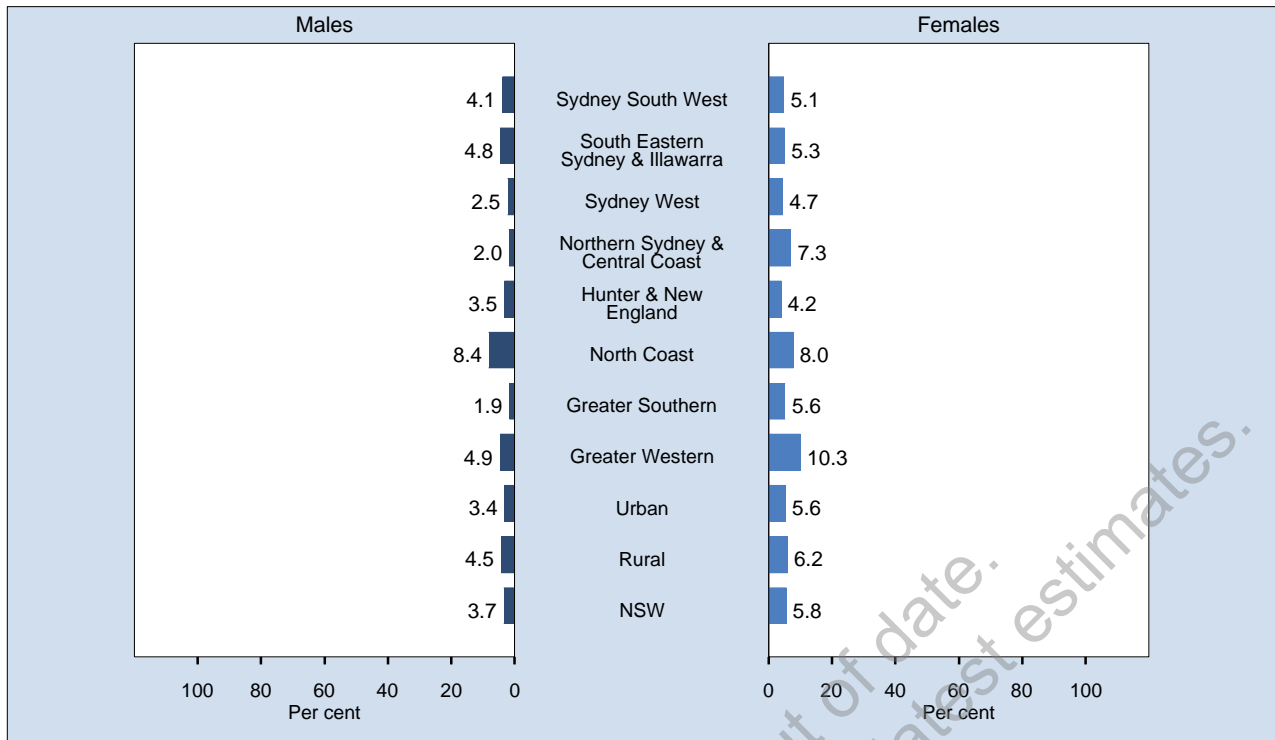
### Food insecurity in the last 12 months by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 7,973 respondents in NSW. For this indicator 22 (0.28%) were not stated (Don't know or Refused) in NSW. The indicator includes those who had suffered some food insecurity in the last 12 months. The question used to define the indicator was: In the last 12 months, were there any times you ran out of food and could not afford to buy more?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

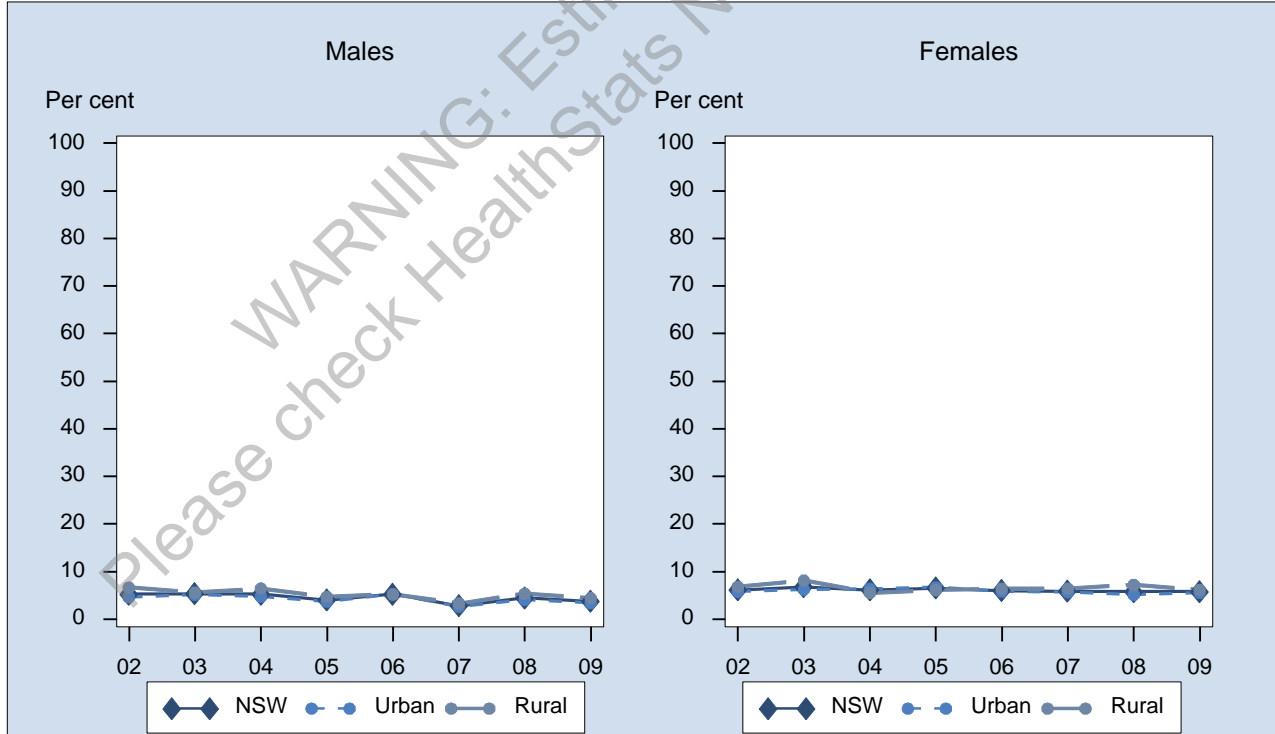
**Food insecurity in the last 12 months by area health service, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 7,973 respondents in NSW. For this indicator 22 (0.28%) were not stated (Don't know or Refused) in NSW. The indicator includes those who had suffered some food insecurity in the last 12 months. The question used to define the indicator was: In the last 12 months, were there any times you ran out of food and could not afford to buy more?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

**Food insecurity in the last 12 months by year, adults aged 16 years and over, NSW, 2002-2009**



**Note:** Estimates are based on the following numbers of respondents for NSW: 2002 (12,609), 2003 (13,001), 2004 (9,416), 2005 (11,489), 2006 (7,956), 2007 (7,368), 2008 (8,535), 2009 (7,973). The indicator includes those who had suffered some food insecurity in the last 12 months. The question used to define the indicator was: In the last 12 months, were there any times you ran out of food and could not afford to buy more?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

# Physical activity

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## Introduction

Regular physical activity is an important factor in maintaining good health. People who regularly participate in moderate-to-vigorous levels of physical activity have lower rates of preventable mortality than those who are physically inactive; also, regular physical activity decreases risk of cardiovascular disease, some cancers, some mental illness, type-2 diabetes, overweight and obesity, and preventable injury.[1]

To maintain good health, the recommendation of 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* is at least 30 minutes of moderate activity on most, and preferably all, days of the week.[2-4]

This can be undertaken in shorter bursts of exercise, such as 3 lots of 10 minutes. Exercise of moderate intensity includes brisk walking, dancing, swimming, or cycling. In the guidelines, adults and older people are encouraged to think of movement as an opportunity rather than an inconvenience, and to be active every day in as many ways as possible.

In the New South Wales Population Health Survey, adequate physical activity is calculated from questions asked in the Active Australia Survey,[5] 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 forms of transport involving physical activity, such as walking and cycling. It also includes public transport for longer distance trips, as public transport trips generally include walking or cycling as part of the whole journey.[6] Many people find active transport is an effective way to build physical activity into their daily routines and busy schedules.[7] Monitoring the active transport habits of the population provides important information about physical activity.

## Results

### ***Adequate physical activity***

In 2009, 55.2 per cent of adults undertook adequate levels of physical activity. A significantly higher proportion of males (60.7 per cent) than females (49.8 per cent) undertook adequate levels of physical activity. Among males, a significantly higher proportion of those aged 16-24 years (78.8 per cent), and a significantly lower proportion of those aged 45-54 years (53.4 per cent) and 75 years and over (44.2 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 (59.3 per cent) and 45-54 years (55.3 per cent), and a significantly lower proportion of those aged 75 years and over (26.5 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 (61.5 per cent), and a significantly lower proportion of adults in the fifth or most disadvantaged quintile (50.7 per cent), undertook adequate levels of physical activity, compared with the overall adult population.

There was no significant difference between urban and rural health areas. A significantly lower proportion of adults in the Sydney South West (51.3 per cent) and Sydney West (51.9 per cent) Area Health Services, and a significantly higher proportion of adults in the South Eastern Sydney & Illawarra (61.2 per cent) and Northern Sydney & Central Coast (58.5 per cent) Area Health Services, 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 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 urban and rural health areas.

However, since 2008, there has been no significant change in the proportion of adults who undertook adequate levels of physical activity.

## Usual transport to work

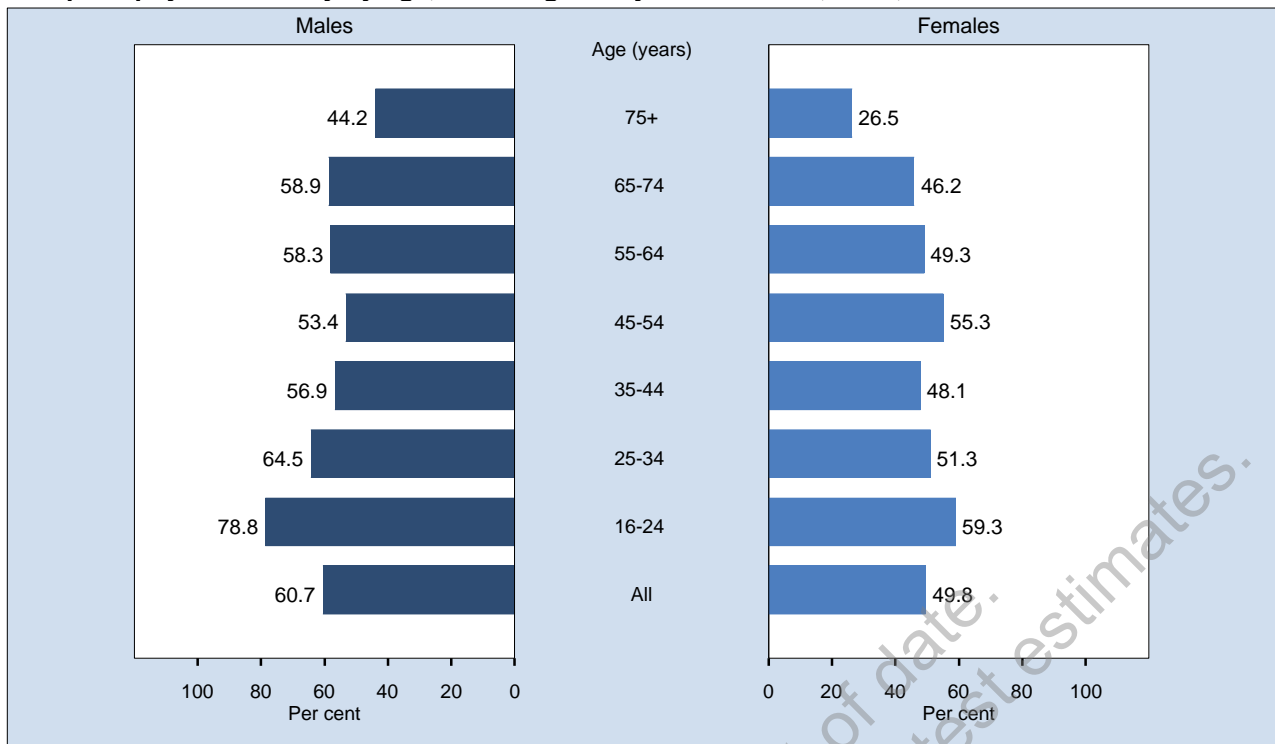
In 2009, among adults who were employed, the usual form of transport to work was: car as driver (70.9 per cent), train (10.5 per cent), work at home (7.2 per cent), walk only (5.9 per cent), bus (5.1 per cent), car as passenger (4.5 per cent), bicycle (1.7 per cent), walk part of the way (1.5 per cent), motorbike or motor scooter (0.9 per cent), truck (0.5 per cent), ferry (0.5 per cent), taxi (0.3 per cent), and tram including light rail (0.1 per cent). Respondents could mention more than 1 response.

## References

1. Bull F, Bauman A, Bellew B, and Brown W. *Getting Australia Active II: An update of evidence on physical activity for health*. Melbourne: National Public Health Partnership, 2004. Available online at [www.nphp.gov.au/publications/a\\_z.htm](http://www.nphp.gov.au/publications/a_z.htm) (accessed 2 September 2010).
2. Australian Government Department of Health and Aged Care. *National Physical Activity Guidelines for Australians*. Canberra: Australian Government Department of Health and Aged Care, 2005. Available online at [www.health.gov.au/internet/main/publishing.nsf/Content/health-pubhlth-strateg-active-index.htm](http://www.health.gov.au/internet/main/publishing.nsf/Content/health-pubhlth-strateg-active-index.htm) (accessed 2 September 2010).
3. 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. Available online at [www.health.gov.au/internet/main/publishing.nsf/Content/phd-physical-choose-health](http://www.health.gov.au/internet/main/publishing.nsf/Content/phd-physical-choose-health) (accessed 2 September 2010).
4. Australian Government Department of Health and Ageing. *Recommendations on physical activity for health for older Australians*. Canberra: Australian Government Department of Health and Ageing, 2009. Available online at [www.health.gov.au/internet/main/publishing.nsf/Content/phd-physical-rec-older-guidelines](http://www.health.gov.au/internet/main/publishing.nsf/Content/phd-physical-rec-older-guidelines) (accessed 2 September 2010).
5. Australian Institute of Health and Welfare. *The Active Australia Survey: A guide and manual for implementation, analysis and reporting*. Canberra: AIHW, 2003. Available online at [www.aihw.gov.au/publications/index.cfm/title/8559](http://www.aihw.gov.au/publications/index.cfm/title/8559) (accessed 2 September 2010).
6. Planning Institute of Australia. Health Spaces and Place Website: Active Transport. Canberra: Planning Institute of Australia, 2009. Available online at [www.healthypaces.org.au/site/design\\_for\\_active\\_transport.php](http://www.healthypaces.org.au/site/design_for_active_transport.php) (accessed 2 September 2010).
7. Victorian Government. Go For Your Life Website: Active Transport. Canberra: Victorian Government, 2008. Available online at [www.goforyourlife.vic.gov.au](http://www.goforyourlife.vic.gov.au) (accessed 2 September 2010).

WARNING: This site is for research purposes only  
Please check Health Status for research purposes

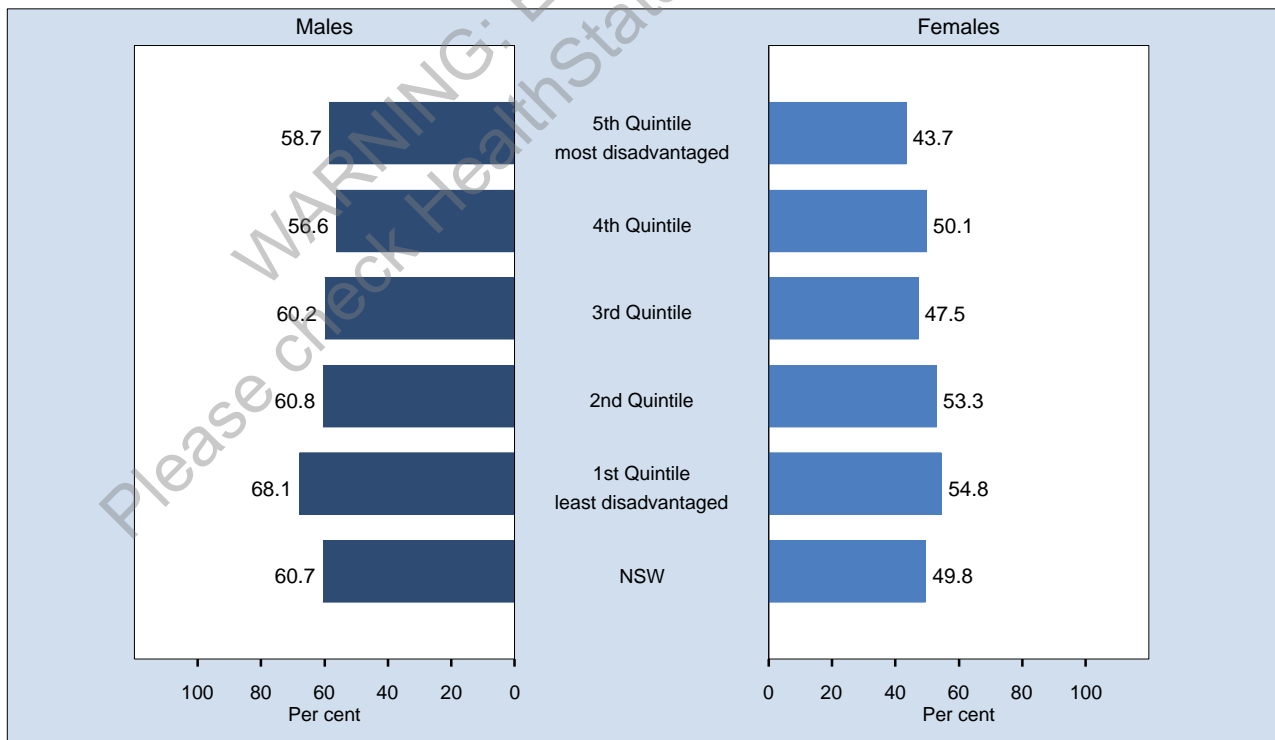
### Adequate physical activity by age, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 9,984 respondents in NSW. For this indicator 381 (3.68%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

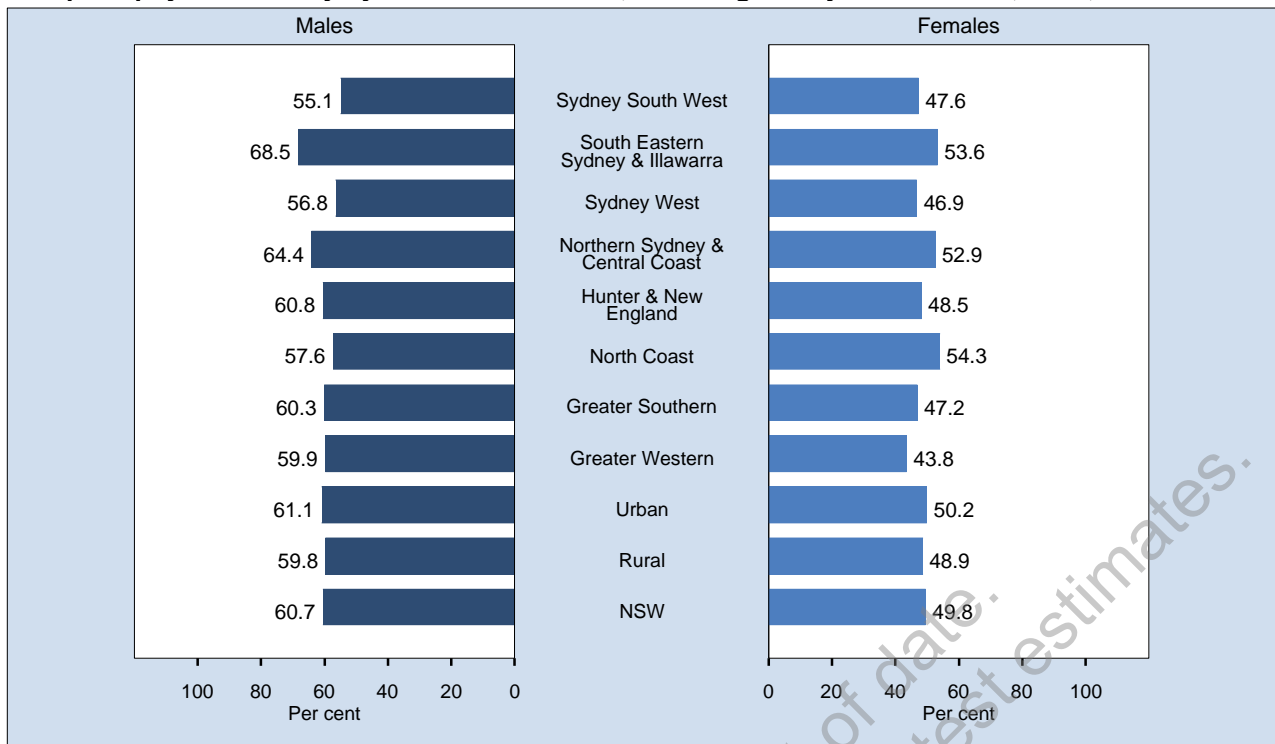
### Adequate physical activity by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 9,984 respondents in NSW. For this indicator 381 (3.68%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

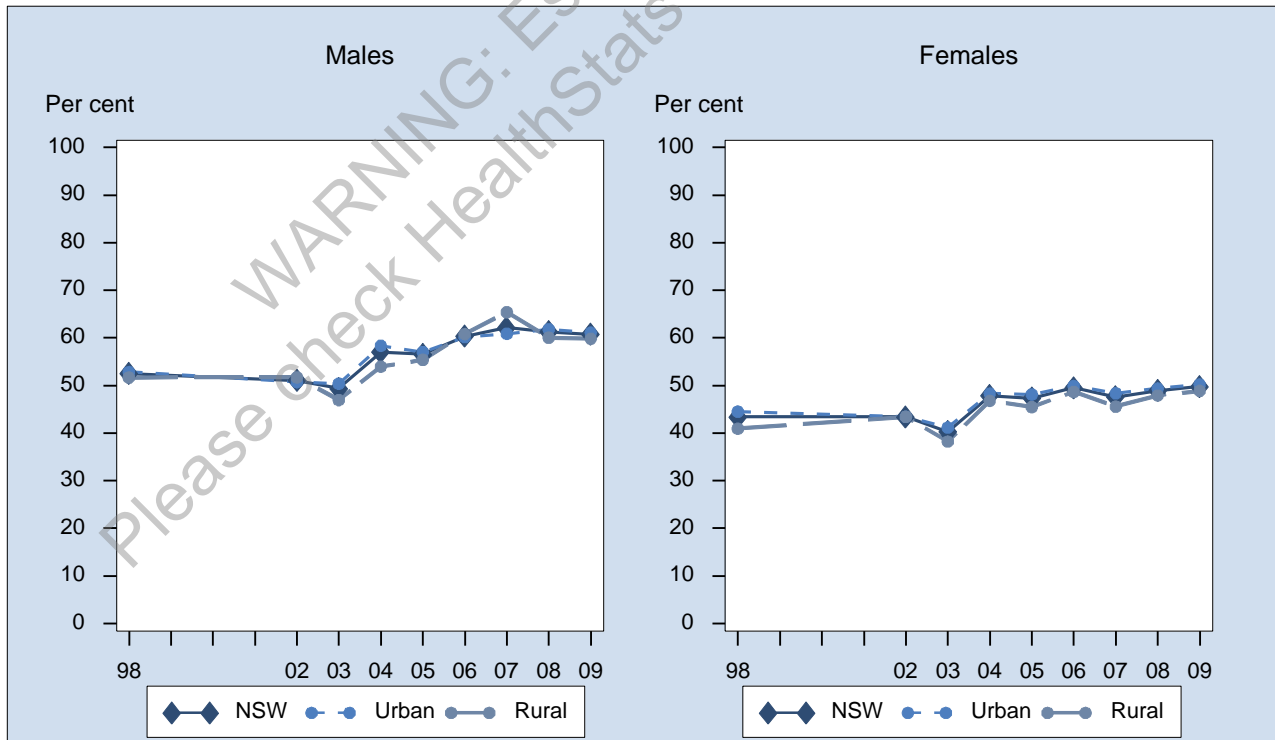
### Adequate physical activity by area health service, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 9,984 respondents in NSW. For this indicator 381 (3.68%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

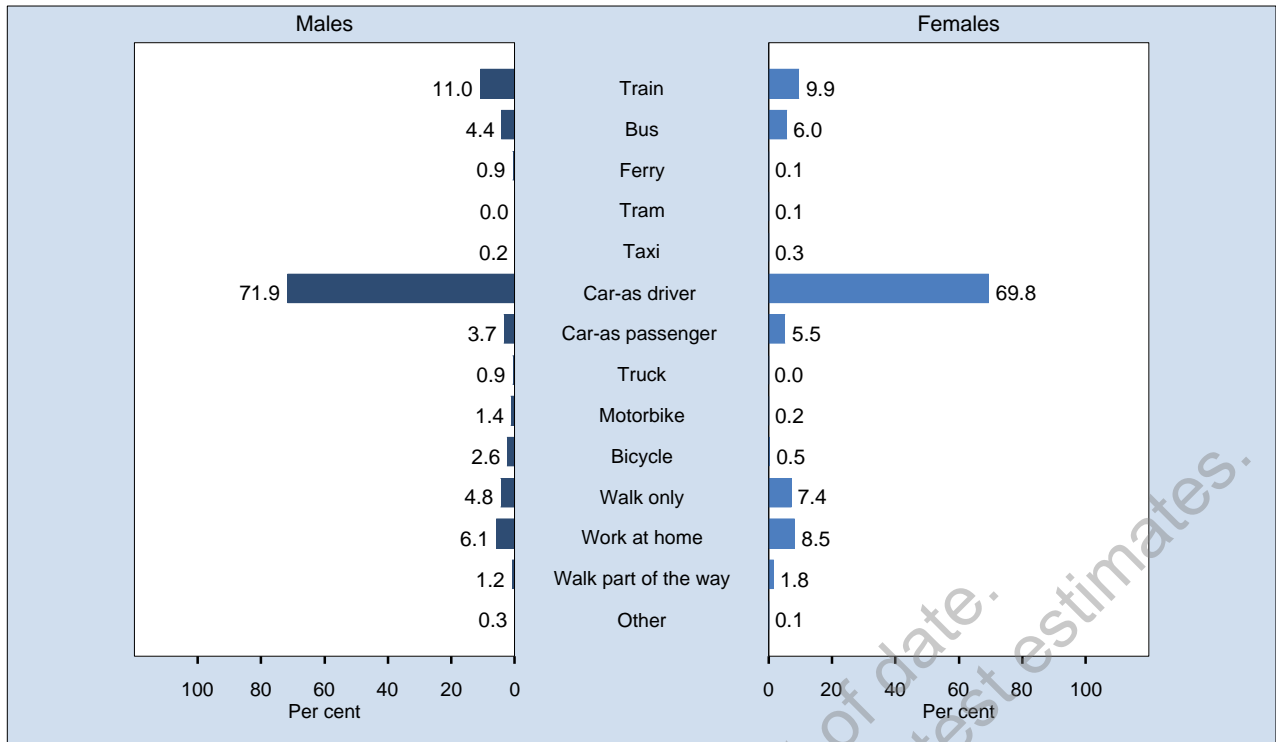
### Adequate physical activity by year, adults aged 16 years and over, NSW, 1998-2009



**Note:** Estimates are based on the following numbers of respondents for NSW: 1998 (17,462), 2002 (12,621), 2003 (13,005), 2004 (9,423), 2005 (11,402), 2006 (7,575), 2007 (5,116), 2008 (8,006), 2009 (9,984). 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

**Usual transport to work, adults aged 16 years and over who were employed, NSW, 2009**



**Note:** Estimates are based on 5,110 respondents in NSW. For this indicator 59 (1.14%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

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

# Smoking

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## Introduction

Tobacco smoking is the leading cause of preventable mortality and morbidity in New South Wales. While the relationship between tobacco smoking, lung cancer, and cardiovascular disease has long been evidenced, a number of other diseases are now known to be associated with smoking. According to the US Surgeon General's Report (2004), tobacco smoking is associated with: cancer, including cancer of the lung, mouth, throat, larynx, esophagus, pancreas, kidney, bladder, stomach, and acute myeloid leukemia; cardiovascular disease, including atherosclerosis, strokes, abdominal aortic aneurysm, hardening and narrowing of the arteries, damage to the cells lining the blood vessels and heart, and blood clots; respiratory disease, including emphysema, chronic obstructive pulmonary disease, and upper and lower respiratory tract infections; reproductive problems, including difficulty becoming pregnant, a higher risk of never becoming pregnant, risk of complications during pregnancy, risk of premature birth, low birthweight infants, stillbirth, and infant mortality including increased risk of sudden infant death syndrome; other health effects, including increased risk of eye diseases, loss of bone mass, and peptic ulcers. Smokers are generally less healthy than nonsmokers. Smoking affects the immune system. Illnesses in smokers last longer and smokers are more likely to be absent from work. Smokers also use more medical services, both outpatient and inpatient services.[1]

As tobacco smokers need to be aware that smoking carries far greater risks than the most widely known diseases, health care providers can use this evidence to counsel their patients against tobacco smoking. Tobacco smokers who quit can lower their risk of a wide range of diseases and improve their health generally.[1]

Exposure to environmental tobacco smoke (passive smoking) is a significant cause of preventable mortality and morbidity in New South Wales. Passive smoking causes lung and nasal and sinus cancer, stroke and ischemic heart disease in adults, lower respiratory infections (croup, bronchitis, bronchiolitis and pneumonia), onset of asthma and worsening of asthma, respiratory symptoms, reduced lung function, middle-ear disease and eye and nasal irritation in children, reduced birthweight, and increased risk of sudden infant death syndrome in infants. There is also a causal association between passive smoking and cervical cancer, decreased pulmonary function and exacerbation of cystic fibrosis in adults, and cardiovascular health and the development of neurodevelopmental and behavioural problems in children. The risk of breast cancer appears to increase with passive smoking during puberty but not with overall lifetime exposure. 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]

The NSW Department of Health's tobacco website provides: information on state and national policy on tobacco control policy; resources for people wanting to quit smoking; and information for the community and businesses on legislation relating to the control of advertising, sale and display of tobacco and environmental tobacco smoke.[3]

The object of the *Public Health (Tobacco) Act 2008* is to reduce the prevalence of tobacco consumption, particularly by young people, in recognition that the consumption of tobacco products adversely affects the health of the people of New South Wales and places a substantial burden on the State's health and financial resources. The Act aims to achieve that object by: prohibiting the display of tobacco in retail outlets, restricting the placement and operation of tobacco vending machines, and banning smoking in a car with a child under the age of 16 years present.[4]

## Results

### *Smoking status*

In 2009, 13.5 per cent of adults smoked daily, 3.7 per cent smoked occasionally, 24.3 per cent did not smoke now but used to smoke, 10.7 per cent tried smoking a few times but never smoked regularly, and 47.8 per cent never smoked.



## ***Current smoking***

In 2009, 17.2 per cent of adults were current (daily or occasional) smokers. A significantly higher proportion of males (20.3 per cent) than females (14.2 per cent) were current smokers. Among males, a significantly higher proportion of those aged 25-34 years (29.2 per cent) and 45-54 years (25.0 per cent), and a significantly lower proportion of those aged 65-74 years (9.3 per cent) and 75 years and over (2.5 per cent) were current smokers, compared with the overall adult male population. Among females, a significantly higher proportion of those aged 25-34 years (19.3 per cent) and 45-54 years (17.1 per cent), and a significantly lower proportion of those aged 65-74 years (6.6 per cent), and 75 years and over (3.4 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 (21.6 per cent), and a significantly lower proportion of adults in the first or least disadvantaged quintile (11.2 per cent), were current smokers, compared with the overall adult population.

A significantly higher proportion of adults in rural areas (18.7 per cent) than urban areas (16.6 per cent) were current smokers. A significantly higher proportion of adults in the Greater Western Area Health Service (20.7 per cent), and significantly lower proportion of adults in the Northern Sydney & Central Coast Area Health Service (13.9 per cent), were current smokers, compared with the overall adult population.

Since 1997, there has been a significant decrease in the proportion of adults who were current smokers (24.0 per cent to 17.2 per cent). The decrease has been significant in males and females, and in rural and urban health areas.

However, since 2008, there has been no significant change in the proportion of adults who were current smokers; however, there has been a significant decrease in females (17.2 per cent to 14.2 per cent).

## ***Daily smoking***

In 2009, 13.5 per cent of adults were daily smokers. A significantly higher proportion of males (15.8 per cent) than females (11.4 per cent) were daily smokers. Among males, a significantly higher proportion of those aged 25-34 years (21.6 per cent) and 45-54 years (20.6 per cent), and a significantly lower proportion of those aged 65-74 years (8.7 per cent) and 75 years and over (2.2 per cent) were daily smokers, compared with the overall adult male population. Among females, a significantly higher proportion of those aged 25-34 years (14.8 per cent), 35-44 years (14.3 per cent), and 45-54 years (13.7 per cent), and a significantly lower proportion of those aged 65-74 years (5.5 per cent) and 75 years and over (3.1 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 (17.8 per cent), and a significantly lower proportion of adults in the first or least disadvantaged quintile (8.6 per cent) and second quintile (11.6 per cent), were daily smokers, compared with the overall adult population.

A significantly higher proportion of adults in rural health areas (15.4 per cent) than urban health areas (12.8 per cent) were daily smokers. A significantly higher proportion of adults in the Greater Western Area Health Service (18.3 per cent), and a significantly lower proportion of adults in the South Eastern Sydney & Illawarra (11.2 per cent) and Northern Sydney & Central Coast (10.5 per cent) Area Health Services, were daily smokers, compared with the overall adult population.

Since 1997, there has been a significant decrease in the proportion of adults who were daily smokers (19.1 per cent to 13.5 per cent). The decrease has been significant in males and females, and in rural and urban health areas.

However, since 2008, there has been no significant change in the proportion of adults who were daily smokers.

## ***Doctor advised to quit smoking***

In 2009, 46.2 per cent of adults who smoked were advised to quit smoking the last time they visited their general practitioner. There was no significant difference between males and females. A significantly higher proportion of adults aged 55-64 years (61.8 per cent) and 65-74 years (69.8 per cent), and a significantly lower proportion of adults aged 25-34 years (34.4 per cent), were advised to quit smoking the last time they visited their general practitioner, compared with the overall adult population.

There was no significant difference among quintiles of disadvantage, between rural and urban health areas, or among area health services.

Since 2005, there has been no significant change in the proportion of adults who smoked who were advised to quit smoking the last time they visited their general practitioner.

However, since 2008, there has been a significant increase in the proportion of adults who smoked who were advised to quit smoking the last time they visited their general practitioner (40.0 per cent to 46.2 per cent). The increase has been significant in urban health areas.

## **Smoke-free homes**

In 2009, 91.9 per cent of adults lived in homes that were smoke-free, 3.7 per cent lived in homes where people occasionally smoked, and 4.5 per cent lived in homes where people frequently smoked.

A significantly lower proportion of adults aged 16-24 years (86.0 per cent), and a significantly higher proportion of adults aged 35-44 years (94.5 per cent), 55-64 years (93.1 per cent), 65-74 years (94.1 per cent), and 75 years and over (95.5 per cent), lived in homes that were smoke-free, compared with the overall adult population.

A significantly higher proportion of adults in the first or least disadvantaged quintile (94.6 per cent), and a significantly lower proportion of adults in the fifth or most disadvantaged quintile (88.4 per cent), lived in homes that were smoke-free, compared with the overall adult population.

There was no significant difference between rural and urban health areas. A significantly higher proportion of adults in the Northern Sydney & Central Coast (95.6 per cent) and Hunter & New England (94.0 per cent) Area Health Services, and a significantly lower proportion of adults in the Greater Western Area Health Service (88.4 per cent), lived in homes that were smoke-free, compared with the overall adult population.

Since 1997, there has been a significant increase in the proportion of adults who lived in homes that were smoke-free (69.7 per cent to 91.9 per cent). The increase has been significant in rural and urban health areas.

Since 2008, there has been a significant increase in the proportion of adults who lived in homes that were smoke-free (89.5 per cent to 91.9 per cent). The increase has been significant in rural and urban health areas.

## **Smoke-free cars**

In 2009, 91.4 per cent of adults with cars said smoking was not allowed in their car. A significantly lower proportion of adults aged 16-24 years (88.3 per cent), and a significantly higher proportion of adults aged 35-44 years (93.5 per cent), 65-74 years (94.0 per cent), and 75 years and over (93.3 per cent), said smoking was not allowed in their car, compared with the overall adult population.

A significantly higher proportion of adults with cars in the first or least disadvantaged quintile (93.7 per cent) and second quintile (93.8 per cent), and a significantly lower proportion of adults in the fifth or most disadvantaged quintile (87.4 per cent), said smoking was not allowed in their car, compared with the overall adult population.

There was no significant difference between rural and urban health areas. A significantly higher proportion of adults with cars in the Northern Sydney & Central Coast Area Health Service (95.2 per cent), and a significantly lower proportion of adults in the Greater Western Area Health Service (87.8 per cent), said smoking was not allowed in their car, compared with the overall adult population.

Since 2003, there has been a significant increase in the proportion of adults with cars who said smoking was not allowed in their car (81.2 per cent to 91.4 per cent). The increase has been significant in rural and urban health areas.

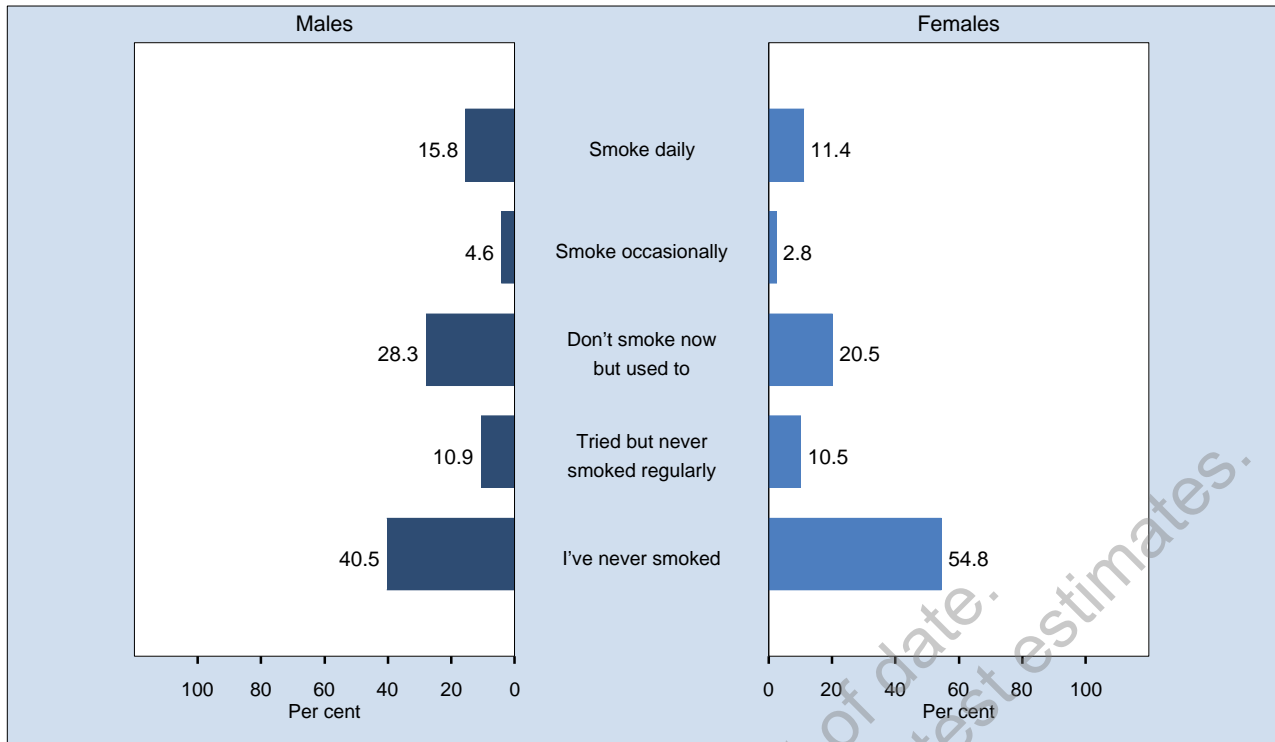
Since 2008, there has been a significant increase in the proportion of adults with cars who said smoking was not allowed in their car (88.2 per cent to 91.4 per cent). The increase has been significant in rural and urban health areas.

## 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. Available online at [www.surgeongeneral.gov/library/smokingconsequences](http://www.surgeongeneral.gov/library/smokingconsequences) (accessed 2 September 2010).
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. Available online at [www.health.gov.au/internet/main/publishing.nsf/Content/health-publth-publicat-document-env\\_ets-cnt.htm](http://www.health.gov.au/internet/main/publishing.nsf/Content/health-publth-publicat-document-env_ets-cnt.htm) (accessed 2 September 2010).
3. NSW Department of Health's Tobacco Website. Sydney: NSW Department of Health, 2009. Available online at [www.health.nsw.gov.au/publichealth/healthpromotion/tobacco/index.asp](http://www.health.nsw.gov.au/publichealth/healthpromotion/tobacco/index.asp) (accessed 2 September 2010).
4. New South Wales Government. *Public Health (Tobacco) Act 2008*. Sydney: NSW Government, November 2008. Available online at [www.health.nsw.gov.au/publichealth/healthpromotion/tobacco/legislation.asp](http://www.health.nsw.gov.au/publichealth/healthpromotion/tobacco/legislation.asp) (accessed 2 September 2010).

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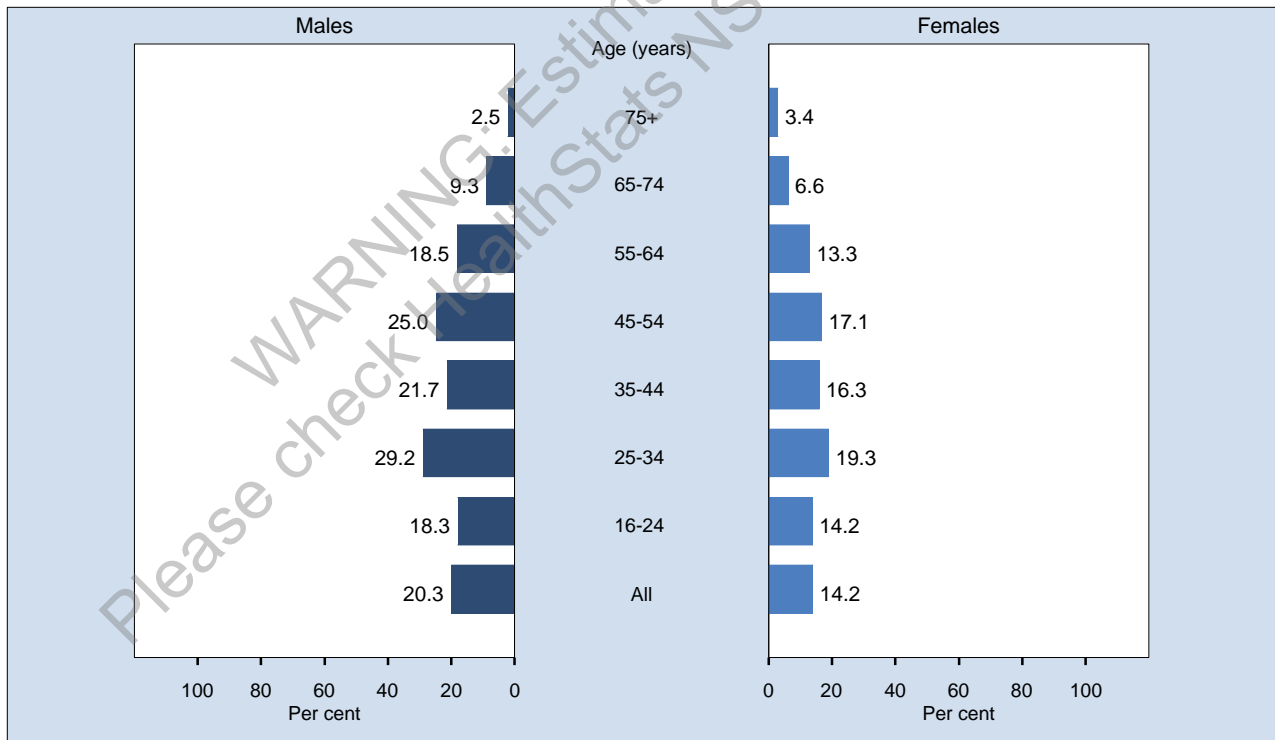
### Smoking status, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 10,703 respondents in NSW. For this indicator 16 (0.15%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

### Current smoking by age, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 10,703 respondents in NSW. For this indicator 16 (0.15%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

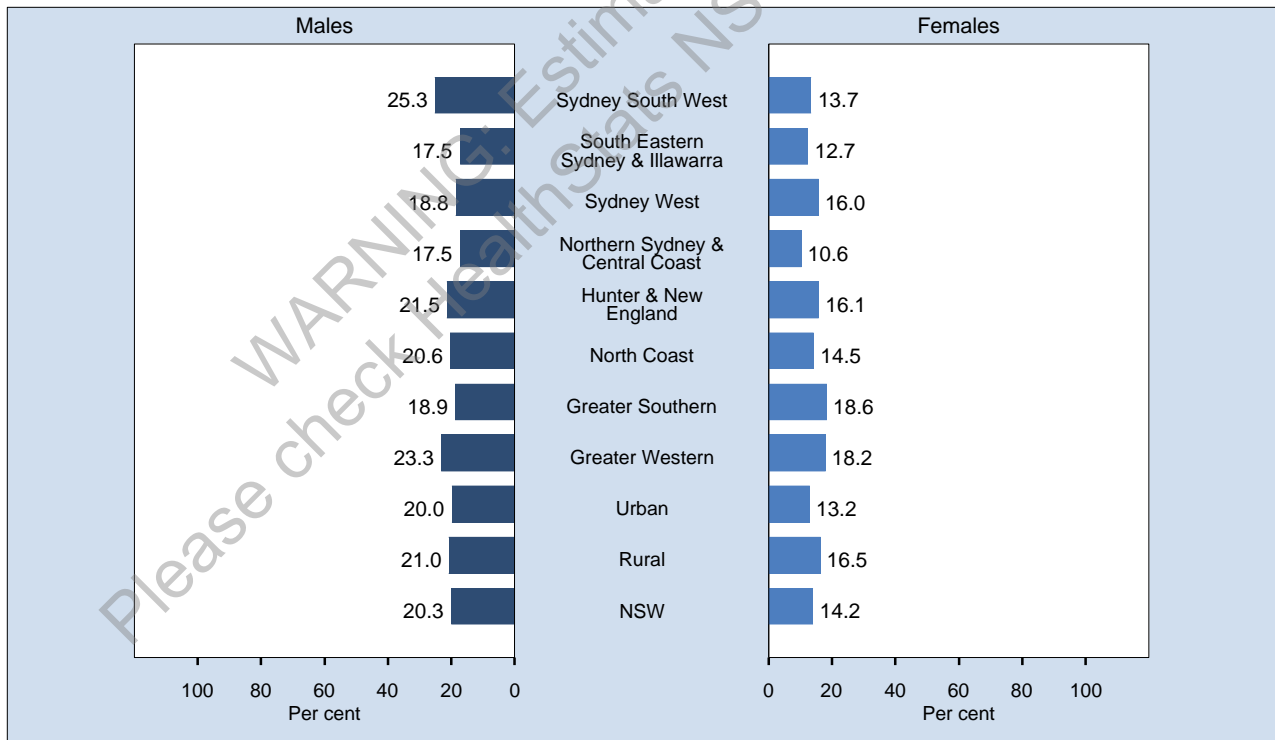
### Current smoking by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 10,703 respondents in NSW. For this indicator 16 (0.15%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

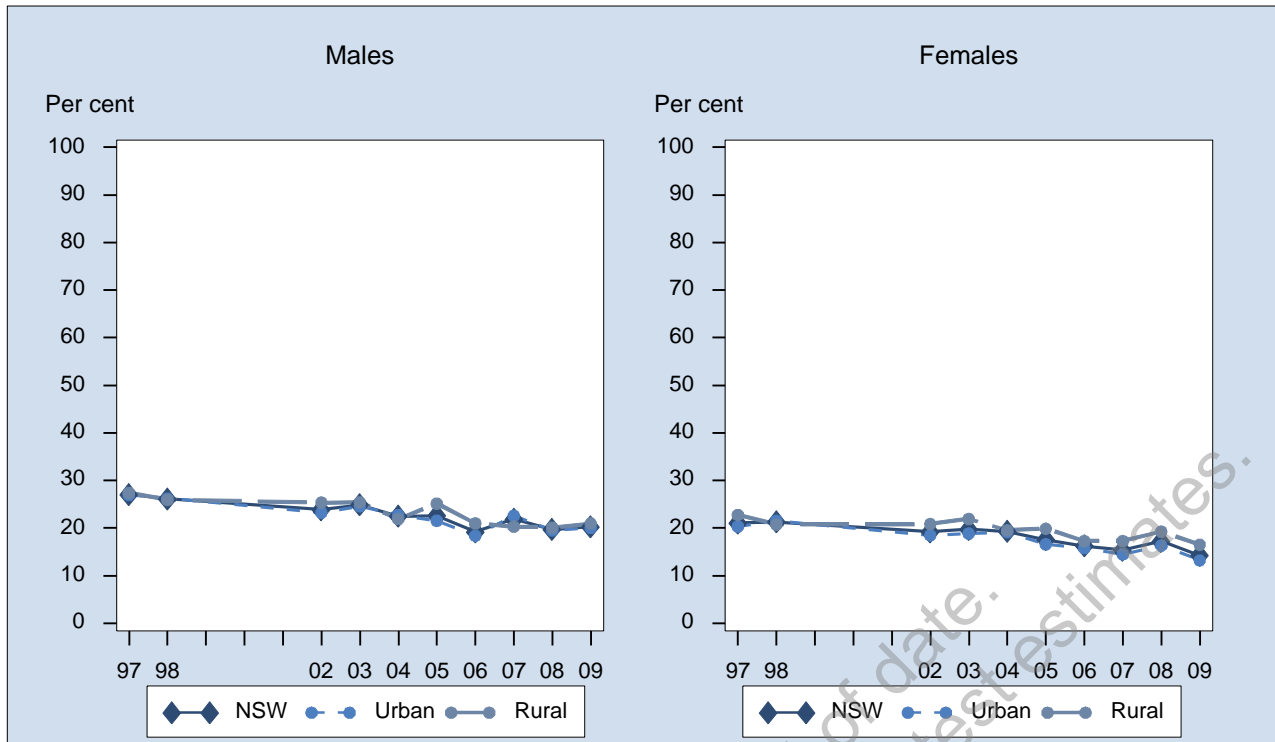
### Current smoking by area health service, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 10,703 respondents in NSW. For this indicator 16 (0.15%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

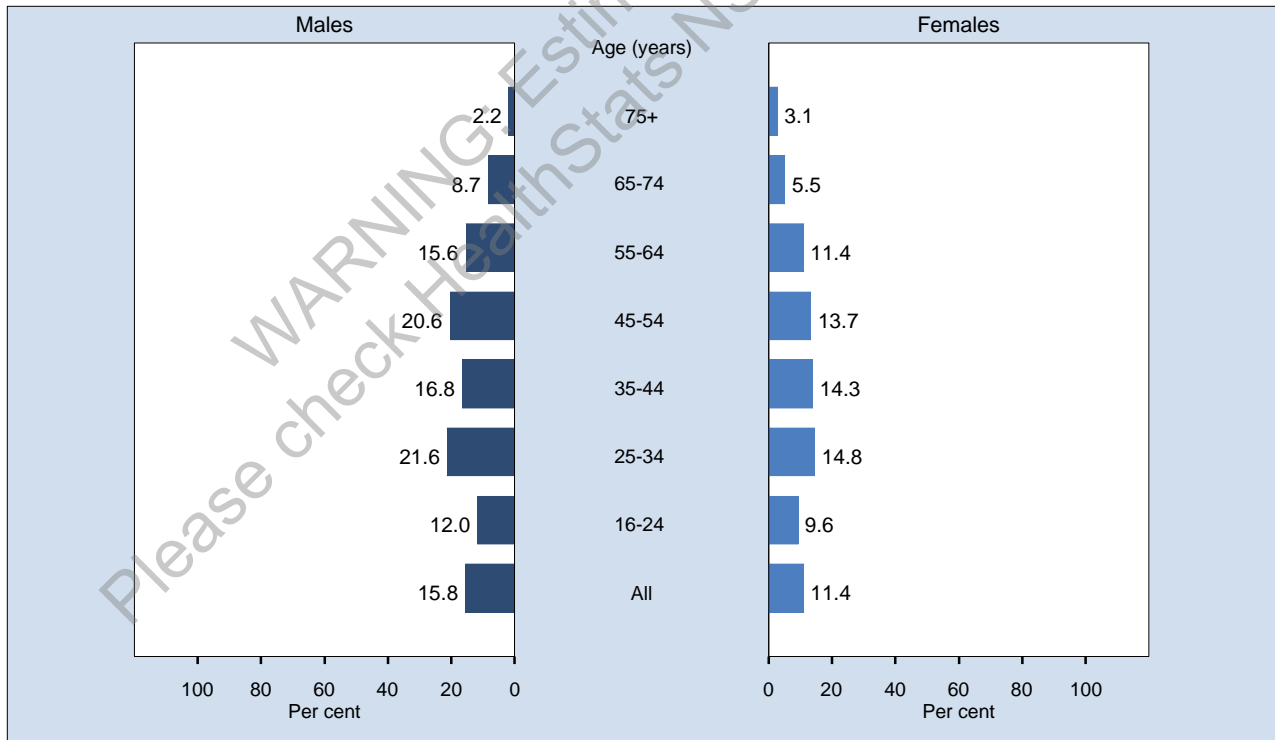
### Current smoking by year, adults aged 16 years and over, NSW, 1997-2009



**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 (9,418), 2005 (11,490), 2006 (7,957), 2007 (7,510), 2008 (8,755), 2009 (10,703). 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

### Daily smoking by age, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 10,703 respondents in NSW. For this indicator 16 (0.15%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

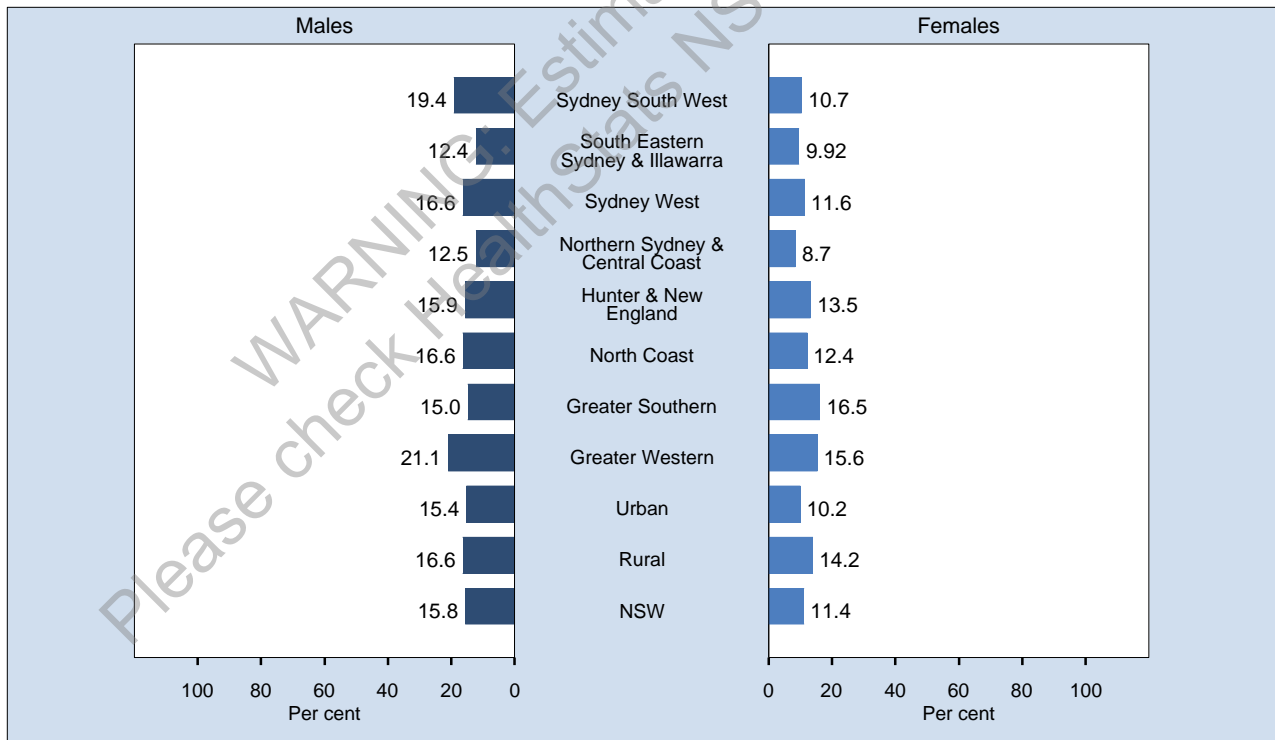
### Daily smoking by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 10,703 respondents in NSW. For this indicator 16 (0.15%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

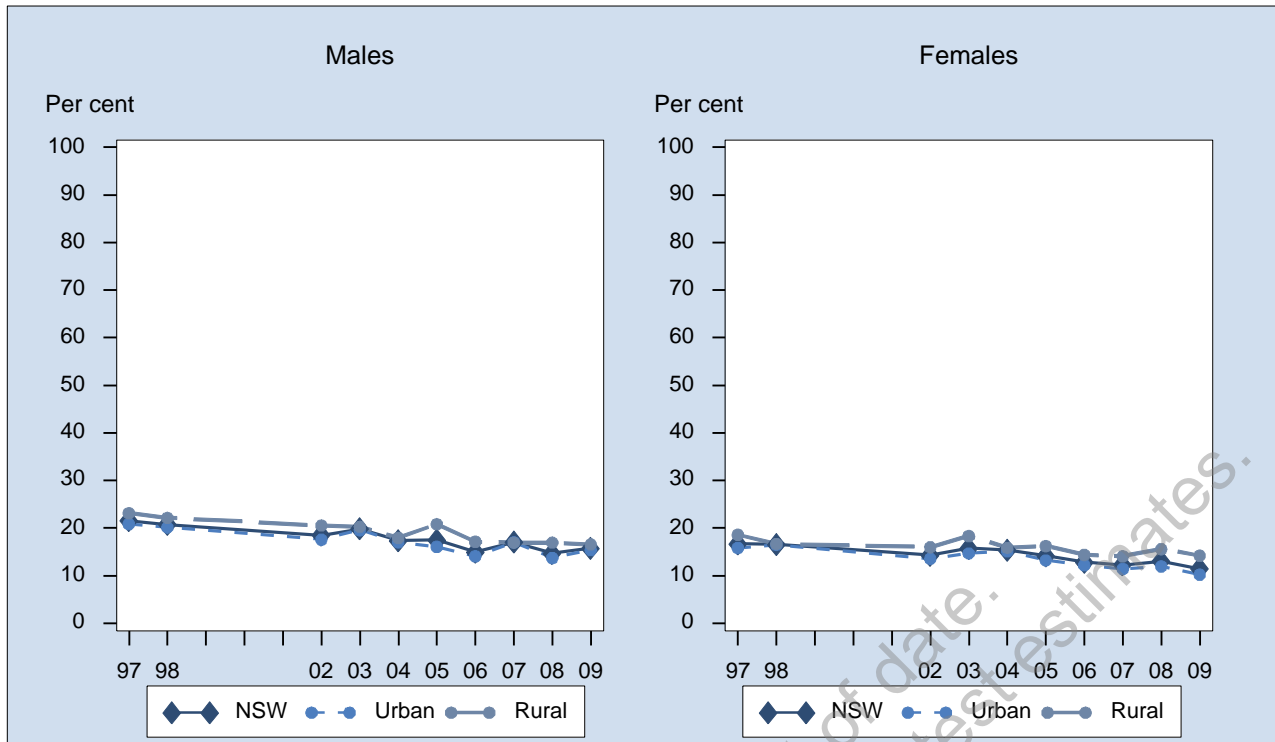
### Daily smoking by area health service, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 10,703 respondents in NSW. For this indicator 16 (0.15%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

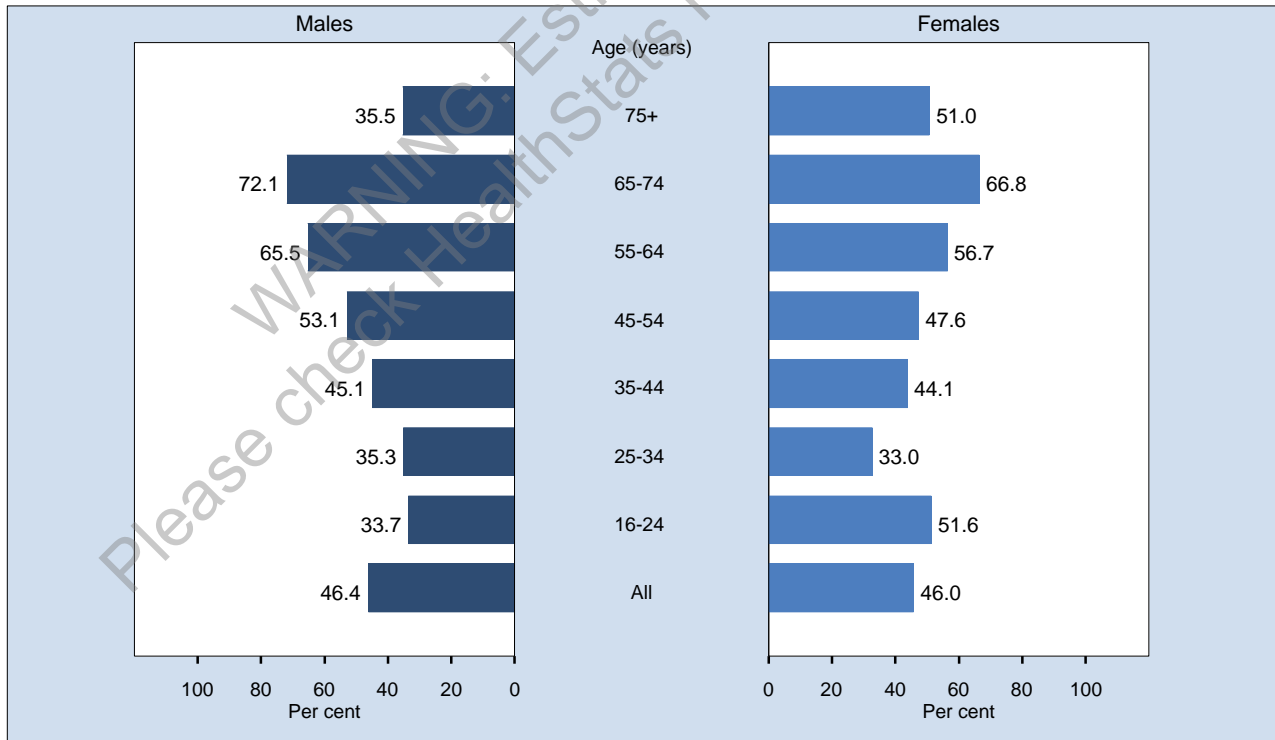
### Daily smoking by year, adults aged 16 years and over, NSW, 1997-2009



**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 (9,418), 2005 (11,490), 2006 (7,957), 2007 (7,510), 2008 (8,755), 2009 (10,703). 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

### Doctor advised to quit smoking by age, adults aged 16 years and over who are current smokers, NSW, 2009



**Note:** Estimates are based on 1,595 respondents in NSW. For this indicator 15 (0.93%) were not stated (Don't know or Refused) in NSW. The indicator includes those who smoke and were advised to quit smoking the last time they visited their general practitioner. The questions used to define the indicator were: What is your current smoking status? The last time you went to your general practitioner, did the doctor discuss your smoking and advise you to quit smoking?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.



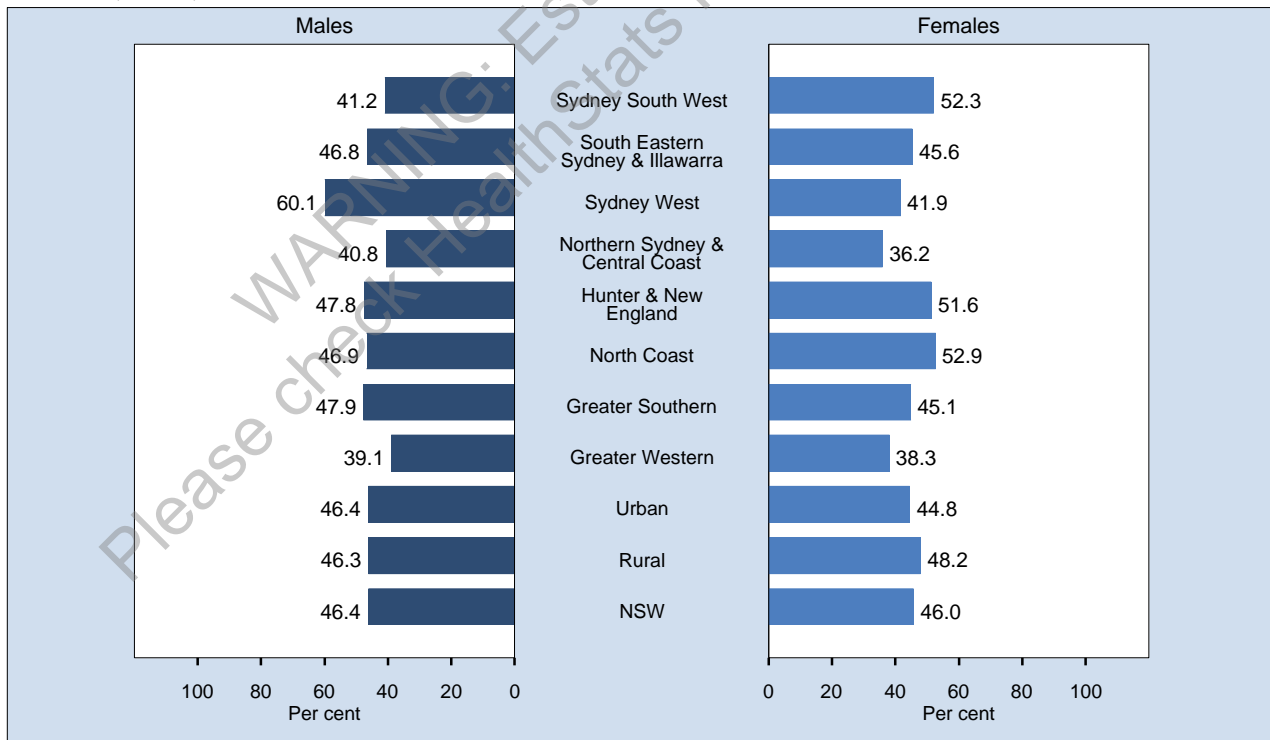
**Doctor advised to quit smoking by socioeconomic disadvantage, adults aged 16 years and over who are current smokers, NSW, 2009**



**Note:** Estimates are based on 1,595 respondents in NSW. For this indicator 15 (0.93%) were not stated (Don't know or Refused) in NSW. The indicator includes those who smoke and were advised to quit smoking the last time they visited their general practitioner. The questions used to define the indicator were: What is your current smoking status? The last time you went to your general practitioner, did the doctor discuss your smoking and advise you to quit smoking?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

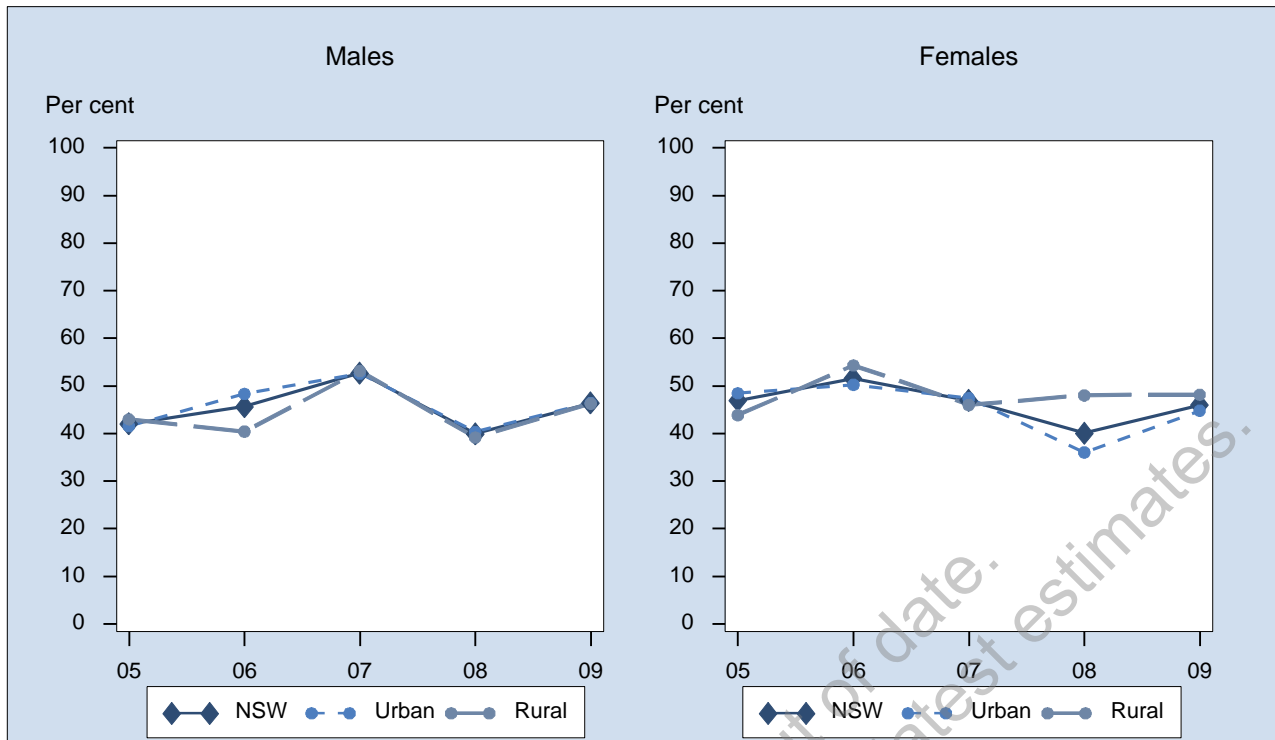
**Doctor advised to quit smoking by area health service, adults aged 16 years and over who are current smokers, NSW, 2009**



**Note:** Estimates are based on 1,595 respondents in NSW. For this indicator 15 (0.93%) were not stated (Don't know or Refused) in NSW. The indicator includes those who smoke and were advised to quit smoking the last time they visited their general practitioner. The questions used to define the indicator were: What is your current smoking status? The last time you went to your general practitioner, did the doctor discuss your smoking and advise you to quit smoking?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

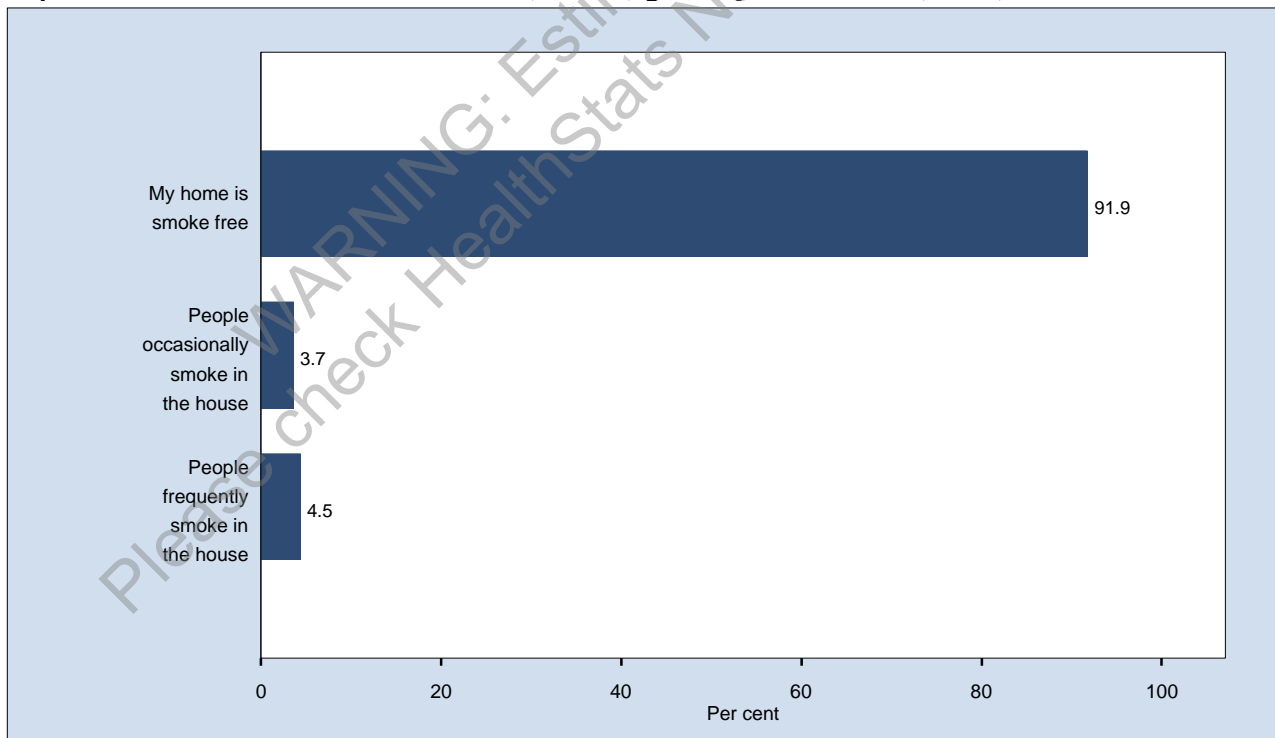
**Doctor advised to quit smoking by year, adults aged 16 years and over who are current smokers, NSW, 2005-2009**



**Note:** Estimates are based on the following numbers of respondents for NSW: 2005 (1,736), 2006 (1,301), 2007 (1,252), 2008 (1,392), 2009 (1,595). The indicator includes those who smoke and were advised to quit smoking the last time they visited their general practitioner. The questions used to define the indicator were: What is your current smoking status? The last time you went to your general practitioner, did the doctor discuss your smoking and advise you to quit smoking?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

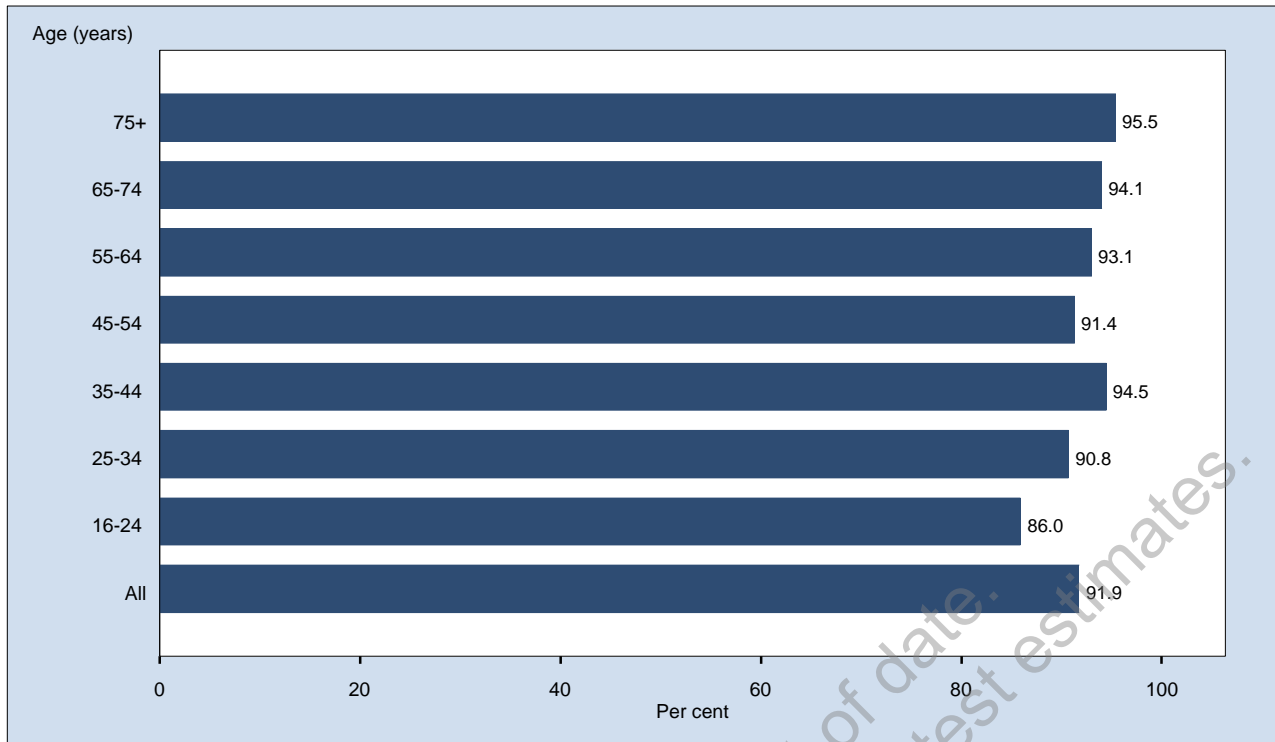
**Exposure to tobacco smoke in household, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 10,255 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

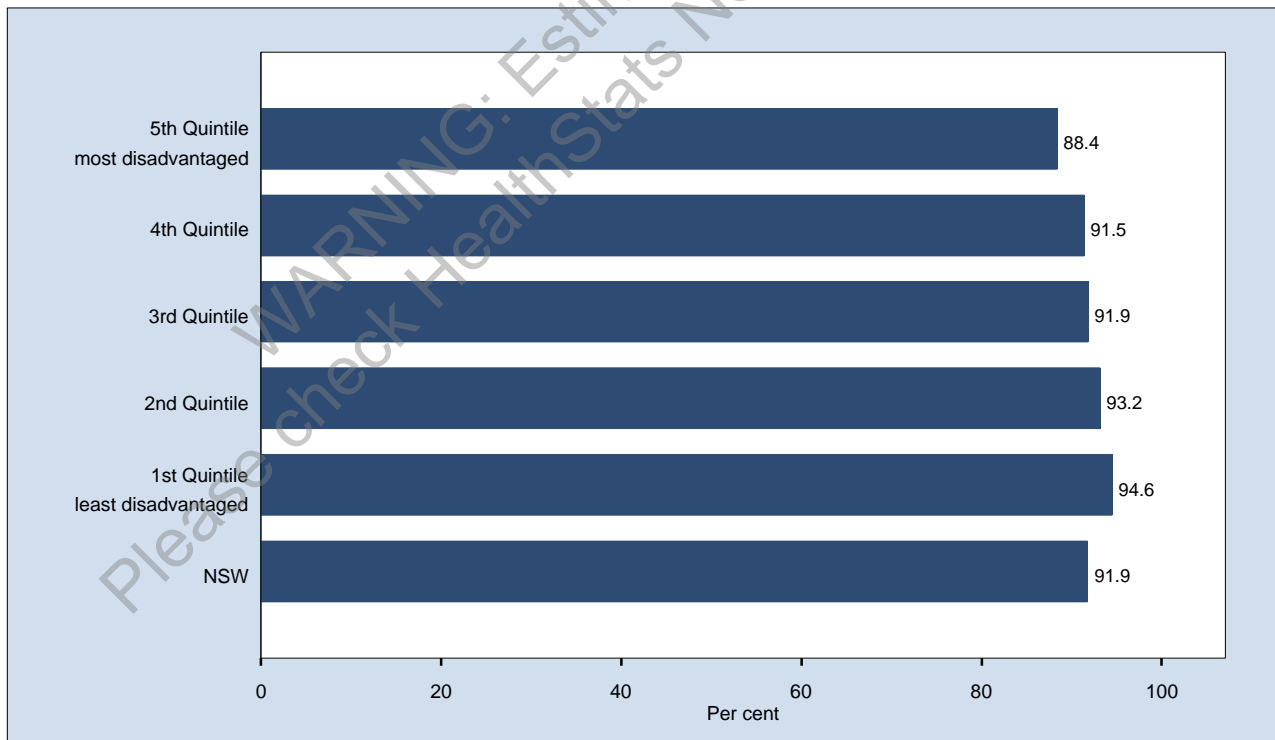
### Live in smoke-free households by age, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 10,255 respondents in NSW. For this indicator 16 (0.16%) were not stated (Don't know or Refused) in NSW. The indicator includes those who indicated their home was smoke-free. The question used to define the indicator was: Which of the following best describes your home situation: my home is smoke-free, people occasionally smoke in the house, or people frequently smoke in the house?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

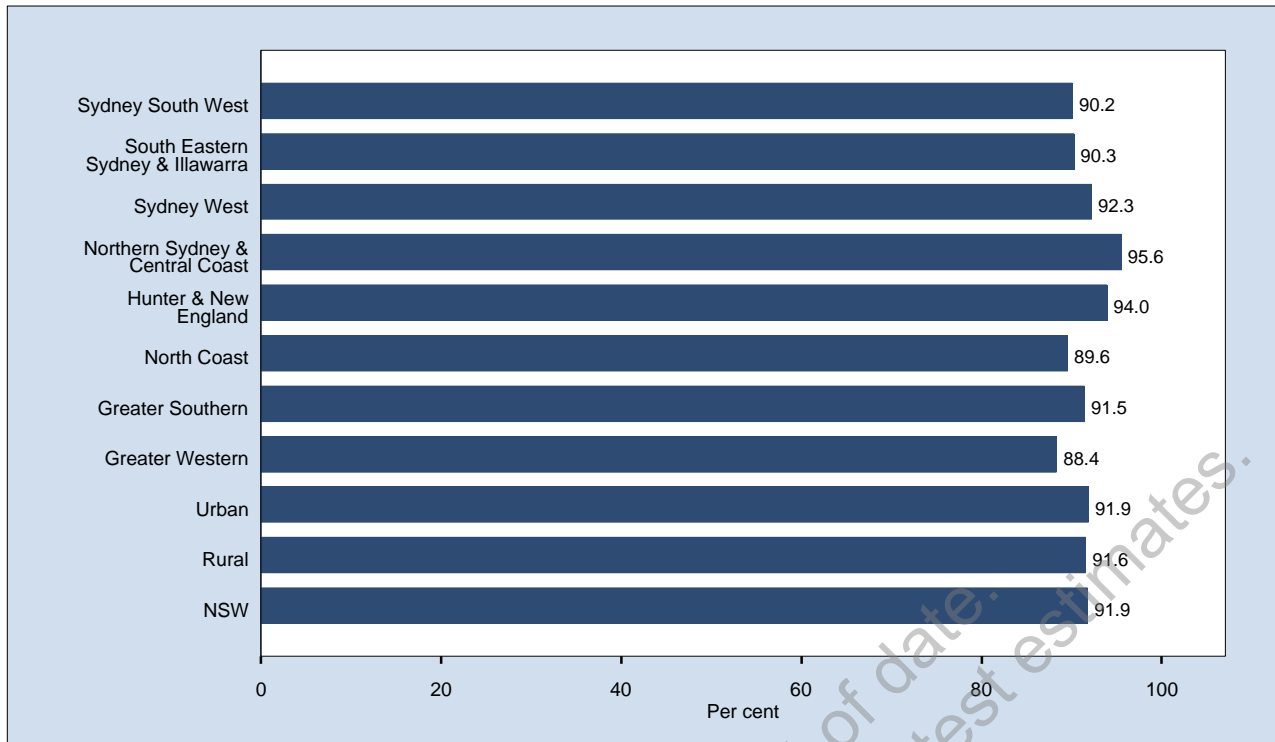
### Live in smoke-free households by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 10,255 respondents in NSW. For this indicator 16 (0.16%) were not stated (Don't know or Refused) in NSW. The indicator includes those who indicated their home was smoke-free. The question used to define the indicator was: Which of the following best describes your home situation: my home is smoke-free, people occasionally smoke in the house, or people frequently smoke in the house?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

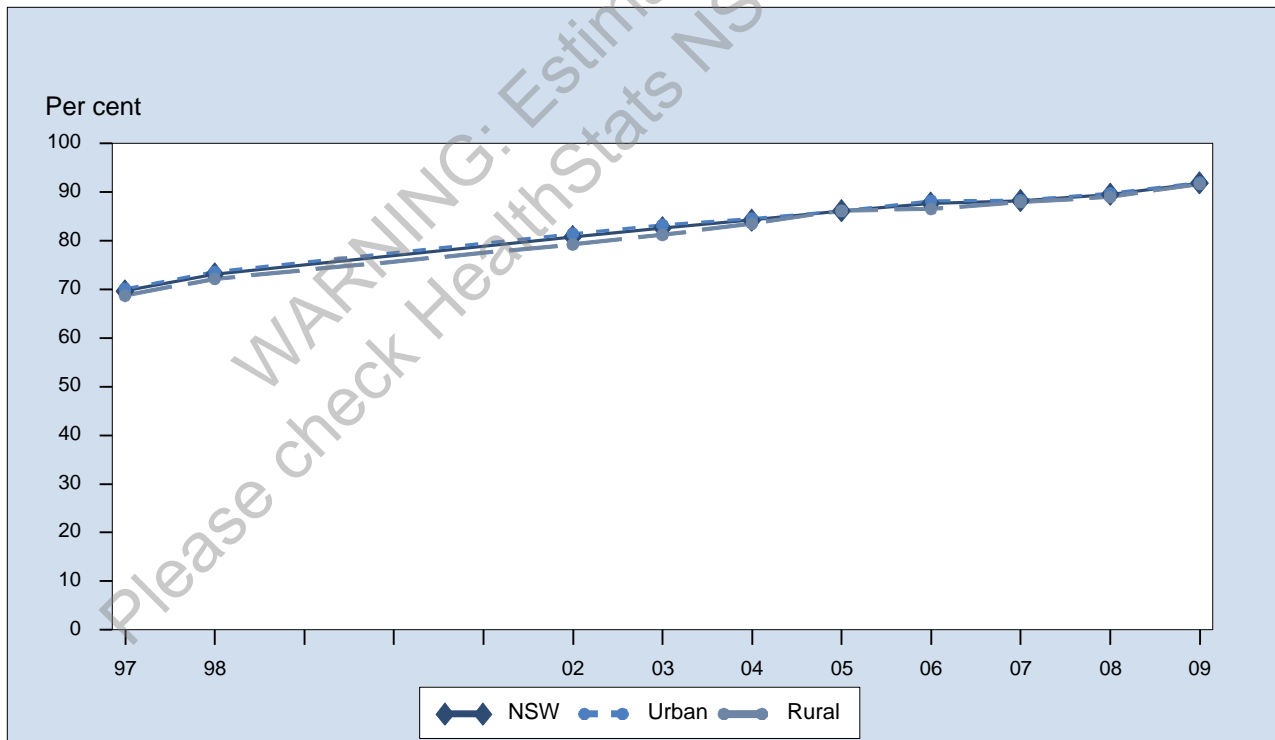
### Live in smoke-free households by area health service, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 10,255 respondents in NSW. For this indicator 16 (0.16%) were not stated (Don't know or Refused) in NSW. The indicator includes those who indicated their home was smoke-free. The question used to define the indicator was: Which of the following best describes your home situation: my home is smoke-free, people occasionally smoke in the house, or people frequently smoke in the house?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

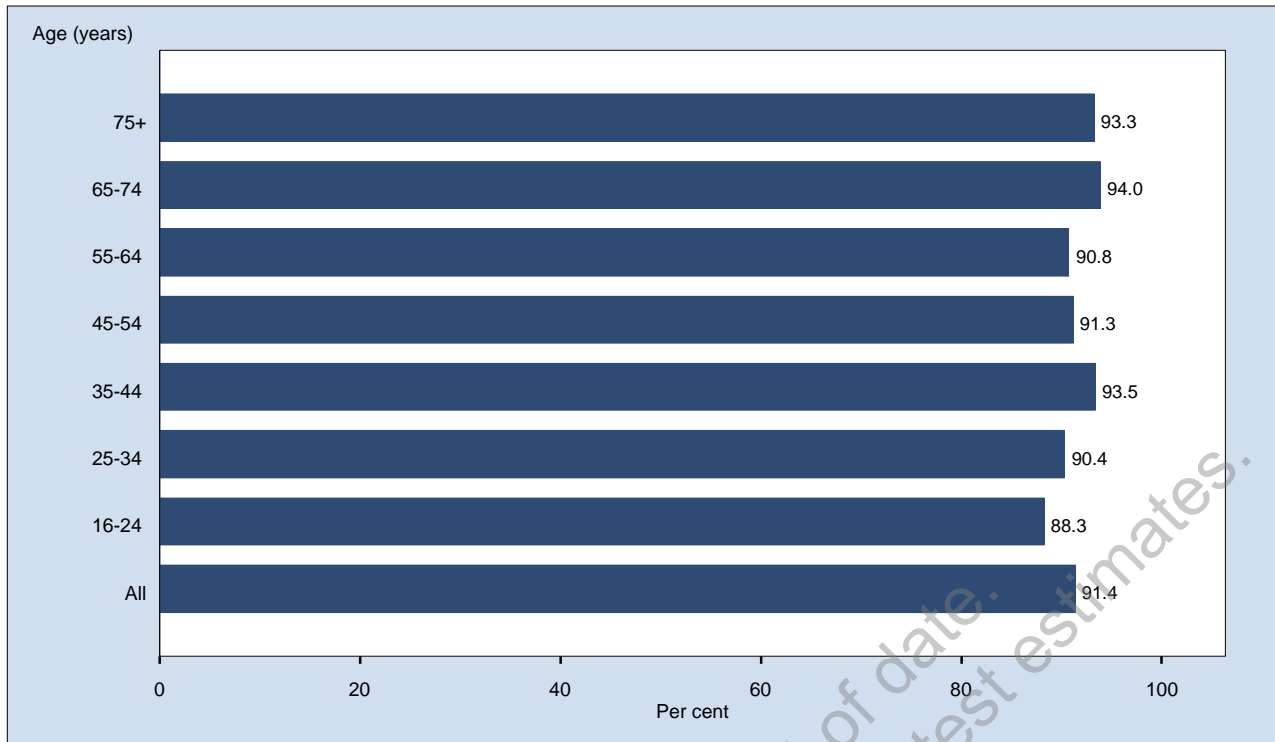
### Live in smoke-free households by year, adults aged 16 years and over, NSW, 1997-2009



**Note:** Estimates are based on the following numbers of respondents for NSW: 1997 (17,495), 1998 (17,451), 2002 (12,607), 2003 (12,989), 2004 (9,415), 2005 (11,282), 2006 (7,946), 2007 (7,471), 2008 (8,752), 2009 (10,255). The indicator includes those who indicated their home was smoke-free. The question used to define the indicator was: Which of the following best describes your home situation: my home is smoke-free, people occasionally smoke in the house, or people frequently smoke in the house?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

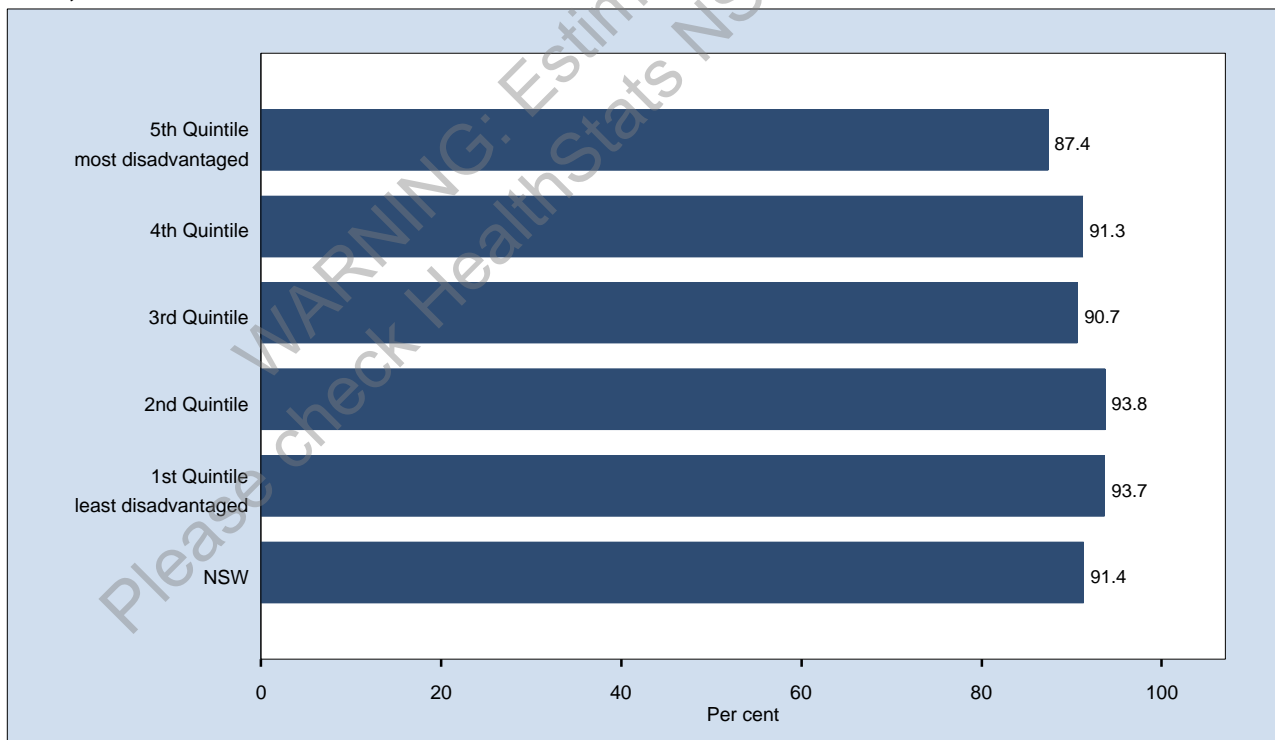
**Bans smoking in car by age, adults aged 16 years and over who own a car, NSW, 2009**



**Note:** Estimates are based on 9,409 respondents in NSW. For this indicator 47 (0.50%) were not stated (Don't know or Refused) in NSW. The indicator includes those who indicated their car was smoke-free. The question used to define the indicator was: Are people allowed to smoke in your car?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

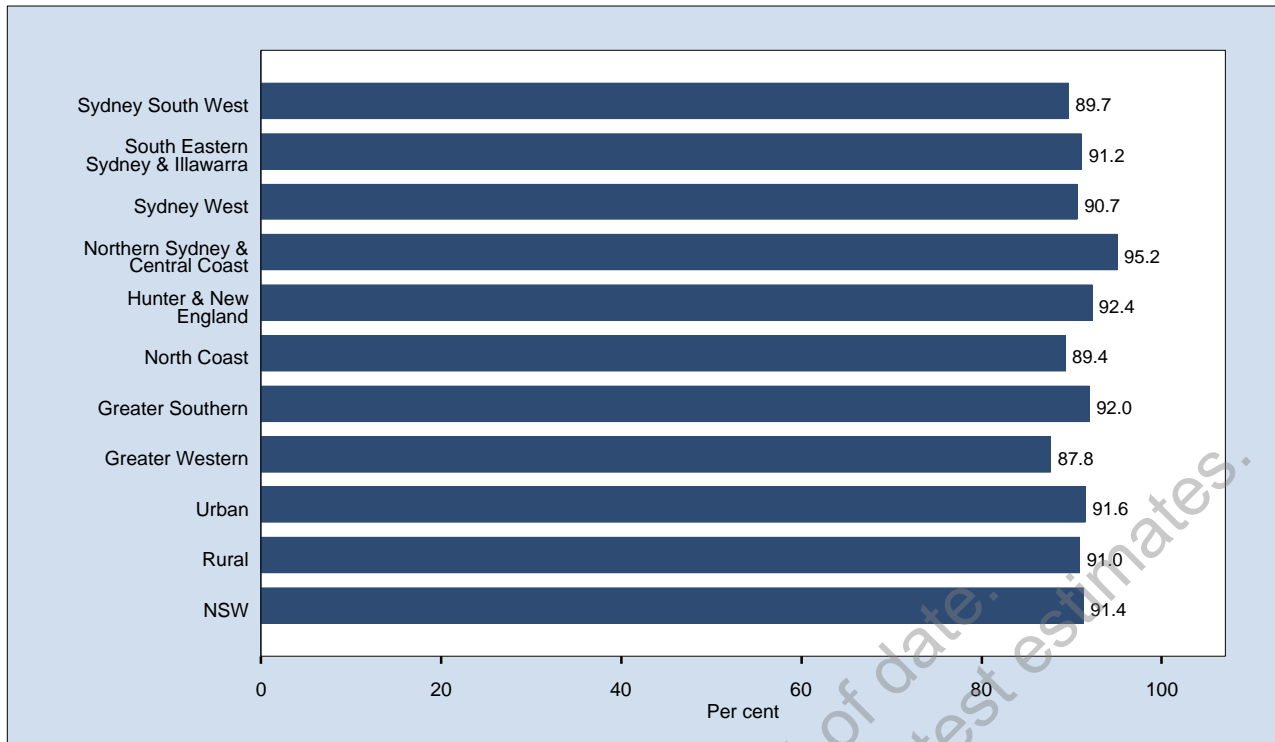
**Bans smoking in car by socioeconomic disadvantage, adults aged 16 years and over who own a car, NSW, 2009**



**Note:** Estimates are based on 9,409 respondents in NSW. For this indicator 47 (0.50%) were not stated (Don't know or Refused) in NSW. The indicator includes those who indicated their car was smoke-free. The question used to define the indicator was: Are people allowed to smoke in your car?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

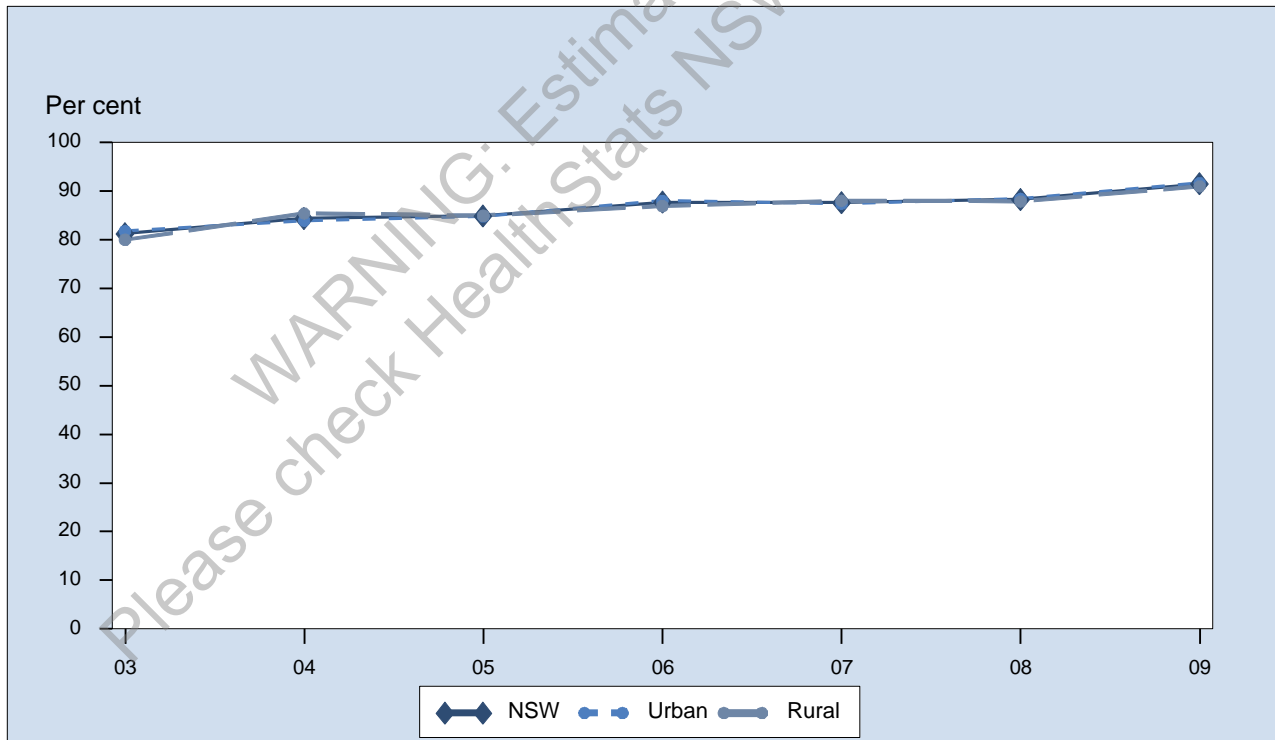
**Bans smoking in car by area health service, adults aged 16 years and over who own a car, NSW, 2009**



**Note:** Estimates are based on 9,409 respondents in NSW. For this indicator 47 (0.50%) were not stated (Don't know or Refused) in NSW. The indicator includes those who indicated their car was smoke-free. The question used to define the indicator was: Are people allowed to smoke in your car?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

**Bans smoking in car by year, adults aged 16 years and over who own a car, NSW, 2003-2009**



**Note:** Estimates are based on the following numbers of respondents for NSW: 2003 (11,652), 2004 (8,585), 2005 (10,349), 2006 (7,251), 2007 (6,882), 2008 (8,020), 2009 (9,409). The indicator includes those who indicated their car was smoke-free. The question used to define the indicator was: Are people allowed to smoke in your car?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

# Health status

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Monitoring the health status of a population helps to detect emerging patterns of illness and disease and provides information to inform policy and planning of health services. This section reports on health-related quality of life (self-rated health), asthma, diabetes or high blood glucose, urinary incontinence, mental health (psychological distress), oral health, and population weight status.

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# Health-related quality of life

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## Introduction

The concept of health-related quality of life (HRQL), as used by health practitioners and researchers, refers to a person's or group's perceived physical and mental health over time. Various measures of HRQL are used. Clinicians often use HRQL to measure the effects of chronic illness in their patients, to better understand how an illness interferes with a person's day-to-day life, and to obtain a measure of how certain conditions and treatments affect their quality of life. Public health professionals use HRQL to measure population health needs, and effects of public health interventions, for numerous disorders, short-term and long-term disabilities, and diseases in different populations. Tracking HRQL in different populations can identify subgroups with health inequities and help guide policies or interventions to improve their health.[1]

Self-rated health is among the most frequently assessed health perceptions in epidemiological research, as it has been found to be the single most reliable and valid HRQL measure, which allows health practitioners and researchers to obtain an overall measure of health status. 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.[2-9]

## Results

### Self-rated health

In 2009, 19.6 per cent of adults rated their health in the last 4 weeks as excellent, 30.4 per cent as very good, 29.9 per cent as good, 14.6 per cent as fair, 4.8 per cent as poor, and 0.8 per cent as very poor.

When ratings of excellent and very good and good were combined to give an overall positive rating, 79.9 per cent of adults rated their health positively. A significantly higher proportion of males (81.4 per cent) than females (78.4 per cent) rated their health positively. Among males, a significantly higher proportion of those aged 16-24 years (87.6 per cent) and 25-34 years (87.1 per cent), and a significantly lower proportion of those aged 55-64 years (74.8 per cent) and 65-74 years (76.6 per cent), and 75 years and over (66.6 per cent), rated their health positively, compared with the overall adult male population. Among females, a significantly higher proportion of those aged 16-24 years (86.7 per cent), and a significantly lower proportion of those aged 65-74 years (73.4 per cent) and 75 years and over (70.6 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 (83.3 per cent), and a significantly lower proportion of adults in the fourth quintile (77.4 per cent), rated their health positively, compared with the overall adult population.

There was no significant difference between urban and rural health areas. A significantly higher proportion of adults in the Northern Sydney & Central Coast Area Health Service (82.4 per cent), and a significantly lower proportion of adults in the Sydney South West Area Health Service (76.9 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 who rated their health positively (85.0 per cent to 79.9 per cent). The decrease has been significant in males and females, and in rural and urban health areas.

However, since 2008, there has been no significant change in the proportion of adults who rated their health positively.

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

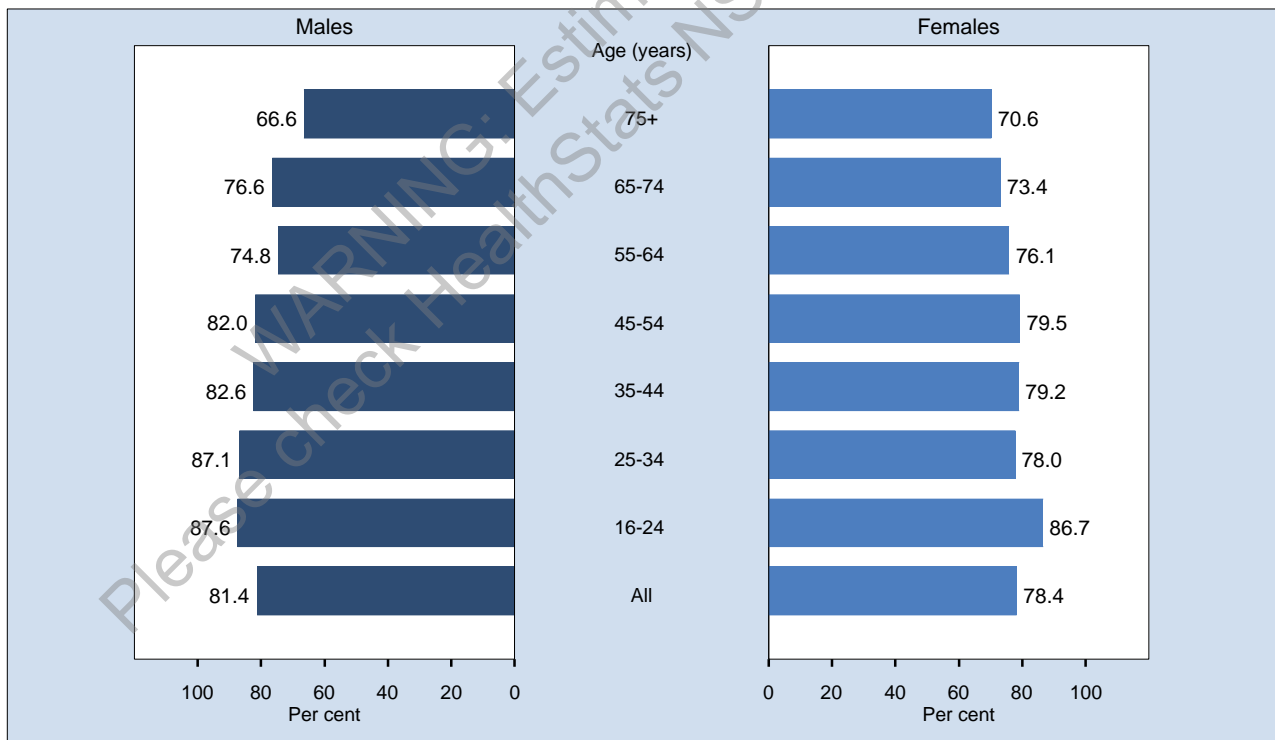
### Self-rated health, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 10,668 respondents in NSW. For this indicator 51 (0.48%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

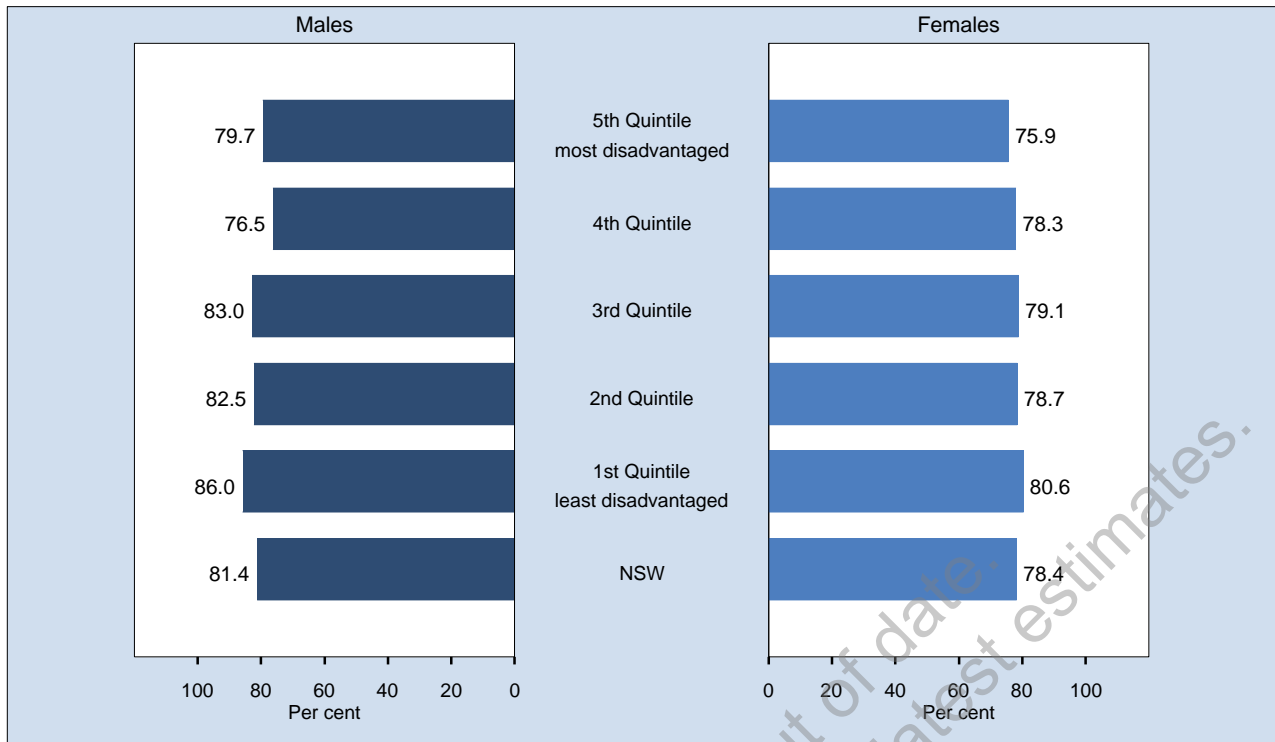
### Excellent, very good, or good self-rated health status by age, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 10,668 respondents in NSW. For this indicator 51 (0.48%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

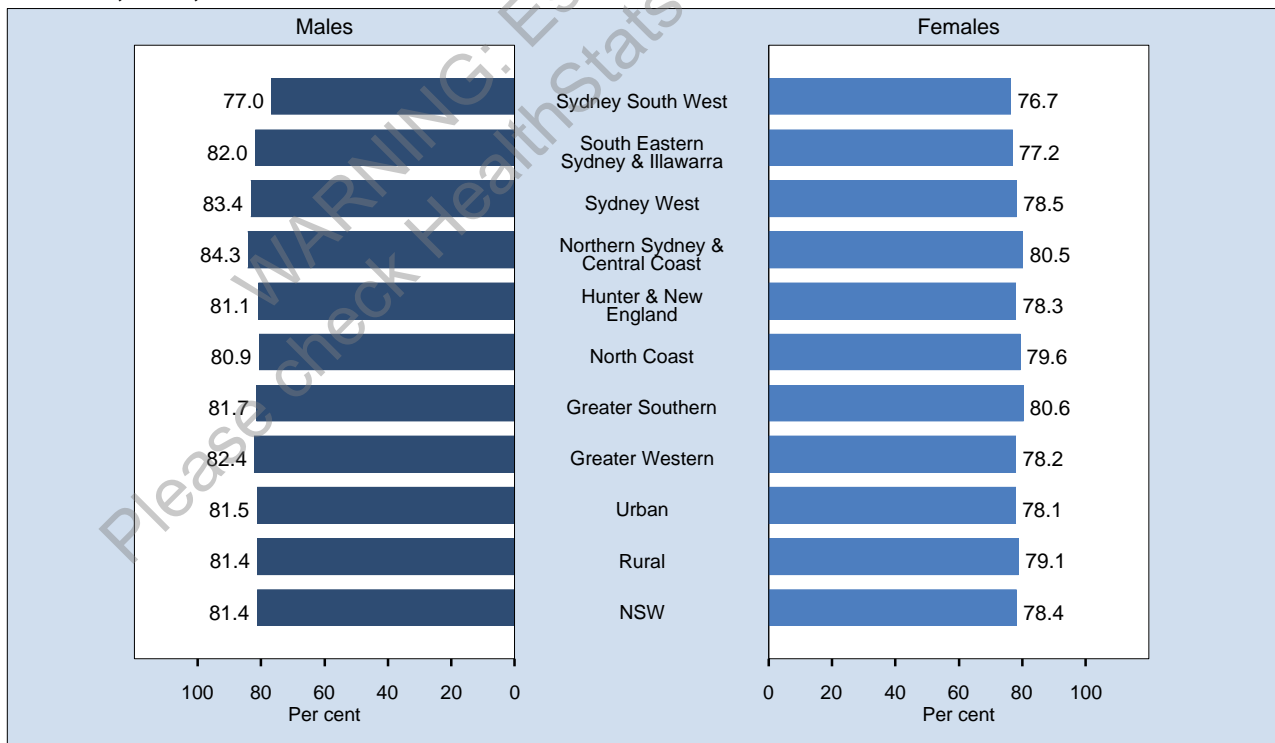
**Excellent, very good, or good self-rated health status by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 10,668 respondents in NSW. For this indicator 51 (0.48%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

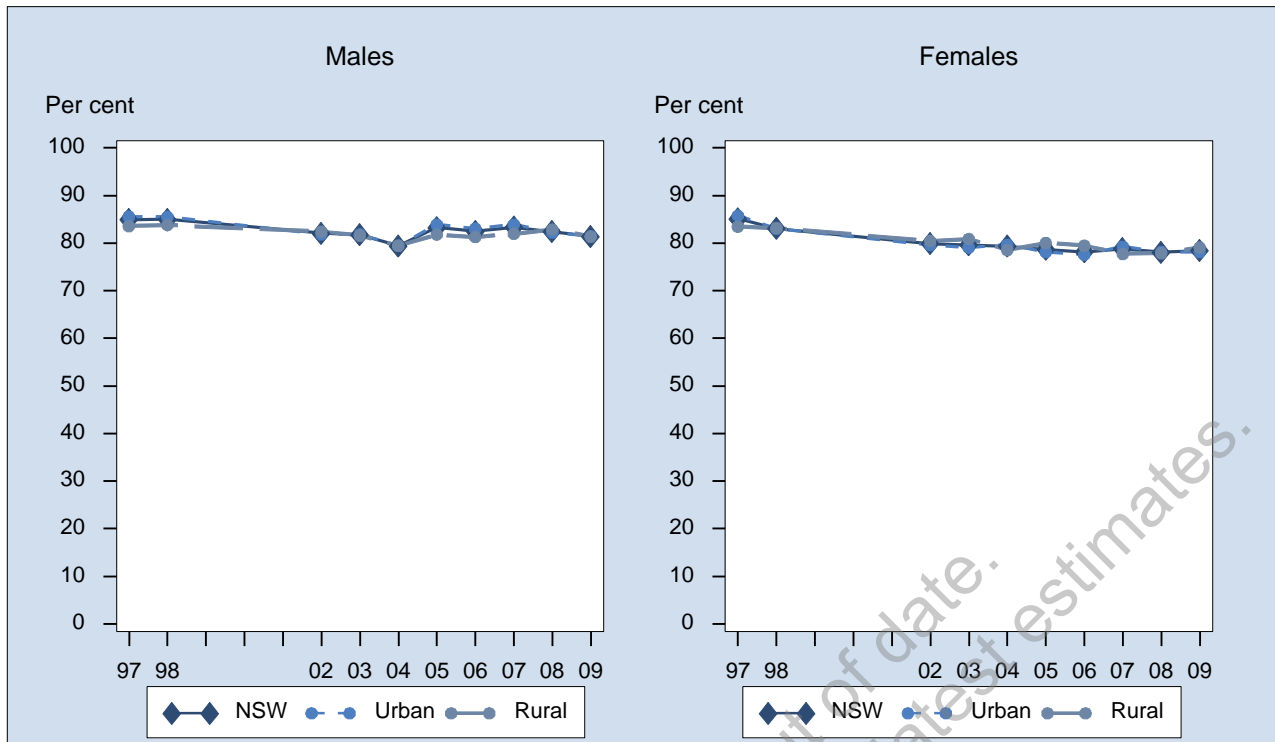
**Excellent, very good, or good self-rated health status by area health service, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 10,668 respondents in NSW. For this indicator 51 (0.48%) 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 2009 (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, 1997-2009**



**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 (9,407), 2005 (11,474), 2006 (7,942), 2007 (11,511), 2008 (10,264), 2009 (10,668). 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

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

# Asthma

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## 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. The effects of asthma can include disturbed sleep, tiredness, and reduced participation in the workforce or organised sport or other activities. Asthma remains a significant health problem in Australia, with prevalence rates high by international standards. Among adults, there has been an overall decrease in the rate of asthma-related general practice consultations between 1998 and 2008, and an overall decrease in asthma-related hospitalisations between 1993-94 and 2006-07.[1-2]

Asthma is not curable but can be managed effectively. Current recommended management strategies include appropriate use of medications, use of a structured or written asthma action plan when asthma is worse or out of control, avoidance of known triggers, and regular review by a general practitioner.[3] The use of a written asthma action plan has been found to decrease urgent visits to doctors, hospitalisations, and deaths due to asthma.[4,5] Research has also shown most patients with a written asthma action plan found it useful for managing their asthma.[6]

## Results

### *Ever had asthma*

In 2009, 19.6 per cent of adults had ever been told by a doctor or hospital they had asthma. A significantly lower proportion of males (17.2 per cent) than females (22.0 per cent) ever had asthma. Among males, a significantly higher proportion of those aged 16-24 years (25.8 per cent), and a significantly lower proportion of those aged 55-64 years (13.3 per cent) and 65-74 years (10.9 per cent), ever had asthma, compared with the overall adult male population. Among females, a significantly higher proportion of those aged 16-24 years (26.7 per cent) and 25-34 years (26.3 per cent), and a significantly lower proportion of those aged 35-44 years (19.0 per cent) and 75 years and over (17.0 per cent), ever had asthma, compared with the overall adult female population.

There was no significant difference among quintiles of disadvantage.

A significantly higher proportion of adults in rural health areas (22.7 per cent) than urban health areas (18.3 per cent) ever had asthma. A significantly higher proportion of adults in the Greater Western Area Health Service (29.4 per cent), and a significantly lower proportion of adults in the South Eastern Sydney & Illawarra Area Health Service (17.0 per cent), ever had asthma, compared with the overall adult population.

Since 1997, there has been a significant increase in the proportion of adults who had ever been told by a doctor or hospital they had asthma (16.8 per cent to 19.6 per cent). The increase has been significant in males and females, and in urban health areas.

However, since 2008, there has been no significant change in the proportion of adults who had ever been told by a doctor or hospital they had asthma.

### *Current asthma*

In 2009, 10.5 per cent of adults have current asthma; that is, doctor diagnosed asthma with recent symptoms or treatment. A significantly lower proportion of males (8.5 per cent) than females (12.5 per cent) have current asthma. Among males, a significantly lower proportion of those aged 35-44 years (6.1 per cent) have current asthma, compared with the overall adult male population. Among females, a significantly lower proportion of those aged 35-44 years (10.3 per cent) have current asthma, compared with the overall adult female population.

There was no significant difference among quintiles of disadvantage.

A significantly higher proportion of adults in rural health areas (11.8 per cent) than urban health areas (9.9 per cent) have current asthma. A significantly higher proportion of adults in the Greater Western Area Health Service (16.5 per cent) have current asthma, compared with the overall adult population.

Since 1997, there has been no significant change in the proportion of adults who have current asthma.

### **Written asthma action plan**

In 2009, 29.0 per cent of adults 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. A significantly lower proportion of males (23.8 per cent) than females (32.5 per cent) with current asthma have a written asthma action plan. Among males, a significantly lower proportion of those aged 16-24 years (11.0 per cent) with current asthma have a written asthma action plan, compared with the overall adult male population with current asthma. Among females, a significantly higher proportion of those aged 55-64 years (42.1 per cent), and a significantly lower proportion of those aged 16-24 years (22.6 per cent) with current asthma have a written asthma action plan, compared with the overall adult female population with current asthma.

A significantly lower proportion of adults in the fourth disadvantaged quintile (21.7 per cent) with current asthma have a written asthma action plan, compared with the overall adult population with current asthma.

There was no significant difference between urban and rural health areas. A significantly lower proportion of adults in the North Coast Area Health Service (21.8 per cent) with current asthma have a written asthma action plan, compared with the overall adult population with current asthma.

### **Smoking and asthma**

In 2009, among adults with current asthma, 19.0 per cent were current smokers. There was no significant difference between males and females. A significantly higher proportion of adults aged 25-34 years (28.2 per cent), and a significantly lower proportion of adults aged 55-64 years (12.3 per cent), 65-74 years (5.6 per cent), and 75 years and over (4.8 per cent) with current asthma were current smokers, compared with the overall adult population with current asthma.

A significantly lower proportion of adults in the first or least disadvantaged quintile (12.2 per cent) with current asthma were current smokers, compared with the overall adult population with current asthma.

A significantly higher proportion of adults in rural health areas (23.9 per cent) than urban health areas (16.5 per cent) with current asthma were current smokers. There was no significant difference among area health services.

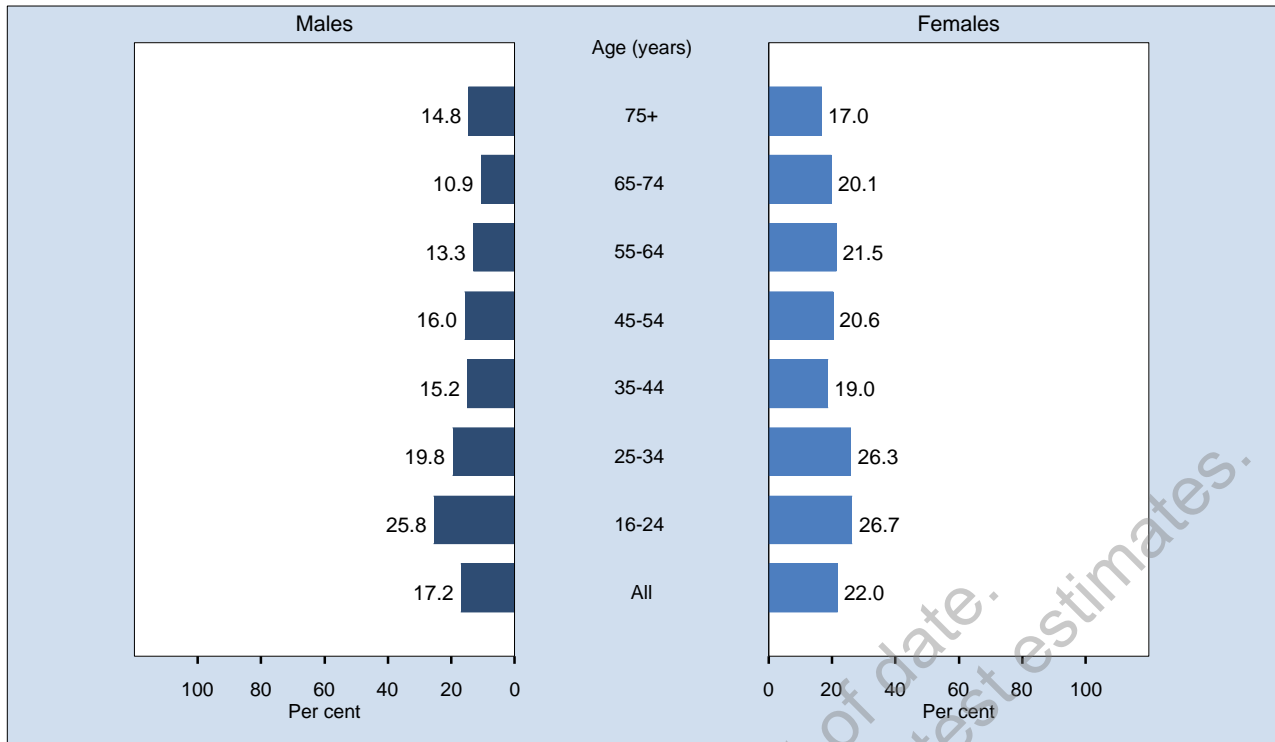
Since 1997, there has been a significant decrease in the proportion of adults with current asthma who were current smokers (24.5 per cent to 19.0 per cent). The decrease has been significant in females, and in urban health areas.

However, since 2008, there has been no significant change in the proportion of adults with current asthma who were current smokers.

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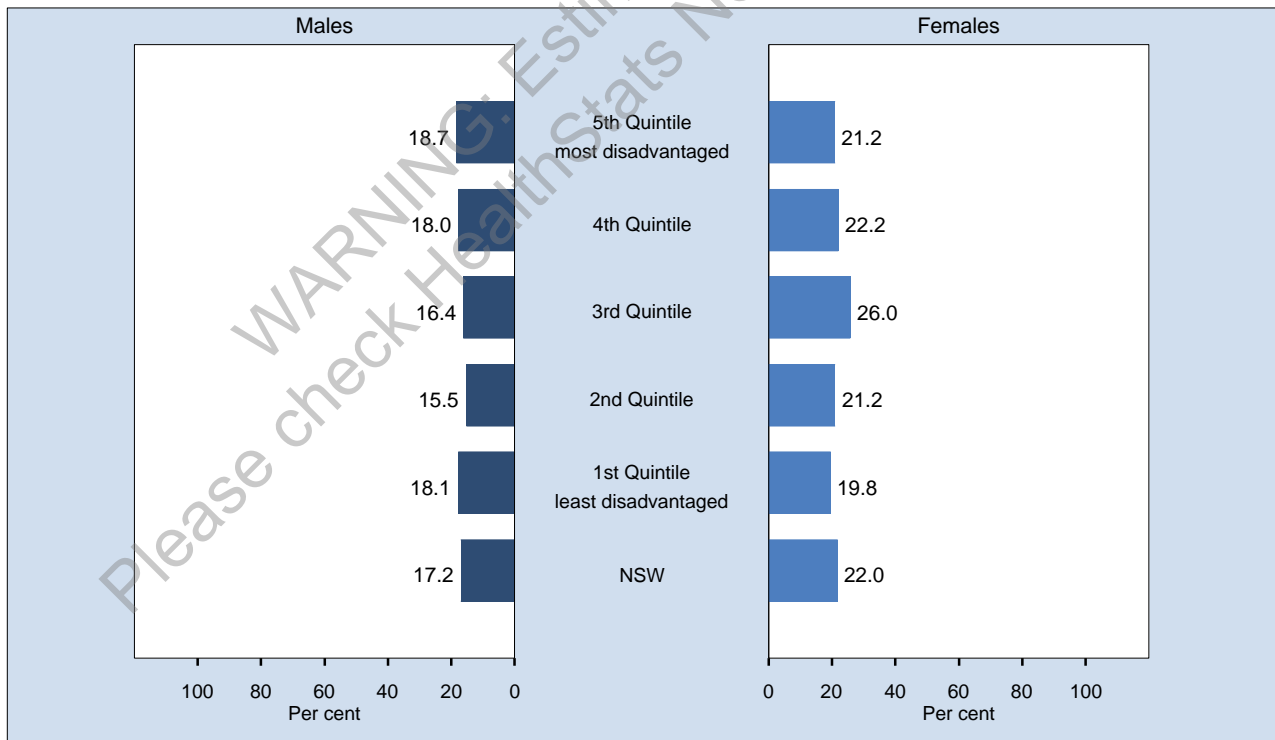
**Ever diagnosed with asthma by age, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 10,699 respondents in NSW. For this indicator 20 (0.19%) were not stated (Don't know or Refused) in NSW. The indicator includes those who have ever been told by a doctor or hospital they have asthma. The question used to define the indicator was: Have you ever been told by a doctor or hospital you have asthma?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

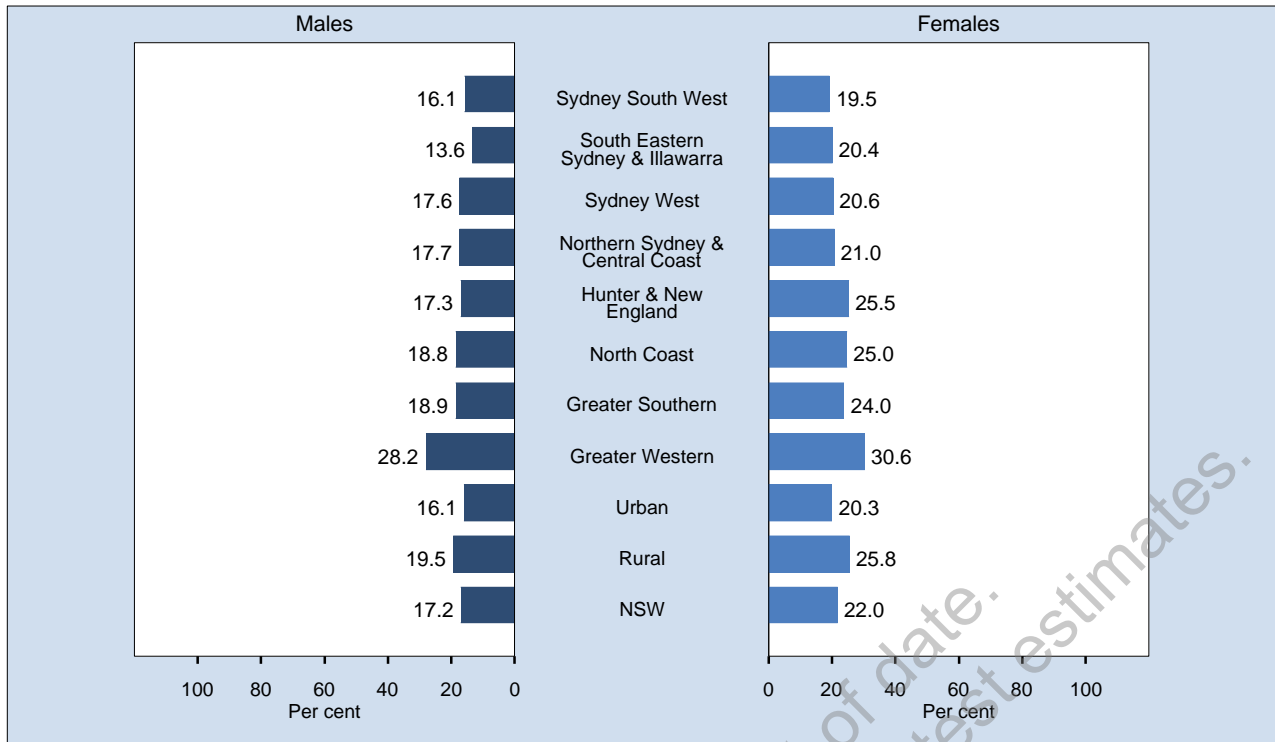
**Ever diagnosed with asthma by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 10,699 respondents in NSW. For this indicator 20 (0.19%) were not stated (Don't know or Refused) in NSW. The indicator includes those who have ever been told by a doctor or hospital they have asthma. The question used to define the indicator was: Have you ever been told by a doctor or hospital you have asthma?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

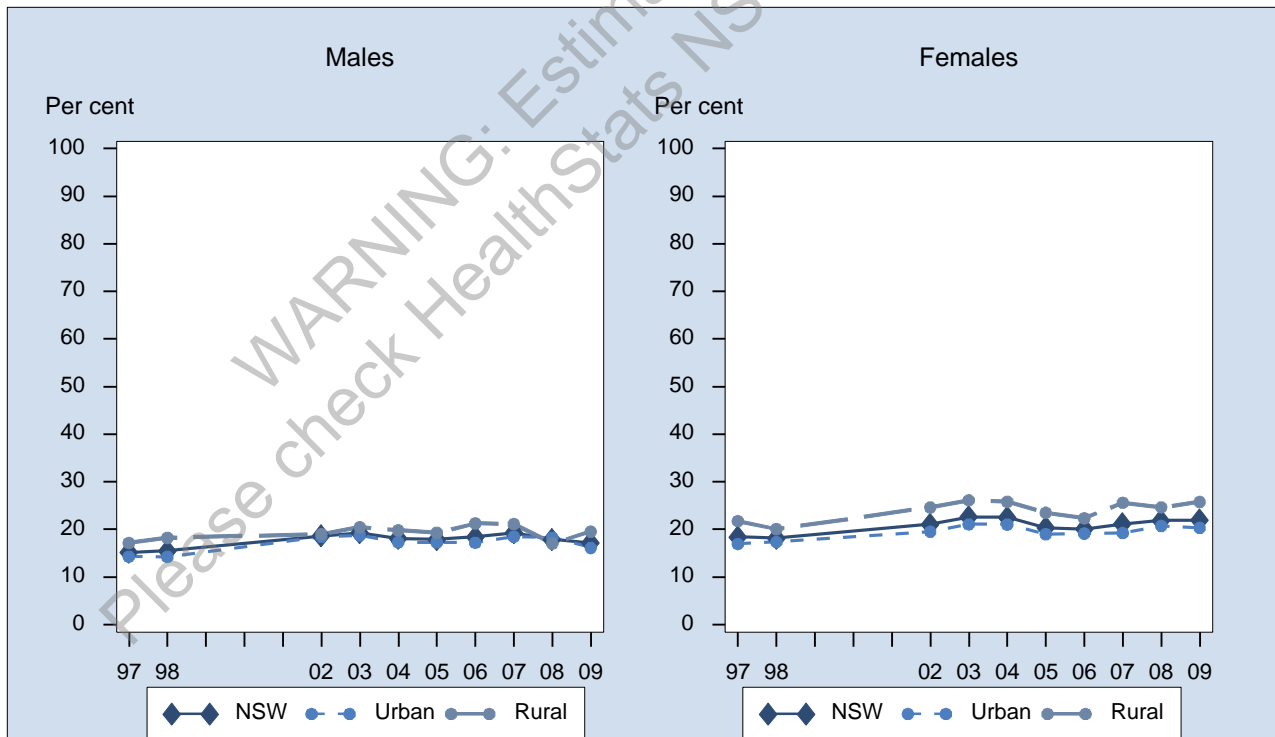
### Ever diagnosed with asthma by area health service, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 10,699 respondents in NSW. For this indicator 20 (0.19%) were not stated (Don't know or Refused) in NSW. The indicator includes those who have ever been told by a doctor or hospital they have asthma. The question used to define the indicator was: Have you ever been told by a doctor or hospital you have asthma?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

### Ever diagnosed with asthma by year, adults aged 16 years and over, NSW, 1997-2009

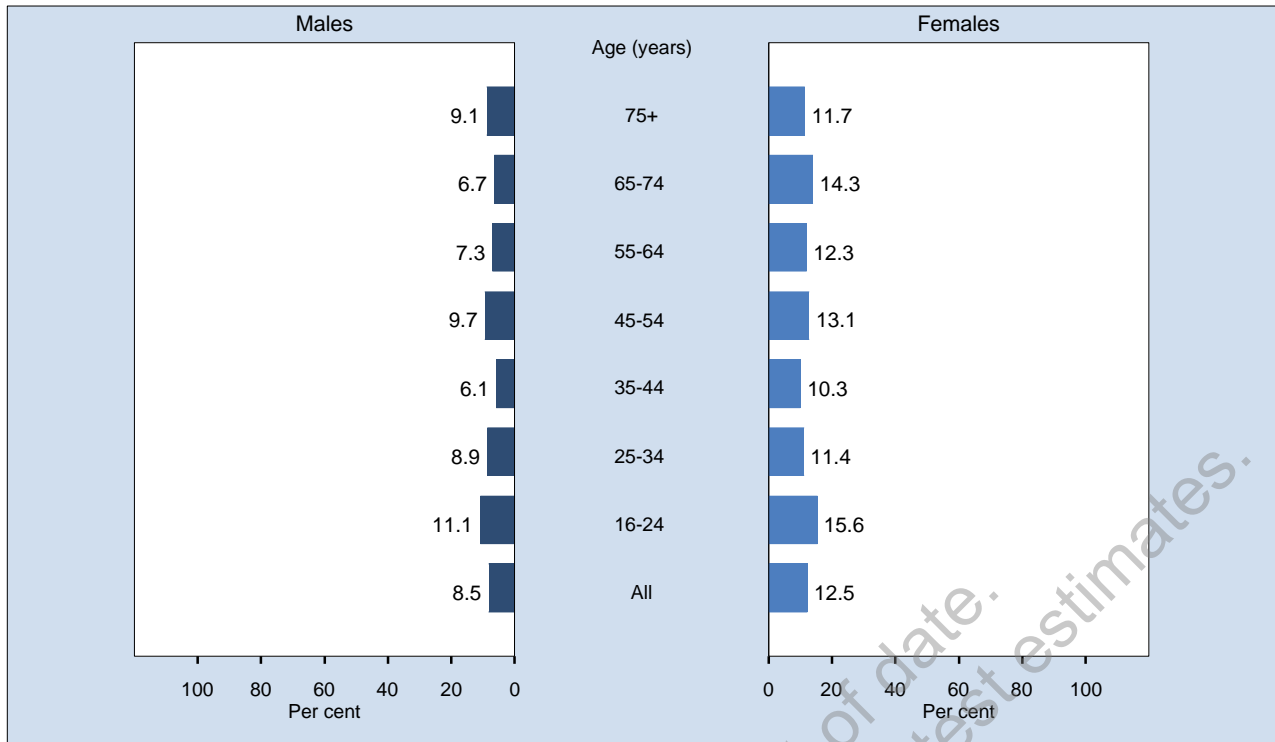


**Note:** Estimates are based on the following numbers of respondents for NSW: 1997 (17,461), 1998 (17,447), 2002 (12,608), 2003 (13,001), 2004 (9,417), 2005 (11,480), 2006 (7,948), 2007 (7,396), 2008 (8,519), 2009 (10,699). The indicator includes those who have ever been told by a doctor or hospital they have asthma. The question used to define the indicator was: Have you ever been told by a doctor or hospital you have asthma?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.



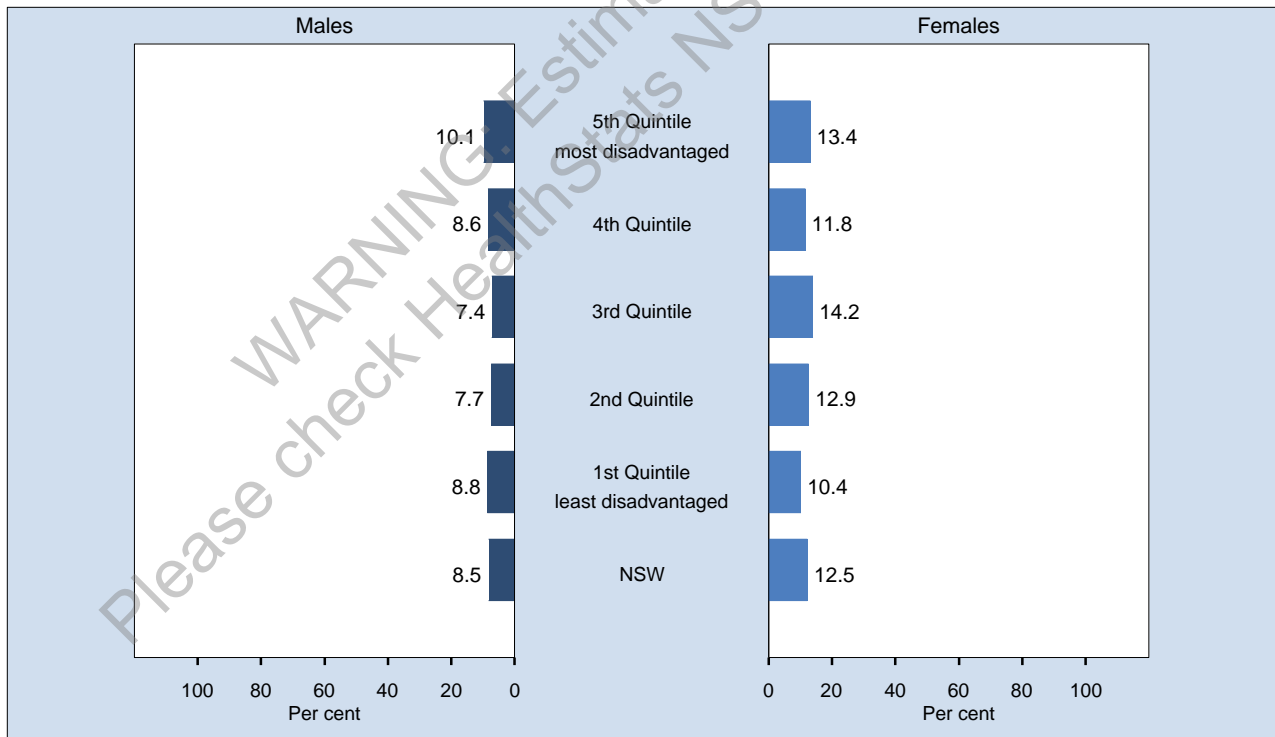
### Current asthma by age, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 10,688 respondents in NSW. For this indicator 31 (0.29%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

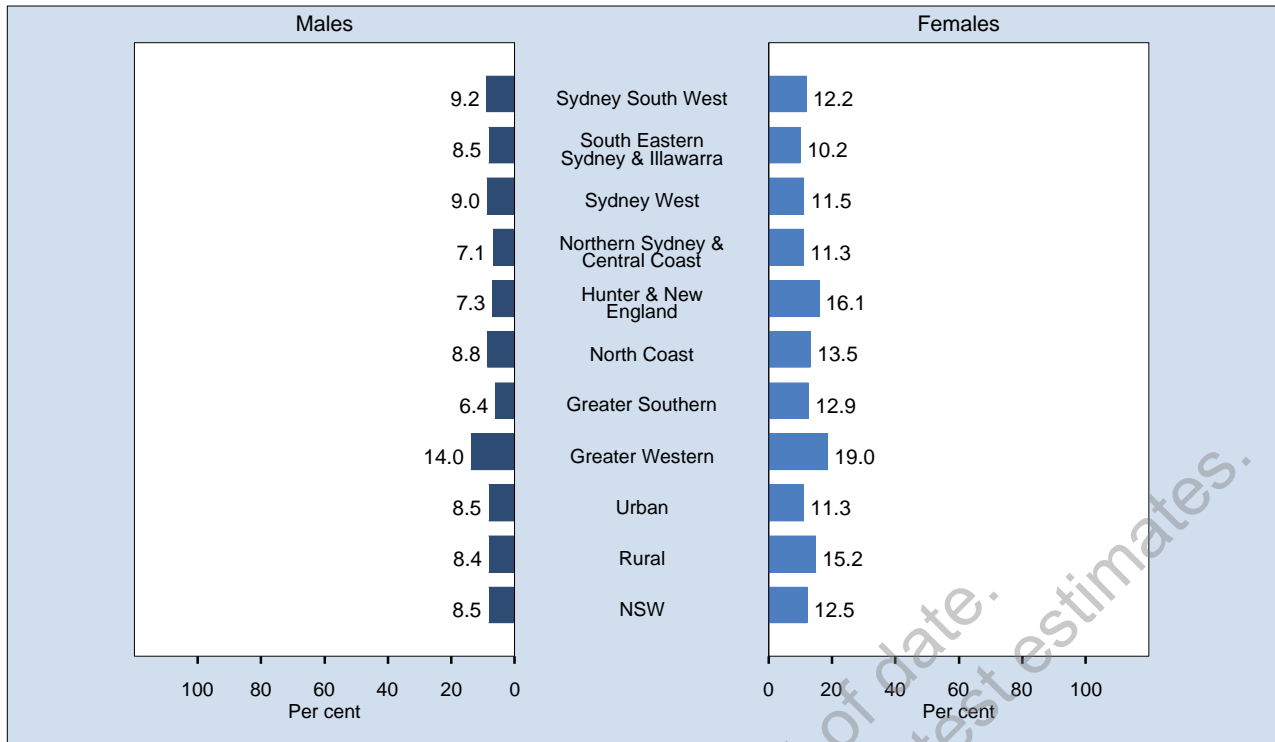
### Current asthma by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 10,688 respondents in NSW. For this indicator 31 (0.29%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

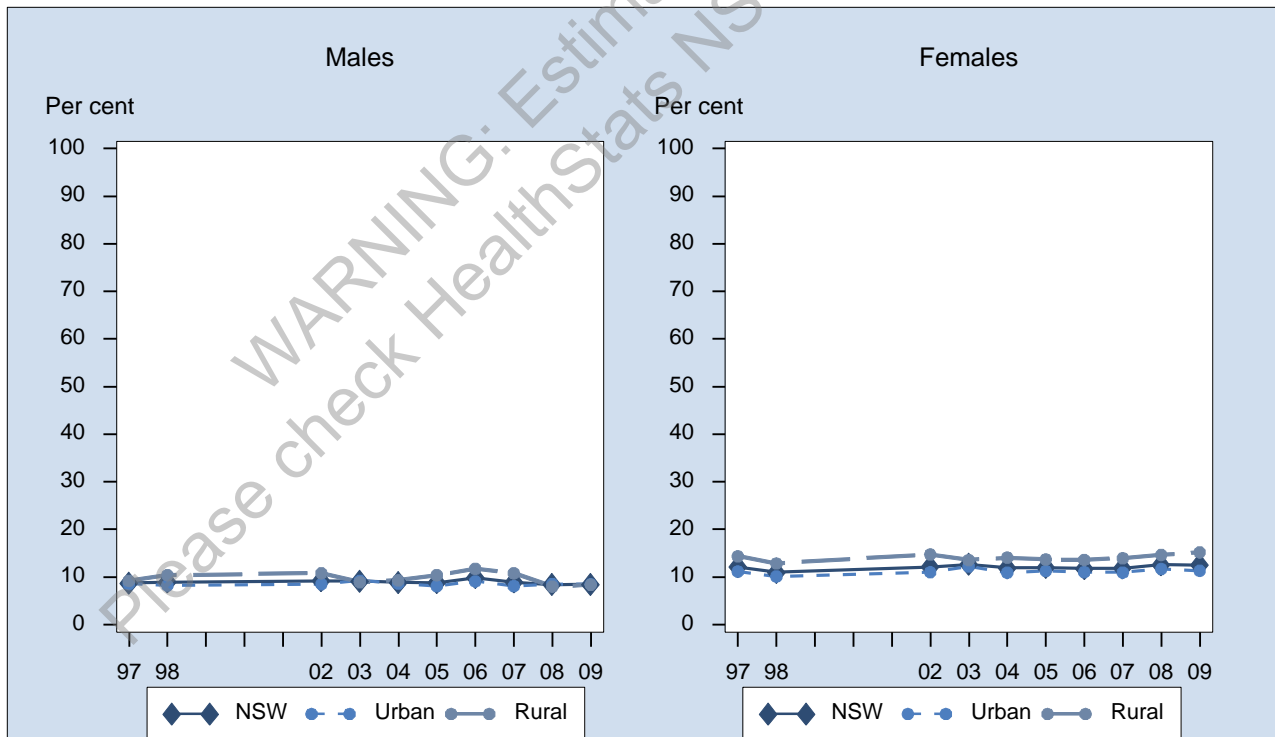
### Current asthma by area health service, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 10,688 respondents in NSW. For this indicator 31 (0.29%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

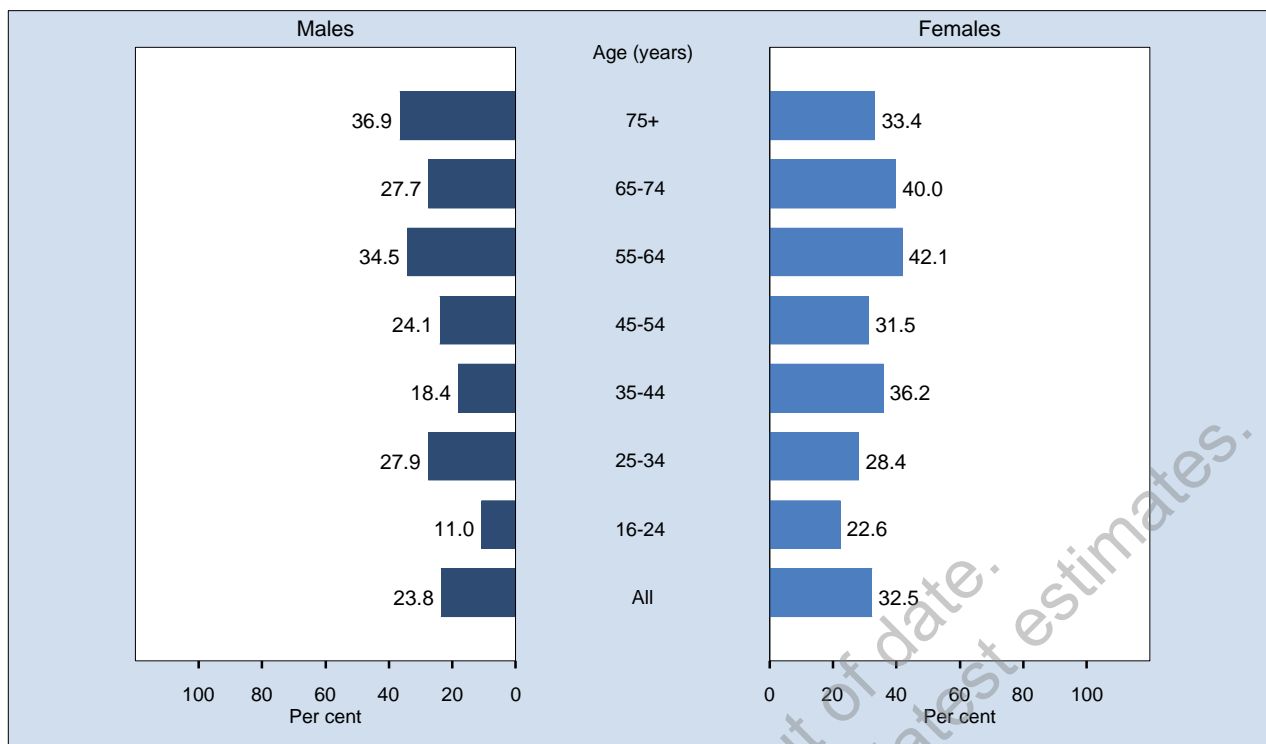
### Current asthma by year, adults aged 16 years and over, NSW, 1997-2009



**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 (9,413), 2005 (11,474), 2006 (7,941), 2007 (7,391), 2008 (8,513), 2009 (10,688). 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

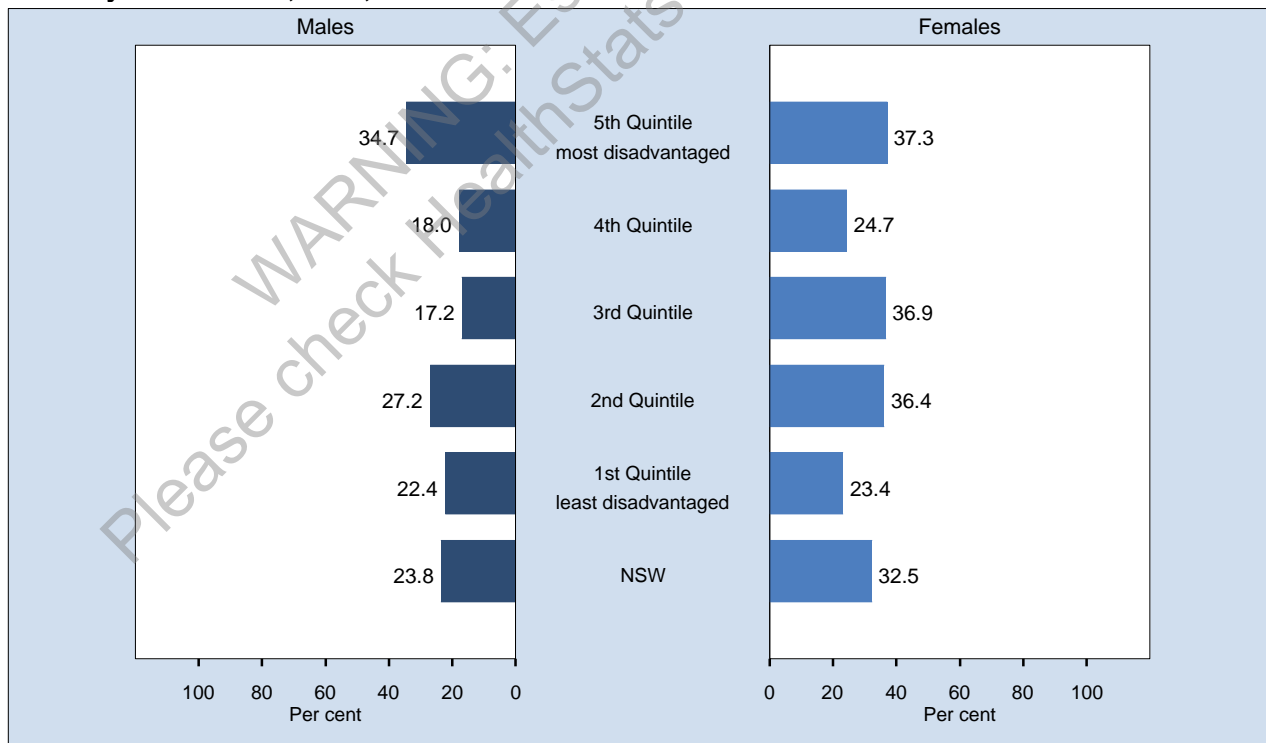
**Written asthma action plan by age, adults aged 16 years and over who currently have asthma, NSW, 2009**



**Note:** Estimates are based on 1,128 respondents in NSW. For this indicator 8 (0.70%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

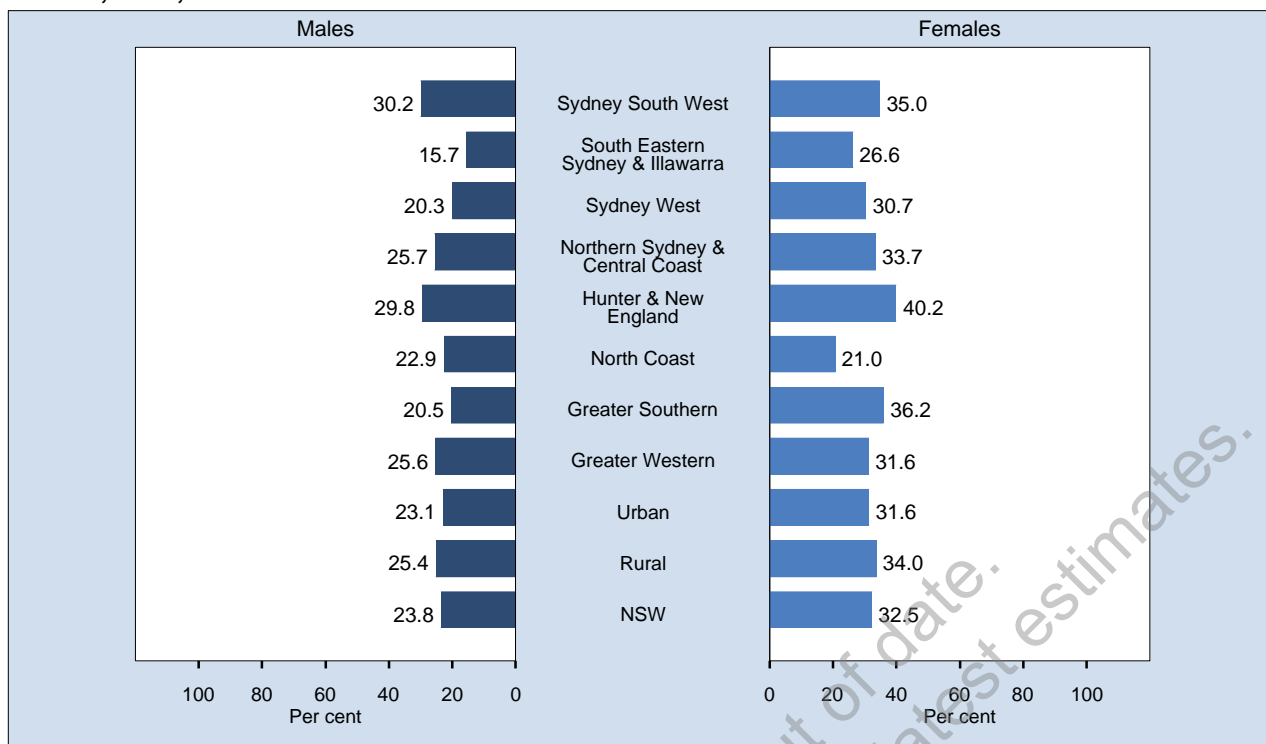
**Written asthma action plan by socioeconomic disadvantage, adults aged 16 years and over who currently have asthma, NSW, 2009**



**Note:** Estimates are based on 1,128 respondents in NSW. For this indicator 8 (0.70%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

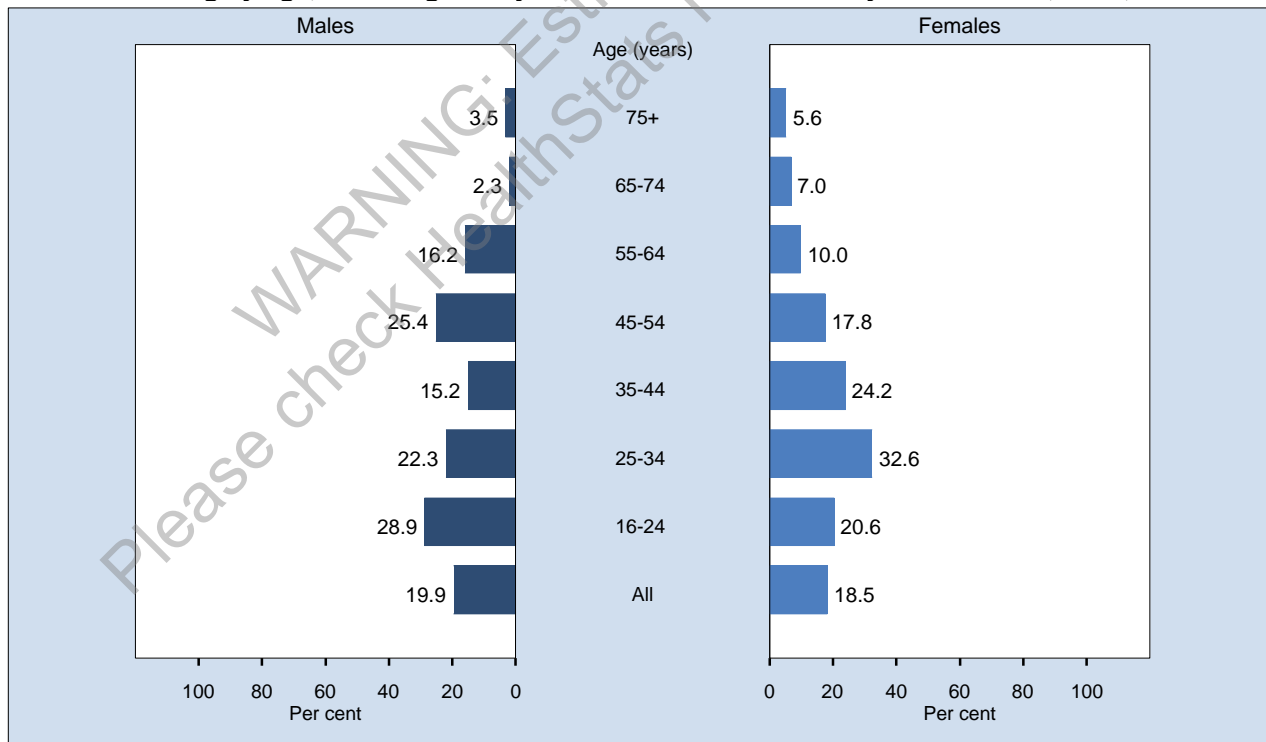
**Written asthma action plan by area health service, adults aged 16 years and over who currently have asthma, NSW, 2009**



**Note:** Estimates are based on 1,128 respondents in NSW. For this indicator 8 (0.70%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

**Current smoking by age, adults aged 16 years and over who currently have asthma, NSW, 2009**



**Note:** Estimates are based on 1,257 respondents in NSW. For this indicator 47 (3.60%) 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 and are current smokers. 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? 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

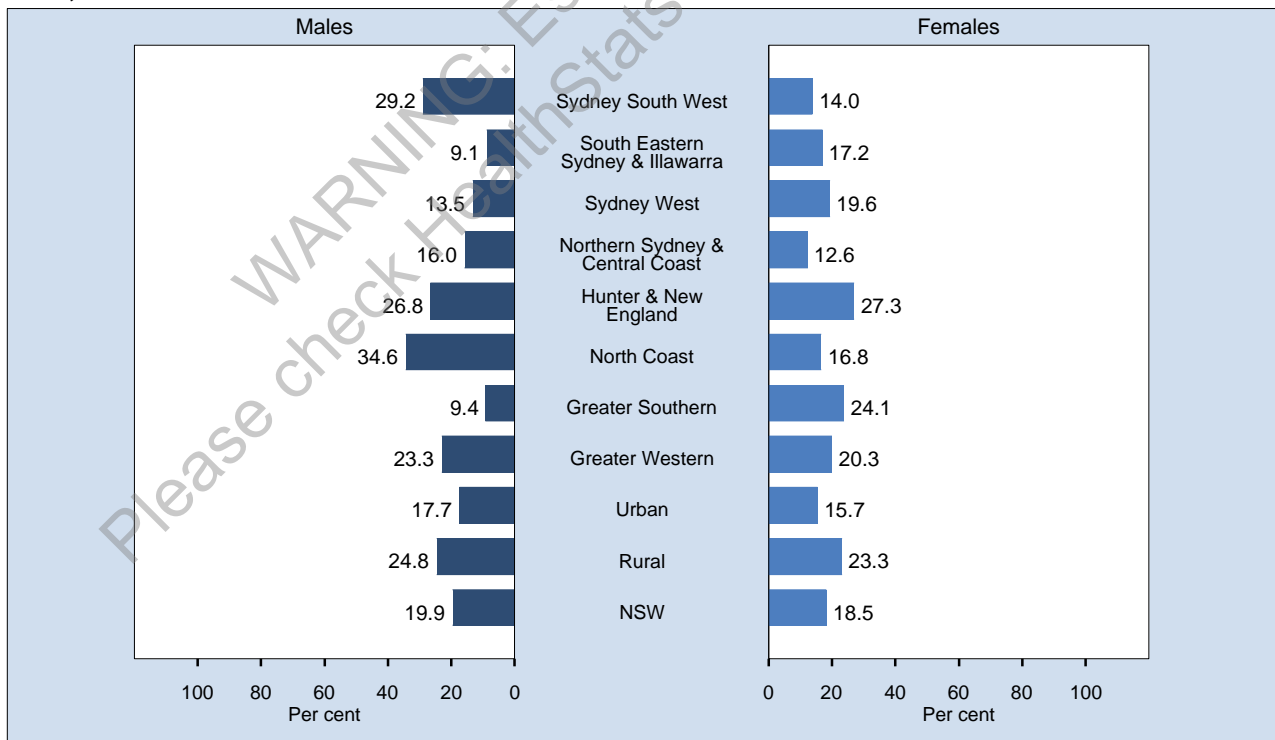
**Current smoking by socioeconomic disadvantage, adults aged 16 years and over who currently have asthma, NSW, 2009**



**Note:** Estimates are based on 1,257 respondents in NSW. For this indicator 47 (3.60%) 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 and are current smokers. 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? 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

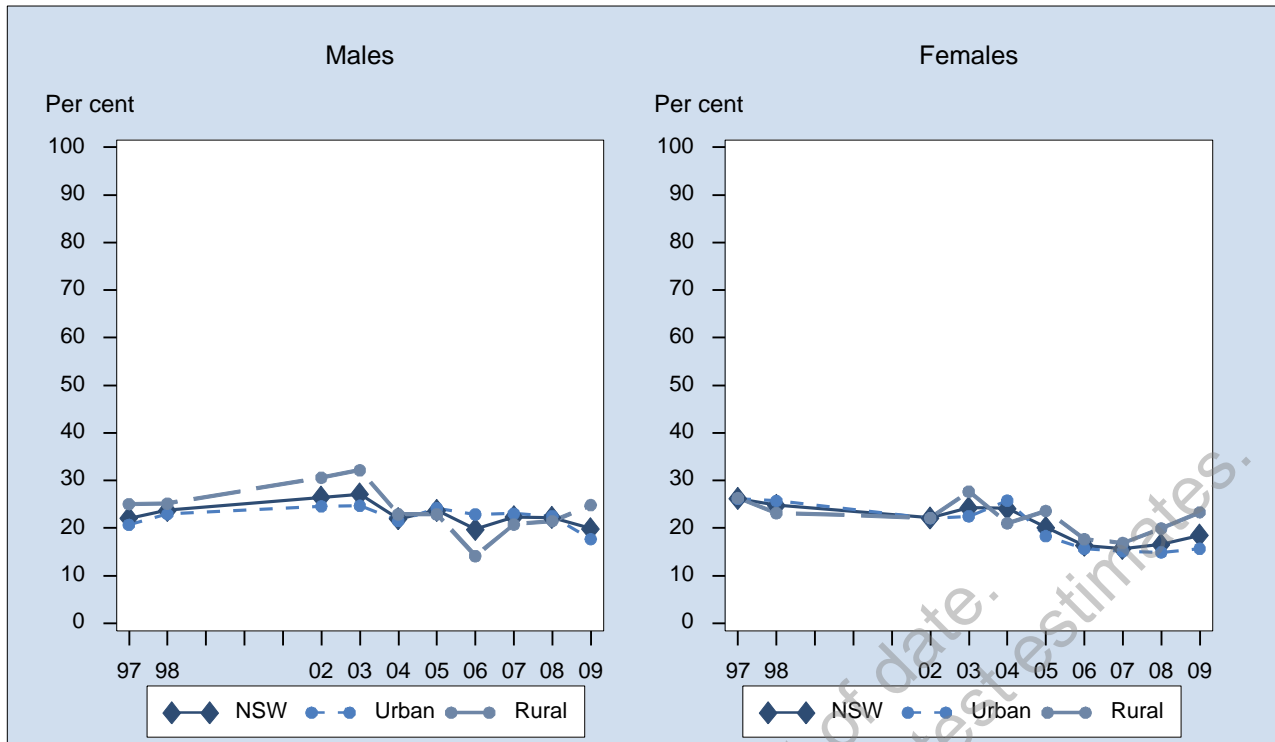
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**Note:** Estimates are based on 1,257 respondents in NSW. For this indicator 47 (3.60%) were not stated (Don't know or Refused) in NSW. The indicator includes those who had symptoms of asthma or treatment for asthma in the last 12 months and are current smokers. 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? 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

**Current smoking by year, adults aged 16 years and over who currently have asthma, NSW, 1997-2009**



**Note:** Estimates are based on the following numbers of respondents for NSW: 1997 (1,860), 1998 (1,896), 2002 (2,534), 2003 (2,807), 2004 (1,994), 2005 (2,212), 2006 (901), 2007 (2,975), 2008 (2,392), 2009 (1,257). The indicator includes those who had symptoms of asthma or treatment for asthma in the last 12 months and are current smokers. 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? 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

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

# Diabetes or high blood glucose

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## 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. Insulin is a hormone needed for glucose to enter the cells and be converted to energy. Diabetes affects a person's health in 2 ways: by direct metabolic complications, which can be immediately life threatening if not treated promptly; 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, or insulin dependent diabetes mellitus, which occurs when the pancreas no longer produces insulin; type 2, or non insulin dependent diabetes mellitus, which occurs when the pancreas is not producing enough insulin and the insulin it produces is not working effectively; and gestational diabetes, which occurs in pregnancy and should disappear after the birth.[1]

Type 2 diabetes accounts for up to 90 per cent of all cases of diabetes, and 71 per cent of hospitalisations for diabetes. In 2006, diabetes was the principal cause of 2.0 per cent of deaths and a related cause of almost 5.0 per cent of deaths in New South Wales. Between 1989-90 and 2006-07, hospitalisations for which diabetes was recorded as a principal diagnosis increased by more than 160 per cent in New South Wales.[2] The management of type 2 diabetes depends on a healthy lifestyle; careful control of glucose levels, blood lipid levels (especially cholesterol levels), blood pressure; and regular screening for complications.[1]

## Results

In 2009, 8.2 per cent of adults had ever been told by a doctor or hospital they had diabetes or high blood glucose. A significantly higher proportion of males (9.4 per cent) than females (7.0 per cent) had ever been told by a doctor or hospital they had diabetes or high blood glucose. Among males, a significantly lower proportion of those aged 16-24 years (1.0 per cent), 25-34 years (1.4 per cent), and 35-44 years (4.4 per cent), and a significantly higher proportion of those aged 55-64 years (17.6 per cent), 65-74 years (26.4 per cent), and 75 years and over (21.4 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 (0.8 per cent), 25-34 years (2.2 per cent), and 35-44 years (3.0 per cent), and a significantly higher proportion of those aged 55-64 years (13.1 per cent), 65-74 years (17.1 per cent), and 75 years and over (14.0 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 (6.5 per cent), and a significantly higher proportion of adults in the fifth or most disadvantaged quintile (10.1 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 urban and rural health areas. A significantly lower proportion of adults in the Northern Sydney & Central Coast Area Health Service (6.3 per cent) had ever been told by a doctor or hospital they had diabetes or high blood glucose, compared with the overall adult population.

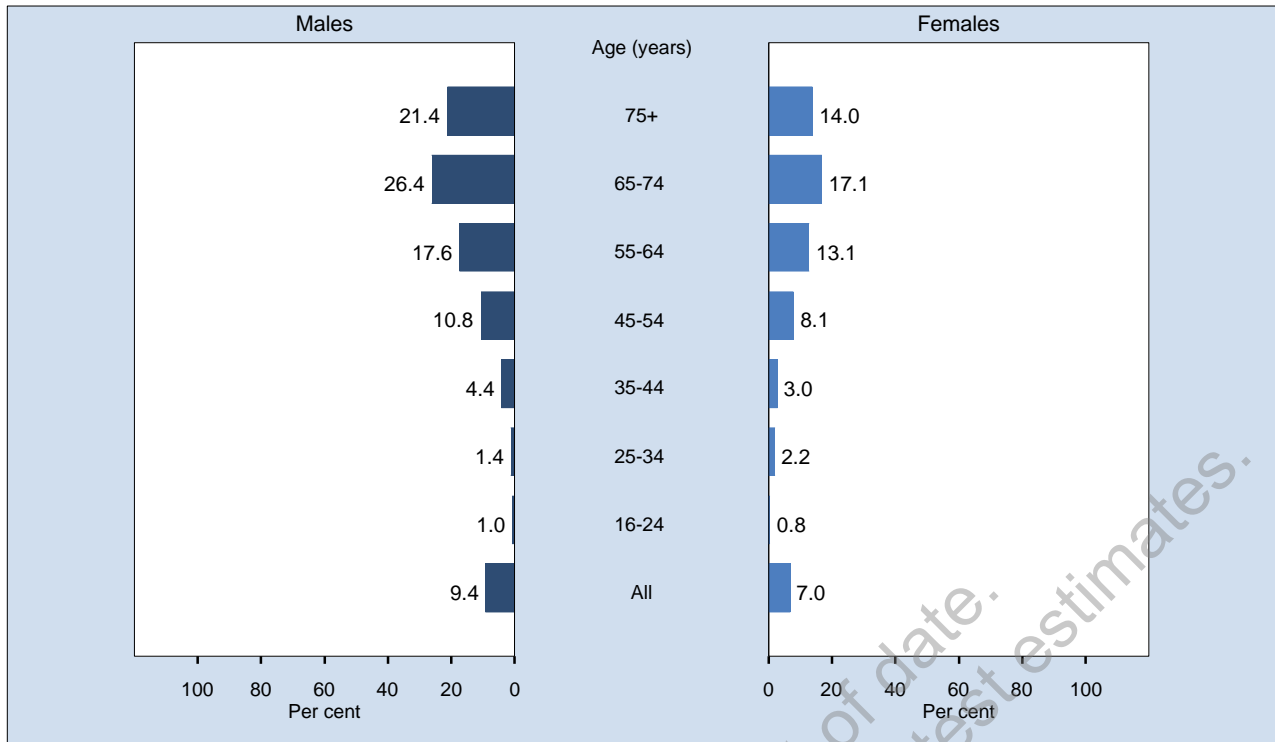
Since 1997, there has been a significant increase in the proportion of adults who had ever been told by a doctor or hospital they had diabetes or high blood glucose (4.7 per cent to 8.2 per cent). The increase has been significant in males and females, and in rural and urban health areas.

Since 2008, there has been a significant increase in the proportion of adults who had ever been told by a doctor or hospital they had diabetes or high blood glucose (7.3 per cent to 8.2 per cent). The increase has been significant in males, and in urban health areas.

## References

1. Diabetes Australia. *What is Diabetes?* Available online at [www.diabetesaustralia.com.au/Understanding-Diabetes/What-is-Diabetes](http://www.diabetesaustralia.com.au/Understanding-Diabetes/What-is-Diabetes) (accessed 6 September 2010).
2. Population Health Division. *The Health of the People of New South Wales: Report of the Chief Health Officer 2008, Summary Report*. Sydney: NSW Department of Health, 2008. Available online at [www.health.nsw.gov.au](http://www.health.nsw.gov.au) (accessed 6 September 2010).

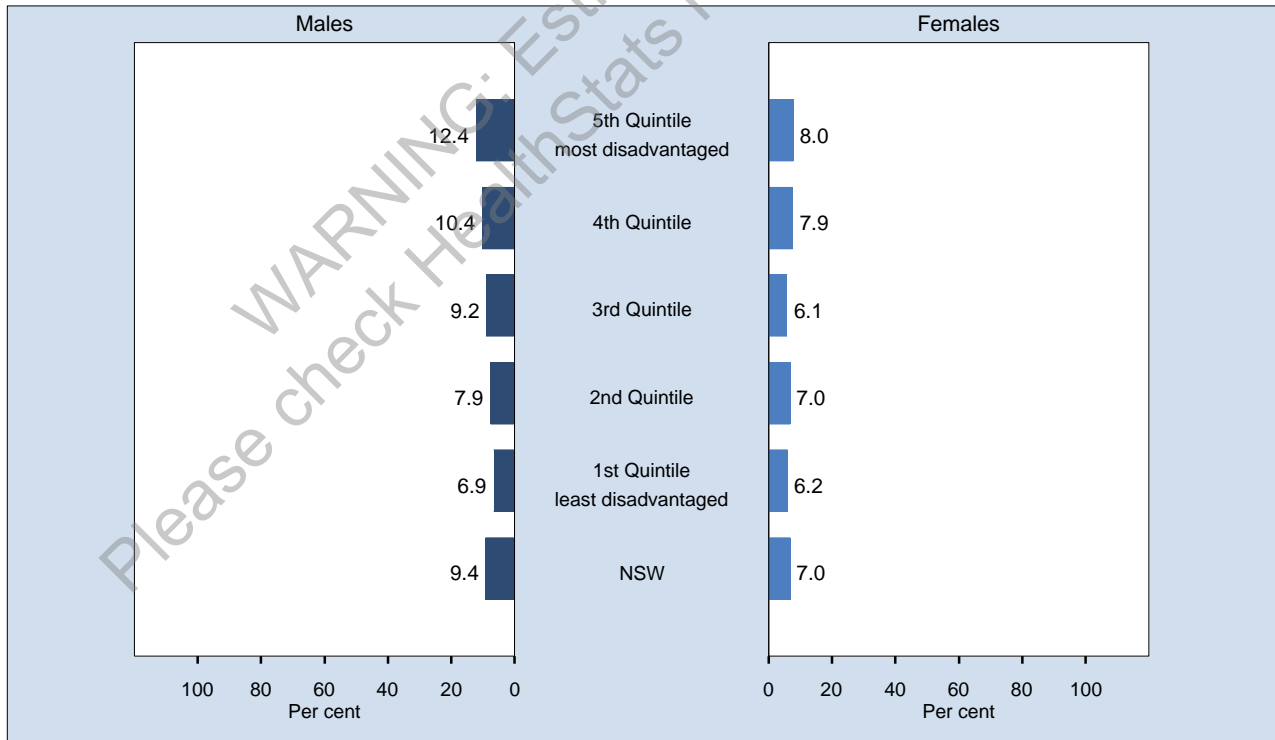
### Diabetes or high blood glucose by age, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 10,629 respondents in NSW. For this indicator 87 (0.81%) 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 2009 (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, 2009

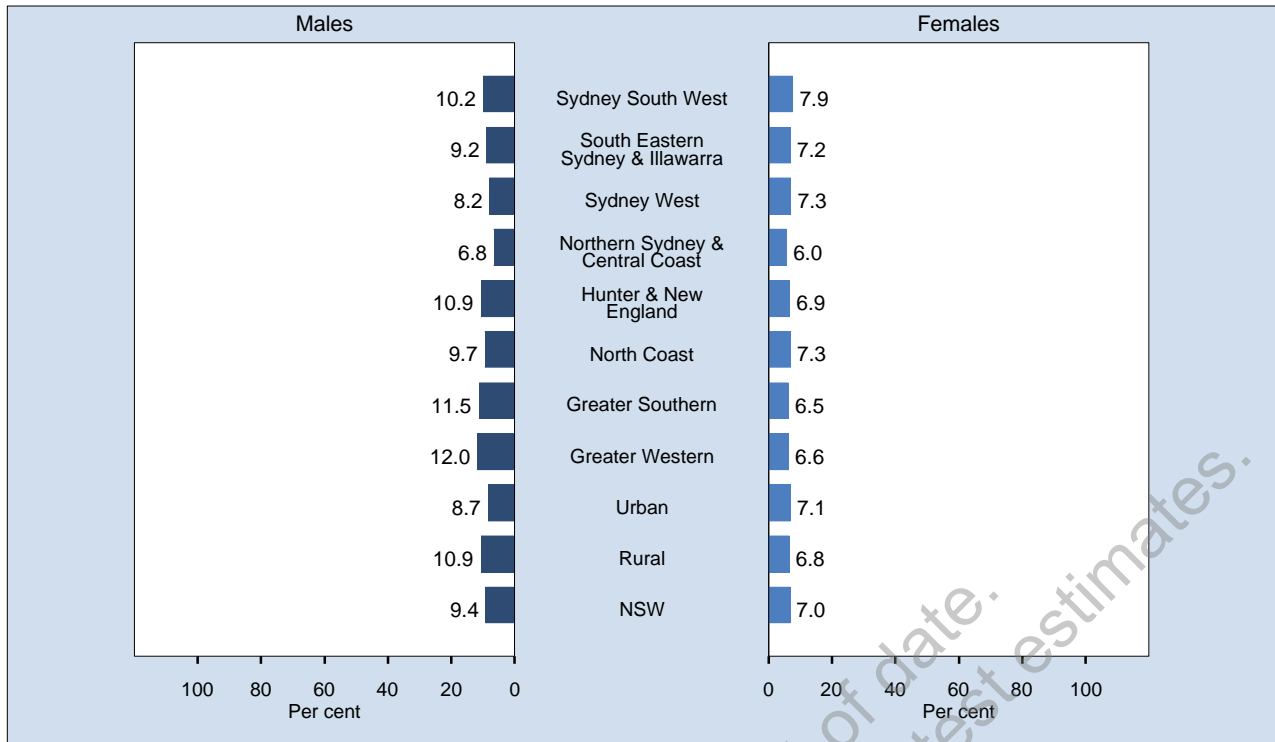


**Note:** Estimates are based on 10,629 respondents in NSW. For this indicator 87 (0.81%) were not stated (Don't know or Refused) in NSW. The indicator includes those who either had diabetes or high blood glucose but did not have gestational diabetes. The questions used to define the indicator were: 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.



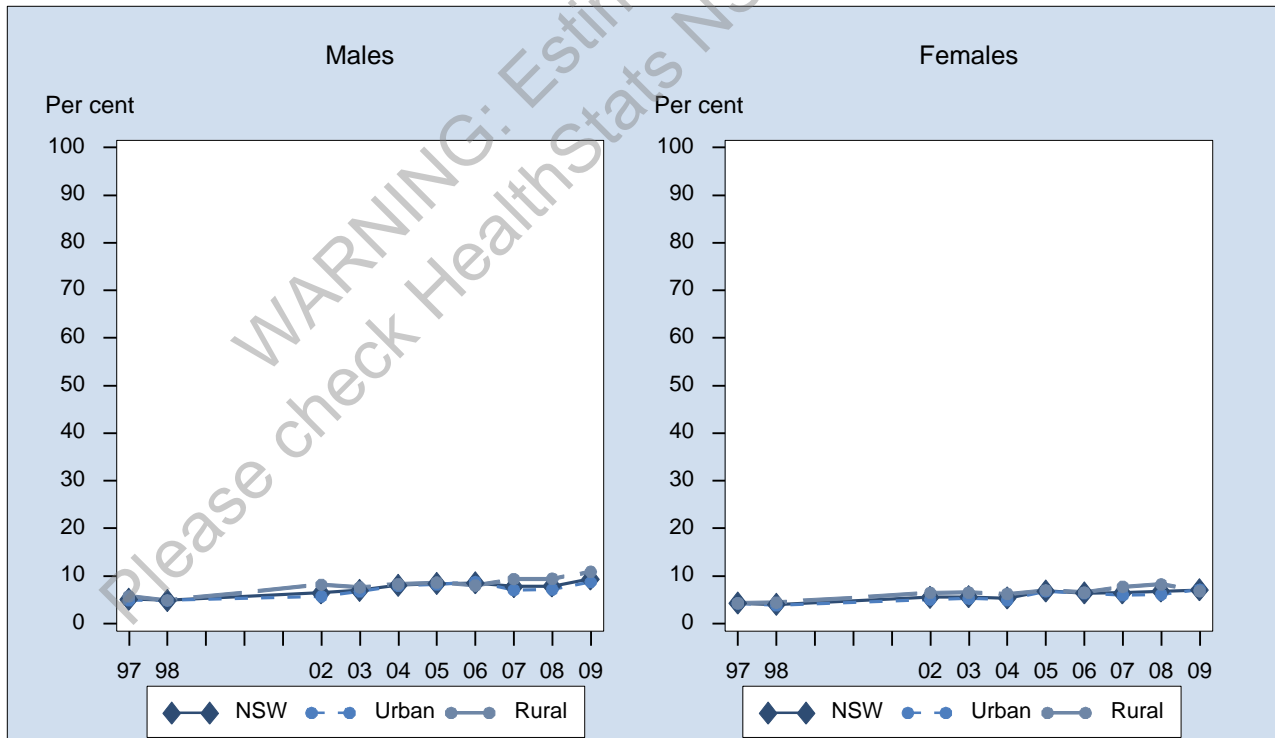
### Diabetes or high blood glucose by area health service, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 10,629 respondents in NSW. For this indicator 87 (0.81%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

### Diabetes or high blood glucose by year, adults aged 16 years and over, NSW, 1997-2009



**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 (9,402), 2005 (11,457), 2006 (7,935), 2007 (7,316), 2008 (8,616), 2009 (10,629). 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

# Urinary incontinence

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## Introduction

Unexpected leaking of urine means there is a problem with bladder control, also called urinary incontinence. It is not normal and is always a sign of an underlying problem. About 4 million Australians have urinary incontinence at some time in their life. Managing urinary incontinence is different in women and men. Women who have had a baby are 3 times more likely to have urinary incontinence than other women. Men can experience urinary incontinence at any age but, once they reach 40, prostate problems are often the cause.[1]

## Results

In 2009, 19.8 per cent of adults aged 40 years and over experienced urinary incontinence some or most of the time in the last 4 weeks. A significantly lower proportion of males (11.0 per cent) than females (28.1 per cent) experienced urinary incontinence in the last 4 weeks. Among males, a significantly lower proportion of those aged 40-44 years (1.0 per cent) and 50-54 years (7.0 per cent), and a significantly higher proportion of those aged 65-69 years (16.7 per cent), 70-74 years (20.3 per cent), 75-79 years (25.3 per cent), and 80 years and over (26.6 per cent), experienced urinary incontinence some or most of the time in the last 4 weeks, compared with the overall adult male population aged 40 years and over. Among females, a significantly higher proportion of those aged 70-74 years (33.9 per cent), 75-79 years (34.2 per cent), and 80 years and over (37.2 per cent), experienced urinary incontinence some or most of the time in the last 4 weeks, compared with the overall adult female population aged 40 years and over.

A significantly higher proportion of adults 40 years and over in the fifth or most disadvantaged quintile (24.5 per cent), and a significantly lower proportion of adults 40 years and over in the first or least disadvantaged quintile (16.0 per cent) and fourth disadvantaged quintile (17.5 per cent) experienced urinary incontinence in the last 4 weeks, compared with the overall adult population aged 40 years and over.

There was no significant difference between urban and rural health areas. A significantly higher proportion of adults 40 years and over in the Sydney South West (23.6 per cent) and Greater Southern (23.3 per cent) Area Health Services, and a significantly lower proportion of adults in the Northern Sydney & Central Coast (15.9 per cent) and North Coast (16.5 per cent) Area Health Services, experienced urinary incontinence in the last 4 weeks, compared with the overall adult population aged 40 years and over.

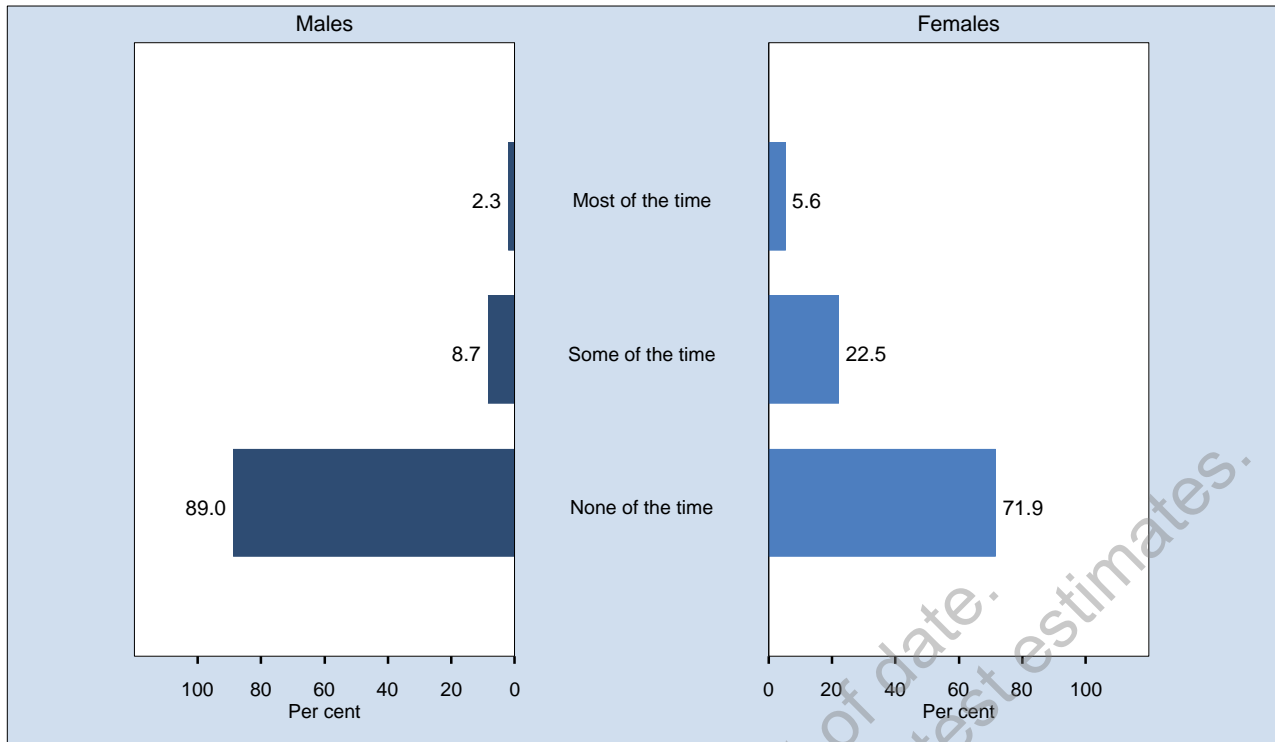
There has been a significant decrease in the proportion of adults aged 40 years and over who experienced urinary incontinence some or most of the time in the last 4 weeks between 2003 and 2009 (22.0 per cent to 19.8 per cent). The decrease has been significant in females, and in urban health areas.

However, since 2006 there has been no significant change in the proportion of adults who experienced urinary incontinence some or most of the time in the last 4 weeks.

## References

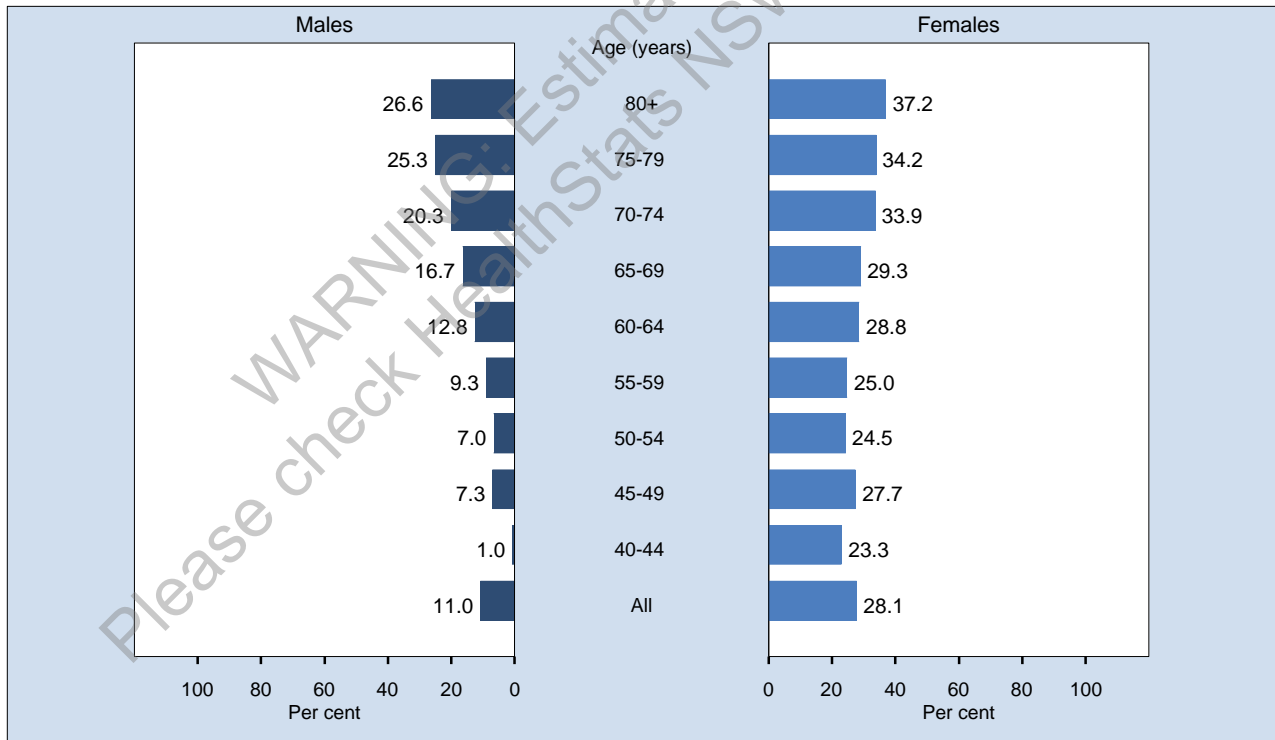
1. Australian Government Department of Health and Ageing. Bladder and Bowel Website at [www.bladderbowel.gov.au](http://www.bladderbowel.gov.au) (accessed 6 September 2010).

### Incontinence status in the last 4 weeks, adults aged 40 years and over, NSW, 2009



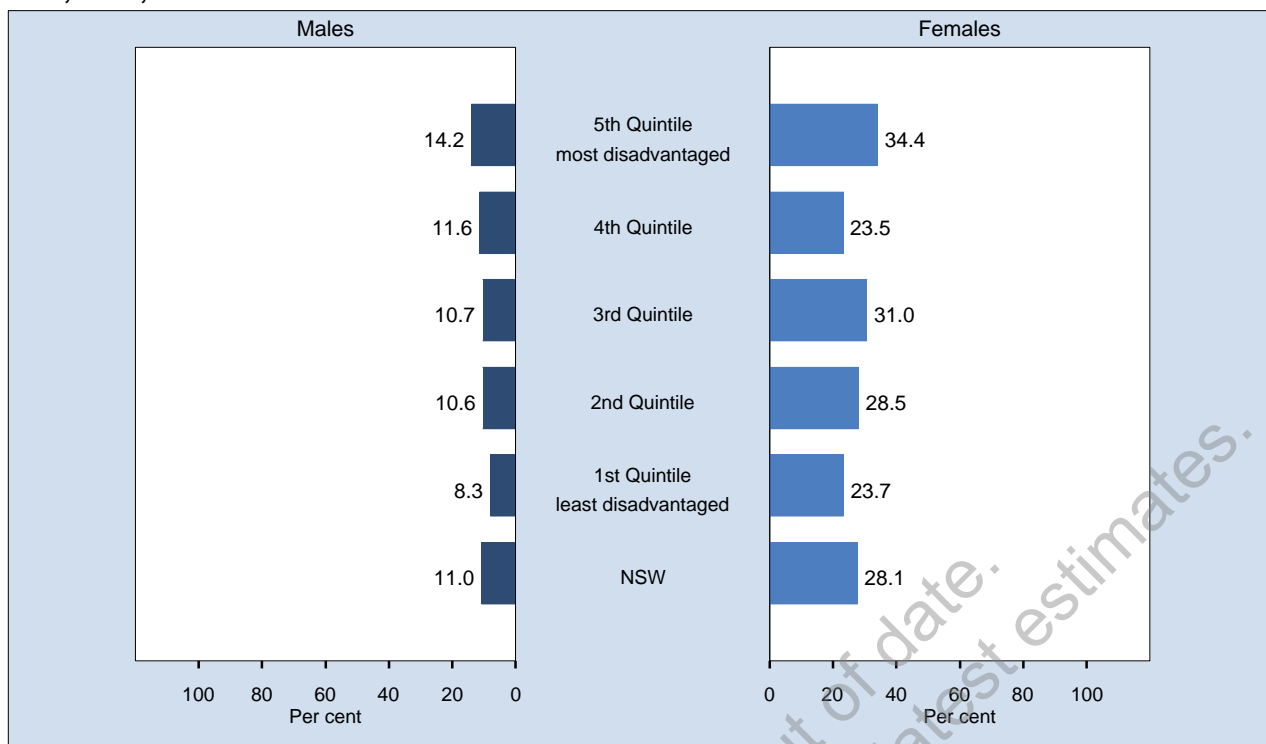
**Note:** Estimates are based on 6,197 respondents in NSW. For this indicator 157 (2.47%) were not stated (Don't know or Refused) in NSW. The question used was: In the last 4 weeks how often have you had a urine leak when you were physically active, exerted yourself, coughed, or sneezed during the day or night?  
**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

### Urinary incontinence in the last 4 weeks by age, adults aged 40 years and over, NSW, 2009



**Note:** Estimates are based on 6,197 respondents in NSW. For this indicator 157 (2.47%) were not stated (Don't know or Refused) in NSW. The indicator includes those who have experienced a urine leak most or some of the time in the last 4 weeks. The question used to define the indicator was: In the last 4 weeks how often have you had a urine leak when you were physically active, exerted yourself, coughed, or sneezed during the day or night?  
**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

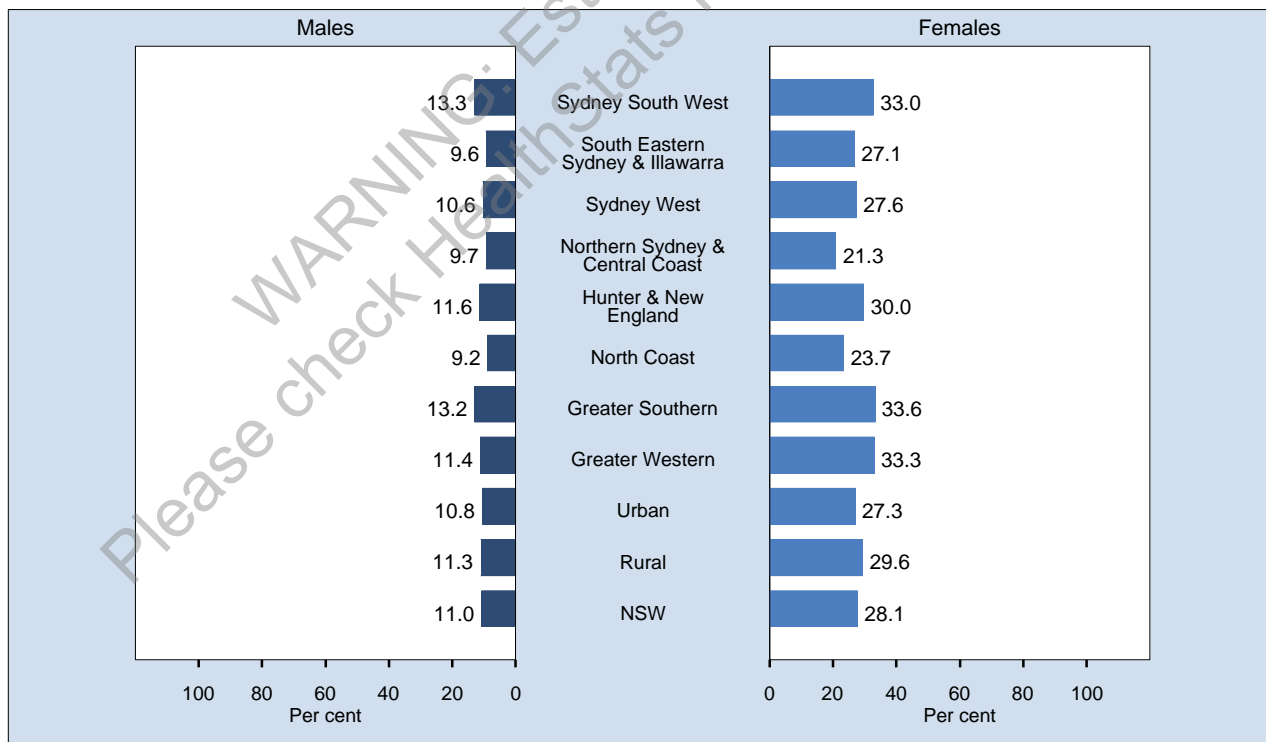
**Urinary incontinence in the last 4 weeks by socioeconomic disadvantage, adults aged 40 years and over, NSW, 2009**



**Note:** Estimates are based on 6,197 respondents in NSW. For this indicator 157 (2.47%) were not stated (Don't know or Refused) in NSW. The indicator includes those who have experienced a urine leak most or some of the time in the last 4 weeks. The question used to define the indicator was: In the last 4 weeks how often have you had a urine leak when you were physically active, exerted yourself, coughed, or sneezed during the day or night?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

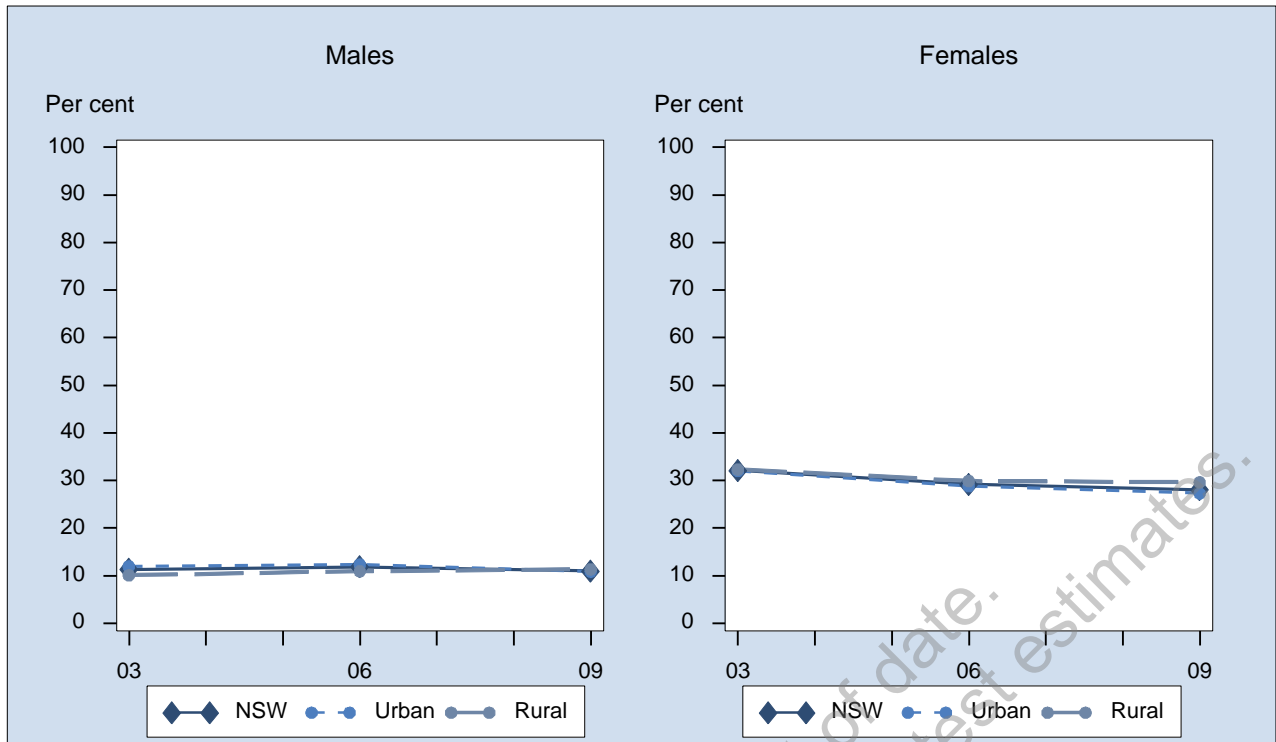
**Urinary incontinence in the last 4 weeks by area health service, adults aged 40 years and over, NSW, 2009**



**Note:** Estimates are based on 6,197 respondents in NSW. For this indicator 157 (2.47%) were not stated (Don't know or Refused) in NSW. The indicator includes those who have experienced a urine leak most or some of the time in the last 4 weeks. The question used to define the indicator was: In the last 4 weeks how often have you had a urine leak when you were physically active, exerted yourself, coughed, or sneezed during the day or night?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

**Urinary incontinence in the last 4 weeks by year, adults aged 40 years and over, NSW, 2003-2009**



**Note:** Estimates are based on the following numbers of respondents for NSW: 2003 (9,218), 2006 (6,000), 2009 (6,197). The indicator includes those who have experienced a urine leak most or some of the time in the last 4 weeks. The question used to define the indicator was: In the last 4 weeks how often have you had a urine leak when you were physically active, exerted yourself, coughed, or sneezed during the day or night?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

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# Mental health

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## Introduction

Psychological distress has a major effect on the ability of people to work, study, and manage their day-to-day activities. The Kessler 10 Plus (K10+) measure of non-specific psychological distress is included in the New South Wales Population Health Survey to monitor psychological distress in people aged 16 years and over.[1] K10+ contains a 10-item questionnaire that measures symptoms such as anxiety, depression, agitation, and psychological fatigue in the most recent 4-week period, and additional questions to establish the effect of the distress. At both the population level and individual level the K10+ measure is brief and accurate screening scale for mental health.[2-8]

For each of the 10 items 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, between 1 and 5 points were assigned to each symptom, with a value of 1 indicating the person experienced the symptom none of the time and 5 indicating all of the time. The total score for each person ranges from 10 points (all responses are none of the time) to 50 points (all responses are all of the time). Responses are classified into 4 categories: low psychological distress when the score is 10-15, moderate psychological distress when the score is 16-21, high psychological distress when the score is 22-29, and very high psychological distress when the score is 30 or higher.

The scores calculated for the New South Wales Population Health Survey are a combination of actual and imputed scores. Where a respondent answered all 10 questions, the score is simply the sum of the individual scores for each question. 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 2009, 67.2 per cent of adults had low levels of psychological distress in the last 4 weeks, 21.3 per cent had moderate levels, 8.1 per cent had high levels, and 3.4 per cent had very high levels.

When ratings of high and very high were combined, 11.5 per cent of adults experienced high or very high levels of psychological distress in the last 4 weeks. There was no significant difference between males and females. A significantly higher proportion of adults aged 25-34 years (14.8 per cent), and a significantly lower proportion of adults aged 65-74 years (6.0 per cent) and 75 years and over (6.7 per cent), experienced high or very high levels of psychological distress in the last 4 weeks, compared with the overall adult population.

A significantly lower proportion of adults in the first or least disadvantaged quintile (8.4 per cent), and a significantly higher proportion of adults in the fifth or most disadvantaged quintile (13.9 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 urban and rural health areas. A significantly higher proportion of adults in the Sydney South West Area Health Service (13.9 per cent), and a significantly lower proportion of adults in the Northern Sydney & Central Coast Area Health Service (8.8 per cent), experienced high or very high levels of psychological distress in the last 4 weeks, compared with the overall adult population.

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

However, since 2008, while there has been no significant change in the proportion of adults who experienced high or very high levels of psychological distress in the last 4 weeks, there has been a significant increase in males (8.5 per cent to 10.7 per cent).

Adults who experienced high or very high psychological distress in the last 4 weeks said their distress was mainly due to physical problems: all of the time (11.3 per cent), most of the time (9.5 per cent), some of the time (21.1 per cent), a little of the time (13.2 per cent), and none of the time (44.9 per cent).

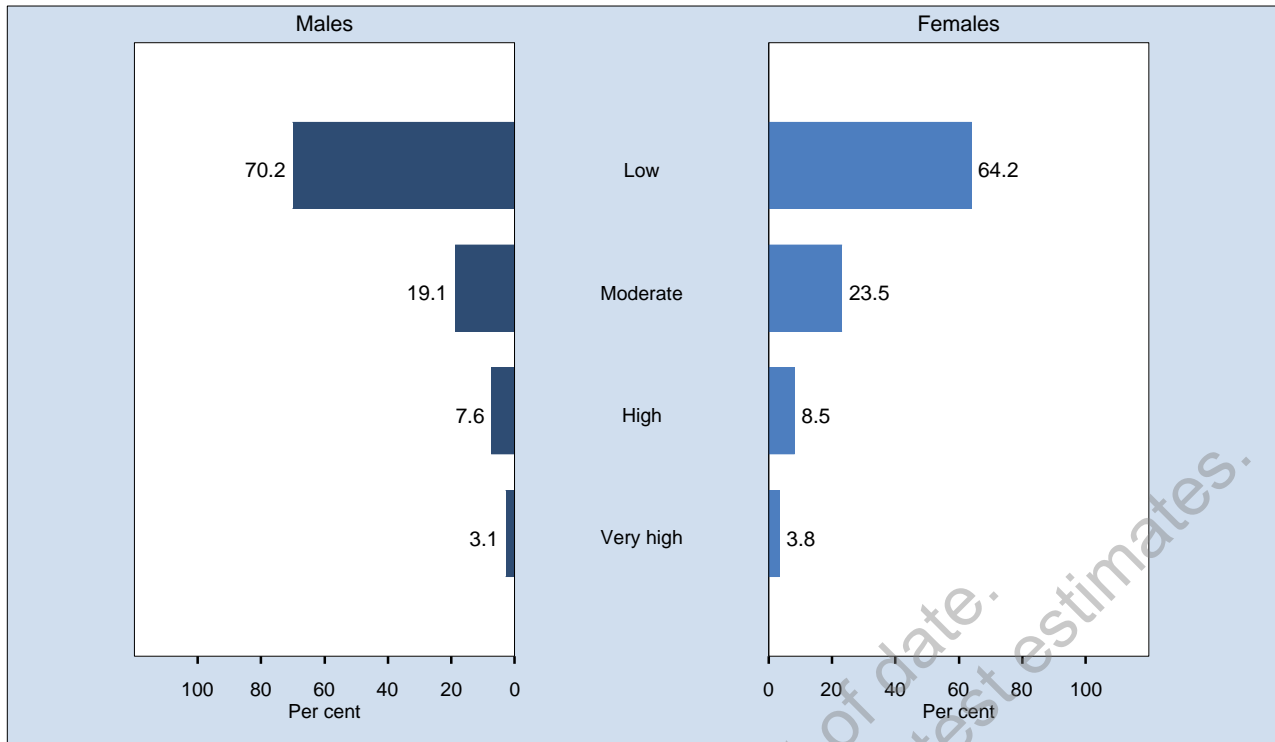
In the last 4 weeks, adults were unable to work or study or manage their day-to-day activities on an average of 0.53 days (0.54 days for males and 0.52 days for females); had to cut down on what they did on an average of 0.74 days (0.60 days for males and 0.88 days for females) in the last 4 weeks; and saw a doctor or other health professional about their psychological distress on an average of 0.12 times (0.09 times for males and 0.16 times for females).

## References

1. National Comorbidity Survey. *K10 and K6 Scales*. Boston: Department of Health Care Policy, Harvard School of Medicine, 2005. Available online at [www.hcp.med.harvard.edu/ncs/k6\\_scales.php](http://www.hcp.med.harvard.edu/ncs/k6_scales.php) (accessed 6 September 2010).
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7. Cairney J, Veldhuizen S, Wade TJ, Kurdyak P, Streiner DL. Evaluation of 2 measures of psychological distress as screeners for depression in the general population. *Can J Psychiatry* 2007; 52: 111-120.
8. Furukawa TA, Kawakami N, Saitoh M, Ono Y, Nakane Y, Nakamura Y, Tachimori H, Iwata N, Uda H, Nakane H, Watanabe M, Naganuma Y, Hata Y, Kobayashi M, Miyake Y, Takeshima T, Kikkawa T. The performance of the Japanese version of the K6 and K10 in the World Mental Health Survey Japan. *Int J Methods Psychiatr Res* 2008; 3: 152-158.

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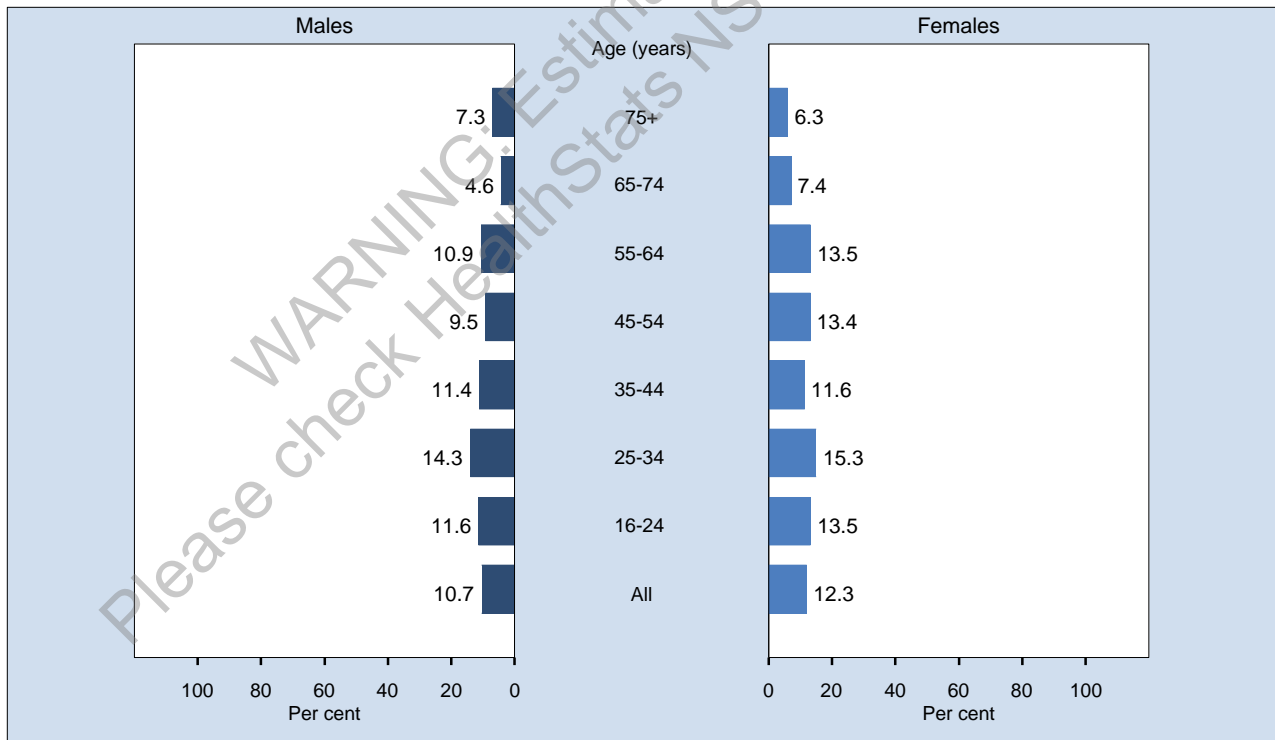
**Psychological distress by Kessler 10 categories, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 10,466 respondents in NSW. For this indicator 69 (0.65%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

**High and very high psychological distress by age, adults aged 16 years and over, NSW, 2009**

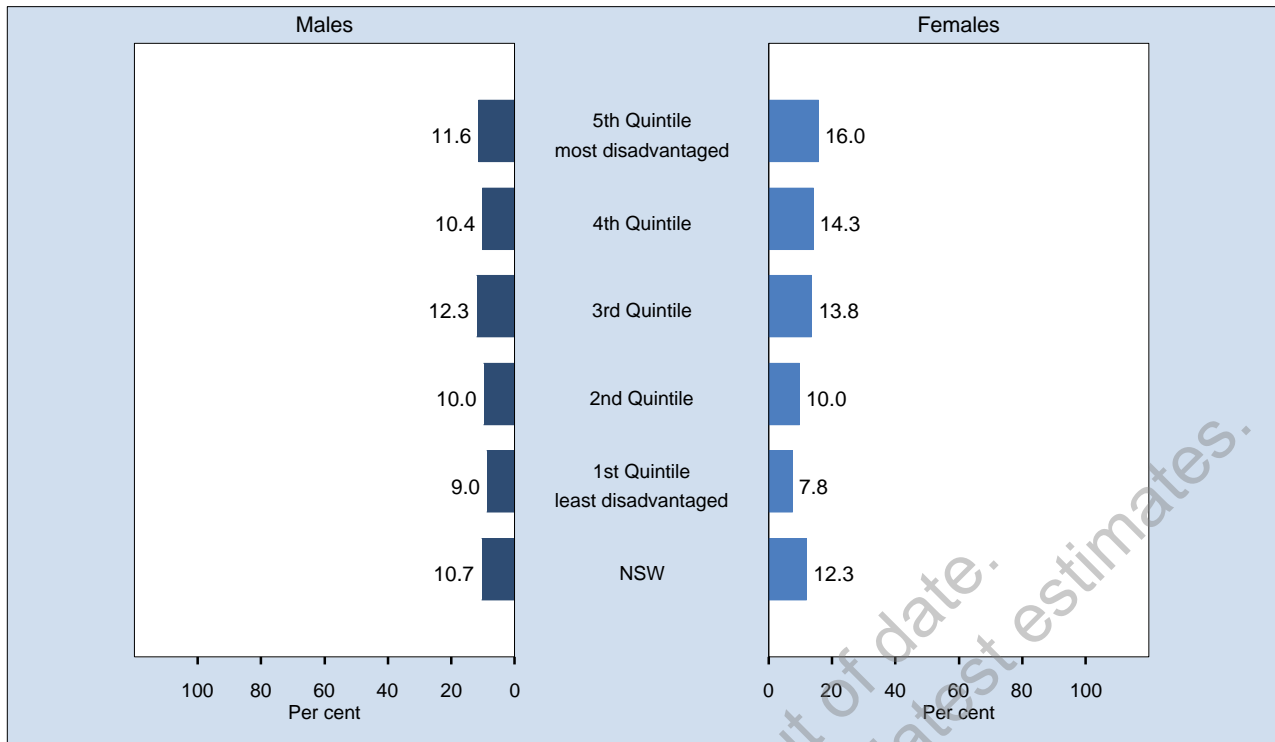


**Note:** Estimates are based on 10,466 respondents in NSW. For this indicator 69 (0.65%) were not stated (Don't know or Refused) in NSW. The indicator includes those with a Kessler 10 (K10) score of 22 or above. The K10 is a 10-item questionnaire that measures the level of psychological distress in the most recent 4-week period.

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

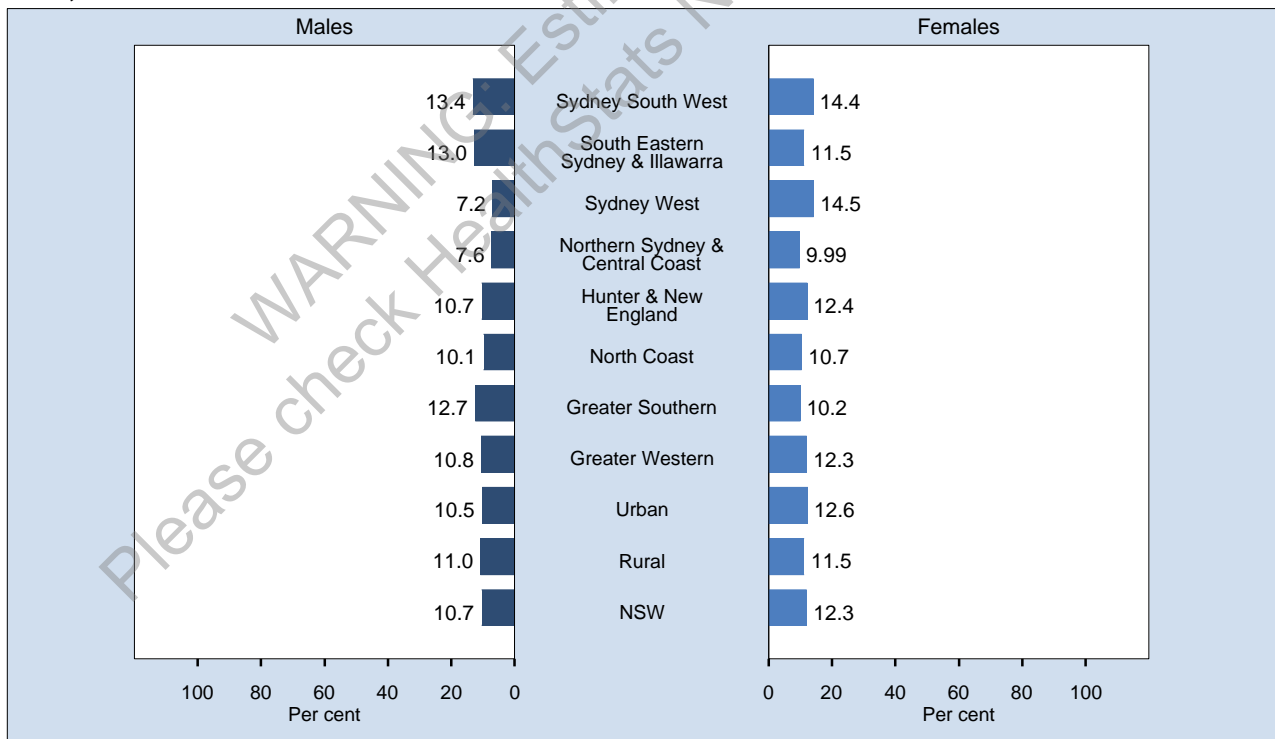


**High and very high psychological distress by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2009**



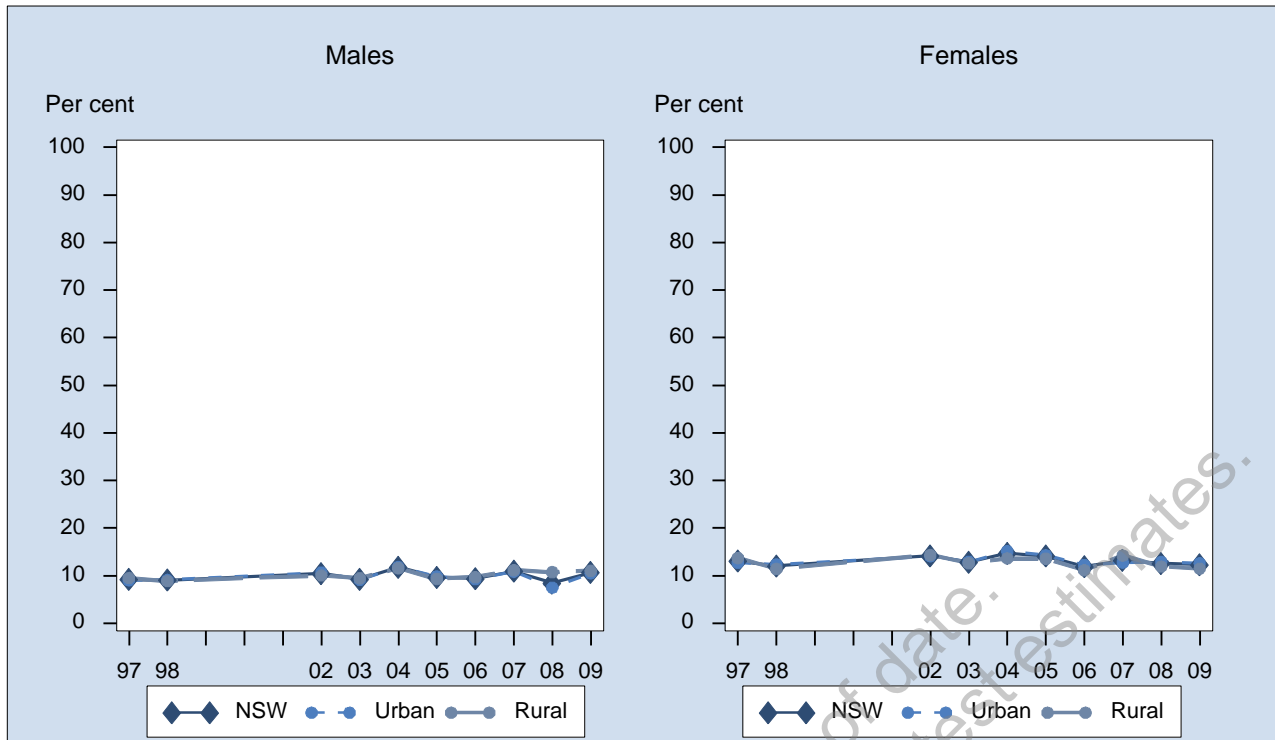
**Note:** Estimates are based on 10,466 respondents in NSW. For this indicator 69 (0.65%) were not stated (Don't know or Refused) in NSW. The indicator includes those with a Kessler 10 (K10) score of 22 or above. The K10 is a 10-item questionnaire that measures the level of psychological distress in the most recent 4-week period.  
**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

**High and very high psychological distress by area health service, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 10,466 respondents in NSW. For this indicator 69 (0.65%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

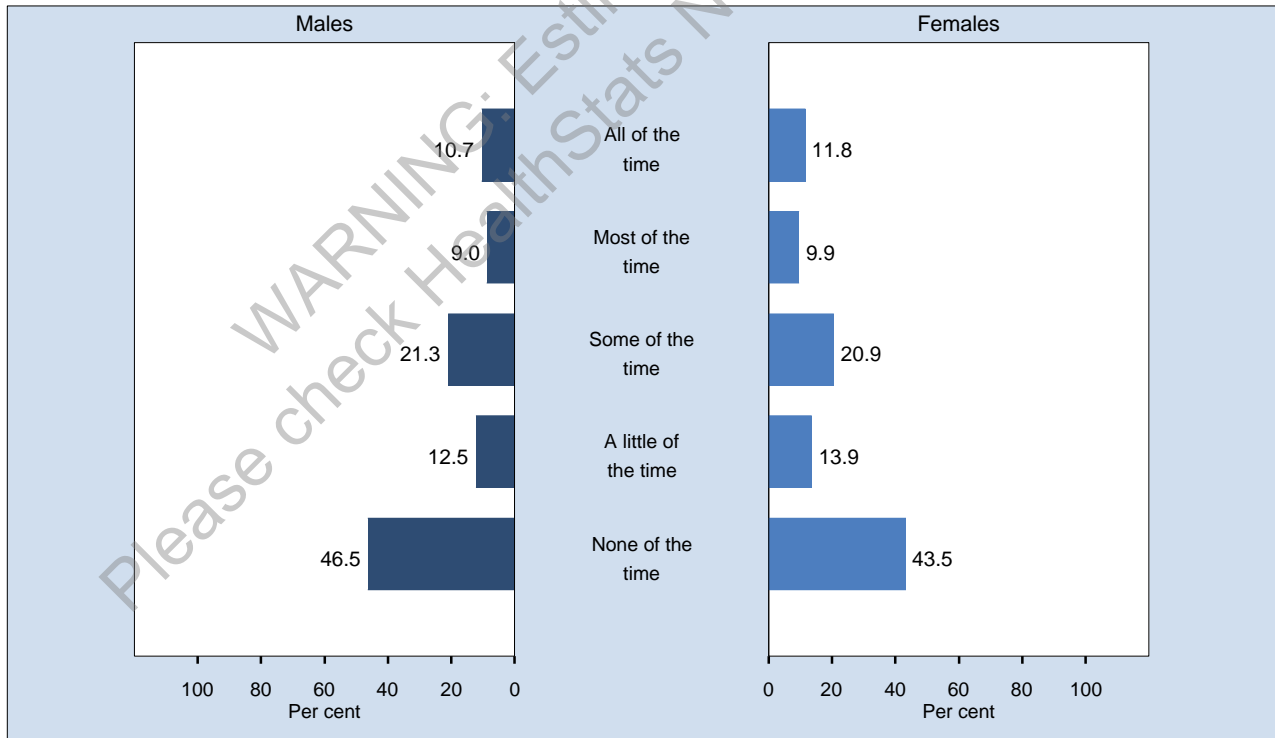
## High and very high psychological distress by year, adults aged 16 years and over, NSW, 1997-2009



**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 (9,305), 2005 (11,388), 2006 (7,869), 2007 (7,366), 2008 (8,360), 2009 (10,466). 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

## Times that physical health problems have been the main cause of psychological distress in last 4 weeks, adults aged 16 years and over with high or very high psychological distress, NSW, 2009



**Note:** Estimates are based on 915 respondents in NSW. For this indicator 19 (2.03%) were not stated (Don't know or Refused) in NSW. The question used was: In the last 4 weeks, how often have physical health problems been the main cause of these feelings? The Kessler 10 tool was also used to define persons with a 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

## Effect of psychological stress on daily activities, adults aged 16 years and over, NSW, 2009

Response	Males mean (95% CI)	Females mean (95% CI)	Persons mean (95% CI)
In the last 4 weeks, days totally unable to manage daily activities	0.54 (0.41-0.67)	0.52 (0.44-0.60)	0.53 (0.46-0.61)
In the last 4 weeks, days cut down on daily activities	0.60 (0.50-0.70)	0.88 (0.77-0.98)	0.74 (0.67-0.81)
In the last 4 weeks, times saw a health professional	0.09 (0.06-0.11)	0.16 (0.13-0.18)	0.12 (0.11-0.14)

**Note:** Estimates are based on 10466 respondents in NSW. For this indicator 69 (0.01%) were not stated (Don't know or Refused) in NSW. The questions were only asked of people who scored 16 and above in the Kessler 10 tool, people who scored less than 16 were allocated a value of 0. The K10 is a 10-item questionnaire that measures the level of psychological distress in the most recent 4-week period. The questions used were: In the last 4 weeks, how many days were you totally unable to work, study or manage your day-to-day activities because of these feelings? Aside from any days that you were totally unable to work, study or manage your day-to-day activities, in the last 4 weeks, how many days were you able to work, study or manage your day-to-day activities, but had to cut down on what you did because of these feelings? In the last 4 weeks, how many times have you seen a doctor or other health professional about these feelings?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

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# Oral health

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## Introduction

Australians enjoy a high standard of oral health. However, there are inequalities, with higher rates of dental caries and edentulism among people with higher levels of socioeconomic disadvantage, people living in rural and remote areas, indigenous people, people born overseas, and people from older generations. There is also differential access to dental services according to country of birth, indigenous status, language spoken at home, health insurance status, socioeconomic status, and educational status.[1-3]

There have been improvements in oral health, particularly among the 'fluoride generation' born since 1970.[1-3] In spite of this, there is a population divide between those who have regular visits to a dental professional and those who visit a dental professional infrequently or only when they have an oral health problem. The latter group is worse off on almost all measures of oral health.[1-3] Also, a higher percentage of patients who use public dental services have inadequate dentition or decayed teeth, compared with the Australian population.[4] Regular visits to a dental professional have a significant and positive effect on oral health.[5,6]

Health insurance which covers dental expenses is an enabling factor in visiting a dentist,[1] and is associated with a more favourable pattern of visiting and types of treatment received.[7] In Australia, over one-quarter of adults avoid or delay visiting a dentist because of cost, and many Australians cite cost as a reason for not receiving recommended or wanted dental treatment.[8]

## Results

### *Edentulism*

In 2009, 5.3 per cent of adults had all their natural teeth missing (edentulism). A significantly lower proportion of males (4.5 per cent) than females (6.0 per cent) had all their natural teeth missing. Among males, a significantly higher proportion of those aged 65-74 years (14.1 per cent) and 75 years and over (17.9 per cent), and a significantly lower proportion of those aged 16-24 years (0.3 per cent), 25-34 years (2.0 per cent), 35-44 years (0.4 per cent), and 45-54 years (2.6 per cent), had all their natural teeth missing, compared with the overall adult male population. Among females, a significantly higher proportion of those aged 65-74 years (17.9 per cent) and 75 years and over (27.1 per cent), and a significantly lower proportion of those aged 16-24 years (1.6 per cent), 25-34 years (1.9 per cent), 35-44 years (1.5 per cent), and 45-54 years (1.5 per cent), had all their natural teeth missing, compared with the overall adult female population.

A significantly lower proportion of adults in the first or least disadvantaged quintile (2.8 per cent), and a significantly higher proportion of adults in the fourth disadvantaged quintile (7.3 per cent), had all their natural teeth missing, compared with the overall adult population.

A significantly higher proportion of adults in rural health areas (7.4 per cent) than urban health areas (4.5 per cent) had all their natural teeth missing. A significantly higher proportion of adults in the Hunter & New England (7.3 per cent), North Coast (7.8 per cent), and Greater Western (8.8 per cent) Area Health Services had all their natural teeth missing, compared with the overall adult population.

Since 1998, there has been a significant decrease in the proportion of adults who had all their natural teeth missing (8.2 per cent to 5.3 per cent). The decrease has been significant in males and females, and in rural and urban health areas.

However, since 2008, there has been no significant change in the proportion of adults who had all their natural teeth missing.

### *Visits to dental professionals*

In 2009, 59.6 per cent of adults visited a dental professional less than 12 months ago, 16.9 per cent 1 to less than 2 years ago, 12.3 per cent 2 to less than 5 years ago, 5.5 per cent 5 to less than 10 years ago, 4.9 per cent 10 years ago or more, and 0.8 per cent had never visited a dental professional.

## ***Visited a dental professional in the last 12 months***

In 2009, 59.6 per cent of adults visited a dental professional less than 12 months ago. A significantly lower proportion of males (57.5 per cent) than females (61.7 per cent) visited a dental professional less than 12 months ago. Among males, a significantly higher proportion of those aged 55-64 years (64.6 per cent), and a significantly lower proportion of those aged 25-34 years (48.4 per cent) and 35-44 years (50.5 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 (67.2 per cent) and 55-64 years (69.1 per cent), and a significantly lower proportion of those aged 25-34 years (52.1 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 (67.0 per cent), and a significantly lower proportion of adults in the fourth disadvantaged quintile (54.3 per cent) and fifth or most disadvantaged quintile (53.9 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 health areas (55.6 per cent) than urban health areas (61.1 per cent) visited a dental professional less than 12 months ago. A significantly higher proportion of adults in the South Eastern Sydney & Illawarra Area Health Service (64.1 per cent), and a significantly lower proportion of adults in the North Coast (53.7 per cent) and Greater Western (53.7 per cent) Area Health Services, 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 who visited a dental professional less than 12 months ago (55.8 per cent to 59.6 per cent). The increase has been significant in males and females, and in urban and rural health areas.

Since 2008, there has been no significant change in the proportion of adults who visited a dental professional less than 12 months ago; however, there has been a significant increase in rural health areas.

## ***Type of dental service last visited***

In 2009, among those adults who visited a dental professional less than 12 months ago, 87.0 per cent last visited a private dental practice, 4.0 per cent last visited a community dental practice, 4.2 per cent last visited a health fund dental clinic, and 4.2 per cent last visited a dental hospital.

## ***Had private health insurance for dental expenses***

In 2009, 49.4 per cent of adults 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 (56.8 per cent) and 55-64 years (54.5 per cent), and a significantly lower proportion of adults aged 25-34 years (42.5 per cent), 65-74 years (42.5 per cent), and 75 years and over (37.0 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 (71.0 per cent) and second disadvantaged quintile (56.5 per cent), and a significantly lower proportion of adults in the fourth disadvantaged quintile (34.0 per cent) and fifth or most disadvantaged quintile (36.9 per cent), had private health insurance for dental expenses, compared with the overall adult population.

A significantly lower proportion of adults in rural health areas (41.2 per cent) than urban health areas (52.5 per cent) had private health insurance for dental expenses. A significantly higher proportion of adults in the South Eastern Sydney & Illawarra (58.5 per cent) and Northern Sydney & Central Coast (62.9 per cent) Area Health Services, and a significantly lower proportion of adults in the Sydney South West (42.9 per cent), North Coast (34.6 per cent), Greater Southern (40.9 per cent), and Greater Western (34.8 per cent) Area Health Services, had private health insurance for dental expenses, compared with the overall adult population.

## ***Payment for last dental visit***

In 2009, among those adults who visited a dental professional less than 12 months ago: 39.8 per cent paid all expenses, 36.6 per cent paid some expenses and their insurance paid some expenses, 7.7 per cent paid no expenses and their insurance paid all expenses, 4.0 per cent paid some expenses and both the government and their insurance paid some expenses, and 11.5 per cent paid no expenses and the government paid all expenses.

## **Cost of last dental visit before any insurance rebate**

In 2009, among those adults 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 (52.7 per cent), \$200 to \$399 (26.3 per cent), \$400 to \$599 (7.6 per cent), \$600 to \$799 (2.1 per cent), \$800 to \$999 (2.0 per cent), and \$1,000 or over (9.2 per cent).

## **Patient paid for some or all of last dental visit**

In 2009, 82.2 per cent of adults who visited a dental professional in the last 12 months paid for some or all of their last dental visit. There was no significant difference between males and females. A significantly higher proportion of adults aged 45-54 years (86.3 per cent), and a significantly lower proportion of adults aged 65-74 years (76.3 per cent) and 75 years and over (66.8 per cent), who visited a dental professional in the last 12 months paid for some or all of their last dental visit, compared with the overall adult population.

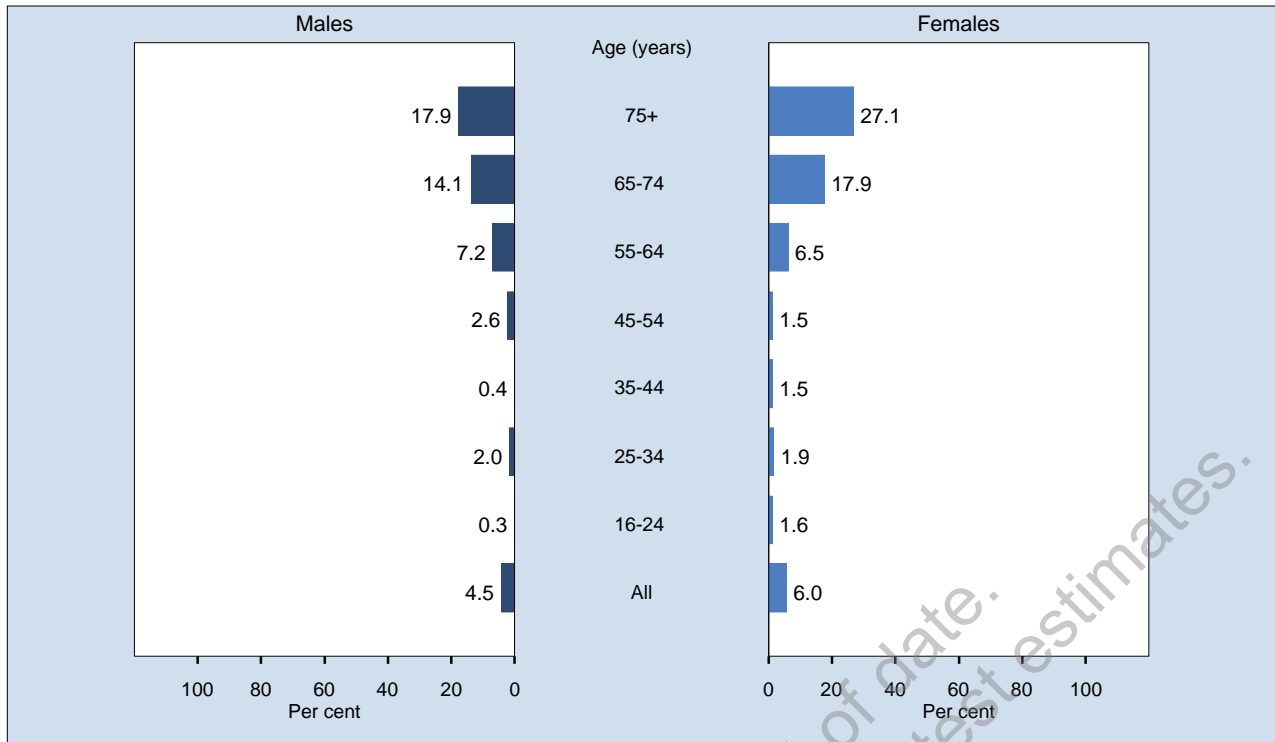
A significantly higher proportion of adults in the first or least disadvantaged quintile (87.5 per cent), and a significantly lower proportion of adults in the fifth or most disadvantaged quintile (77.1 per cent), who visited a dental professional in the last 12 months paid for some or all of their last dental visit, compared with the overall adult population.

A significantly higher proportion of adults in rural health areas (84.5 per cent) than urban health areas (81.4 per cent) who visited a dental professional in the last 12 months paid for some or all of their last dental visit. A significantly higher proportion of adults in the Northern Sydney & Central Coast (88.3 per cent), Hunter & New England (85.6 per cent), and Greater Southern (86.2 per cent) Area Health Services, and a significantly lower proportion of adults in the Sydney South West Area Health Service (78.6 per cent), who visited a dental professional in the last 12 months paid for some or all of their last dental visit, compared with the overall adult population.

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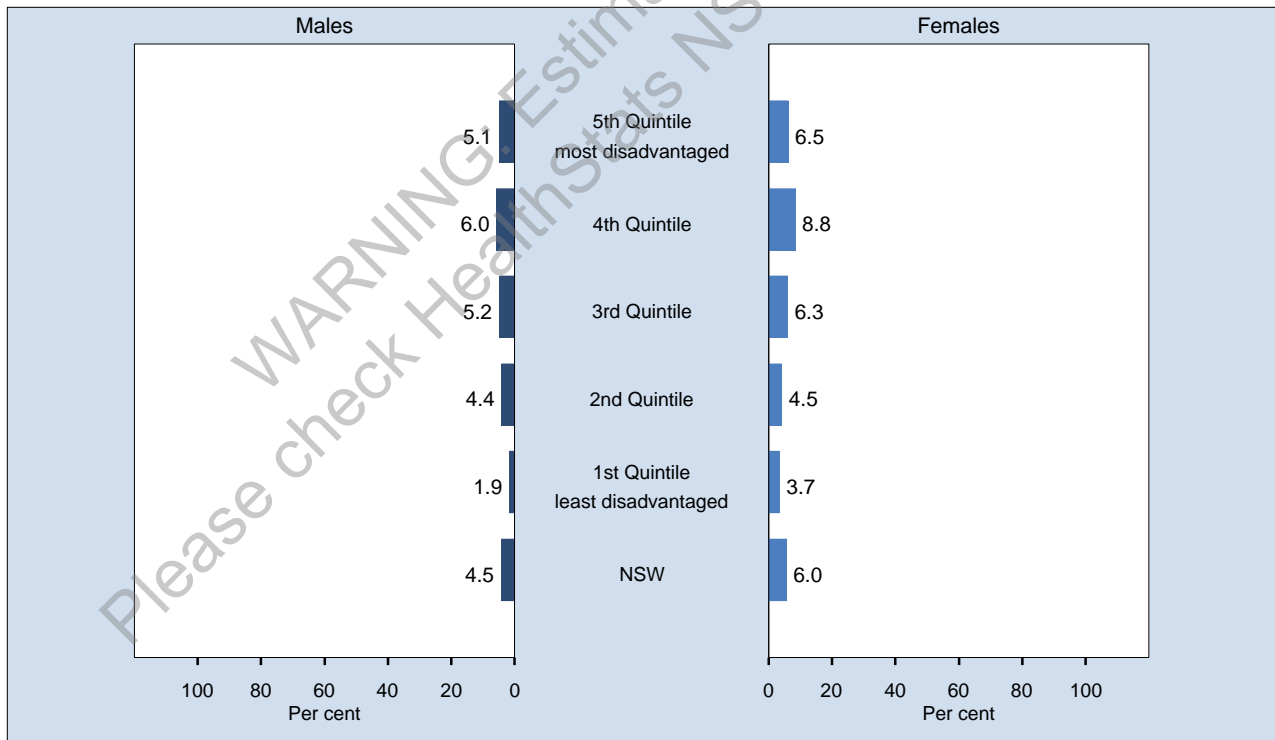
### All natural teeth missing by age, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 5,918 respondents in NSW. For this indicator 11 (0.19%) were not stated (Don't know or Refused) in NSW. The indicator includes those who had all their natural teeth missing. Natural teeth does not include dentures but includes wisdom teeth. The question used to define the indicator was: Are any of your natural teeth missing?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

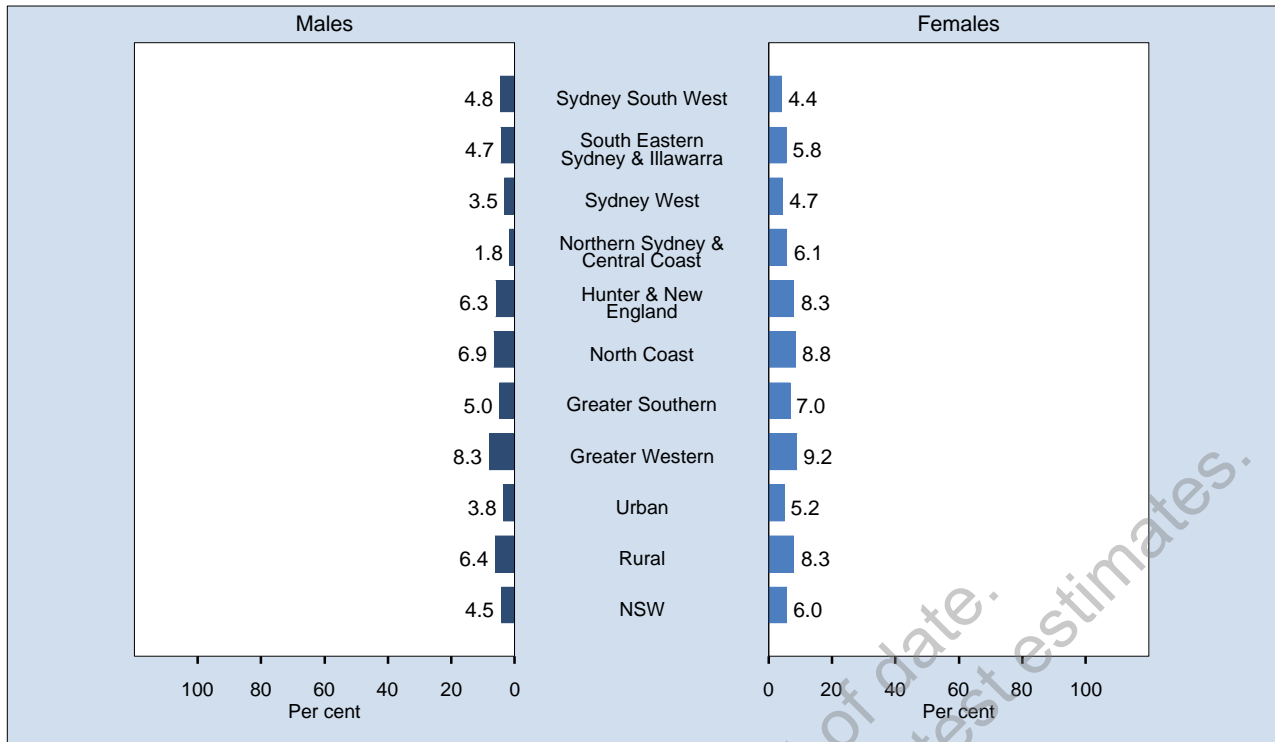
### All natural teeth missing by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 5,918 respondents in NSW. For this indicator 11 (0.19%) were not stated (Don't know or Refused) in NSW. The indicator includes those who had all their natural teeth missing. Natural teeth does not include dentures but includes wisdom teeth. The question used to define the indicator was: Are any of your natural teeth missing?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

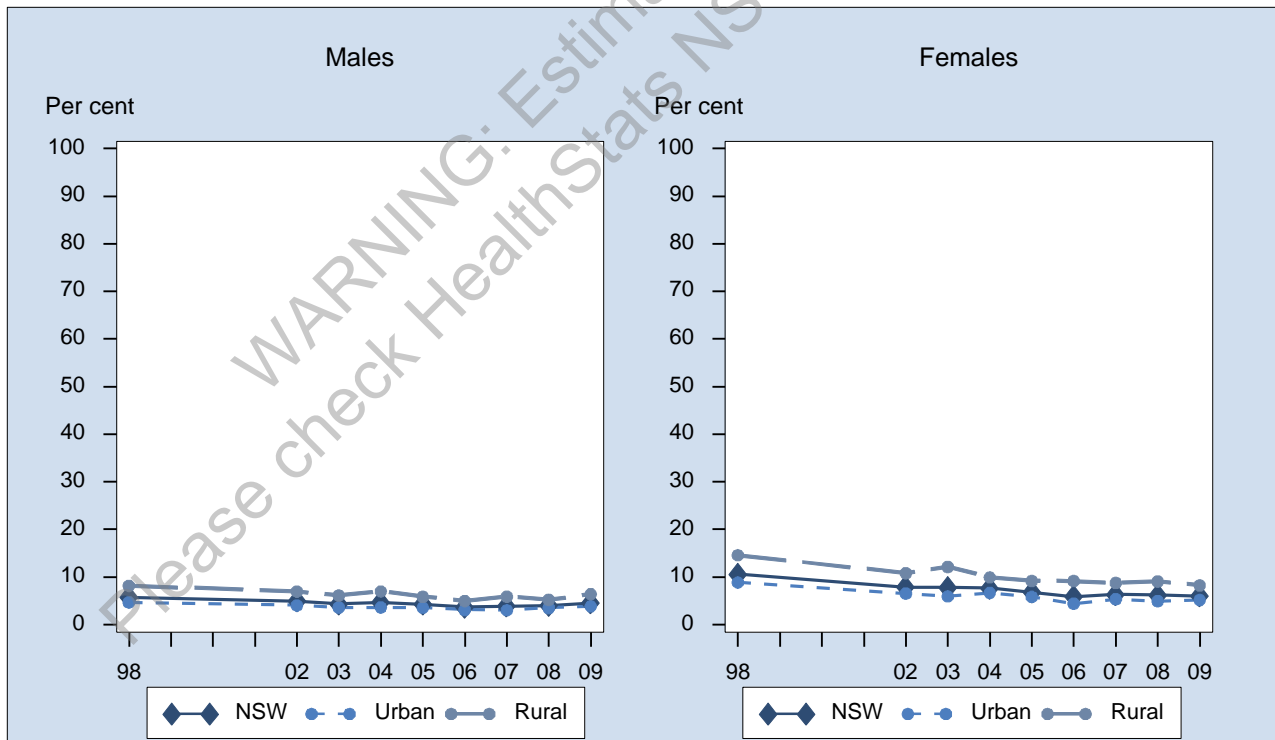
### All natural teeth missing by area health service, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 5,918 respondents in NSW. For this indicator 11 (0.19%) were not stated (Don't know or Refused) in NSW. The indicator includes those who had all their natural teeth missing. Natural teeth does not include dentures but includes wisdom teeth. The question used to define the indicator was: Are any of your natural teeth missing?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

### All natural teeth missing by year, adults aged 16 years and over, NSW, 1998-2009



**Note:** Estimates are based on the following numbers of respondents for NSW: 1998 (17,434), 2002 (12,617), 2003 (13,003), 2004 (9,418), 2005 (11,489), 2006 (7,959), 2007 (7,483), 2008 (8,618), 2009 (5,918). The indicator includes those who had all their natural teeth missing. Natural teeth does not include dentures but includes wisdom teeth. The question used to define the indicator was: Are any of your natural teeth missing?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.



### Time since last dental visit, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 5,880 respondents in NSW. For this indicator 49 (0.83%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

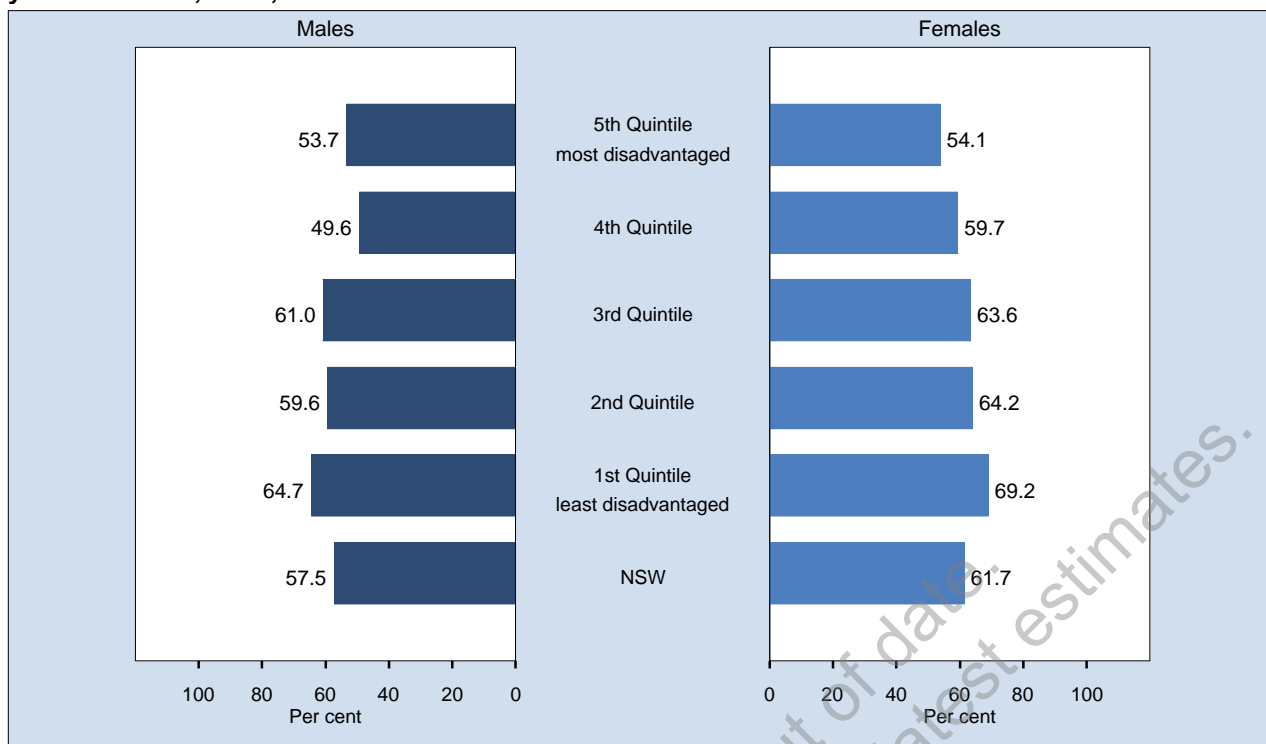
### Visited a dental professional in the last 12 months by age, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 5,880 respondents in NSW. For this indicator 49 (0.83%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

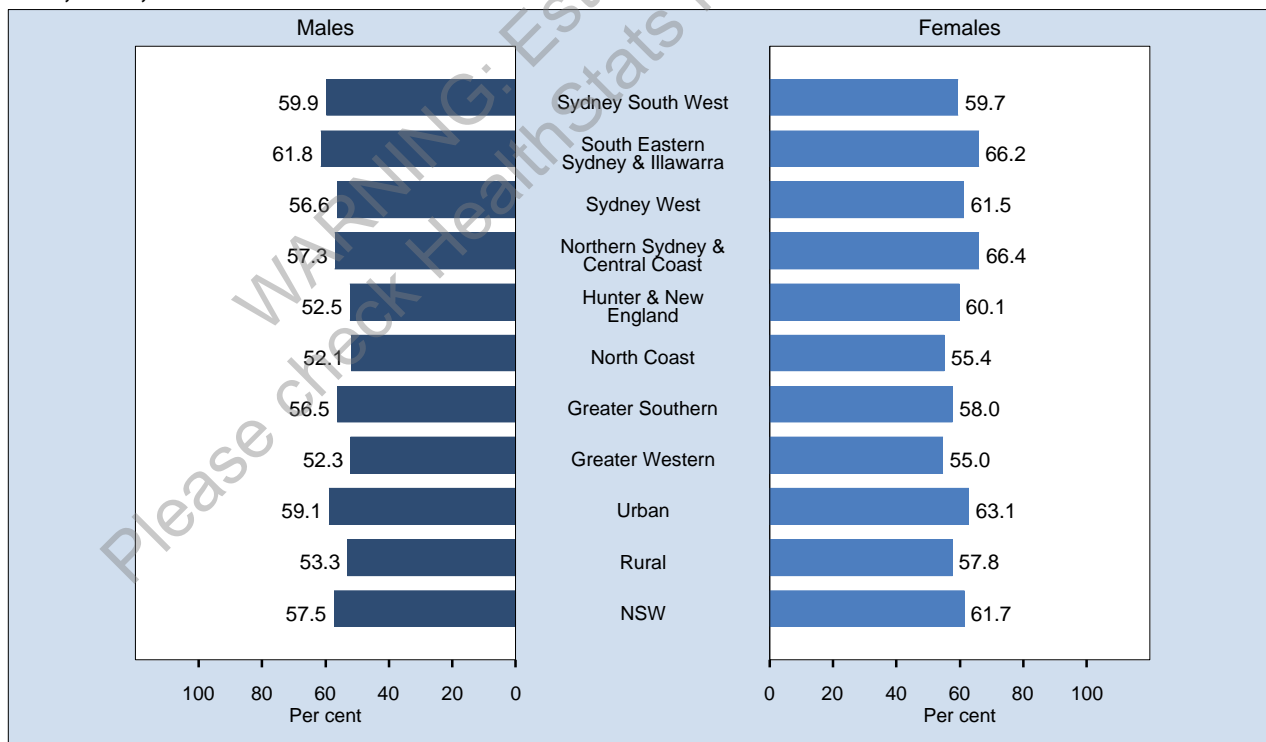
**Visited a dental professional in the last 12 months by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 5,880 respondents in NSW. For this indicator 49 (0.83%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

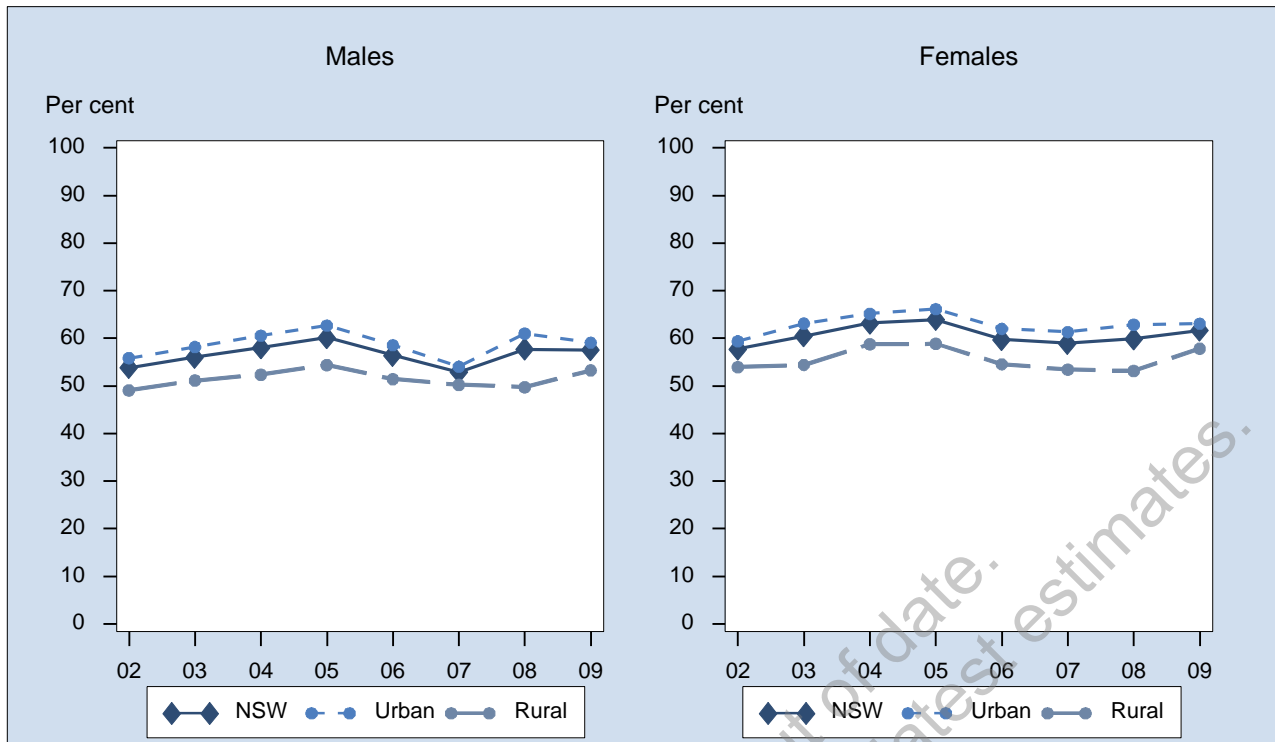
**Visited a dental professional in the last 12 months by area health service, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 5,880 respondents in NSW. For this indicator 49 (0.83%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

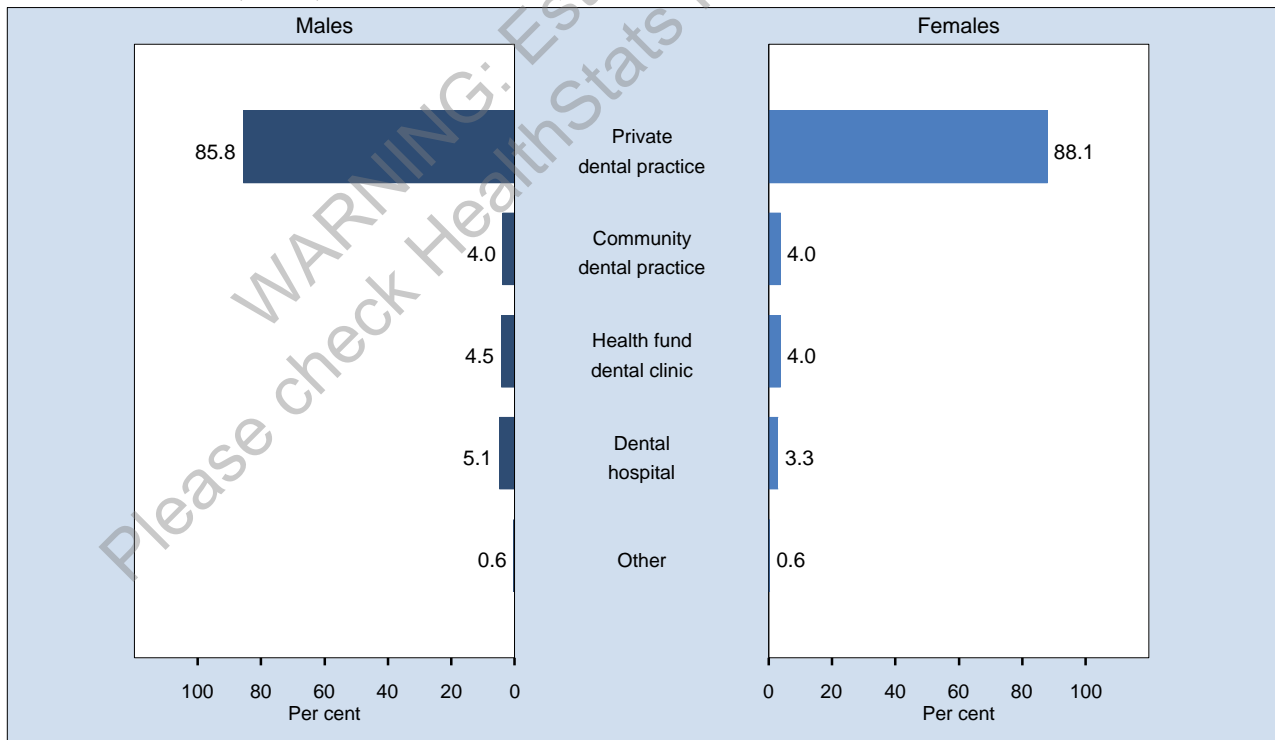
**Visited a dental professional in the last 12 months by year, adults aged 16 years and over, NSW, 2002-2009**



**Note:** Estimates are based on the following numbers of respondents for NSW: 2002 (12,166), 2003 (12,865), 2004 (9,320), 2005 (11,351), 2006 (7,902), 2007 (7,443), 2008 (8,543), 2009 (5,880). 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

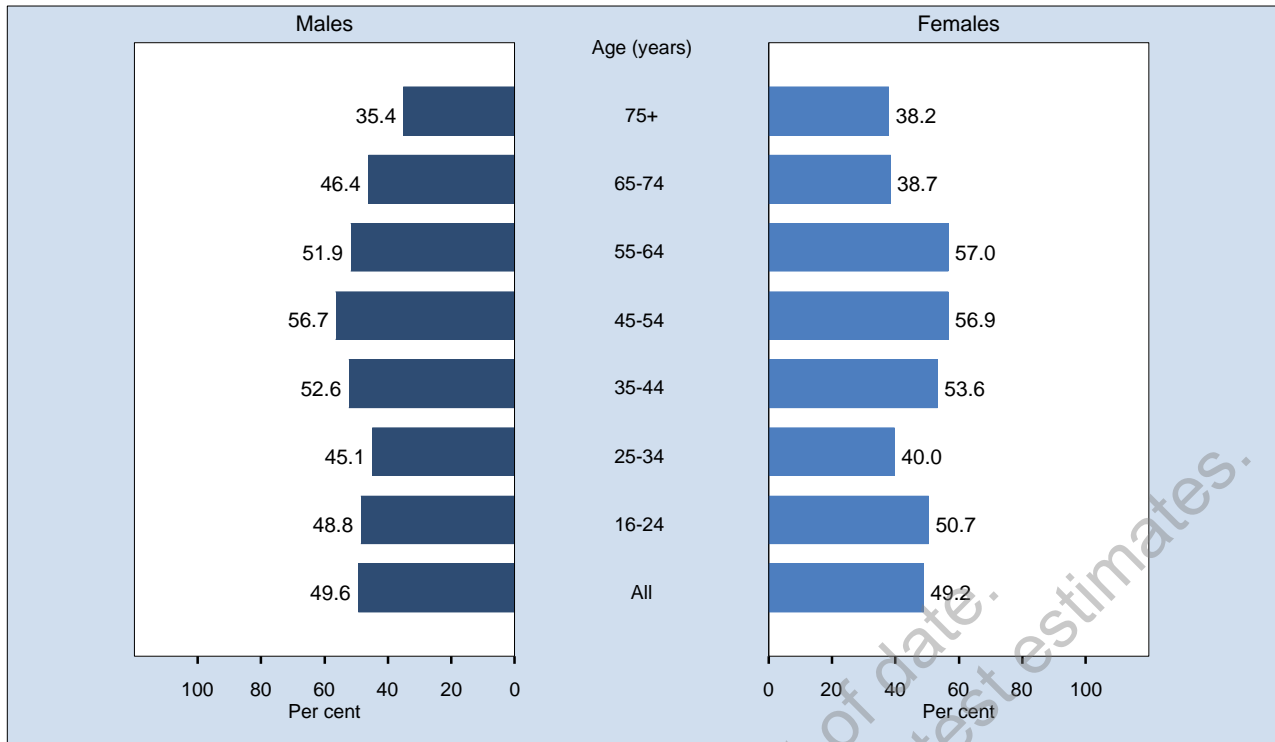
**Type of dental service last visited, adults aged 16 years and over who visited a dental professional in the last 12 months, NSW, 2009**



**Note:** Estimates are based on 3,549 respondents in NSW. For this indicator 64 (1.77%) 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 2009 (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, 2009**



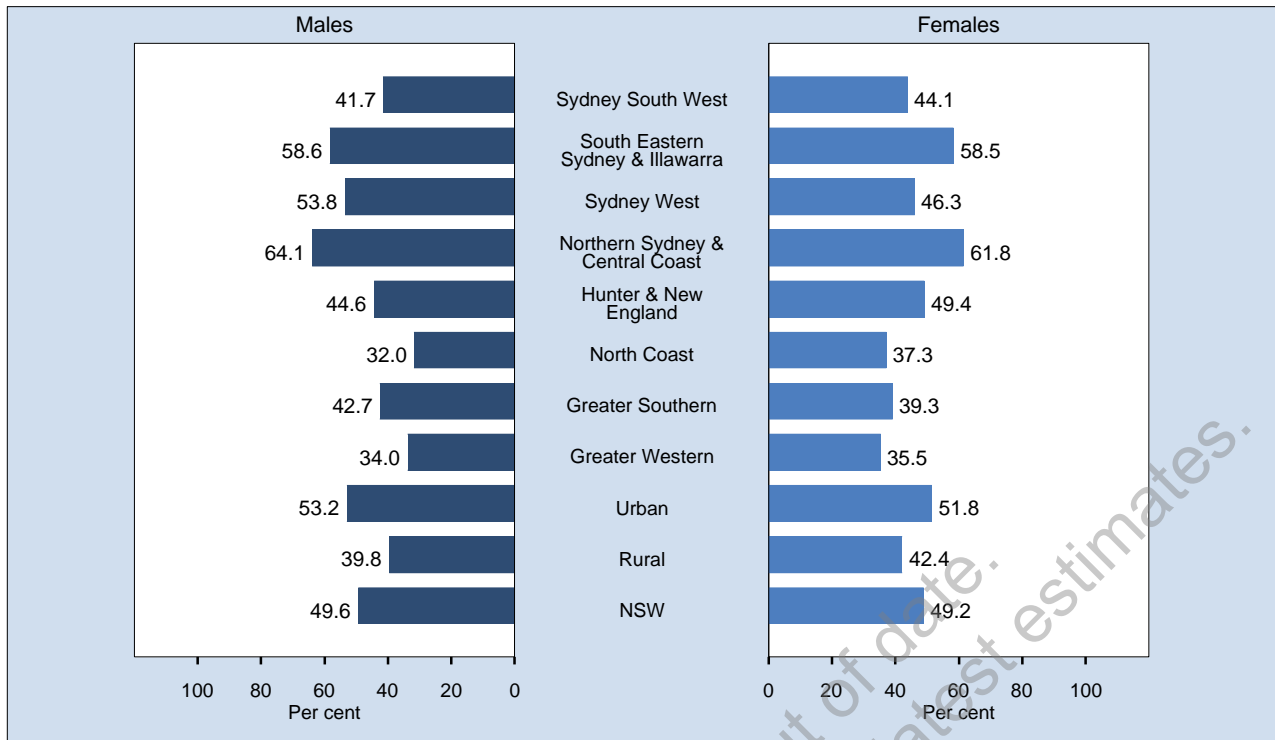
**Note:** Estimates are based on 5,831 respondents in NSW. For this indicator 98 (1.65%) were not stated (Don't know or Refused) in NSW. The indicator includes those who have private health insurance for dental expenses. The question used to define the indicator was: Do you have private health insurance cover for dental expenses?  
**Source:** New South Wales Population Health Survey 2009 (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, 2009**



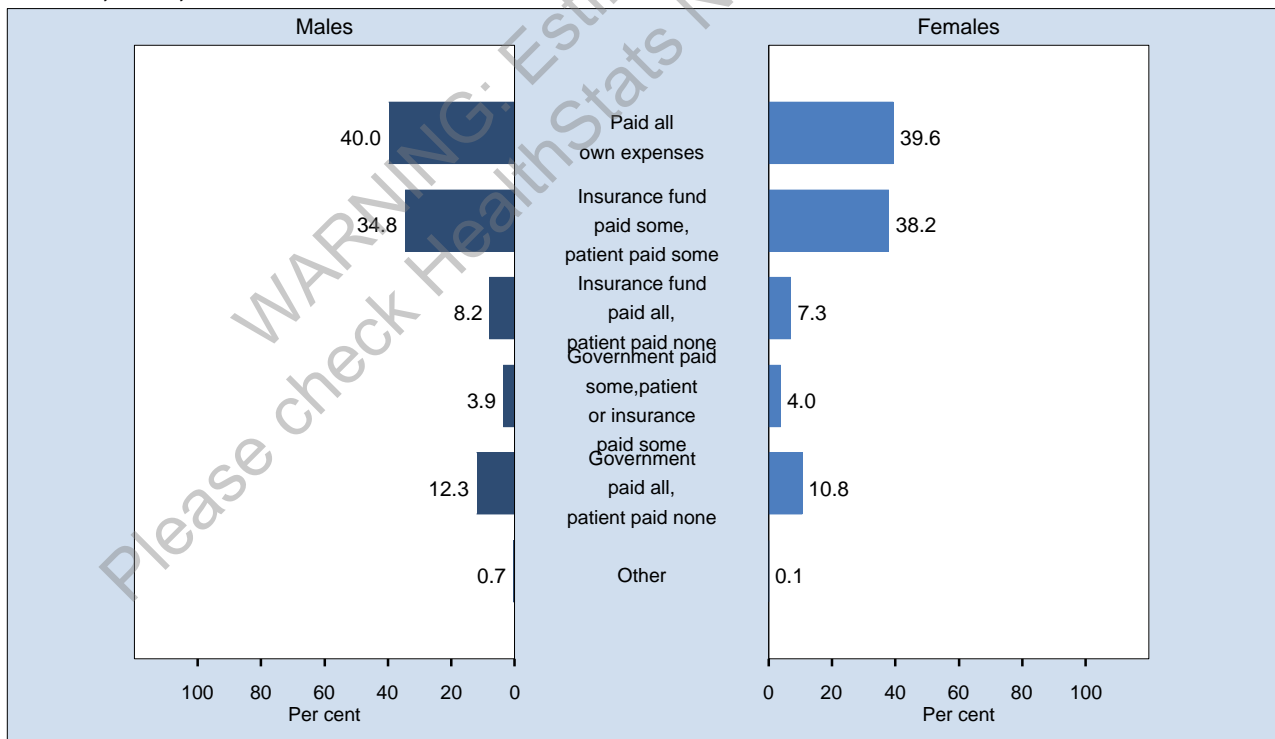
**Note:** Estimates are based on 5,831 respondents in NSW. For this indicator 98 (1.65%) were not stated (Don't know or Refused) in NSW. The indicator includes those who have private health insurance for dental expenses. The question used to define the indicator was: Do you have private health insurance cover for dental expenses?  
**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

**Has private health insurance for dental expenses by area health service, adults aged 16 years and over, NSW, 2009**



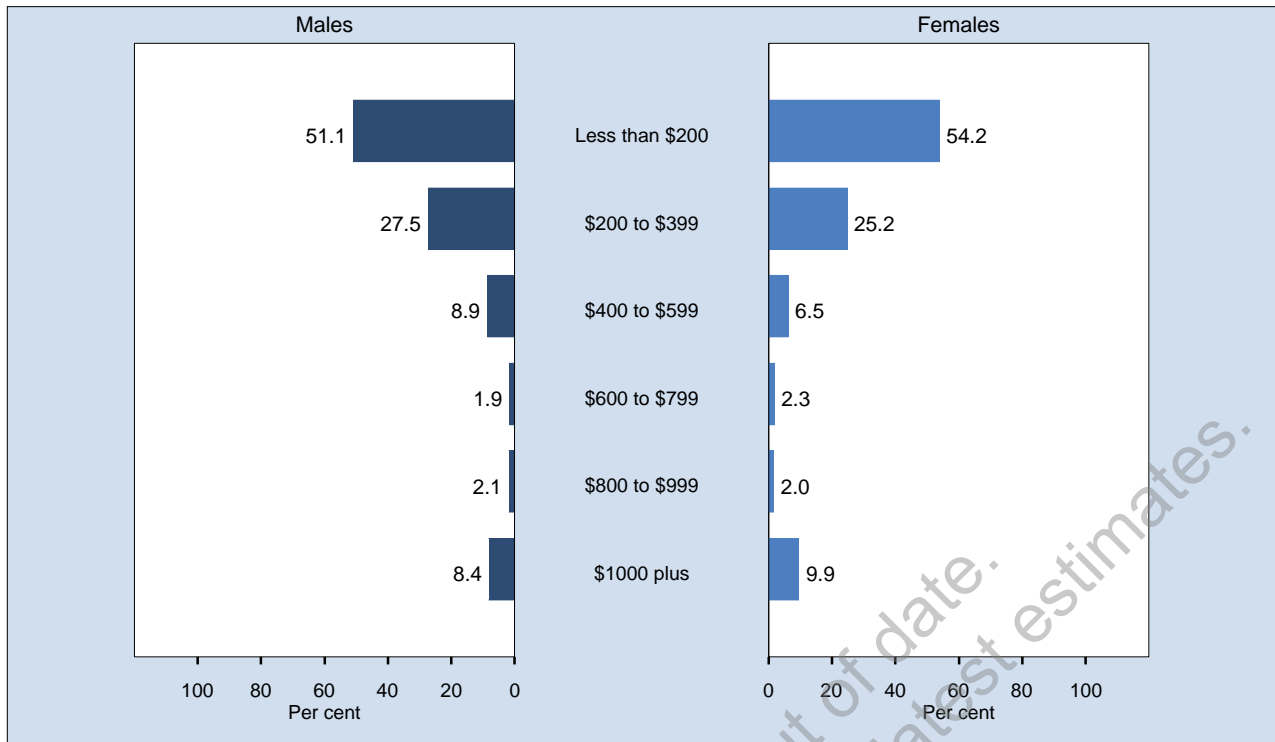
**Note:** Estimates are based on 5,831 respondents in NSW. For this indicator 98 (1.65%) were not stated (Don't know or Refused) in NSW. The indicator includes those who have private health insurance for dental expenses. The question used to define the indicator was: Do you have private health insurance cover for dental expenses?  
**Source:** New South Wales Population Health Survey 2009 (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, 2009**



**Note:** Estimates are based on 3,459 respondents in NSW. For this indicator 234 (6.34%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

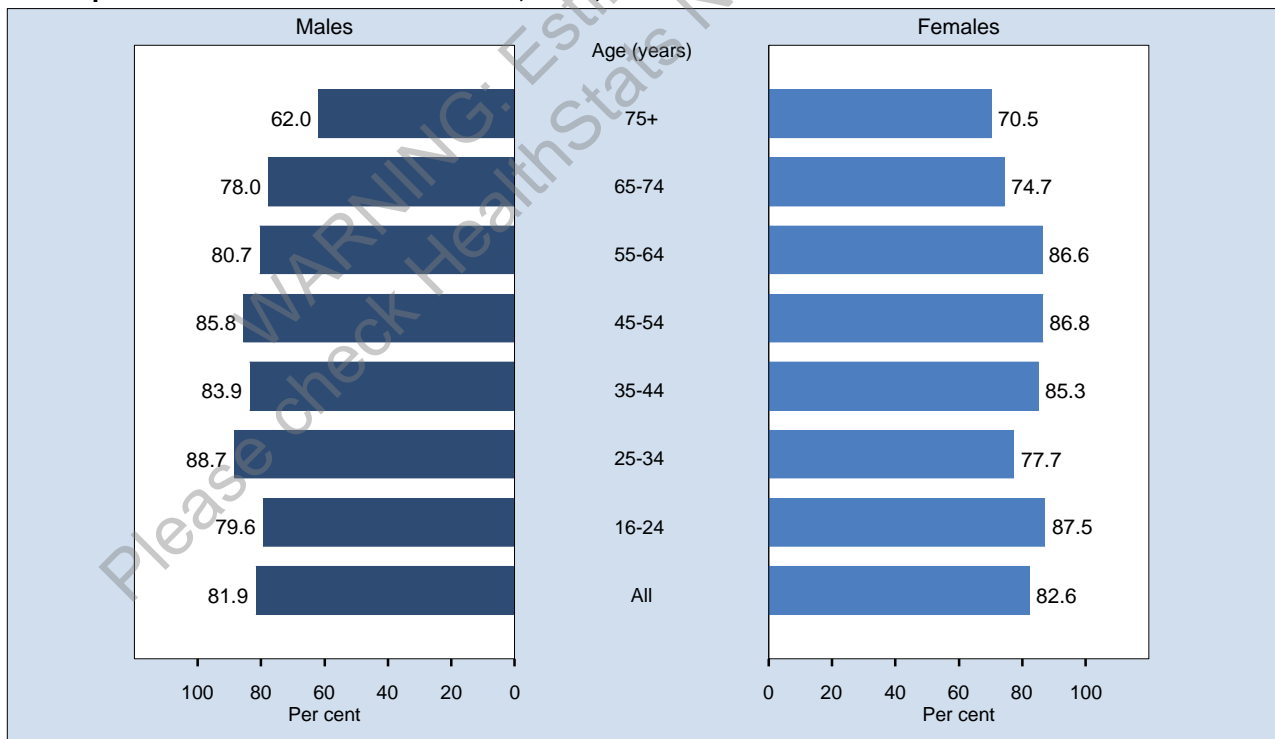
**Cost of last dental visit before any insurance rebate, adults aged 16 years and over who visited a dental professional in the last 12 months, NSW, 2009**



**Note:** Estimates are based on 2,283 respondents in NSW. For this indicator 2,271 (49.87%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

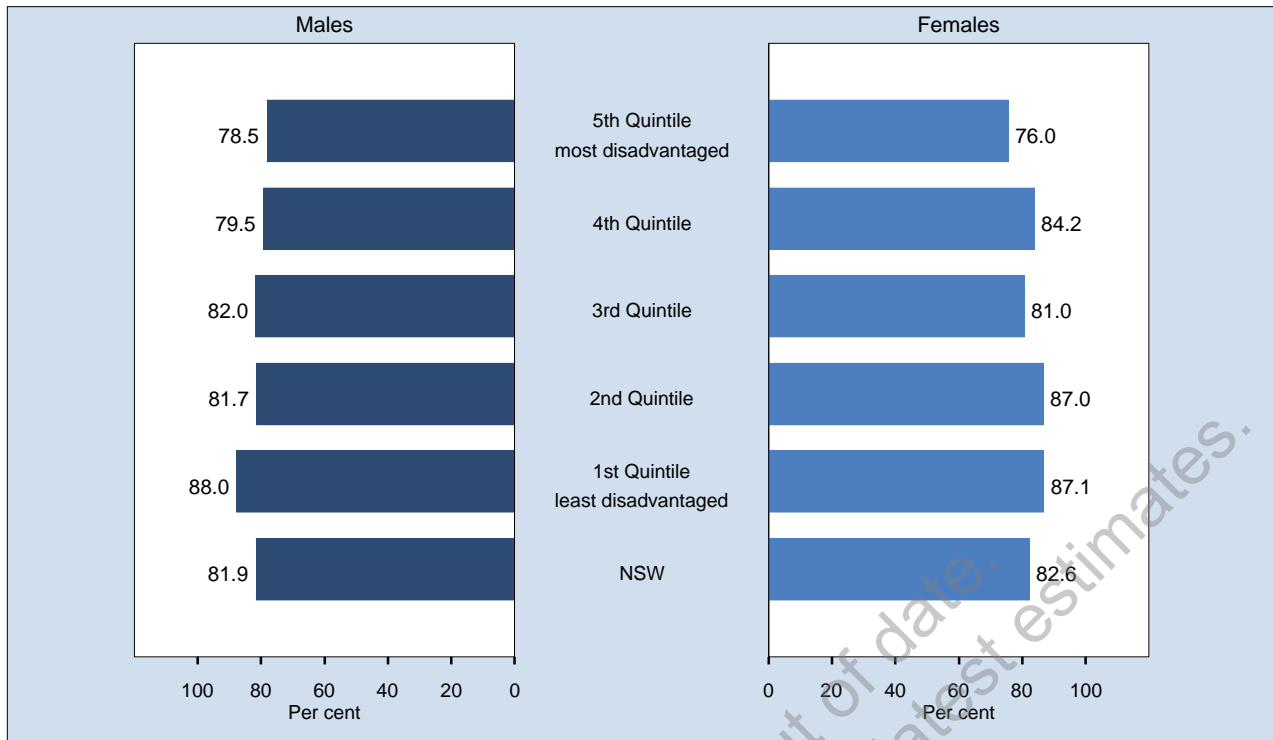
**Patient paid for some or all of last dental visit by age, adults aged 16 years and over who visited a dental professional in the last 12 months, NSW, 2009**



**Note:** Estimates are based on 5,270 respondents in NSW. For this indicator 0 (0.00%) were not stated (Don't know or Refused) in NSW. The indicator includes those who had visited a dentist in the last 12 months who paid all or some of their dental expenses. The questions used to define the indicator 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? No, paid all own expenses; yes, insurance fund paid some, patient paid some; yes, insurance fund paid all, patient paid none; yes, government paid some, patient or insurance paid some; yes, government paid all, patient paid none; other payment arrangement (specify).

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

**Patient paid for some or all of last dental visit by socioeconomic disadvantage, adults aged 16 years and over who visited a dental professional in the last 12 months, NSW, 2009**



**Note:** Estimates are based on 5,270 respondents in NSW. For this indicator 0 (0.00%) were not stated (Don't know or Refused) in NSW. The indicator includes those who had visited a dentist in the last 12 months who paid all or some of their dental expenses. The questions used to define the indicator 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? No, paid all own expenses; yes, insurance fund paid some, patient paid some; yes, insurance fund paid all, patient paid none; yes, government paid some, patient or insurance paid some; yes, government paid all, patient paid none; other payment arrangement (specify).

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

**Patient paid for some or all of last dental visit by area health service, adults aged 16 years and over who visited a dental professional in the last 12 months, NSW, 2009**



**Note:** Estimates are based on 5,270 respondents in NSW. For this indicator 0 (0.00%) were not stated (Don't know or Refused) in NSW. The indicator includes those who had visited a dentist in the last 12 months who paid all or some of their dental expenses. The questions used to define the indicator 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? No, paid all own expenses; yes, insurance fund paid some, patient paid some; yes, insurance fund paid all, patient paid none; yes, government paid some, patient or insurance paid some; yes, government paid all, patient paid none; other payment arrangement (specify).

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

# Population weight status

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## Introduction

In its broadest sense, a healthy weight can be defined as a weight associated with a high level of physical, social and emotional health, linked with a low risk of future chronic illness and premature death.[1] Each person is different and healthy weight is determined by different factors.[2] However, preventing weight gain in people with healthy weight, and avoiding further weight gain among those already overweight, are important public health priorities.[3]

Two indicators of weight status are conventionally used in population 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. BMI is calculated from a person's weight and height and gives a reasonable estimate of total adiposity.[1] 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, acceptable or ideal 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.

The primary cause of weight gain and obesity is a discrepancy in the long-term energy balance, with energy intake persistently exceeding energy expenditure over time. A number of key dietary and physical activity behaviours have been linked to a greater risk of obesity. These include the excessive consumption of high fat, energy dense foods and sweetened fluids, too-frequent consumption of fast foods, inadequate levels of physical activity, and too much time spent in sedentary behaviours. In addition the social, political and economic environment in which people live now inhibits appropriate dietary and physical activity patterns and encourages an energy imbalance.[1] Being overweight or obese increases the risk of a wide range of health problems, including cardiovascular disease, type 2 diabetes, breast cancer, gallstones, degenerative joint disease, obstructive sleep apnoea, and impaired psychosocial functioning.[1]

The New South Wales Population Health Survey calculates BMI from self-reported height and weight. 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. Therefore, while caution should be used when interpreting BMI calculated from self-reported height and weight, it is still useful for ongoing surveillance of population health.[4-9]

## Results

In 2009, according to estimates of BMI based on self-reported height and weight, 2.5 per cent of adults were underweight, 45.0 per cent were healthy weight, 33.1 per cent were overweight, and 19.4 per cent were obese. When obesity was further classified, 12.9 per cent of adults had a BMI between 30 and 35 (Obesity Class I), 4.1 per cent of adults had a BMI between 35 and 40 (Obesity Class II), and 2.3 per cent of adults had a BMI of 40 or over (Obesity Class III).

### Overweight

In 2009, 33.1 per cent of adults were overweight: that is, had a BMI between 25 to 30. A significantly higher proportion of males (40.1 per cent) than females (26.0 per cent) were overweight. Among males, a significantly lower proportion of those aged 16-24 years (28.2 per cent), and a significantly higher proportion of those aged 55-64 years (44.4 per cent), were overweight, compared with the overall adult male population. Among females, a significantly lower proportion of those aged 16-24 years (14.7 per cent) and 35-44 years (22.0 per cent), and a significantly higher proportion of those aged 45-54 years (31.3 per cent), 55-64 years (30.3 per cent), and 65-74 years (33.5 per cent), were overweight, compared with the overall adult female population.

There was no significant difference among quintiles of disadvantage, or between urban and rural health areas, or among area health services.



Since 1997, there has been a significant increase in the proportion of adults who were overweight (30.6 per cent to 33.1 per cent). The increase has been significant in females, and in rural and urban health areas.

However, since 2008, there has been no significant change in the proportion of adults who were overweight.

## **Obese**

In 2009, 19.4 per cent of adults were obese: that is, had a BMI of 30 or over. There was no significant difference between males and females. A significantly lower proportion of adults aged 16-24 years (9.3 per cent), 25-34 years (16.4 per cent), and 75 years and over (13.7 per cent), and a significantly higher proportion of adults aged 45-54 years (22.3 per cent), 55-64 years (25.9 per cent), and 65-74 years (24.6 per cent), were obese, compared with the overall adult population.

A significantly lower proportion of adults in the first or least disadvantaged quintile (15.1 per cent) and second disadvantaged quintile (16.6 per cent), and a significantly higher proportion of adults in the fourth disadvantaged quintile (22.0 per cent) and fifth or most disadvantaged quintile (24.5 per cent), were obese, compared with the overall adult population.

A significantly higher proportion of adults in rural health areas (22.5 per cent) than urban health areas (18.1 per cent) were obese. A significantly higher proportion of adults in the Sydney West (22.2 per cent), Greater Southern (24.7 per cent) and Greater Western (28.1 per cent) Area Health Services, and a significantly lower proportion of adults in the Northern Sydney & Central Coast Area Health Service (14.7 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 19.4 per cent). The increase has been significant in males and females, and in rural and urban health areas.

However, since 2008, there has been no significant change in the proportion of adults who were obese.

## **Overweight or obese**

In 2009, 52.5 per cent of adults were overweight or obese: that is, had a BMI of 25 or over. A significantly higher proportion of males (59.5 per cent) than females (45.4 per cent) were overweight or obese. Among males, a significantly lower proportion of those aged 16-24 years (37.9 per cent) and 75 years and over (51.3 per cent), and a significantly higher proportion aged 55-64 years (68.3 per cent) and 65-74 years (67.7 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 (23.5 per cent) and 25-34 years (38.6 per cent), and a significantly higher proportion of those aged 45-54 years (53.2 per cent), 55-64 years (58.2 per cent), and 65-74 years (58.9 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 (47.5 per cent) and second disadvantaged quintile (49.0 per cent), and a significantly higher proportion of adults in the fourth disadvantaged quintile (57.6 per cent) and fifth or most disadvantaged quintile (56.1 per cent), were overweight or obese, compared with the overall adult population.

A significantly higher proportion of adults in rural health areas (57.2 per cent) than urban health areas (50.5 per cent) were overweight or obese. A significantly higher proportion of adults in the Hunter & New England (57.5 per cent), Greater Southern (58.0 per cent), and Greater Western (63.0 per cent) Area Health Services, and a significantly lower proportion of adults in the South Eastern Sydney & Illawarra (47.9 per cent) and Northern Sydney & Central Coast (47.6 per cent) Area Health Services, 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 52.5 per cent). The increase has been significant in males and females, and in rural and urban health areas.

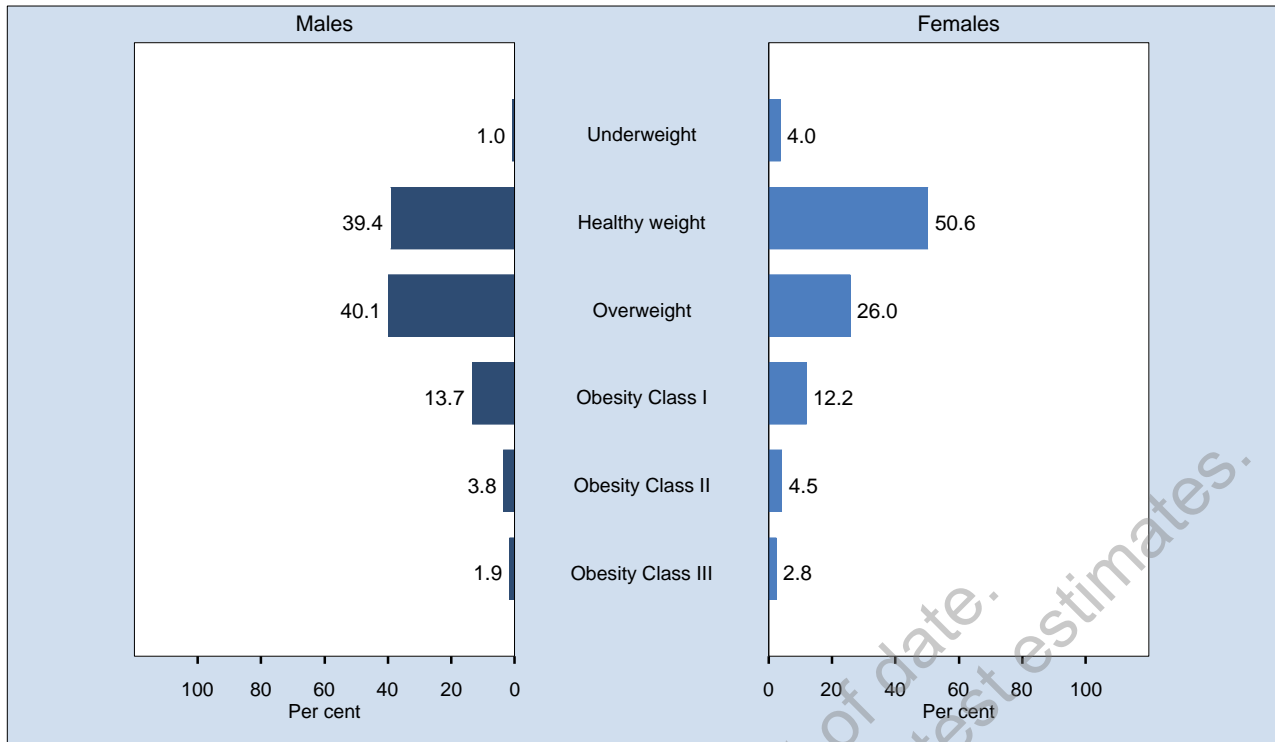
However, since 2008, there has been no significant change in the proportion of adults who were overweight or obese.

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WARNING: Estimates only for most estimates.  
Please check HealthStats NSW for most estimates.

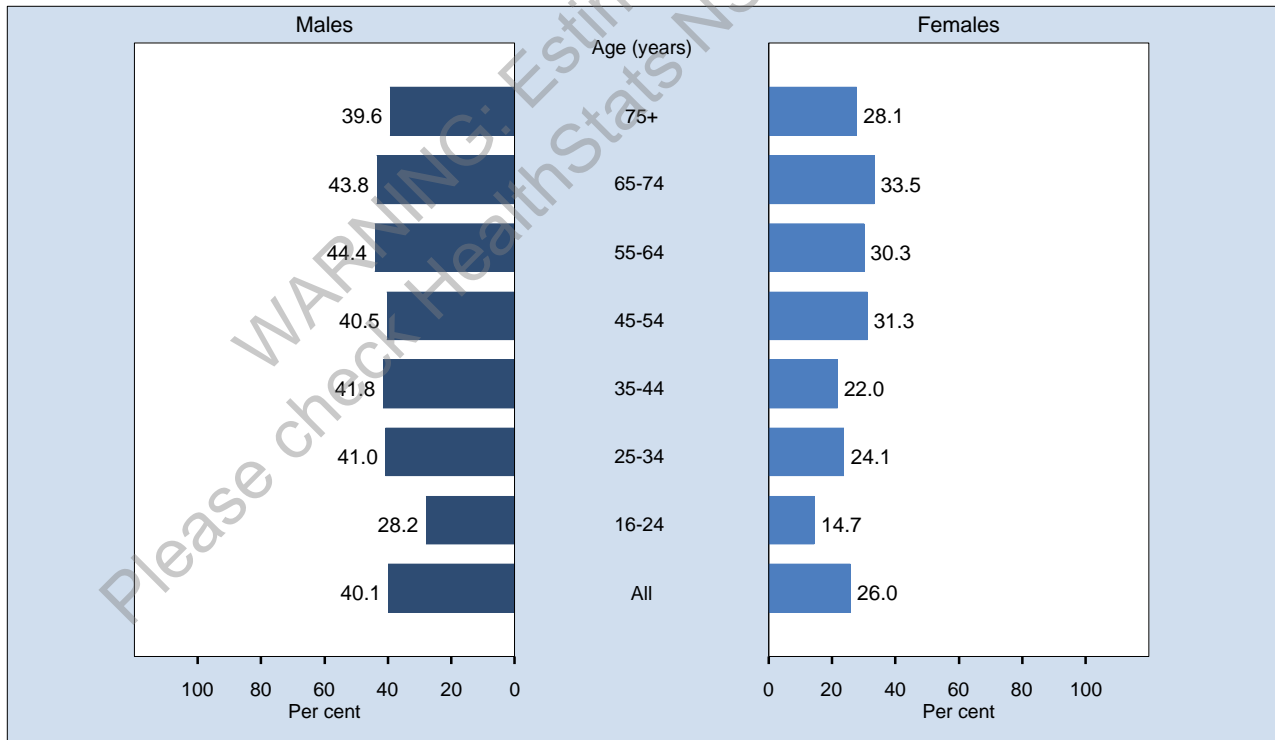
### Body Mass Index categories, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 10,072 respondents in NSW. For this indicator 459 (4.36%) 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:  $BMI = \text{weight(kg)} / \text{height}^2(\text{m})$ . The categories shown for 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).

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

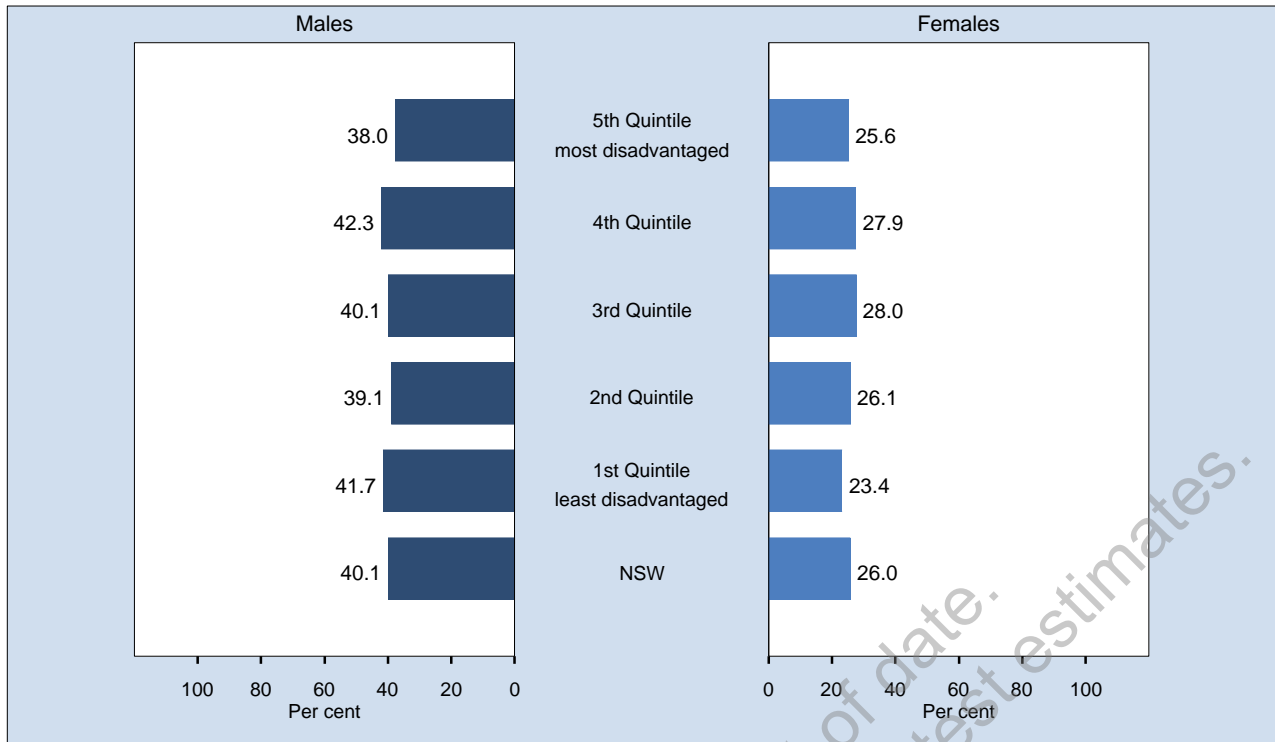
### Overweight by age, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 10,072 respondents in NSW. For this indicator 459 (4.36%) 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? BMI is calculated as follows  $BMI = \text{weight(kg)} / \text{height}^2(\text{m})$ .

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

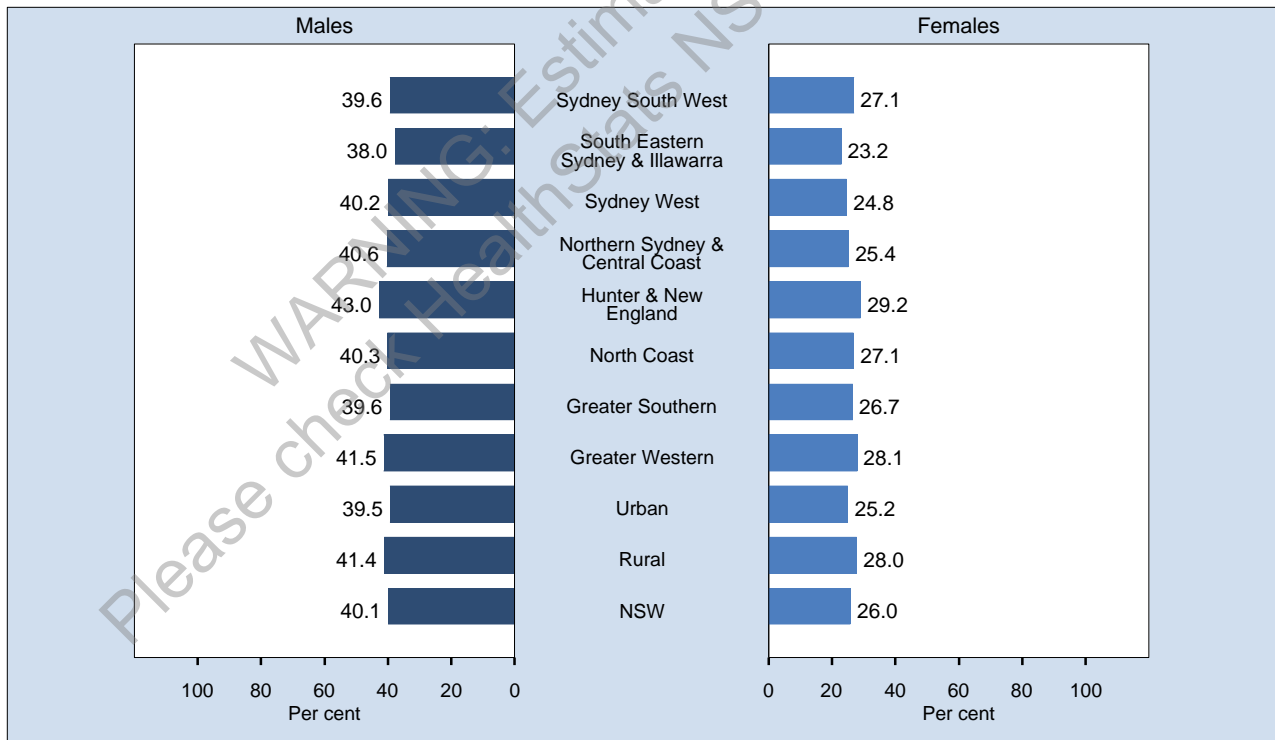
### Overweight by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 10,072 respondents in NSW. For this indicator 459 (4.36%) 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? BMI is calculated as follows  $BMI = \text{weight(kg)/height}^2(\text{m})$ .

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

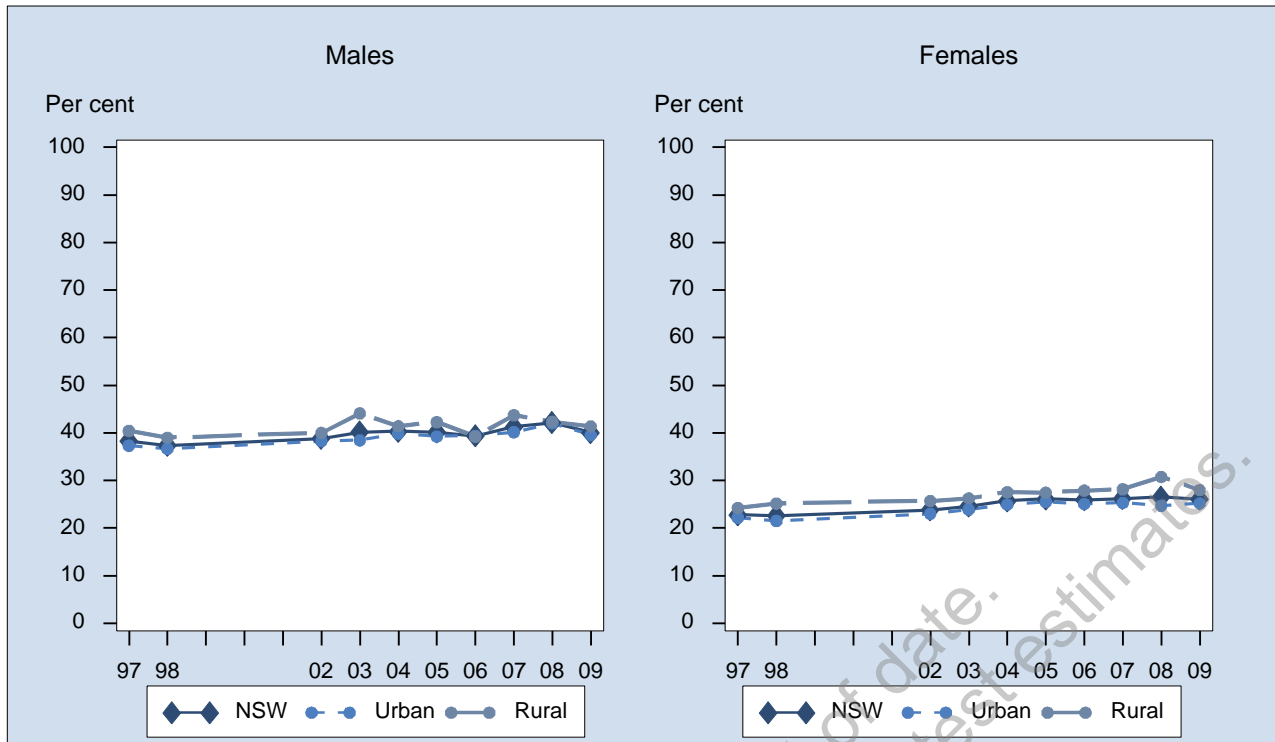
### Overweight by area health service, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 10,072 respondents in NSW. For this indicator 459 (4.36%) 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? BMI is calculated as follows  $BMI = \text{weight(kg)/height}^2(\text{m})$ .

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

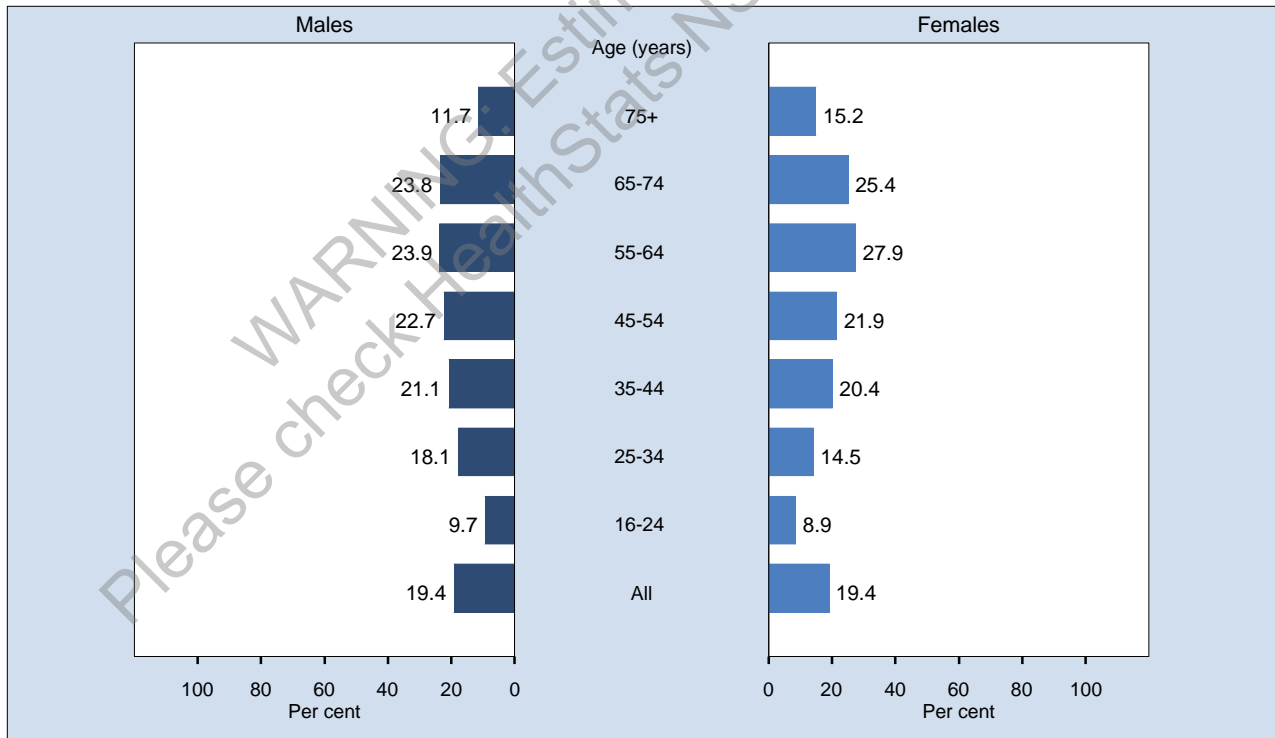
### Overweight by year, adults aged 16 years and over, NSW, 1997-2009



**Note:** Estimates are based on the following numbers of respondents for NSW: 1997 (16,790), 1998 (16,445), 2002 (11,997), 2003 (12,448), 2004 (9,063), 2005 (11,078), 2006 (7,668), 2007 (7,264), 2008 (8,225), 2009 (10,072). 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? BMI is calculated as follows BMI = weight(kg)/height<sup>2</sup>(m).

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

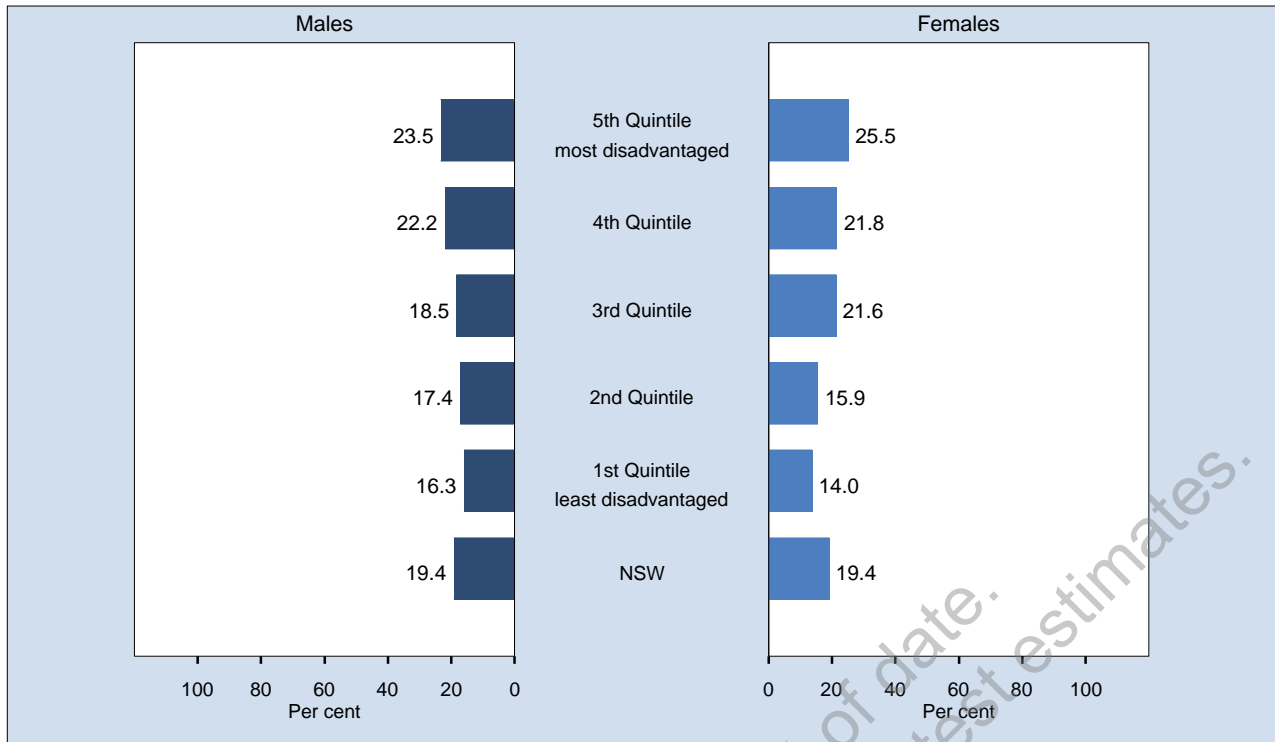
### Obese by age, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 10,072 respondents in NSW. For this indicator 459 (4.36%) 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? BMI is calculated as follows BMI = weight(kg)/height<sup>2</sup>(m).

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

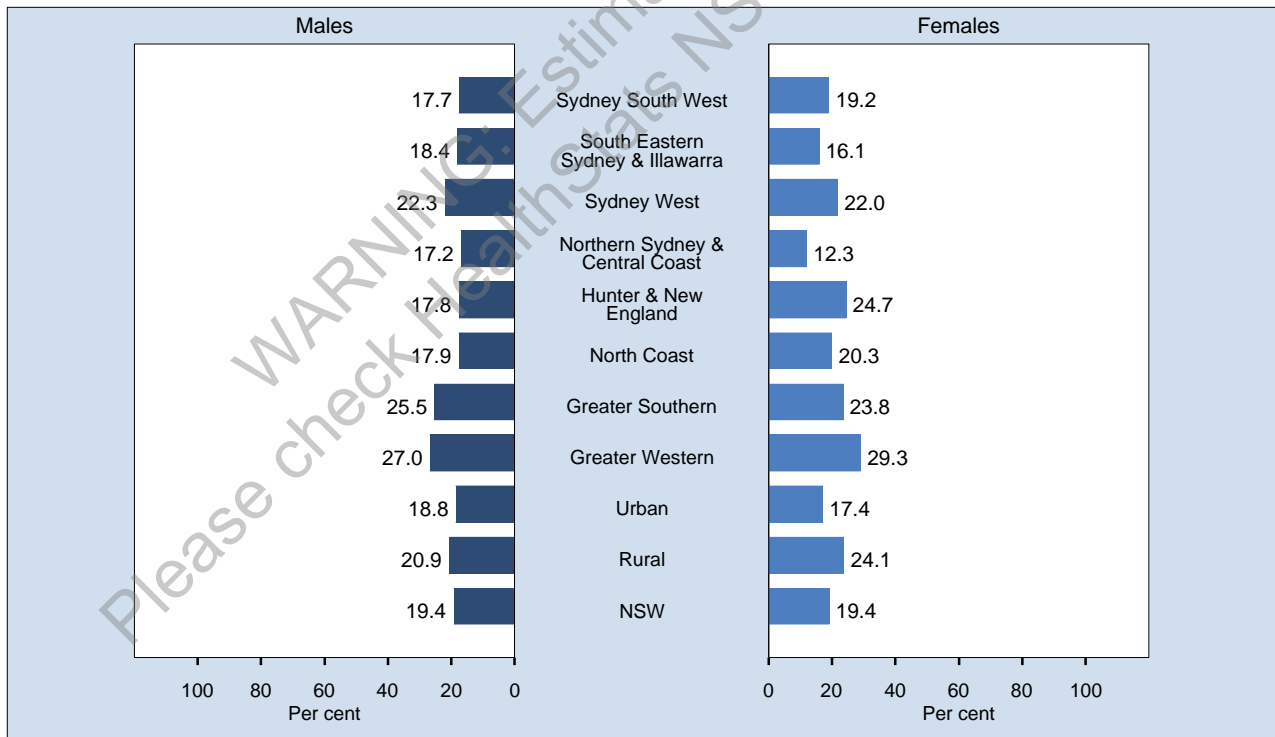
### Obese by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 10,072 respondents in NSW. For this indicator 459 (4.36%) 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? BMI is calculated as follows  $BMI = \text{weight(kg)}/\text{height}^2(\text{m})$ .

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

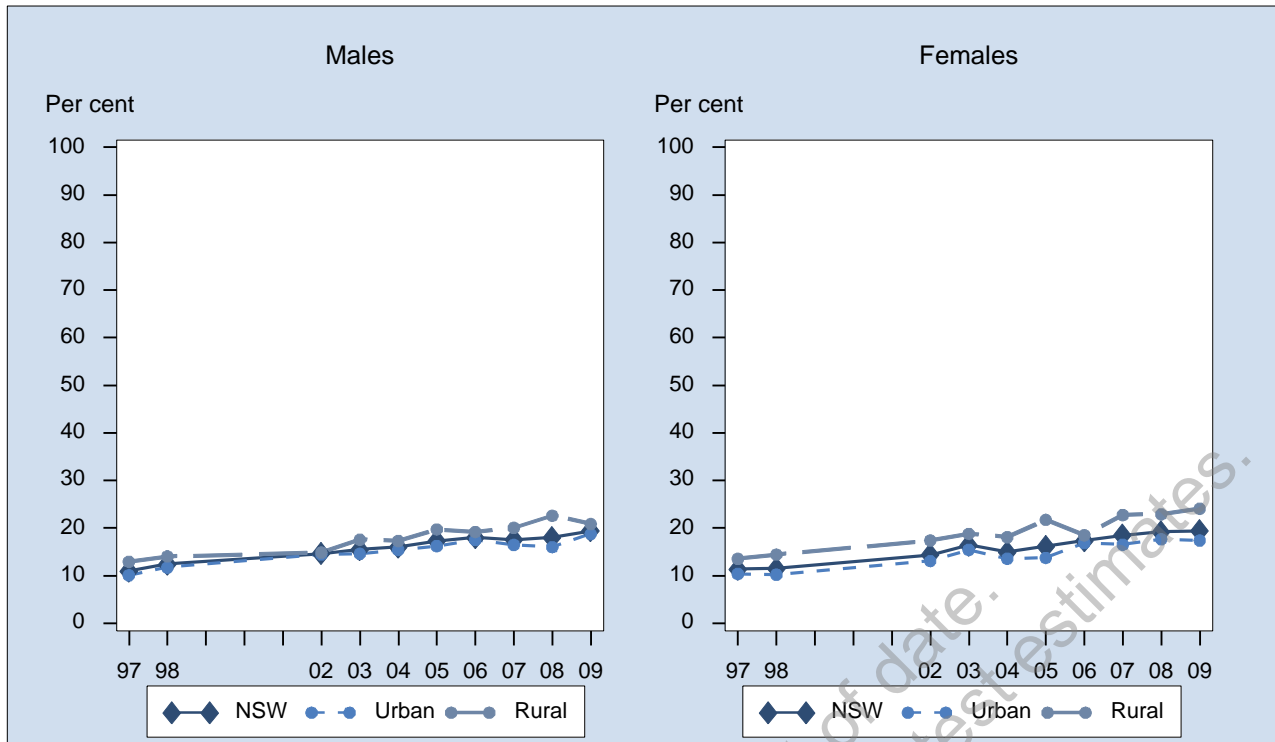
### Obese by area health service, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 10,072 respondents in NSW. For this indicator 459 (4.36%) 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? BMI is calculated as follows  $BMI = \text{weight(kg)}/\text{height}^2(\text{m})$ .

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

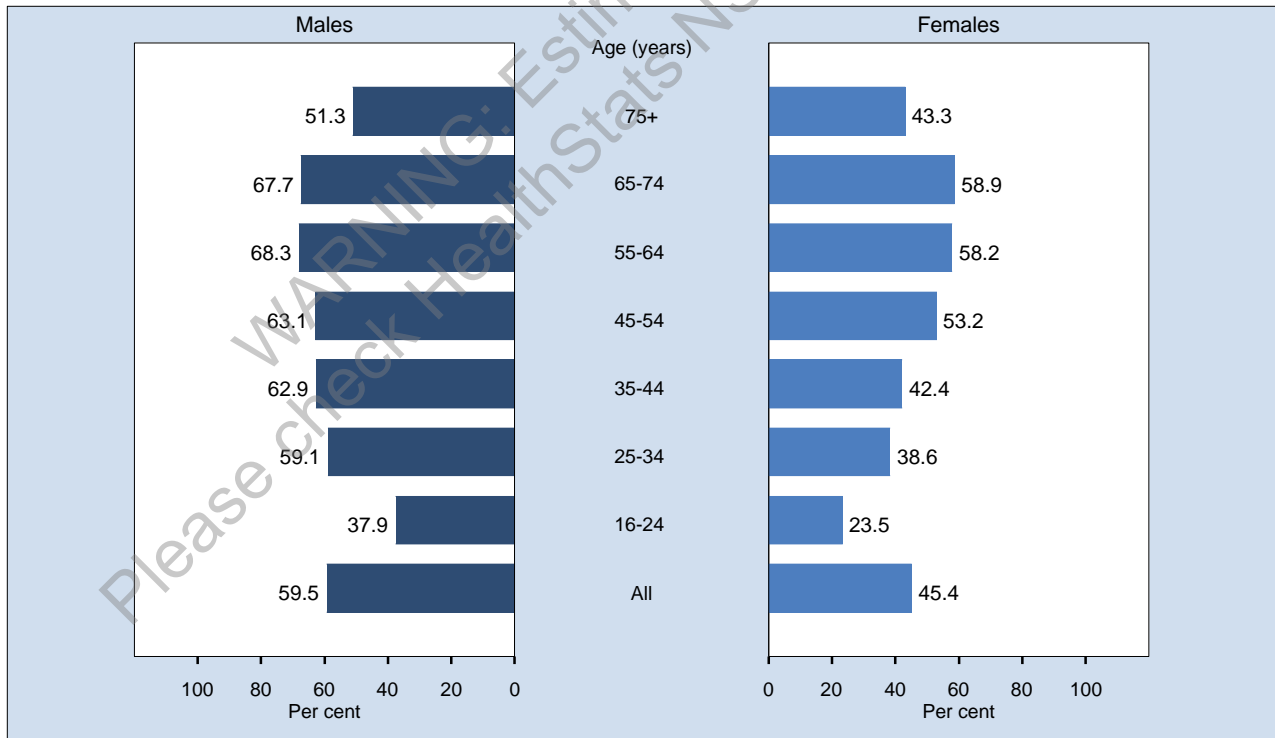
### Obese by year, adults aged 16 years and over, NSW, 1997-2009



**Note:** Estimates are based on the following numbers of respondents for NSW: 1997 (16,790), 1998 (16,445), 2002 (11,997), 2003 (12,448), 2004 (9,063), 2005 (11,078), 2006 (7,668), 2007 (7,264), 2008 (8,225), 2009 (10,072). 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? BMI is calculated as follows BMI = weight(kg)/height<sup>2</sup>(m).

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

### Overweight or obese by age, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 10,072 respondents in NSW. For this indicator 459 (4.36%) 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? BMI is calculated as follows: BMI = weight (kg)/height<sup>2</sup>(m). Categories for this indicator include overweight (BMI from 25.0 to 29.9) and obese (BMI of 30.0 and over).

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

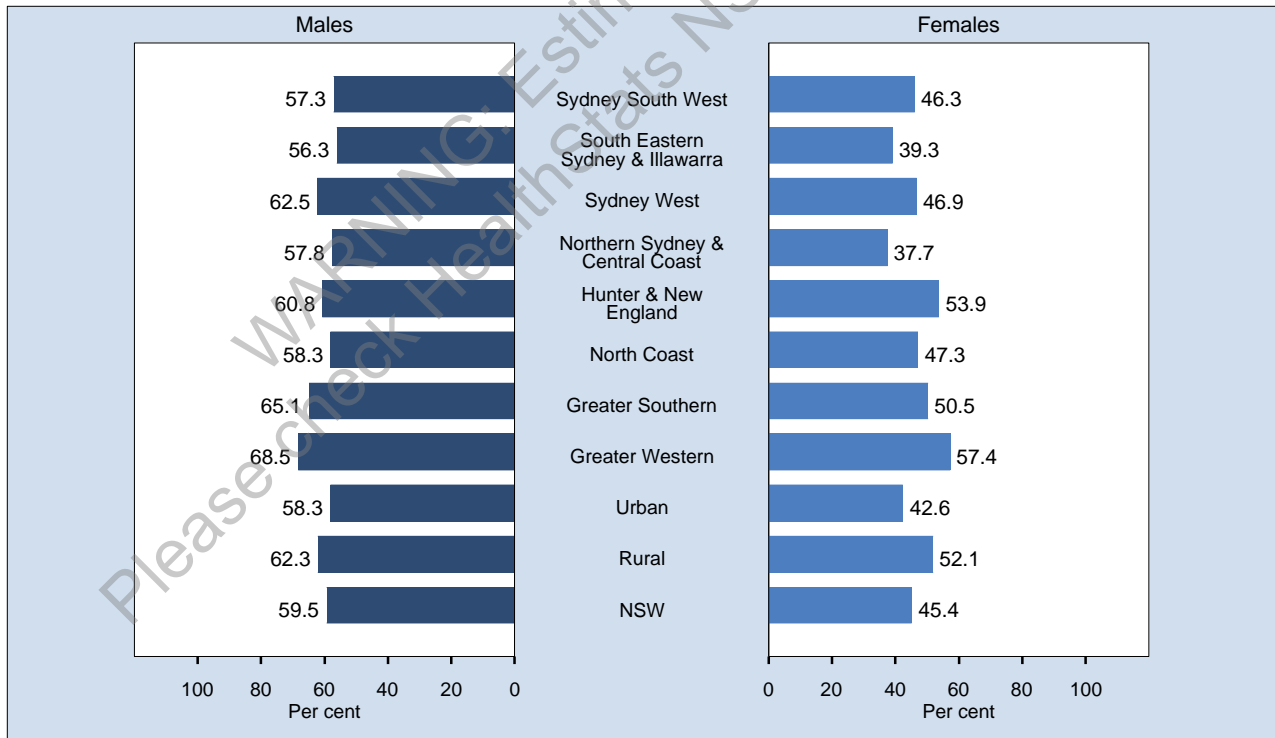
### Overweight or obese by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 10,072 respondents in NSW. For this indicator 459 (4.36%) 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? 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).

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

### Overweight or obese by area health service, adults aged 16 years and over, NSW, 2009

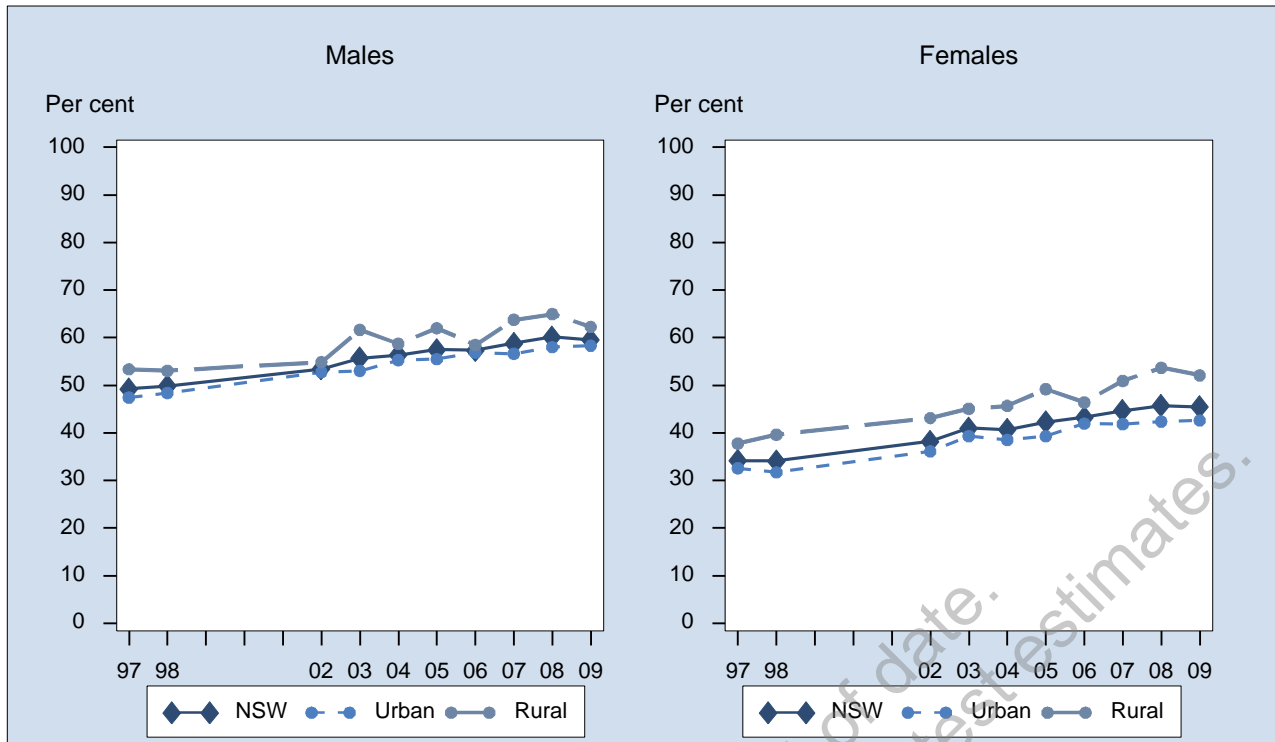


**Note:** Estimates are based on 10,072 respondents in NSW. For this indicator 459 (4.36%) were not stated (Don't know or Refused) in NSW. The indicator includes those who are overweight or obese: that is with a Body Mass Index (BMI) of 25.0 or higher. The questions used to define the indicator were: How tall are you without shoes? How much do you weigh without clothes or shoes? 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).

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.



## Overweight or obese by year, adults aged 16 years and over, NSW, 1997-2009



**Note:** Estimates are based on the following numbers of respondents for NSW: 1997 (16,790), 1998 (16,445), 2002 (11,997), 2003 (12,448), 2004 (9,063), 2005 (11,078), 2006 (7,668), 2007 (7,264), 2008 (8,225), 2009 (10,072). 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? BMI is calculated as follows: BMI = weight (kg)/height<sup>2</sup>(m). Categories for this indicator include overweight (BMI from 25.0 to 29.9) and obese (BMI of 30.0 and over).

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

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

# Health services

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Monitoring health service use and access provides information to inform policy and planning of health services. This section reports on health service use and access, private health insurance, difficulties getting health care, emergency department presentations, hospital admissions, general practice visits, public dental service attendances, and community health centre attendances.

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

# Health service use and access

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## 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 2009, in the last 12 months, 14.7 per cent of adults were admitted to hospital for at least 1 night, 17.9 per cent presented to an emergency department, 7.9 per cent attended a community health centre, 5.3 per cent attended a public dental service or hospital, 85.5 per cent visited a general practitioner, and 11.7 per cent did not attend any health services.

### ***Private health insurance***

In 2009, 56.3 per cent of adults were covered by private health insurance. There was no significant difference between males and females. A significantly lower proportion of adults aged 16-24 years (49.5 per cent), 25-34 years (47.3 per cent), and 75 years and over (48.7 per cent), and a significantly higher proportion of adults aged 45-54 years (65.2 per cent) and 55-64 years (64.0 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 (79.4 per cent) and second disadvantaged quintile (62.2 per cent), and a significantly lower proportion of adults in the fourth disadvantaged quintile (45.1 per cent) and fifth or most disadvantaged quintile (41.4 per cent), were covered by private health insurance, compared with the overall adult population.

A significantly higher proportion of adults in urban health areas (59.5 per cent) than rural health areas (48.8 per cent) were covered by private health insurance. A significantly higher proportion of adults in the South Eastern Sydney & Illawarra (62.1 per cent) and Northern Sydney & Central Coast (70.8 per cent) Area Health Services, and a significantly lower proportion of adults in the Sydney South West (50.9 per cent), Hunter & New England (52.8 per cent), North Coast (40.9 per cent), Greater Southern (50.6 per cent), and Greater Western (47.4 per cent) Area Health Services, 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 who were covered by private health insurance (42.0 per cent to 56.3 per cent). The increase has been significant in males and females, and in rural and urban health areas.

However, since 2008, there has been no significant change in the proportion of adults who were covered by private health insurance.

### ***Difficulties getting health care***

In 2009, 17.6 per cent of adults experienced difficulties getting health care. A significantly lower proportion of males (15.9 per cent) than females (19.2 per cent) experienced difficulties getting health care. Among males, a significantly lower proportion of those aged 16-24 years (5.3 per cent), 65-74 years (12.5 per cent), and 75 years and over (12.4 per cent), and a significantly higher proportion aged 35-44 years (22.4 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 (8.9 per cent), 65-74 years (15.7 per cent) and 75 years and over (10.2 per cent), and a significantly higher proportion of those aged 35-44 years (26.9 per cent) and 45-54 years (23.7 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 (12.1 per cent) and second disadvantaged quintile (15.4 per cent), and a significantly higher proportion of adults in the fourth disadvantaged quintile (25.5 per cent), experienced difficulties getting health care, compared with the overall adult population.

A significantly higher proportion of adults in rural health areas (27.6 per cent) than urban health areas (13.2 per cent) experienced difficulties getting health care. A significantly higher proportion of adults in the Hunter & New England (25.7 per cent), North Coast (27.7 per cent), Greater Southern (28.0 per cent), and Greater Western (32.2 per cent) Area Health Services, and a significantly lower proportion of adults in the Sydney South West (10.1 per cent), South Eastern Sydney & Illawarra (13.3 per cent), and Sydney West (14.6 per cent) Area Health Services, experienced difficulties getting health care, compared with the overall adult population.

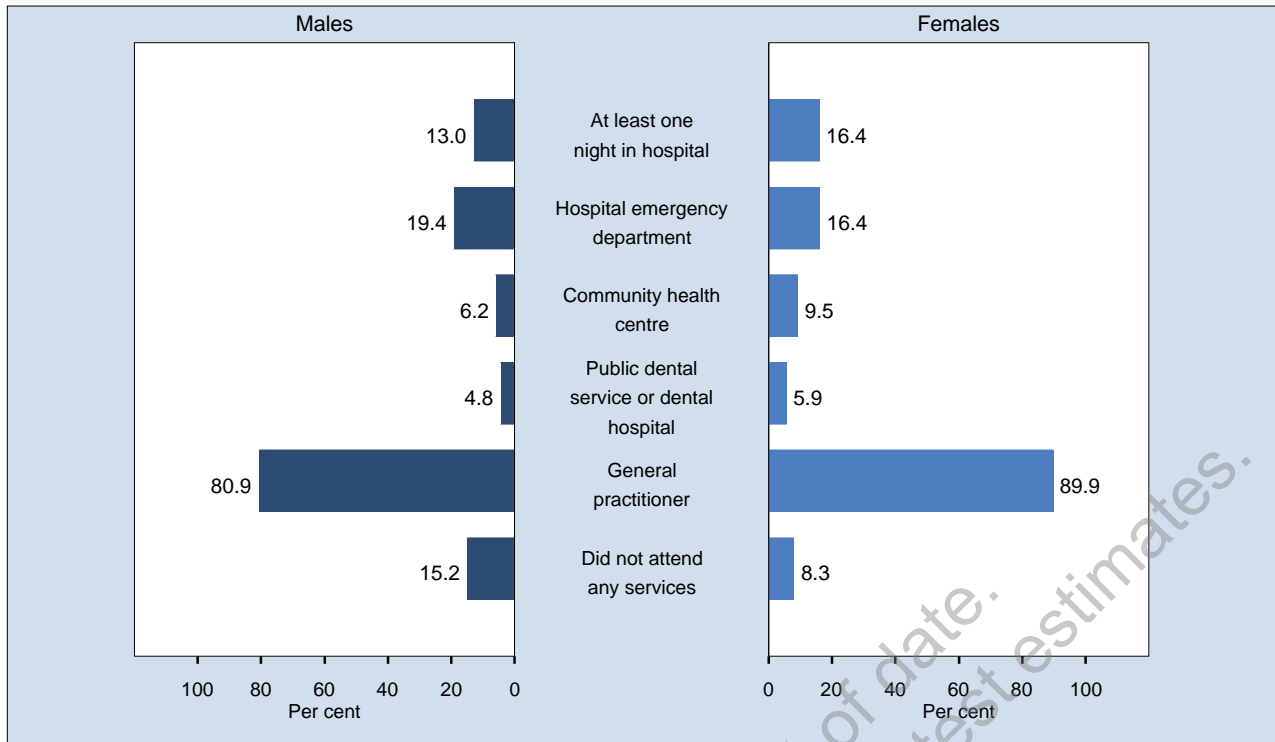
Since 1997, there has been a significant increase in the proportion of adults who experienced difficulties getting health care (9.9 per cent to 13.2 per cent). The increase has been significant in males and females, and in rural and urban health areas.

However, since 2008, there has been no significant change in the proportion of adults who experienced difficulties getting health care; however, there has been a significant decrease in females (21.6 per cent to 19.2 per cent).

Among those who experienced difficulties getting health care, the main difficulties were: waiting time for an appointment with a general practitioner (47.9 per cent), shortage of health services (15.0 per cent), shortage of general practitioners in area (14.2 per cent), quality of treatment (13.7 per cent), difficulty in accessing specialists (11.3 per cent), transport issues (9.5 per cent), waiting time in emergency departments (7.7 per cent), cost of health services (6.7 per cent), waiting time for dental services (5.0 per cent), waiting time for elective surgery (3.0 per cent), difficulty getting after hours general practitioner appointment (2.8 per cent), and no bulk billing (1.3 per cent). Respondents could mention more than 1 type of difficulty.

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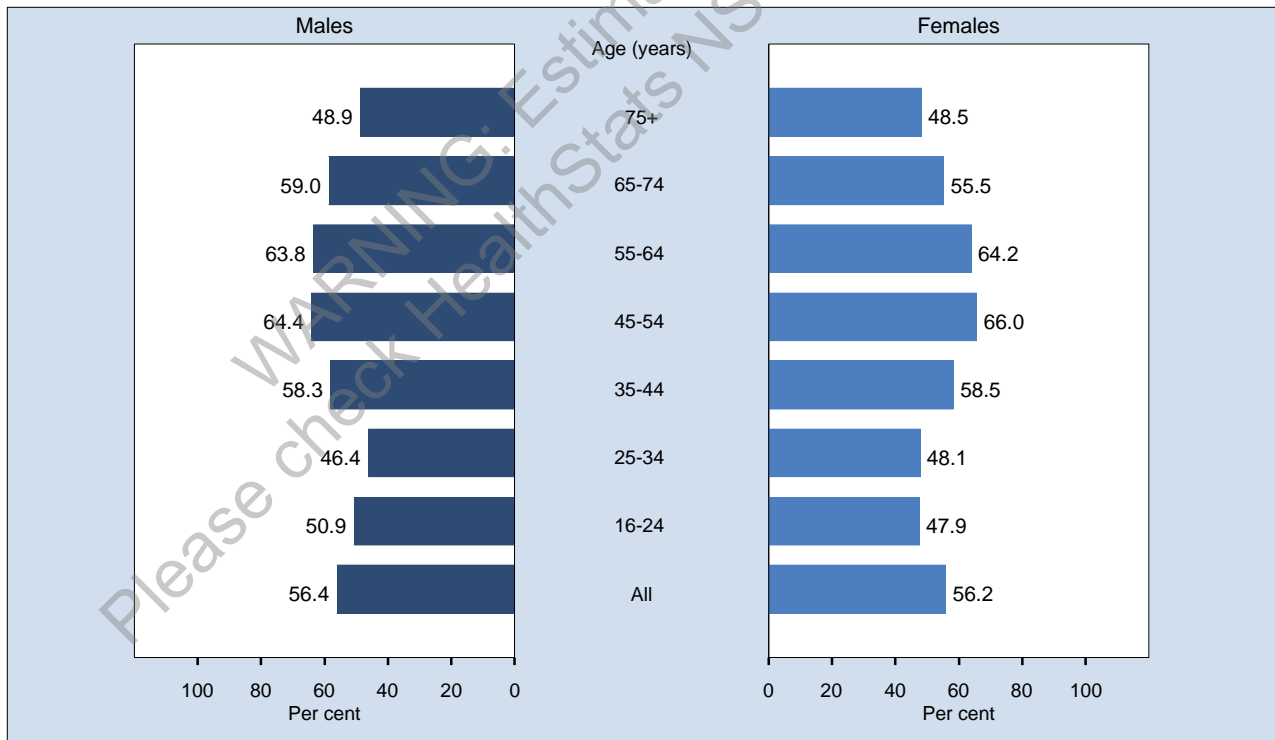
### Health services attended in last 12 months, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 10,646 respondents in NSW. For this indicator 73 (0.68%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

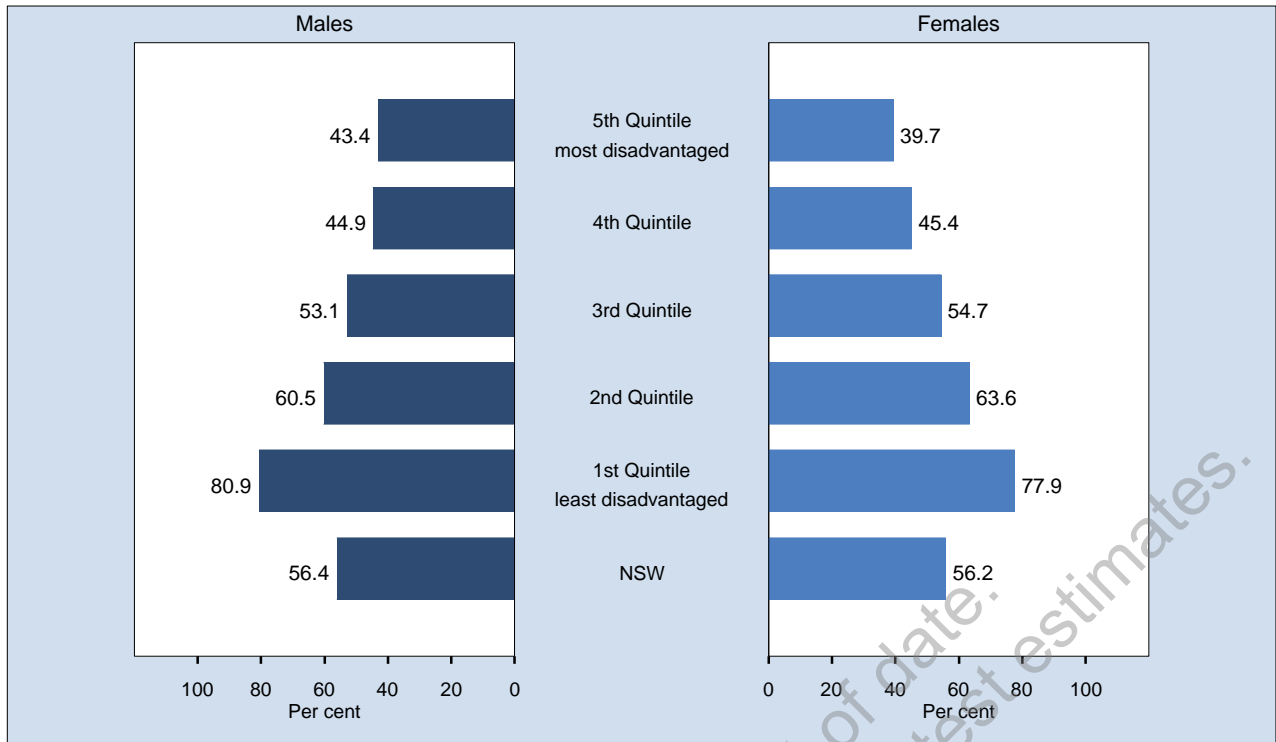
### Private health insurance by age, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 10,601 respondents in NSW. For this indicator 118 (1.10%) 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?

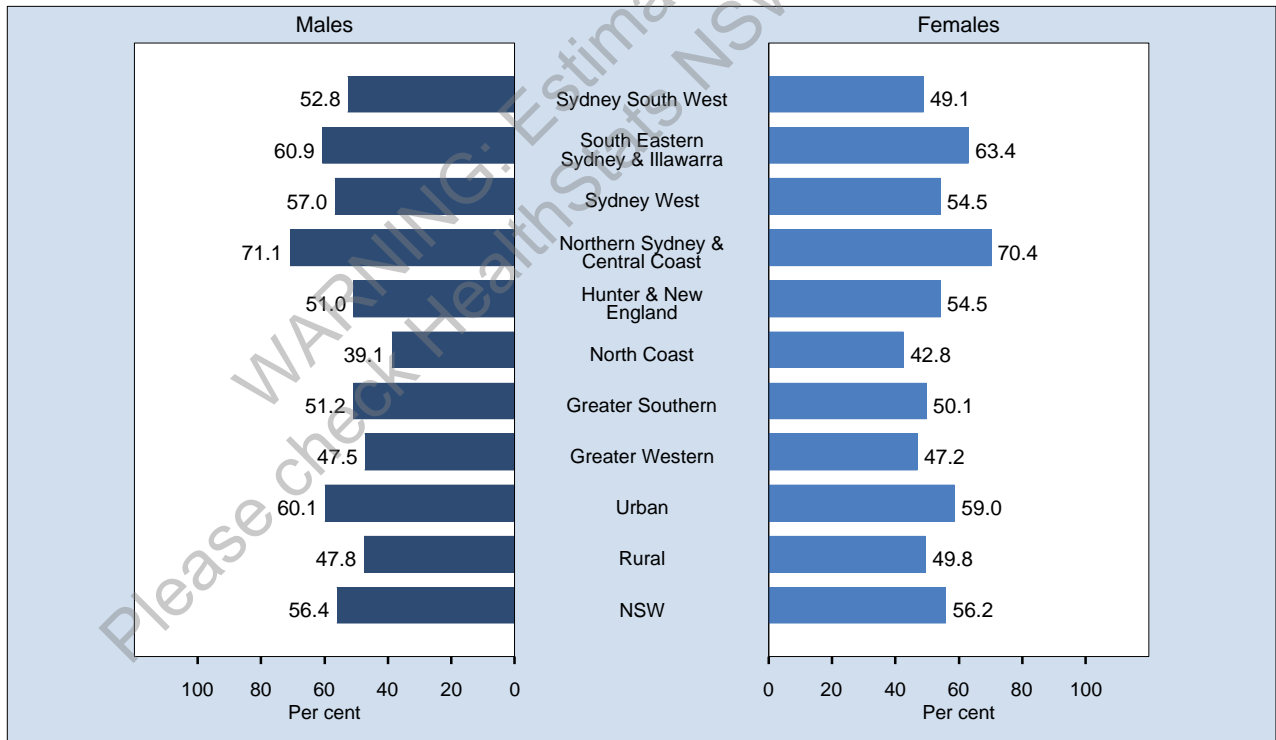
**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

**Private health insurance by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2009**



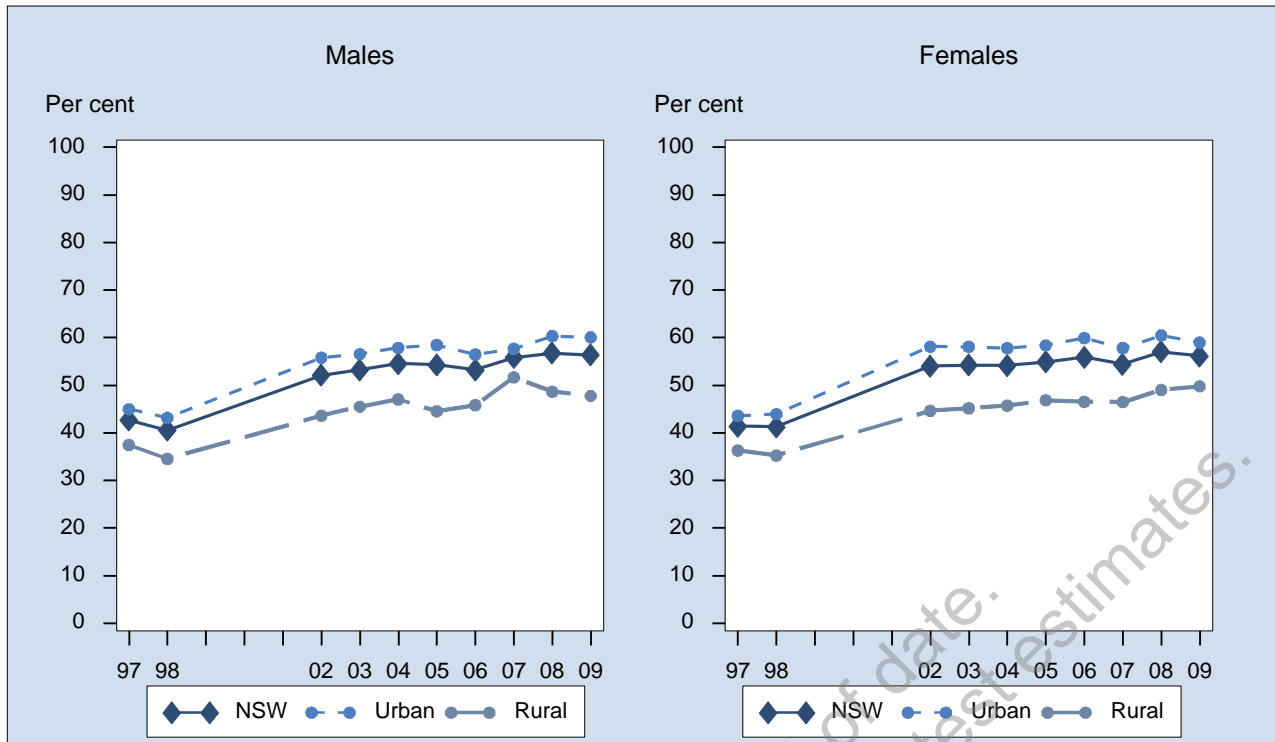
**Note:** Estimates are based on 10,601 respondents in NSW. For this indicator 118 (1.10%) were not stated (Don't know or Refused) in NSW. The indicator includes those who have private health insurance. The question used to define the indicator was: Apart from Medicare, are you covered by private health insurance?  
**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

**Private health insurance by area health service, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 10,601 respondents in NSW. For this indicator 118 (1.10%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

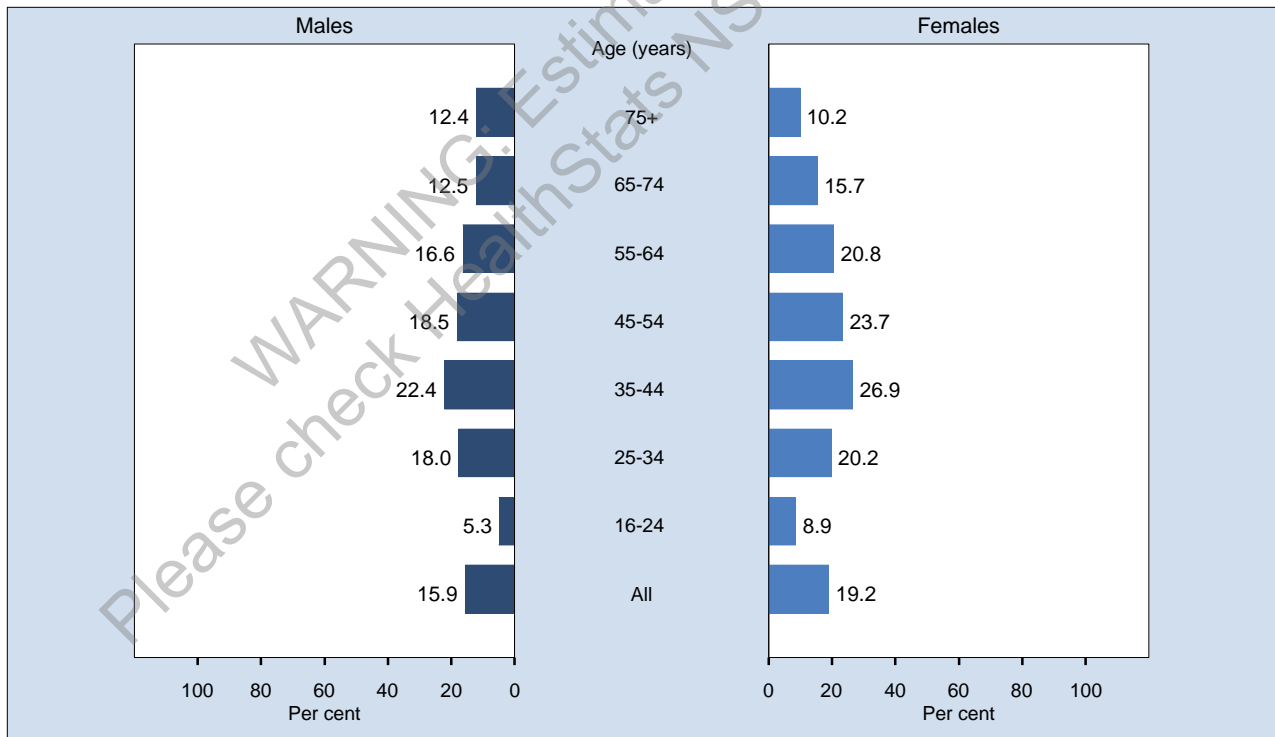
### Private health insurance by year, adults aged 16 years and over, NSW, 1997-2009



**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 (9,356), 2005 (11,413), 2006 (7,911), 2007 (13,039), 2008 (10,203), 2009 (10,601). 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 2009 (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, 2009



**Note:** Estimates are based on 10,479 respondents in NSW. For this indicator 39 (0.37%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

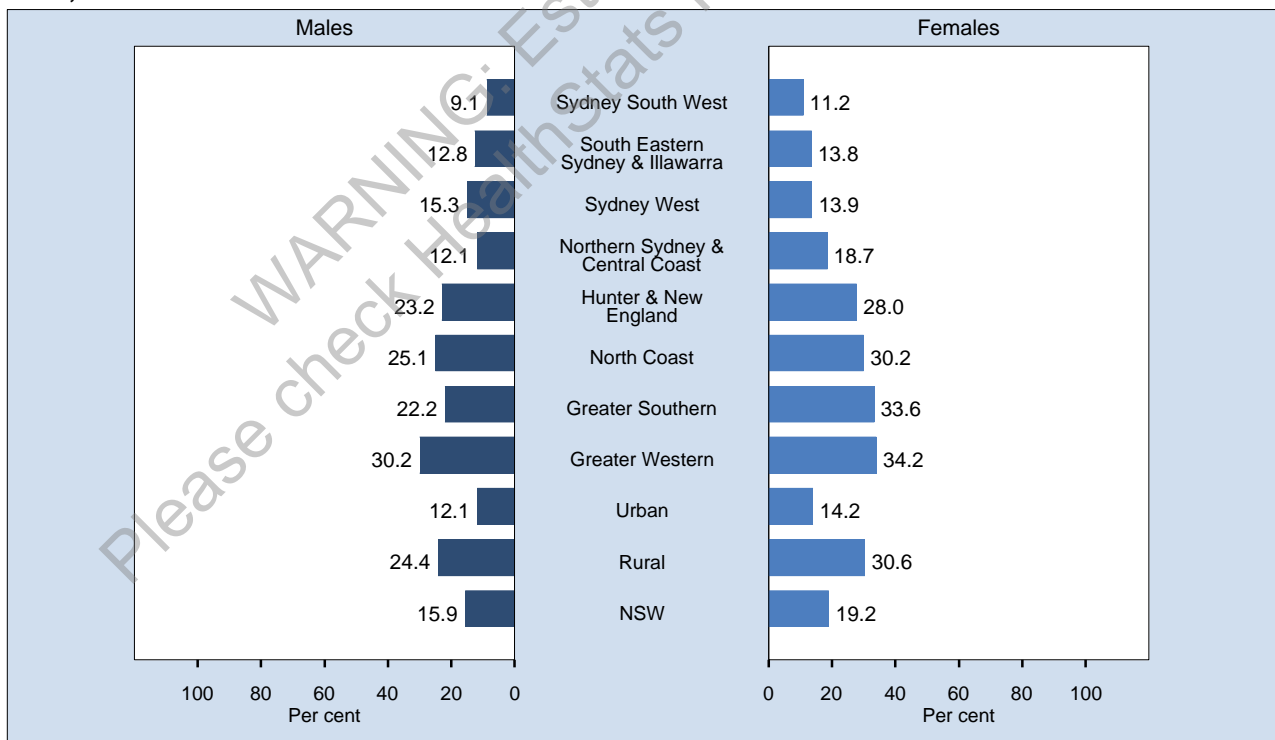
**Difficulties getting health care when needing it by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 10,479 respondents in NSW. For this indicator 39 (0.37%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

**Difficulties getting health care when needing it by area health service, adults aged 16 years and over, NSW, 2009**

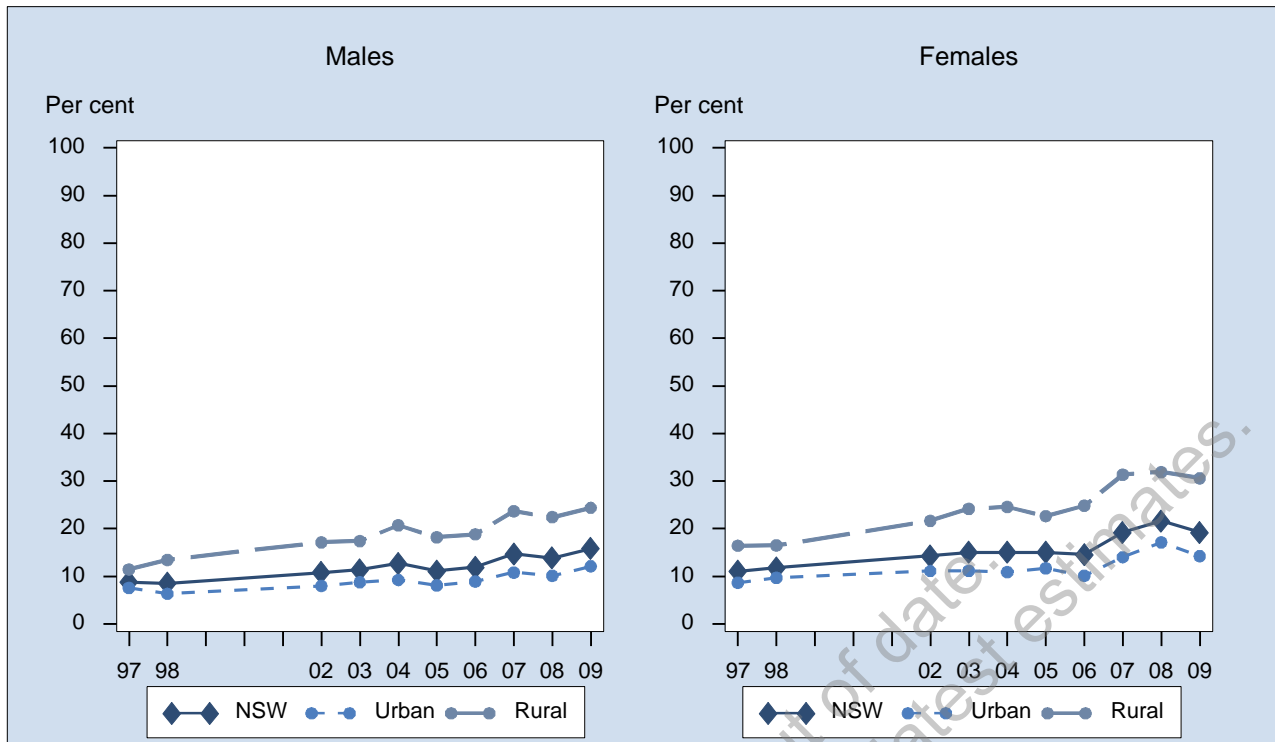


**Note:** Estimates are based on 10,479 respondents in NSW. For this indicator 39 (0.37%) were not stated (Don't know or Refused) in NSW. The indicator includes those who had difficulties getting health care when they needed it. It excludes those who said they do not need health care. The question used to define the indicator was: Do you have any difficulties getting health care when you need it?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.



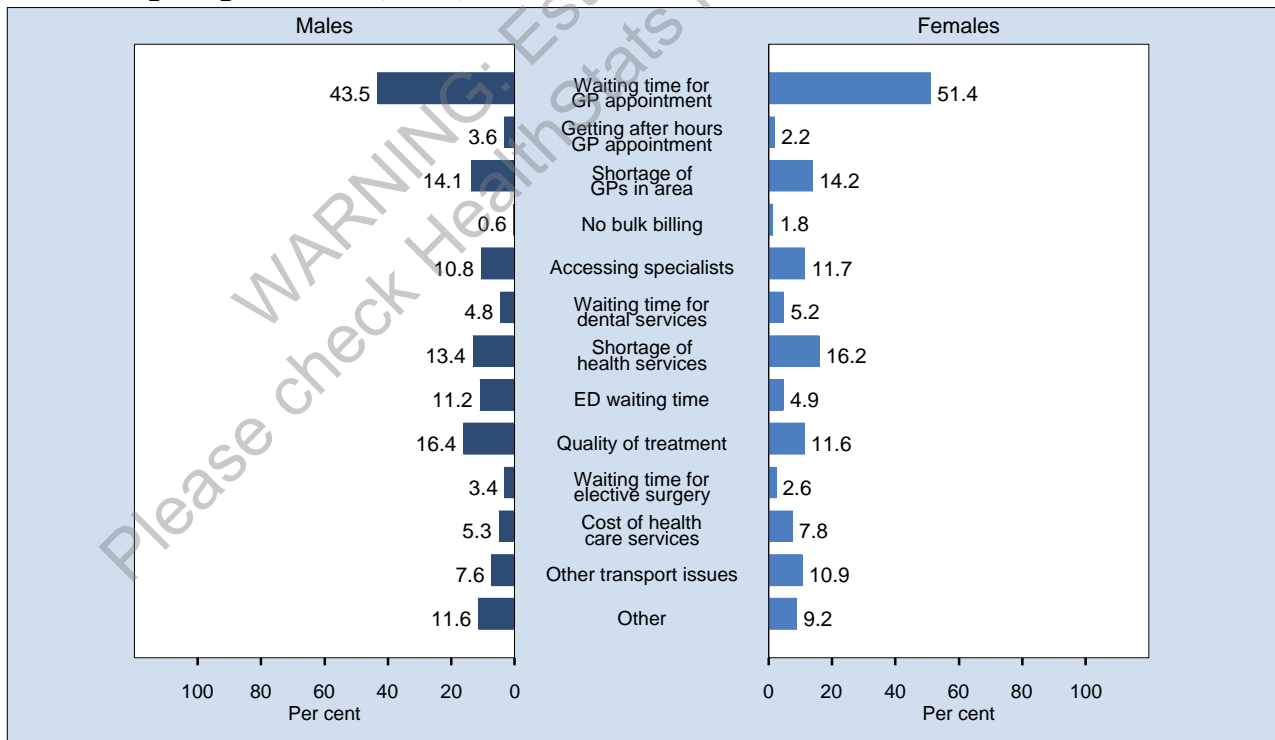
**Difficulties getting health care when needing it by year, adults aged 16 years and over, NSW, 1997-2009**



**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 (9,084), 2005 (11,201), 2006 (7,769), 2007 (12,738), 2008 (10,047), 2009 (10,479). 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 2009 (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, 2009**



**Note:** Estimates are based on 2,099 respondents in NSW. For this indicator 39 (1.82%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

# Emergency department presentations

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## Introduction

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

## Results

### *Presented to an emergency department*

In 2009, the New South Wales Population Health Survey estimated that 17.9 per cent of adults presented to an emergency department on 1 or more occasions in the last 12 months. A significantly higher proportion of males (19.4 per cent) than females (16.4 per cent) presented to an emergency department. Among males, a significantly lower proportion of those aged 65-74 years (15.9 per cent) presented to an emergency department, compared with the overall adult male population. Among females, a significantly lower proportion of those aged 45-54 years (13.1 per cent), and a significantly higher proportion of those aged 75 years and over (22.0 per cent), presented to an emergency department, compared with the overall adult female population.

A significantly lower proportion of adults in the first or least disadvantaged quintile (15.5 per cent), and a significantly higher proportion of adults in the fourth disadvantaged quintile (20.1 per cent), presented to an emergency department, compared with the overall adult population.

A significantly higher proportion of adults in rural health areas (21.7 per cent) than urban health areas (16.2 per cent) presented to an emergency department. A significantly higher proportion of adults in the North Coast (24.7 per cent), Greater Southern (21.8 per cent), and Greater Western (26.7 per cent) Area Health Services, and a significantly lower proportion of adults in the Sydney West (14.3 per cent) and Northern Sydney & Central Coast (14.9 per cent) Area Health Services, presented to an emergency department, compared with the overall adult population.

Since 1997, there has been a significant increase in the proportion of adults who presented to an emergency department on 1 or more occasions in the last 12 months (13.9 per cent to 17.9 per cent). The increase has been significant in males and females, and in rural and urban health areas.

However, since 2008, there has been no significant change in the proportion of adults who presented to an emergency department on 1 or more occasions in the last 12 months.

### *Rating of emergency department care*

Those who presented to an emergency department were asked to rate the care they received: 24.2 per cent rated their care as excellent, 28.9 per cent as very good, 26.0 per cent as good, 11.9 per cent as fair, and 9.0 per cent as poor. Responses of excellent, very good and good were combined into a positive rating of care.

In 2009, among those adults who presented to an emergency department in the last 12 months, 79.1 per cent gave a positive rating to the care they received. There was no significant difference between males and females. A significantly higher proportion of adults aged 55-64 years (84.3 per cent) and 75 years and over (88.5 per cent), and a significantly lower proportion of adults aged 35-44 years (72.8 per cent), gave a positive rating to the care they received, compared with the overall adult population.

A significantly higher proportion of adults in the fifth or most disadvantaged quintile (83.8 per cent) gave a positive rating to the care they received, compared with the overall adult population.

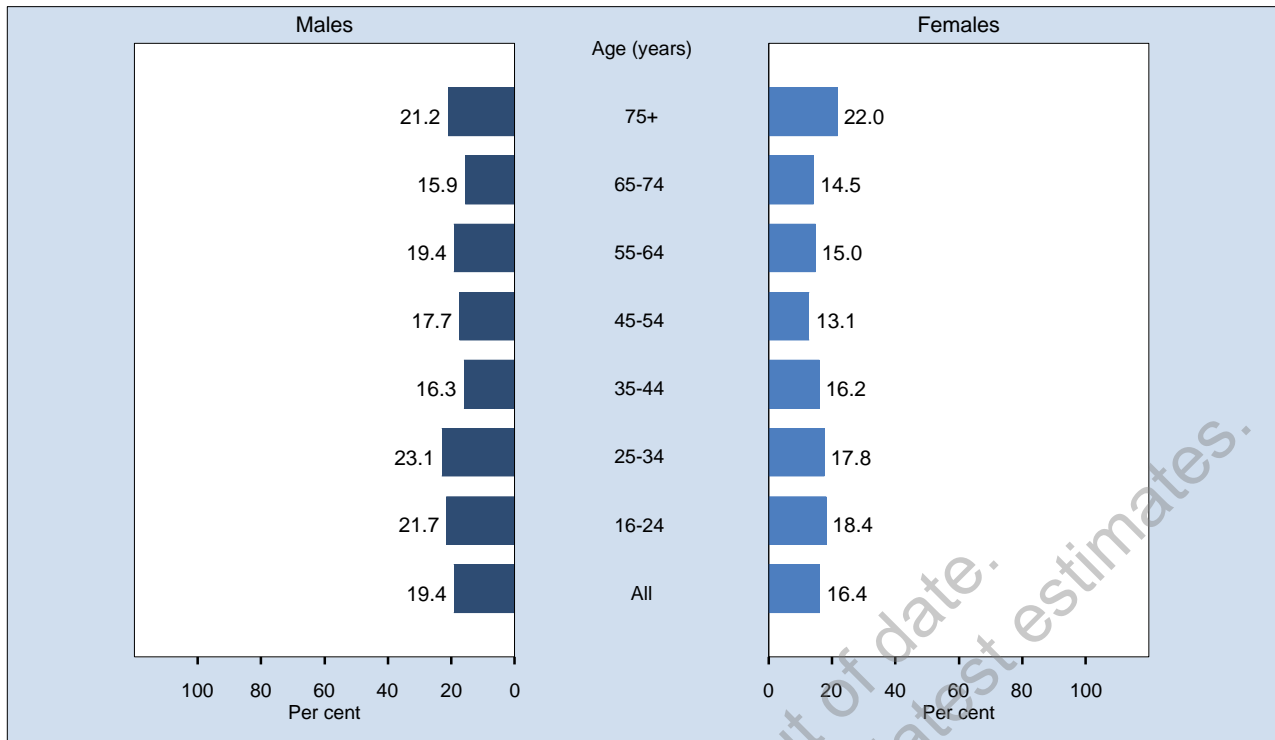
There was no significant difference between urban and rural health areas. A significantly higher proportion of adults in the North Coast Area Health Service (84.4 per cent) gave a positive rating to the care they received, compared with the overall adult population.

Since 1997, there has been no significant change in the proportion of adults who gave a positive rating to their emergency department care.

The main reason for rating care as fair or poor was waiting time (69.4 per cent) followed by: poor or inadequate service (26.0 per cent), communication problems (12.3 per cent), poor attitude of clinical staff (11.9 per cent), inadequate medication or management (9.9 per cent), not enough staff (8.8 per cent), sent home without treatment or follow-up (6.2 per cent), poor technical skill of clinical staff (5.1 per cent), poor accommodation quality (4.0 per cent), and misdiagnosis or contradictory diagnosis (2.7 per cent). Respondents could mention more than 1 response.

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

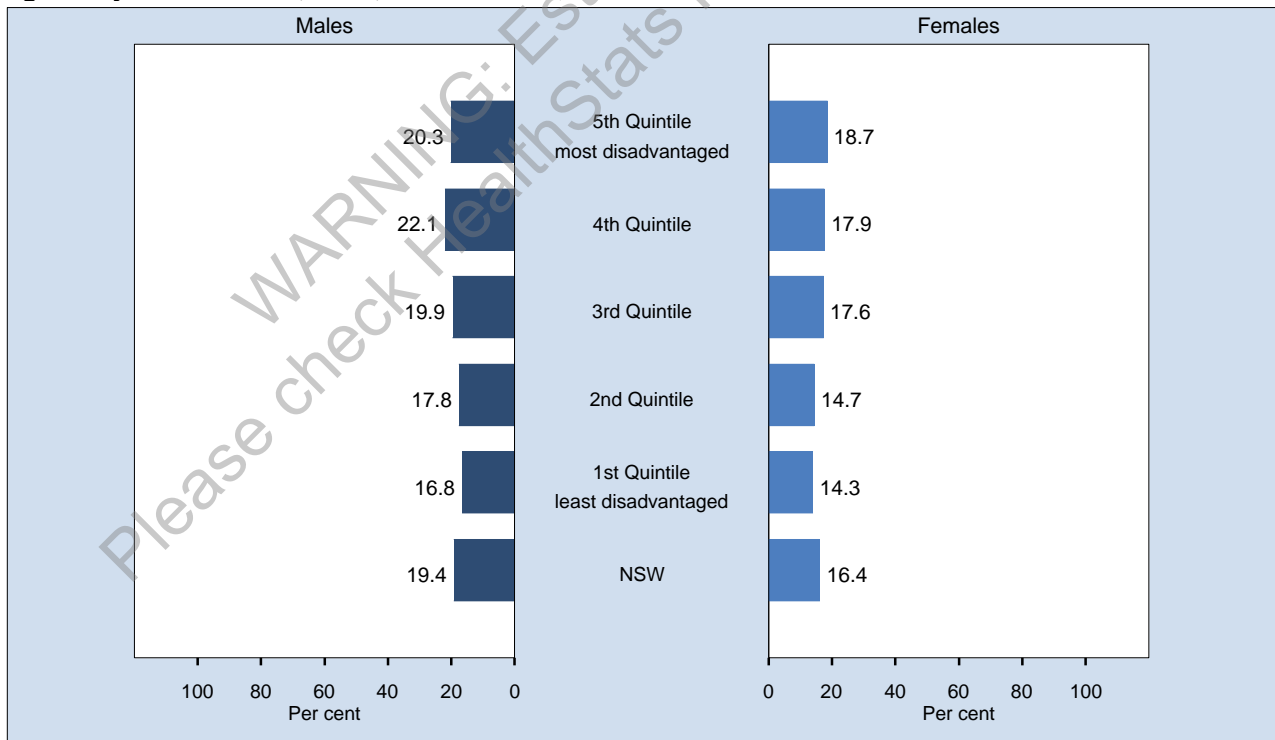
**Emergency department presentation in the last 12 months by age, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 10,646 respondents in NSW. For this indicator 73 (0.68%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

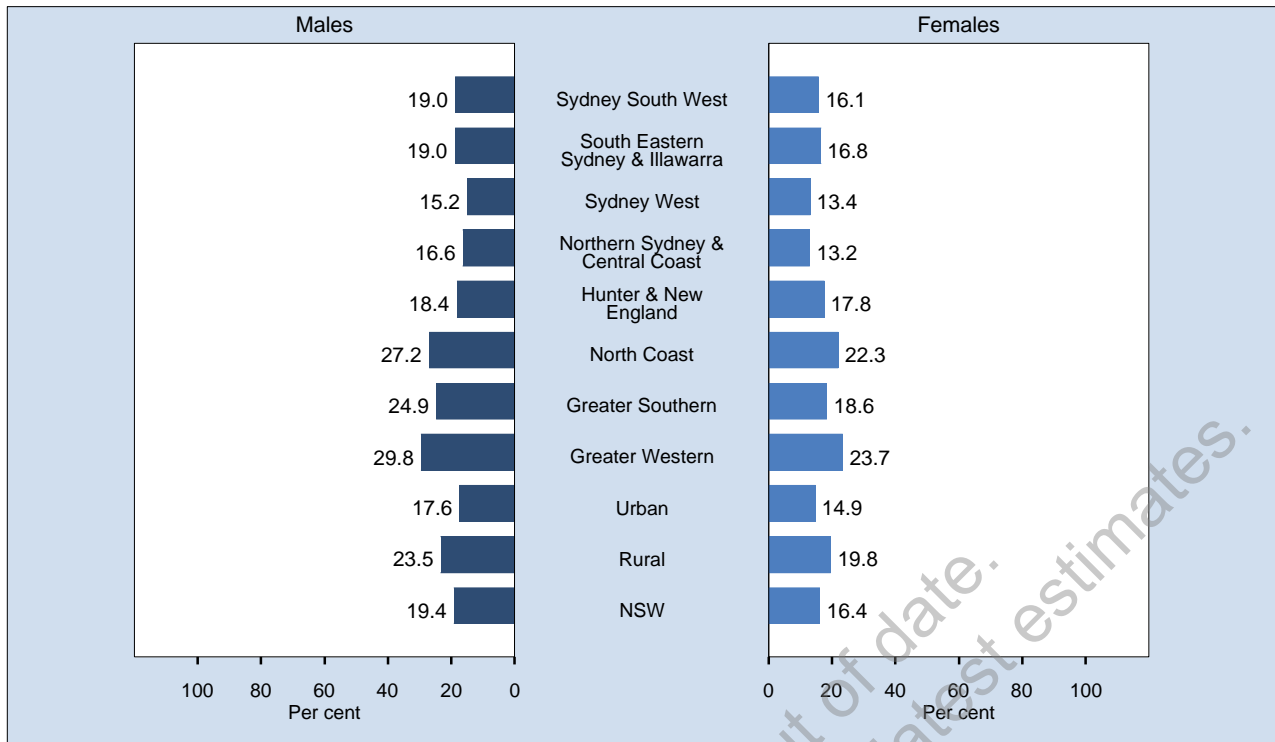
**Emergency department presentation in the last 12 months by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 10,646 respondents in NSW. For this indicator 73 (0.68%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

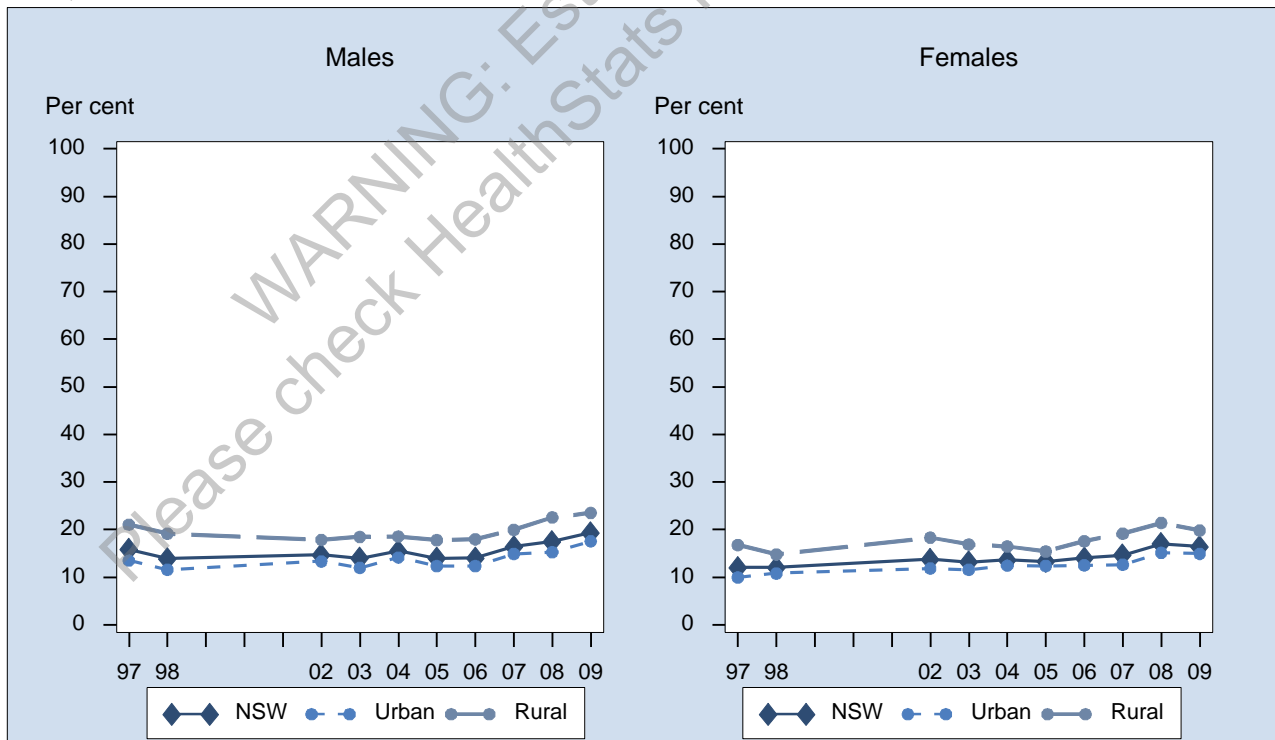
**Emergency department presentation in the last 12 months by area health service, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 10,646 respondents in NSW. For this indicator 73 (0.68%) 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 2009 (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, 1997-2009**



**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 (9,412), 2005 (11,470), 2006 (7,941), 2007 (13,097), 2008 (10,290), 2009 (10,646). 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

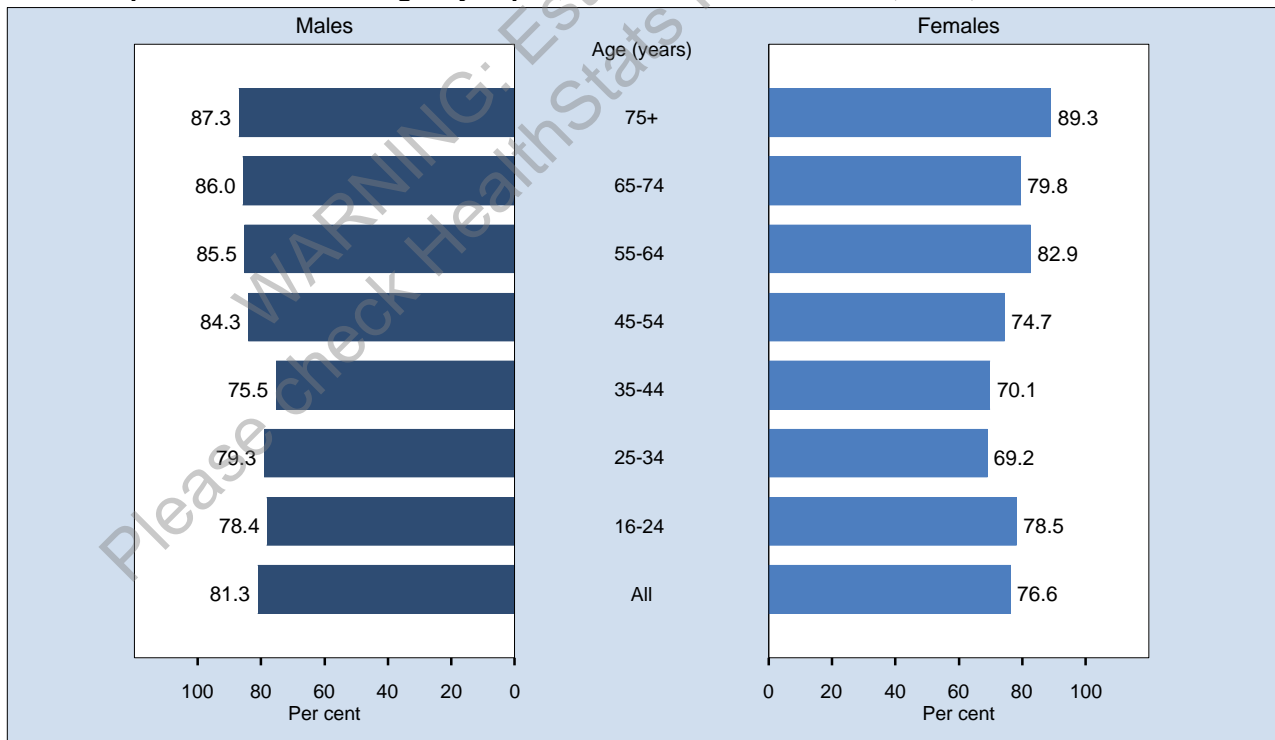
**Emergency department care ratings, adults aged 16 years and over who presented to an emergency department in the last 12 months, NSW, 2009**



**Note:** Estimates are based on 1,992 respondents in NSW. For this indicator 19 (0.94%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

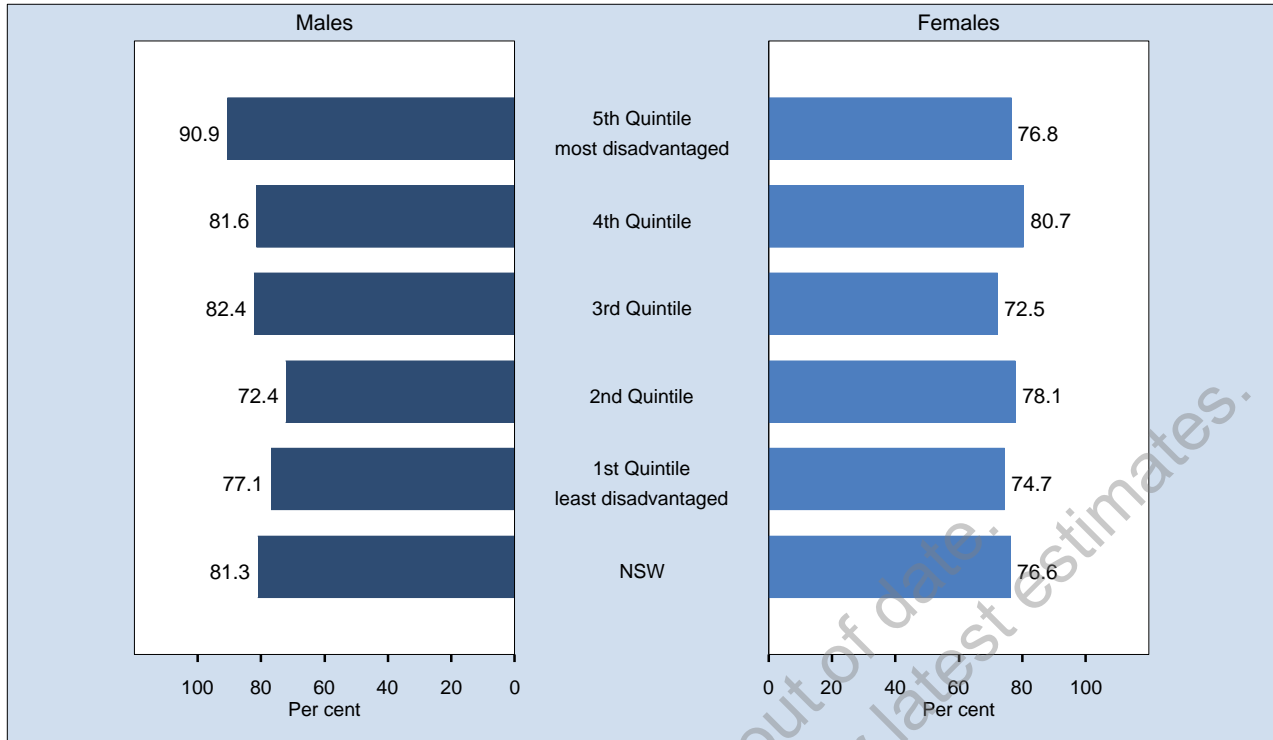
**Emergency department care rated as excellent, very good or good by age, adults aged 16 years and over who presented to an emergency department in the last 12 months, NSW, 2009**



**Note:** Estimates are based on 1,992 respondents in NSW. For this indicator 19 (0.94%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

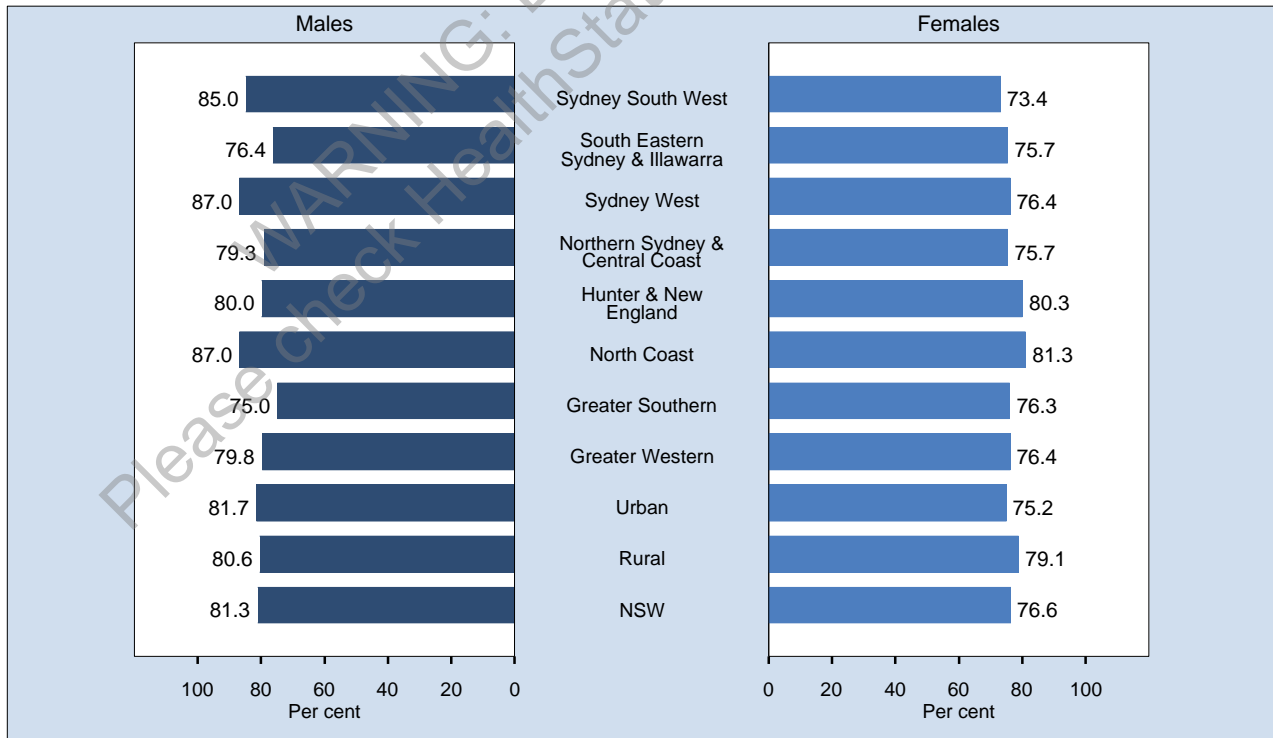
**Emergency department care rated as excellent, very good or good by socioeconomic disadvantage, adults aged 16 years and over who presented to an emergency department in the last 12 months, NSW, 2009**



**Note:** Estimates are based on 1,992 respondents in NSW. For this indicator 19 (0.94%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

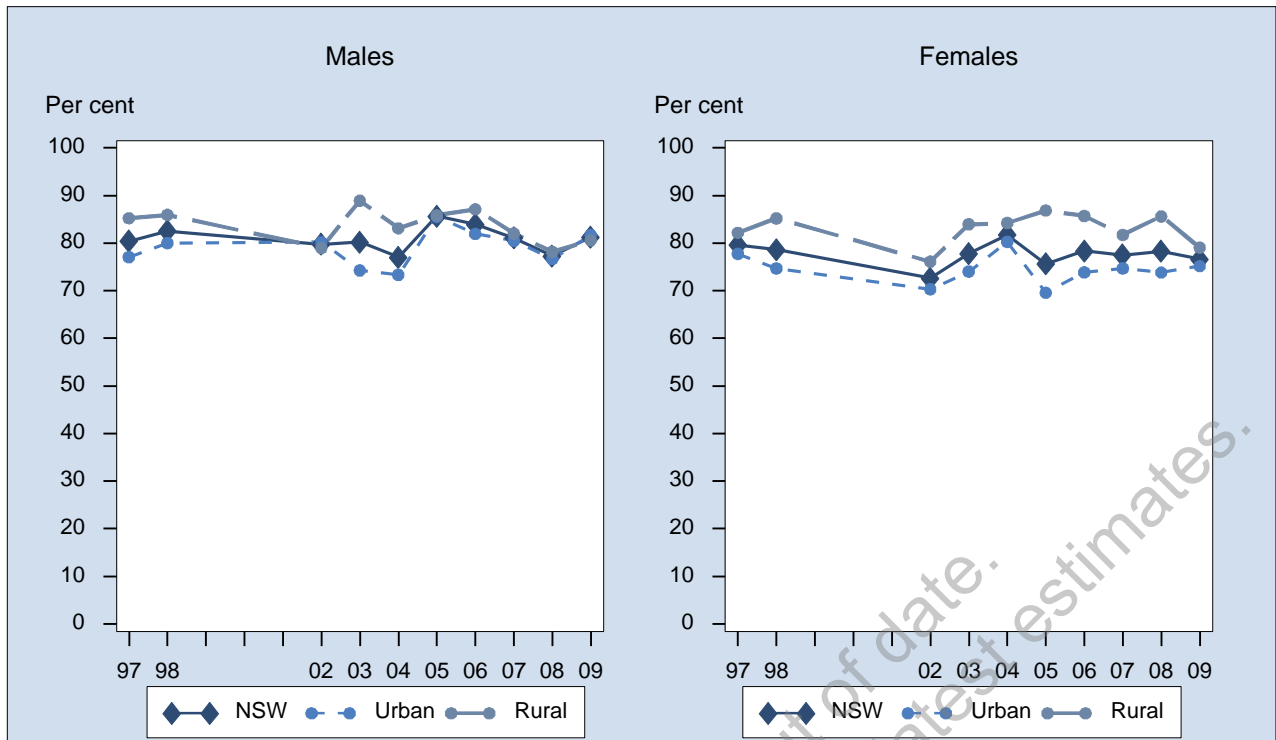
**Emergency department care rated as excellent, very good or good by area health service, adults aged 16 years and over who presented to an emergency department in the last 12 months, NSW, 2009**



**Note:** Estimates are based on 1,992 respondents in NSW. For this indicator 19 (0.94%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

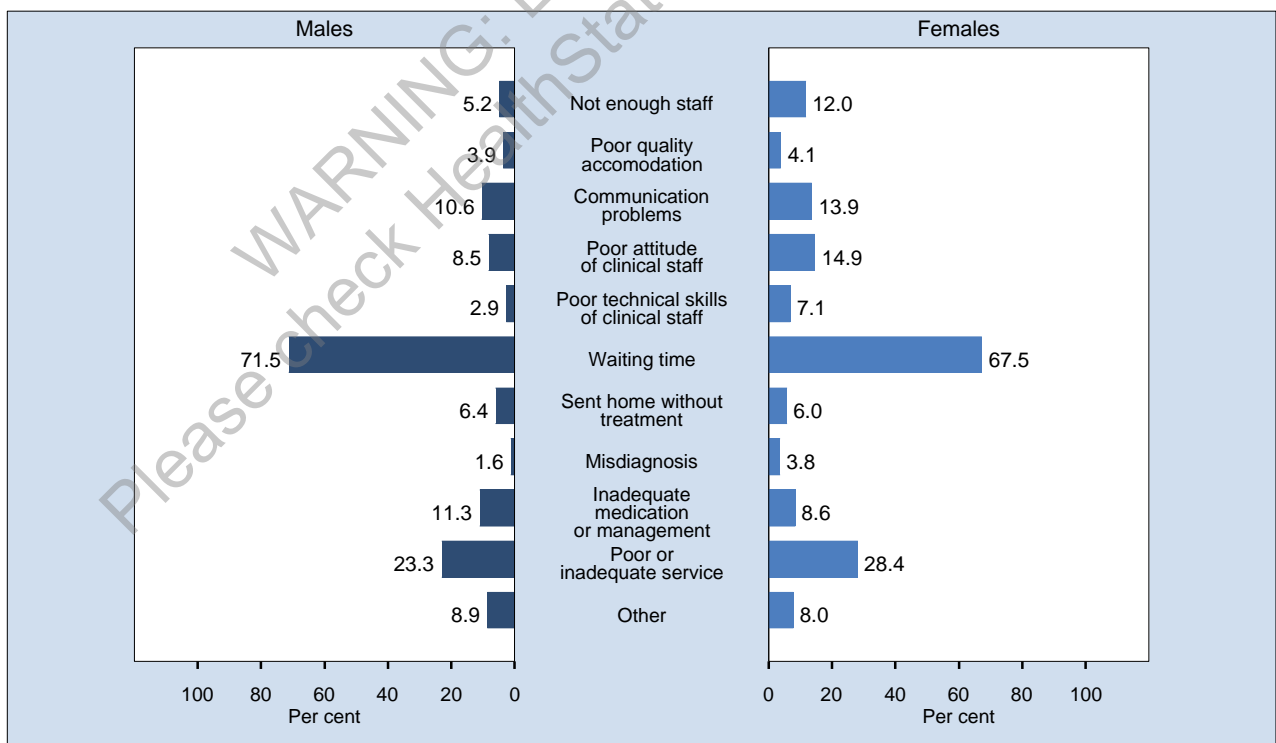
**Emergency department care rated as excellent, very good or good by year, adults aged 16 years and over who presented to an emergency department in the last 12 months, NSW, 1997-2009**



**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 (1,535), 2005 (1,689), 2006 (1,225), 2007 (2,157), 2008 (1,891), 2009 (1,992). 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

**Reason for rating most recent emergency visit as fair or poor, adults aged 16 years and over who presented to an emergency department in the last 12 months and rated the care as fair or poor, NSW, 2009**



**Note:** Estimates are based on 384 respondents in NSW. For this indicator 19 (4.71%) 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? Could you briefly describe why you rated the care you received as fair or poor? Respondents could mention more than 1 response. Percentages may total more than 100%.

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.



# Hospital admissions

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## Introduction

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

## Results

### *Admitted to a hospital*

In 2009, the New South Wales Population Health Survey estimated that 14.7 per cent of adults were admitted to hospital on 1 or more occasions in the last 12 months. A significantly lower proportion of males (13.0 per cent) than females (16.4 per cent) were admitted to hospital. Among males, a significantly lower proportion of those aged 16-24 years (8.1 per cent), 25-34 years (6.8 per cent), and 35-44 years (8.6 per cent), and a significantly higher proportion of those aged 55-64 years (17.2 per cent), 65-74 years (23.1 per cent), and 75 years and over (30.1 per cent), were admitted to hospital, compared with the overall adult male population. Among females, a significantly lower proportion of those aged 16-24 years (10.3 per cent), 45-54 years (12.2 per cent), and 55-64 years (11.9 per cent), and a significantly higher proportion of those aged 25-34 years (24.7 per cent) and 75 years and over (26.7 per cent), were admitted to hospital, compared with the overall adult female population.

There was no significant difference among quintiles of disadvantage, between urban and rural health areas, or among area health services.

Since 1997, there has been a significant increase in the proportion of adults admitted to hospital on 1 or more occasions in the last 12 months (13.0 per cent to 14.7 per cent). The increase has been significant in males and females, and in urban health areas.

However, since 2008, there has been no significant change in the proportion of adults admitted to hospital on 1 or more occasions in the last 12 months; however, there has been a significant increase in males (11.1 per cent to 13.0 per cent).

### *Rating of hospital care*

Those who were admitted to hospital were asked to rate the care they received: 38.8 per cent rated their care as excellent, 31.1 per cent as very good, 20.5 per cent as good, 5.6 per cent as fair, and 4.0 per cent as poor. Responses of excellent, very good, and good were combined into a positive rating of care.

In 2009, among those adults admitted to hospital in the last 12 months, 90.4 per cent gave a positive rating to the care they received. There was no significant difference between males and females, among age groups, among quintiles of disadvantage, between rural and urban health areas. A significantly higher proportion of adults in the Hunter & New England Area Health Service (94.0 per cent) gave a positive rating to the care they received.

Since 1997, there has been no significant change in the proportion of adults who gave a positive rating to their hospital care.

The main reason for rating care as fair or poor was excessive waiting time for care (29.1 per cent) followed by: poor technical skill of clinical staff (21.3 per cent), communication problems (19.1 per cent), poor quality accommodation (17.4 per cent), poor attitude of clinical staff (17.3 per cent), not enough staff (12.4 per cent), inadequate medication or management (10.4 per cent), poor or inadequate food (5.5 per cent), and hospital could not offer required care (4.8 per cent). Respondents could mention more than 1 response.

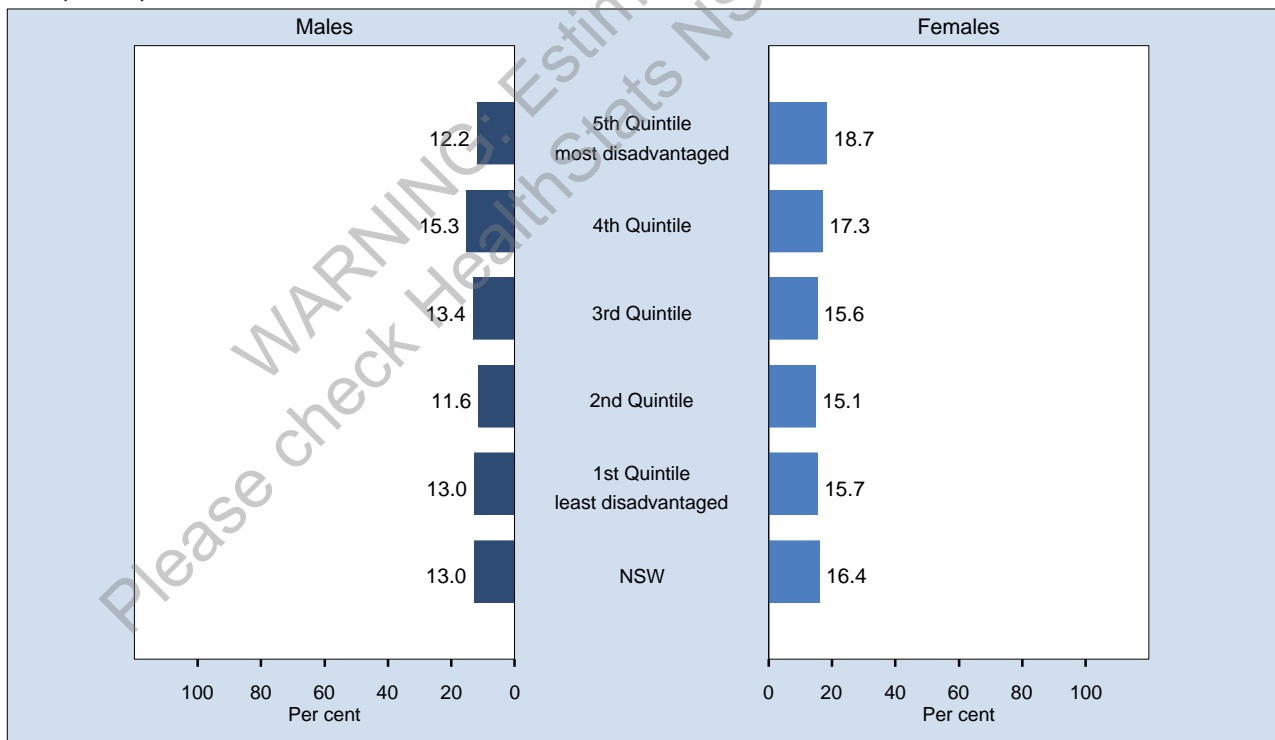
### Hospital admission in the last 12 months by age, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 10,646 respondents in NSW. For this indicator 73 (0.68%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

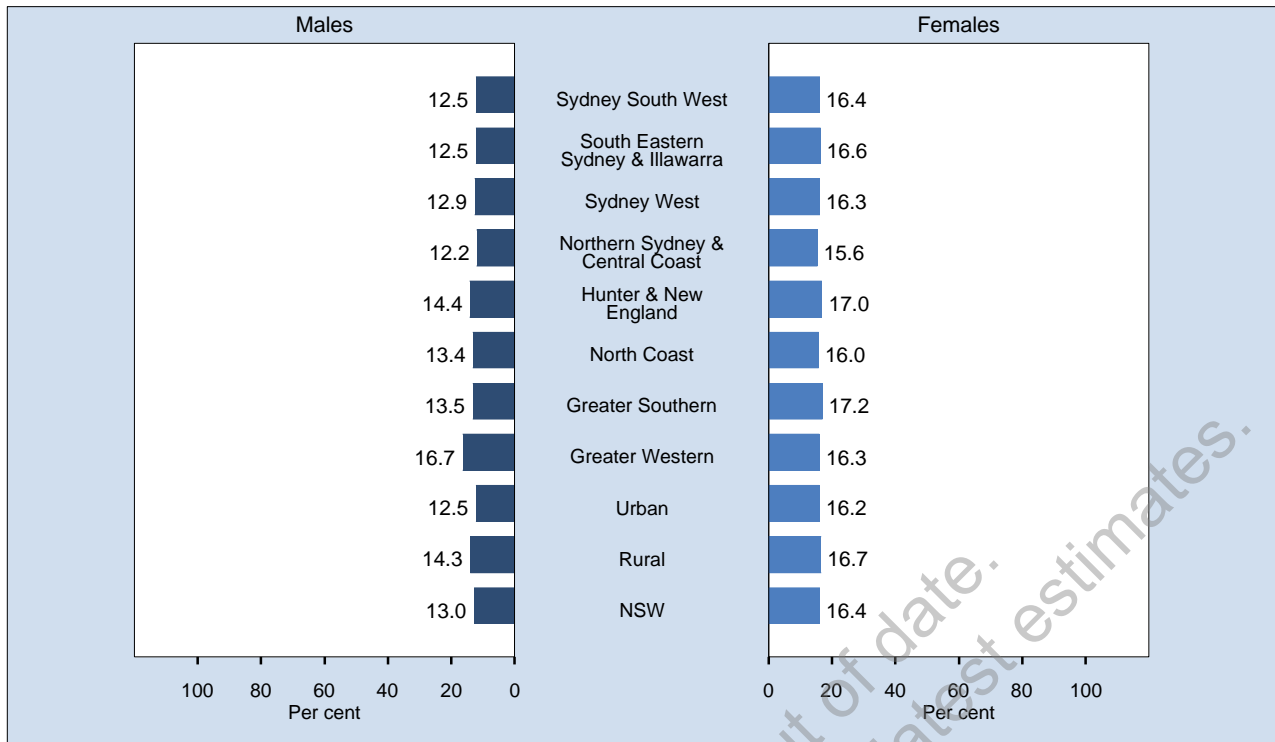
### Hospital admission in the last 12 months by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 10,646 respondents in NSW. For this indicator 73 (0.68%) 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?

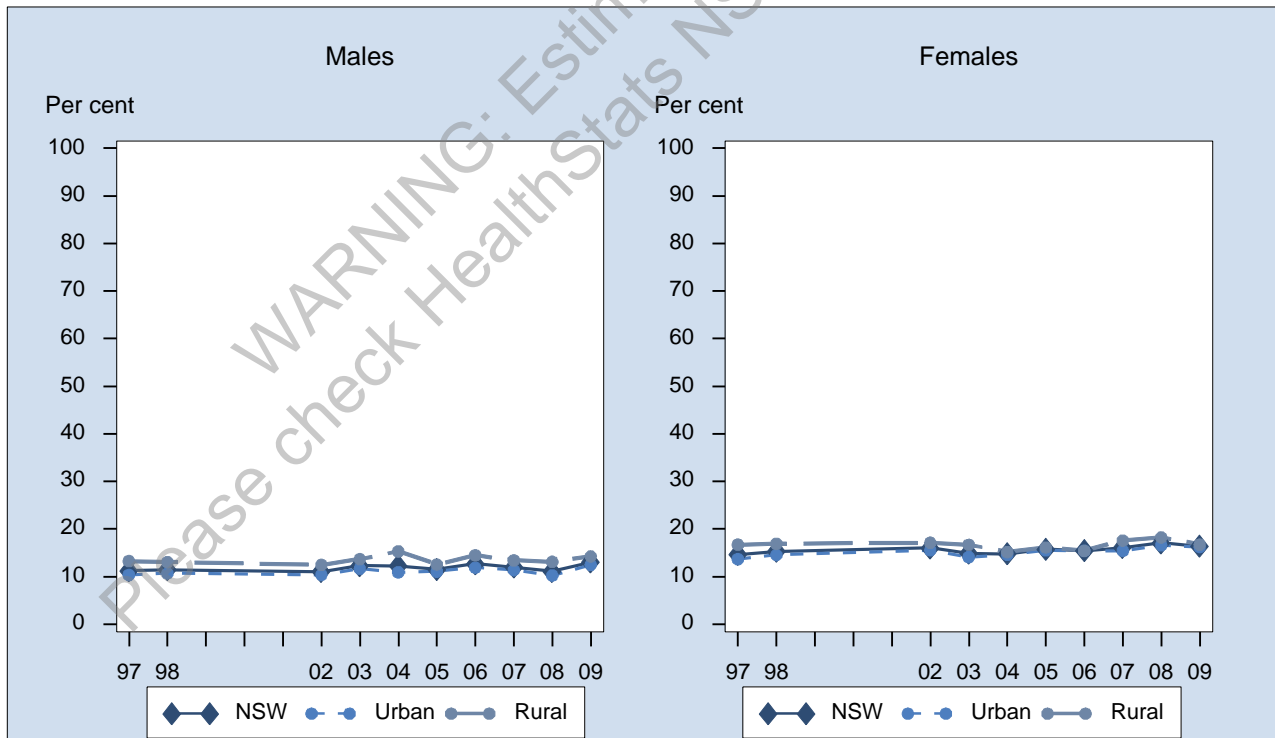
**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

**Hospital admission in the last 12 months by area health service, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 10,646 respondents in NSW. For this indicator 73 (0.68%) 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 2009 (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, 1997-2009**



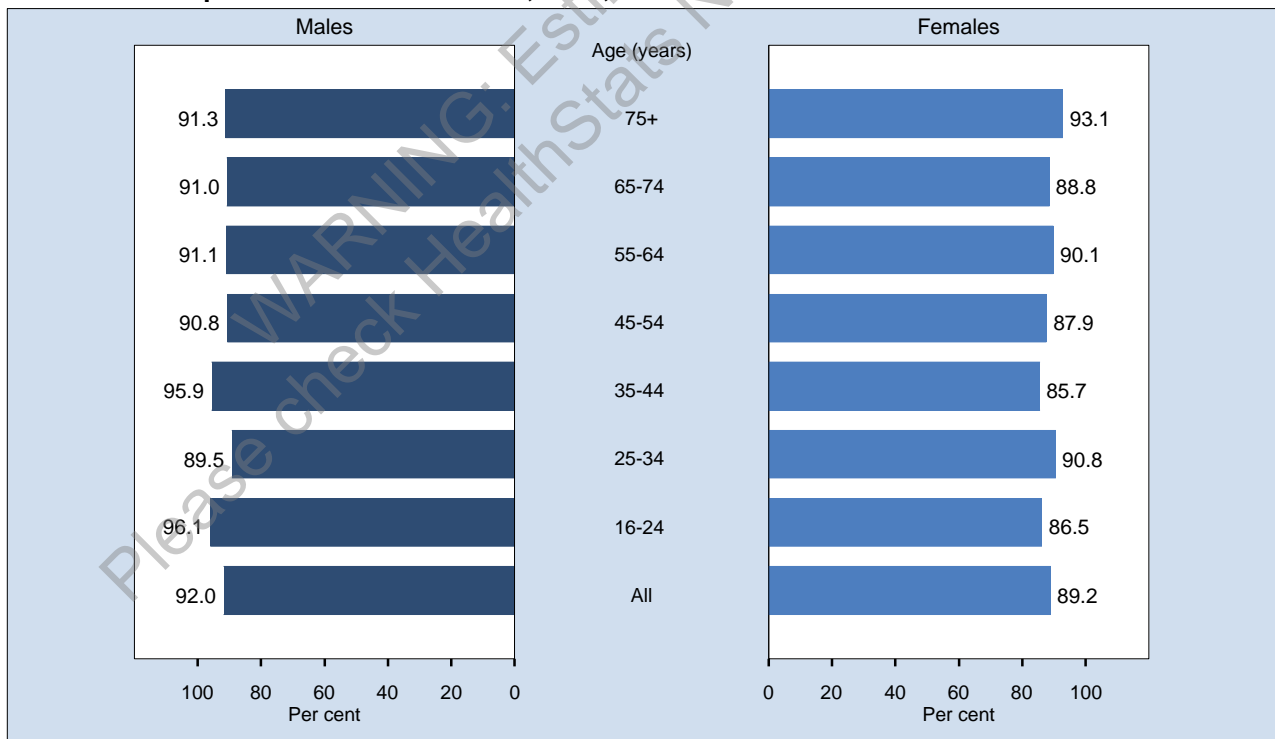
**Note:** Estimates are based on the following numbers of respondents for NSW: 1997 (17,494), 1998 (17,454), 2002 (12,603), 2003 (12,992), 2004 (9,412), 2005 (11,470), 2006 (7,941), 2007 (13,097), 2008 (10,290), 2009 (10,646). The indicator includes those admitted to hospital in the last 12 months. The 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 2009 (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, 2009**



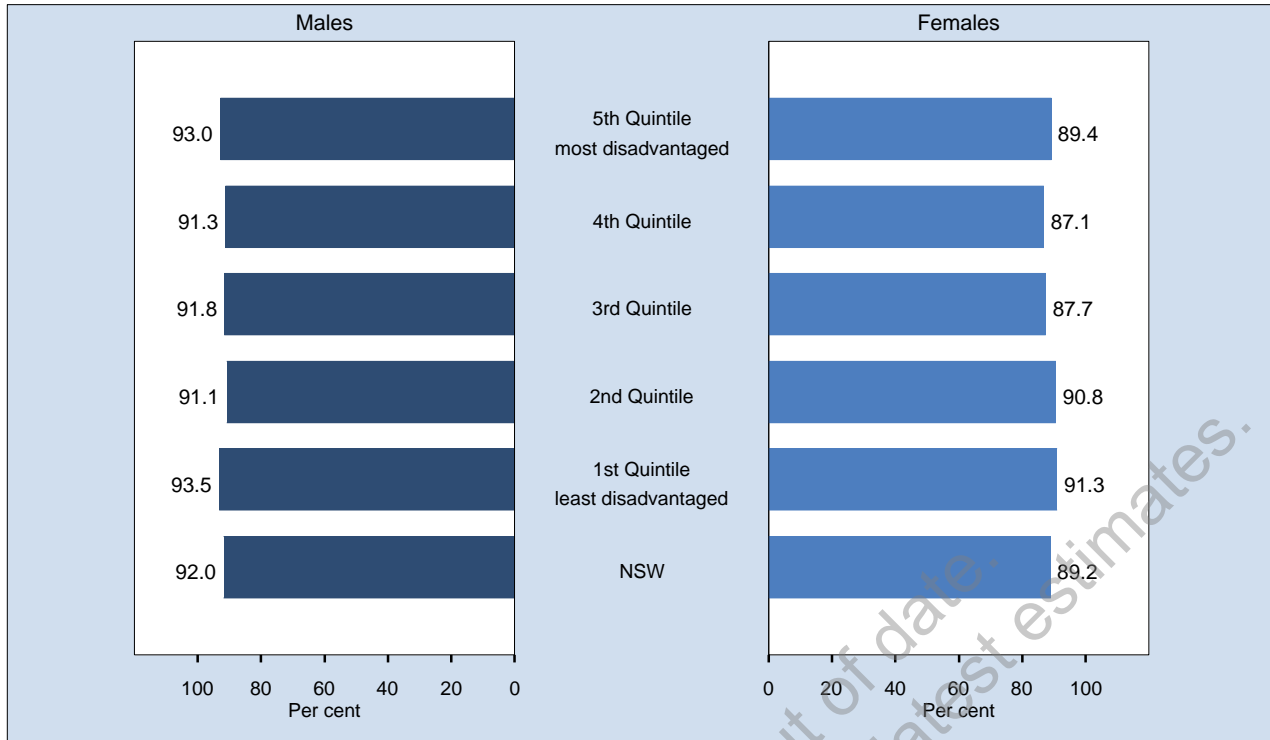
**Note:** Estimates are based on 1,781 respondents in NSW. For this indicator 11 (0.61%) were not stated (Don't know or Refused) in NSW. The questions used were: In the last 12 months, have you stayed at least 1 night in hospital? Overall, what do you think of the care you received at this hospital: Was it excellent, very good, good, fair or poor?  
**Source:** New South Wales Population Health Survey 2009 (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, 2009**



**Note:** Estimates are based on 1,781 respondents in NSW. For this indicator 11 (0.61%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

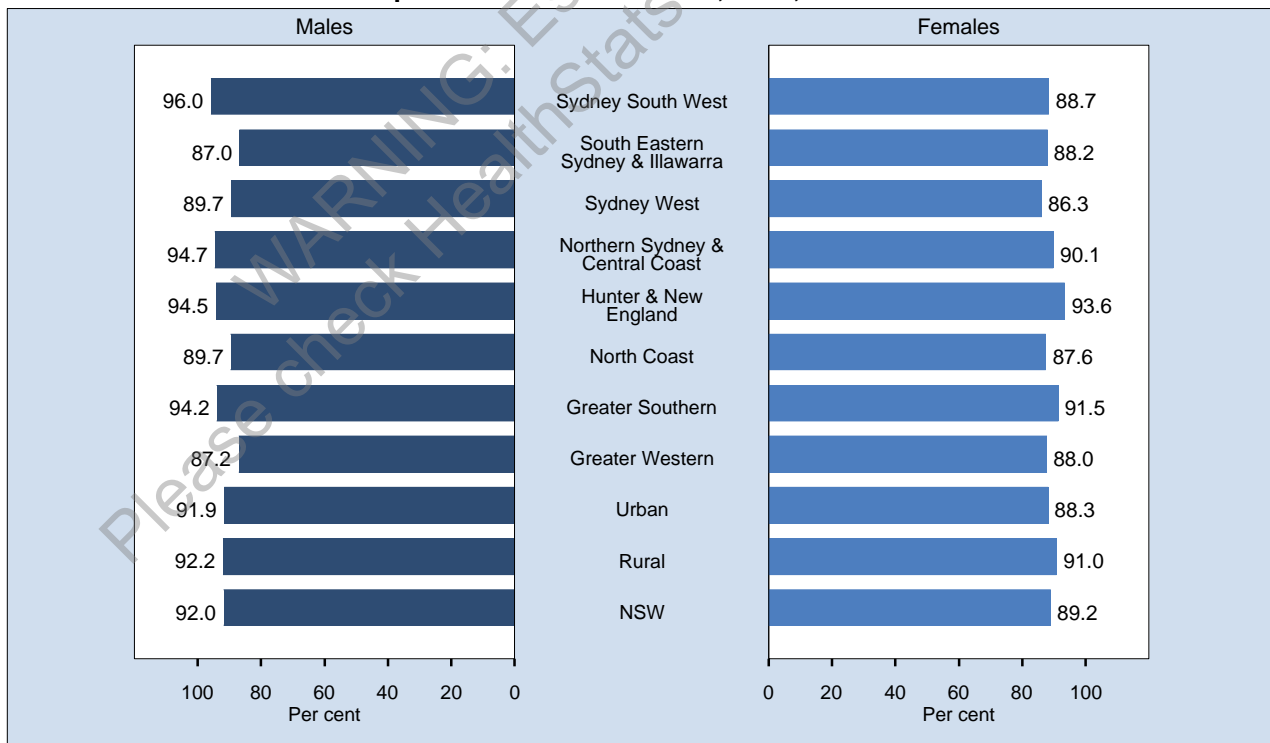
**Hospital care rated as excellent, very good or good by socioeconomic disadvantage, adults aged 16 years and over who were admitted to hospital in the last 12 months, NSW, 2009**



**Note:** Estimates are based on 1,781 respondents in NSW. For this indicator 11 (0.61%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

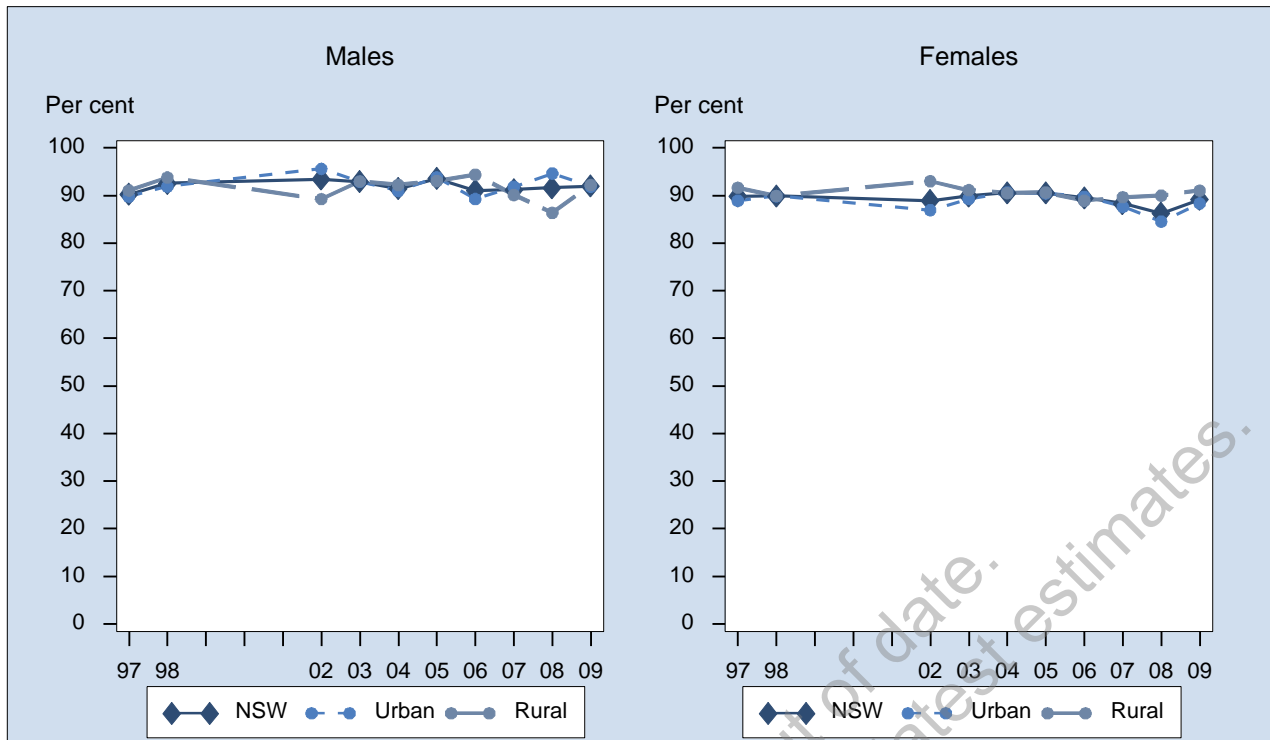
**Hospital care rated as excellent, very good or good by area health service, adults aged 16 years and over who were admitted to hospital in the last 12 months, NSW, 2009**



**Note:** Estimates are based on 1,781 respondents in NSW. For this indicator 11 (0.61%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

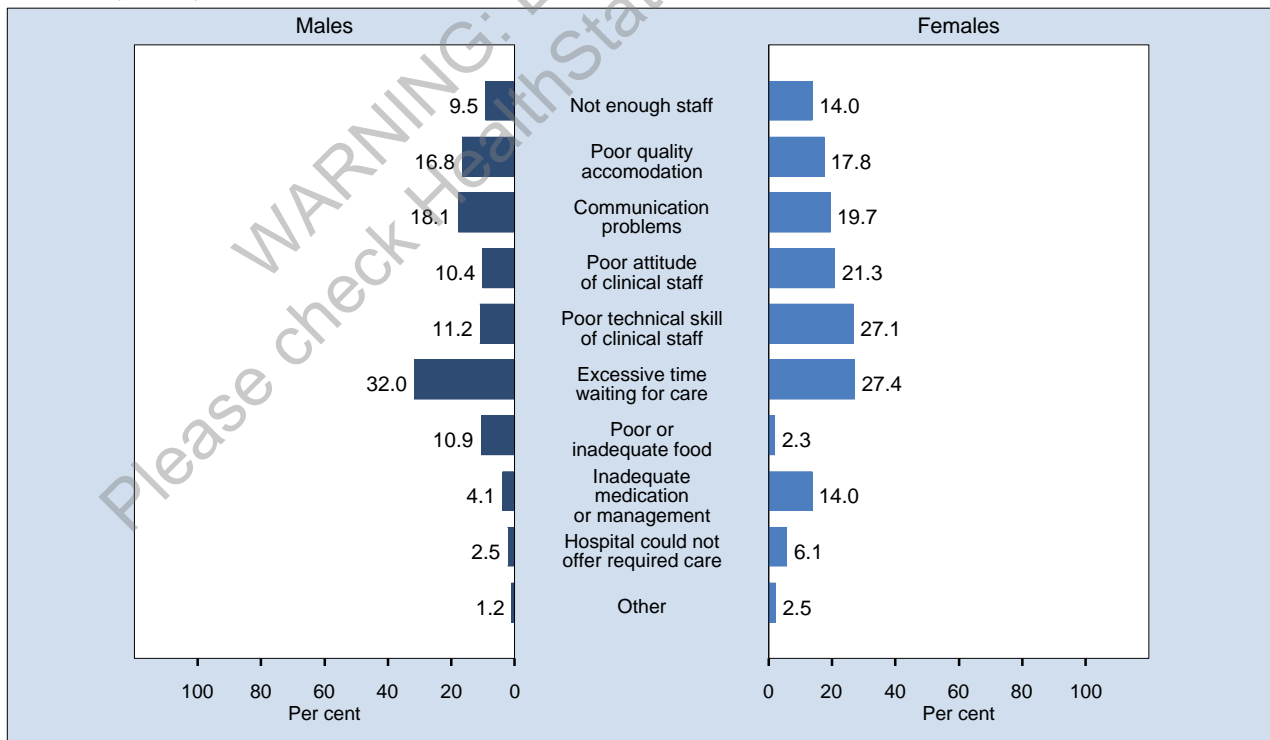
**Hospital care rated as excellent, very good or good by year, adults aged 16 years and over who were admitted to hospital in the last 12 months, NSW, 1997-2009**



**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 (1,461), 2005 (1,772), 2006 (1,245), 2007 (2,099), 2008 (1,681), 2009 (1,781). 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

**Reason for rating most recent overnight hospital stay as fair or poor, adults aged 16 years and over who were admitted to hospital in the last 12 months and rated the care as fair or poor aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 182 respondents in NSW. For this indicator 11 (5.70%) were not stated (Don't know or Refused) in NSW. The questions used 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? Could you briefly describe why you rated the care you received as fair or poor? Respondents could mention more than 1 response. Percentages may total more than 100%.

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

# General practice visits

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## Introduction

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

## Results

### *When last visited a general practice*

In 2009, 13.8 per cent of adults visited a general practice in the last week, 9.7 per cent visited a general practice 1 to 2 weeks ago, 17.6 per cent visited a general practice between 2 weeks and 1 month ago, 35.5 per cent visited a general practice between 1 month and 6 months ago, 8.7 per cent visited a general practice between 6 and 12 months ago, and 14.6 per cent visited a general practice more than 12 months ago.

### *Visited a general practice in the last 2 weeks*

In 2009, 23.5 per cent of adults visited a general practice in the last 2 weeks. A significantly lower proportion of males (19.1 per cent) than females (27.8 per cent) visited a general practice in the last 2 weeks. Among males, a significantly lower proportion of those aged 16-24 years (8.5 per cent) and 25-34 years (6.5 per cent), and a significantly higher proportion of those aged 55-64 years (26.1 per cent), 65-74 years (33.1 per cent), and 75 years and over (41.0 per cent), visited a general practice in the last 2 weeks, compared with the overall adult male population. Among females, a significantly lower proportion of those aged 16-24 years (19.5 per cent), 35-44 years (24.3 per cent), and 45-54 years (24.5 per cent), and a significantly higher proportion of those aged 65-74 years (35.2 per cent) and 75 years and over (44.4 per cent), visited a general practice in the last 2 weeks, compared with the overall adult female population.

A significantly lower proportion of adults in the second disadvantaged quintile (21.2 per cent) visited a general practice in the last 2 weeks, compared with the overall adult population.

There was no significant difference between rural and urban health areas or among area health services.

Since 1997, there has been no significant change in the proportion of adults who visited a general practice in the last 2 weeks; however, there has been a significant decrease in males and in urban health areas.

However, since 2008, there has been a significant decrease in the proportion of adults who visited a general practice in the last 2 weeks (25.2 per cent to 23.5 per cent). The decrease has been significant in males and in urban health areas.

### *Visited a general practice in the last 12 months*

In 2009, 85.5 per cent of adults visited a general practice in the last 12 months. A significantly lower proportion of males (80.9 per cent) than females (89.9 per cent) visited a general practice in the last 12 months. Among males, a significantly lower proportion of those aged 16-24 years (63.9 per cent) and 25-34 years (71.8 per cent), and a significantly higher proportion of those aged 55-64 years (91.0 per cent), 65-74 years (94.6 per cent), and 75 years and over (96.0 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 (80.4 per cent), and a significantly higher proportion of those aged 55-64 years (93.1 per cent), 65-74 years (95.6 per cent), and 75 years and over (96.4 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.

A significantly lower proportion of adults in rural health areas (83.2 per cent) than urban health areas (86.5 per cent) visited a general practice in the last 12 months. A significantly lower proportion of adults in the Hunter & New England Area Health Service (82.3 per cent) visited a general practice in the last 12 months, compared with the overall adult population.

Since 1997, there has been a significant decrease in the proportion of adults who visited a general practice in the last 12 months (87.8 per cent to 85.5 per cent). The decrease has been significant in males, and in rural health areas.

However, since 2008, there has been no significant change in the proportion of adults who visited a general practice in the last 12 months.

### ***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: 38.9 per cent rated their care as excellent, 31.5 per cent as very good, 23.1 per cent as good, 5.4 per cent as fair, and 1.1 per cent as poor. Responses of excellent, very good and good were combined into a positive rating of care.

In 2009, 93.5 per cent gave a positive rating to the care they received (as excellent or very good or good). There was no significant difference between males and females. A significantly lower proportion of adults aged 35-44 years (91.5 per cent), and a significantly higher proportion of adults aged 65-74 years (96.9 per cent) and 75 years and over (96.6 per cent), gave a positive rating to the care they received, compared with the overall adult population.

There was no significant difference among quintiles of disadvantage, or between rural and urban health areas. A significantly higher proportion of adults in the Sydney South West Area Health Service (95.0 per cent) gave a positive rating to the care they received, compared with the overall adult population.

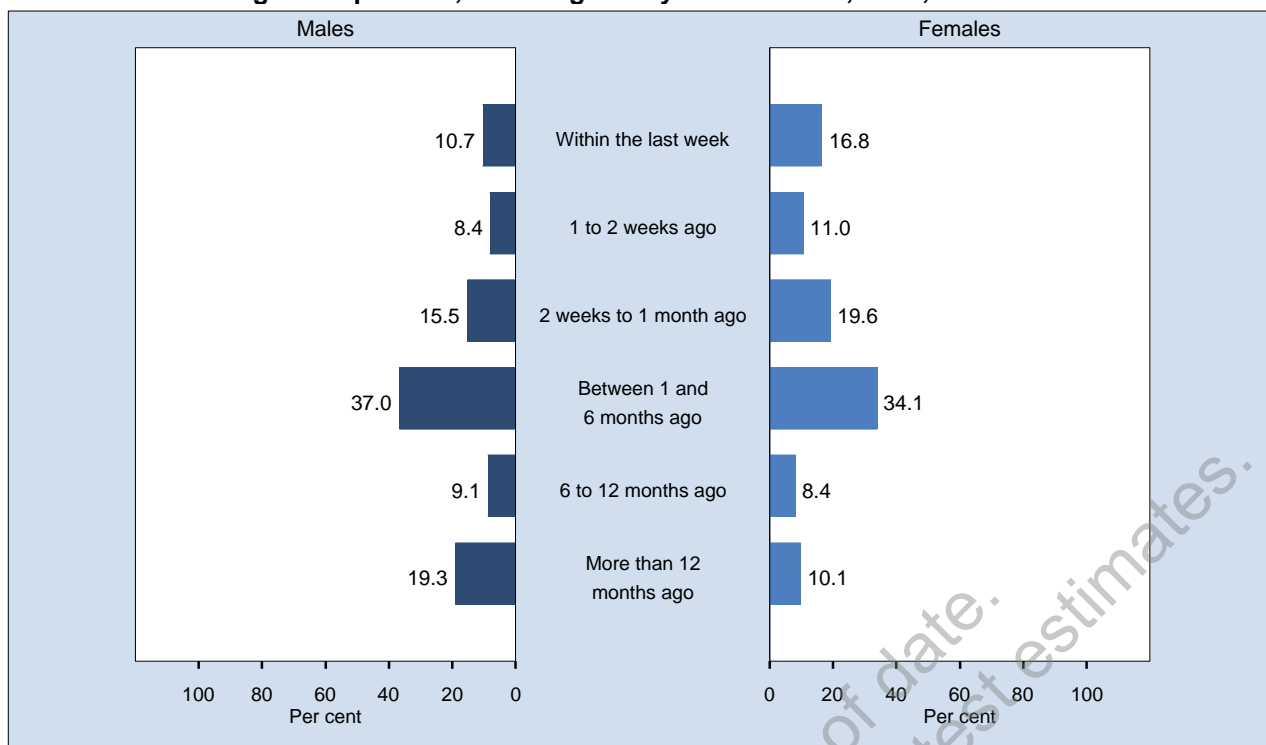
Since 2007, there has been no significant change in the proportion of adults who gave a positive rating to the general practice care they received.

The main reason for rating care as fair or poor was lack of caring manner (32.5 per cent) followed by: inadequate or wrong medication or management (26.3 per cent), waiting time (25.8 per cent), unhappy with level of service (22.0 per cent), communication problems (12.6 per cent), lack of technical skills of clinical staff (8.4 per cent), lack of availability or other access problems (6.2 per cent), can't find a general practice I like (3.8 per cent), too expensive (3.4 per cent), lack of English on part of doctor (1.0 per cent), and too far to go (0.3 per cent). Respondents could mention more than 1 response.

WARNING: Estimated out of date.  
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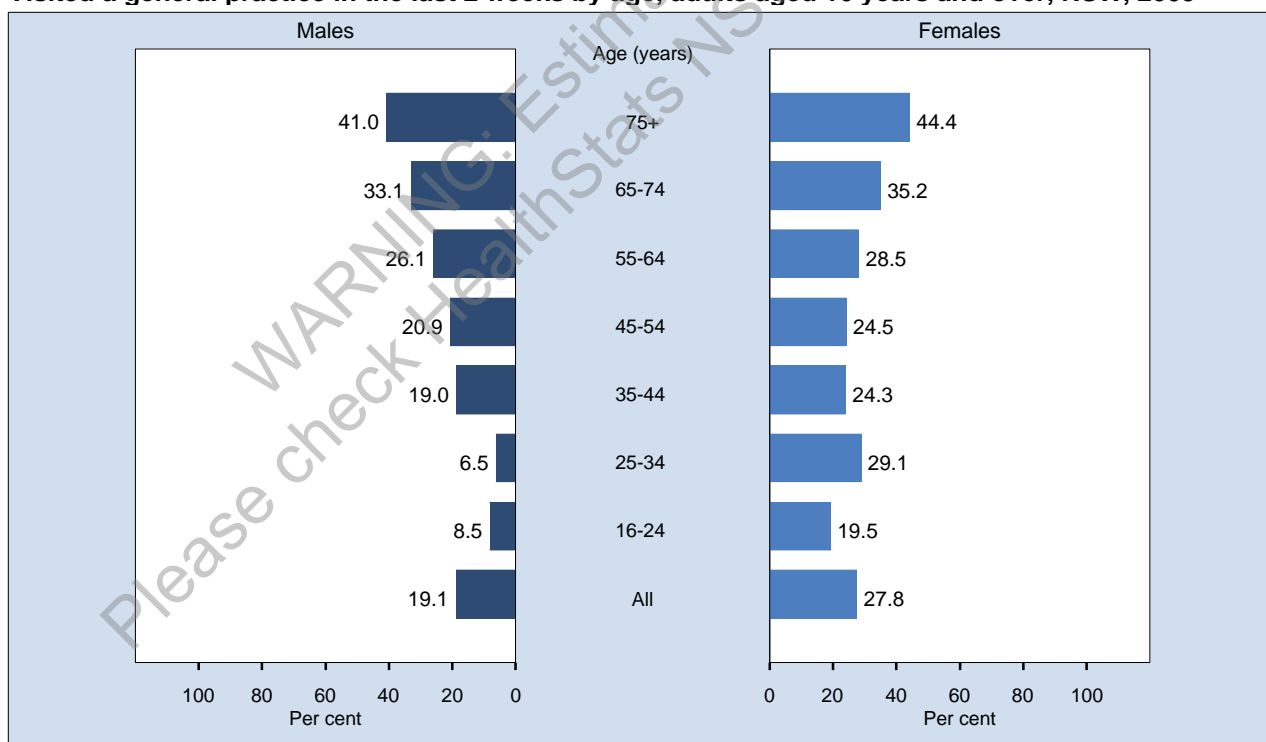
### When last visited a general practice, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 10,608 respondents in NSW. For this indicator 111 (1.04%) 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? When did you last see a general practitioner? Would you say within the last week, 1 to 2 weeks ago, 2 weeks to 1 month ago, between 1 and 6 months, or 6 to 12 months ago?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

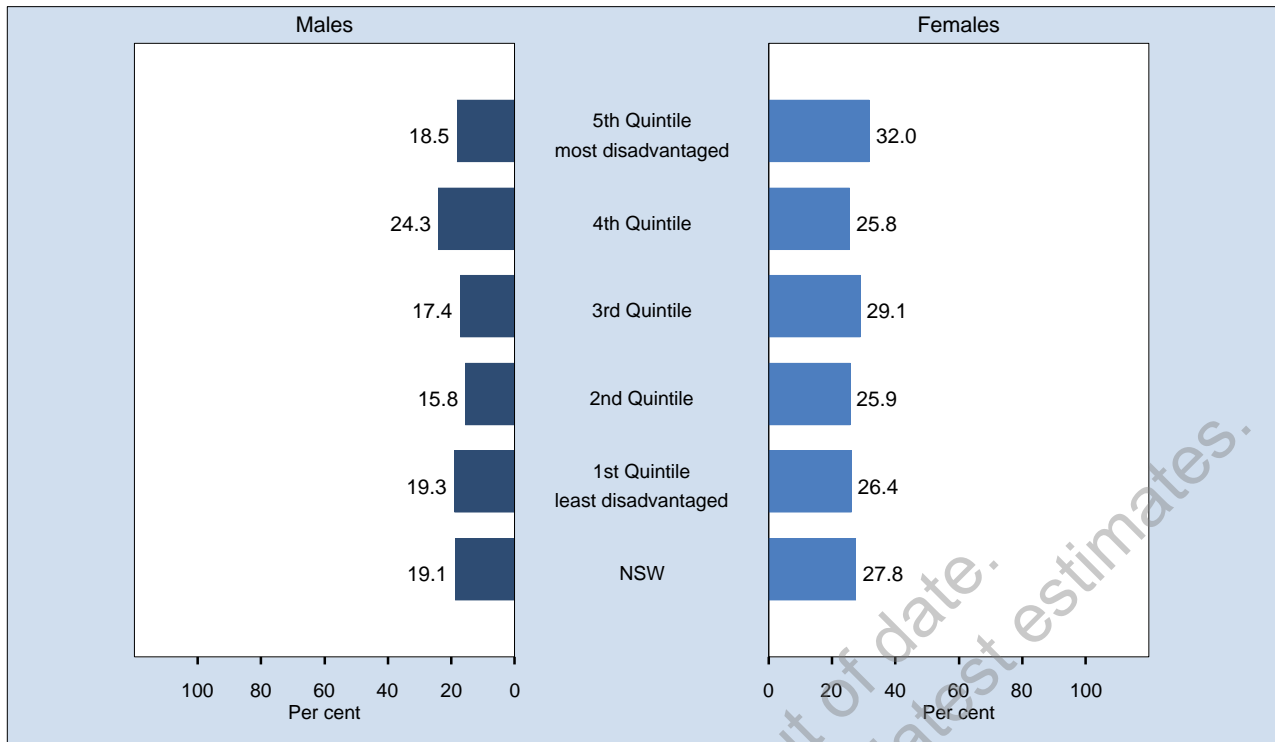
### Visited a general practice in the last 2 weeks by age, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 10,608 respondents in NSW. For this indicator 111 (1.04%) were not stated (Don't know or Refused) in NSW. The indicator includes those that have seen a general practitioner in the last 2 weeks. The questions used to define the indicator were: In the last 12 months did you see a general practitioner? When did you last see a general practitioner?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

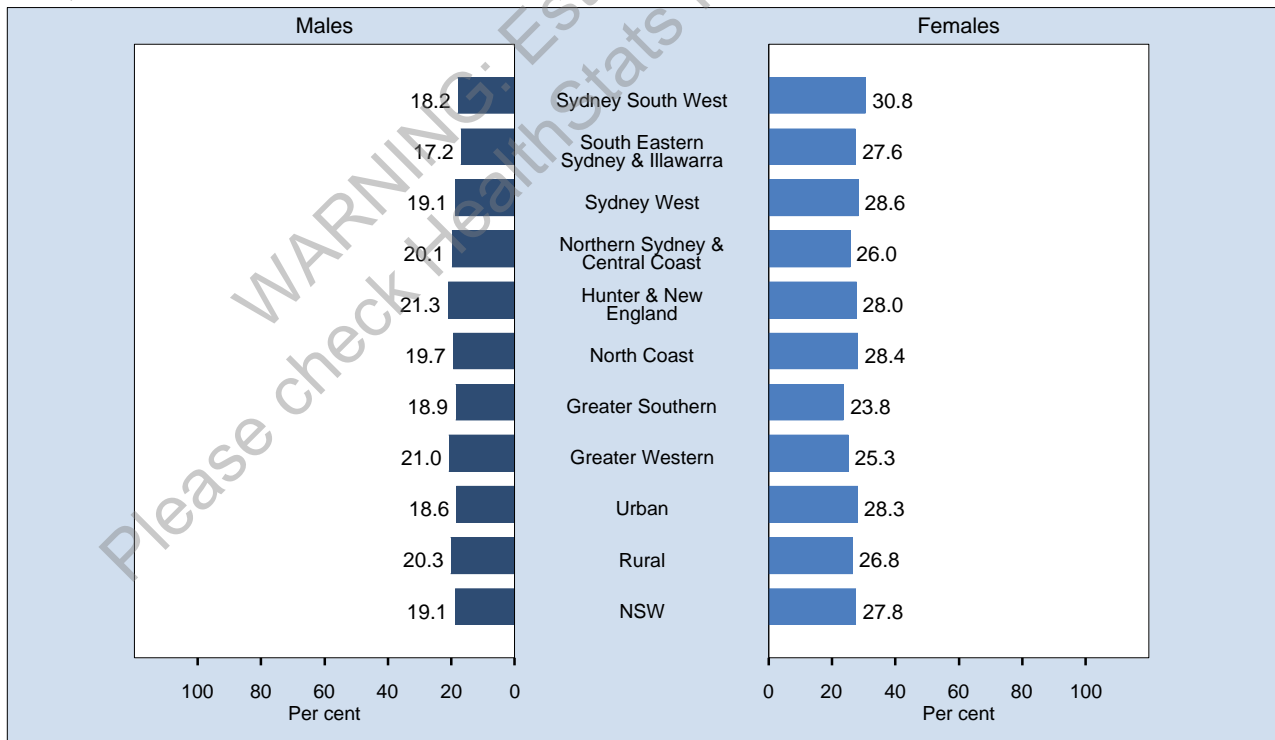
**Visited a general practice in the last 2 weeks by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 10,608 respondents in NSW. For this indicator 111 (1.04%) were not stated (Don't know or Refused) in NSW. The indicator includes those that have seen a general practitioner in the last 2 weeks. The questions used to define the indicator were: In the last 12 months did you see a general practitioner? When did you last see a general practitioner?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

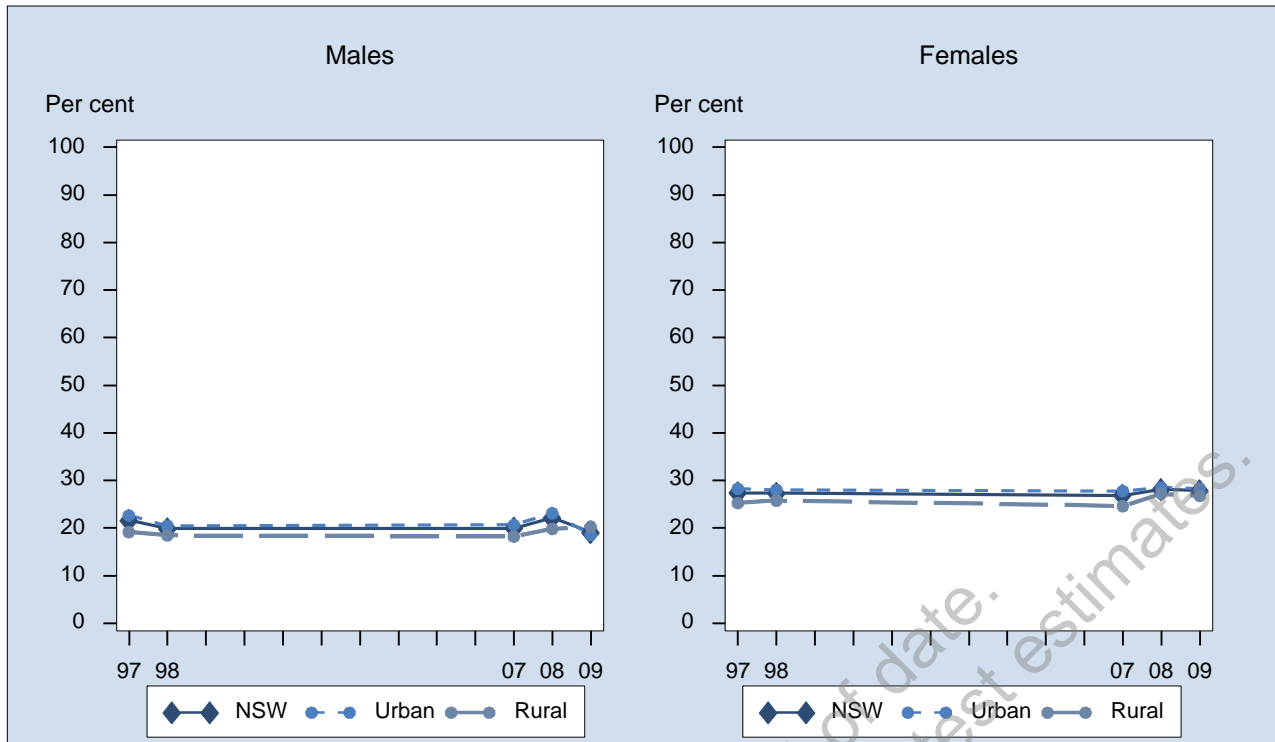
**Visited a general practice in the last 2 weeks by area health service, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 10,608 respondents in NSW. For this indicator 111 (1.04%) were not stated (Don't know or Refused) in NSW. The indicator includes those that have seen a general practitioner in the last 2 weeks. The questions used to define the indicator were: In the last 12 months did you see a general practitioner? When did you last see a general practitioner?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

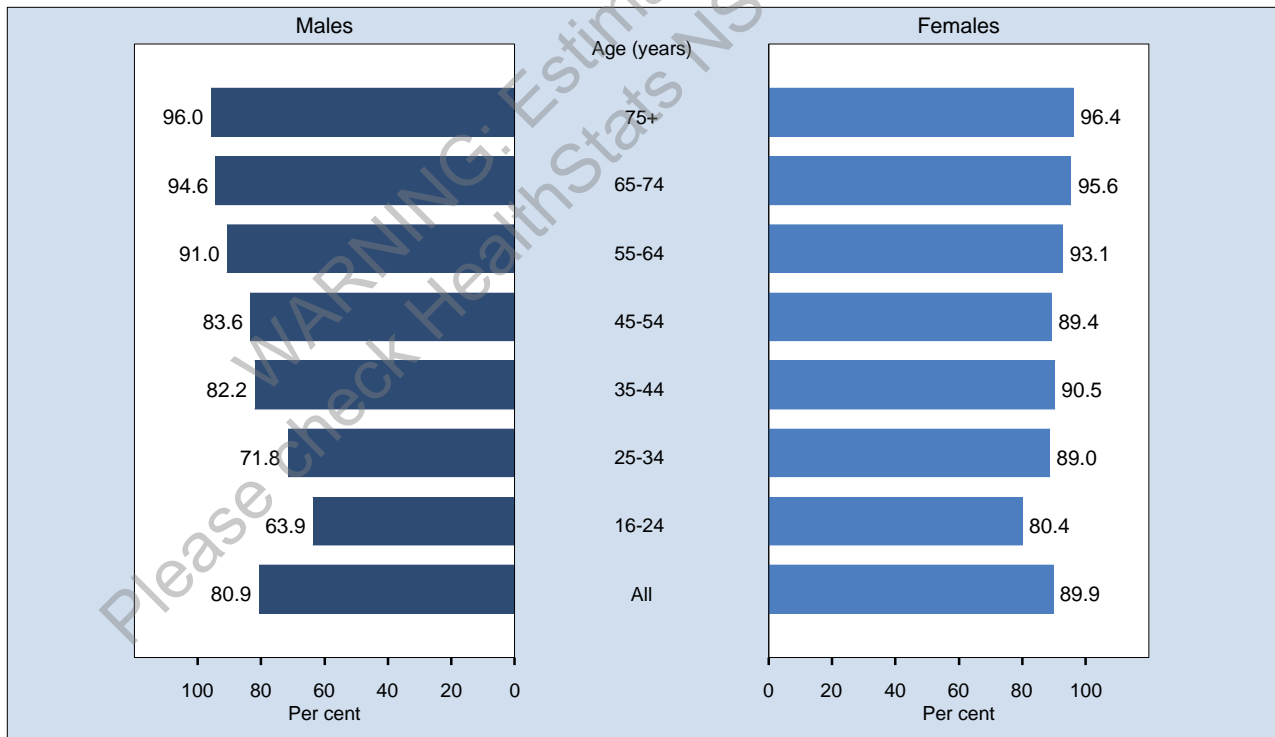
**Visited a general practice in the last 2 weeks by year, adults aged 16 years and over, NSW, 1997-2009**



**Note:** Estimates are based on the following numbers of respondents for NSW: 1997 (17,462), 1998 (17,412), 2007 (13,034), 2008 (10,248), 2009 (10,608). The indicator includes those that have seen a general practitioner in the last 2 weeks. The questions used to define the indicator were: In the last 12 months did you see a general practitioner? When did you last see a general practitioner?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

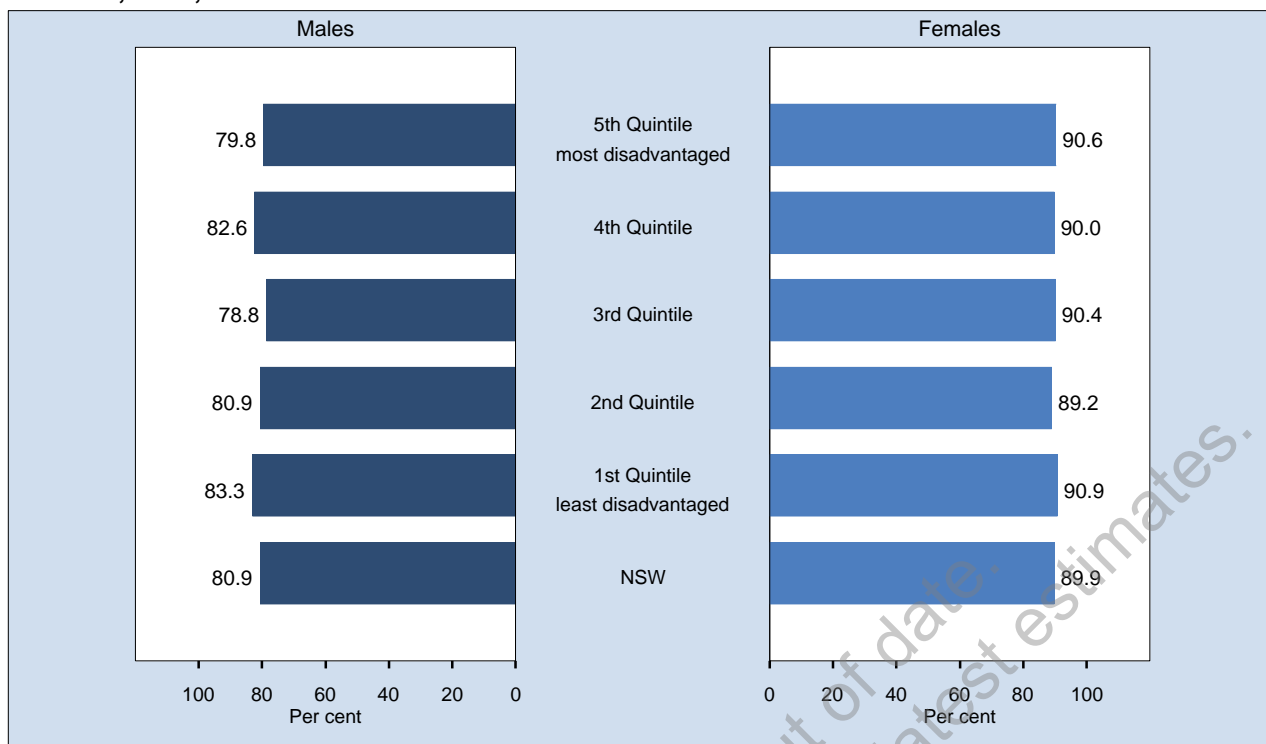
**Visited a general practice in the last 12 months by age, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 10,646 respondents in NSW. For this indicator 73 (0.68%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

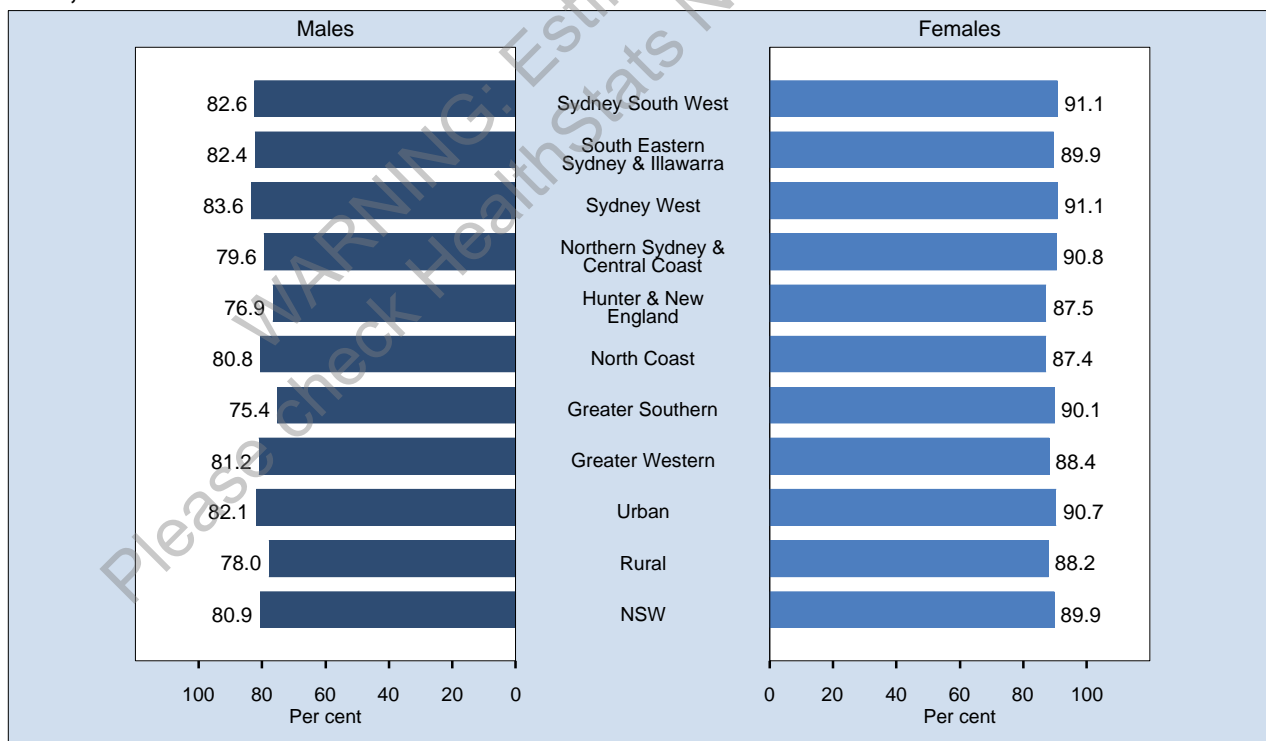
**Visited a general practice in the last 12 months by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 10,646 respondents in NSW. For this indicator 73 (0.68%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

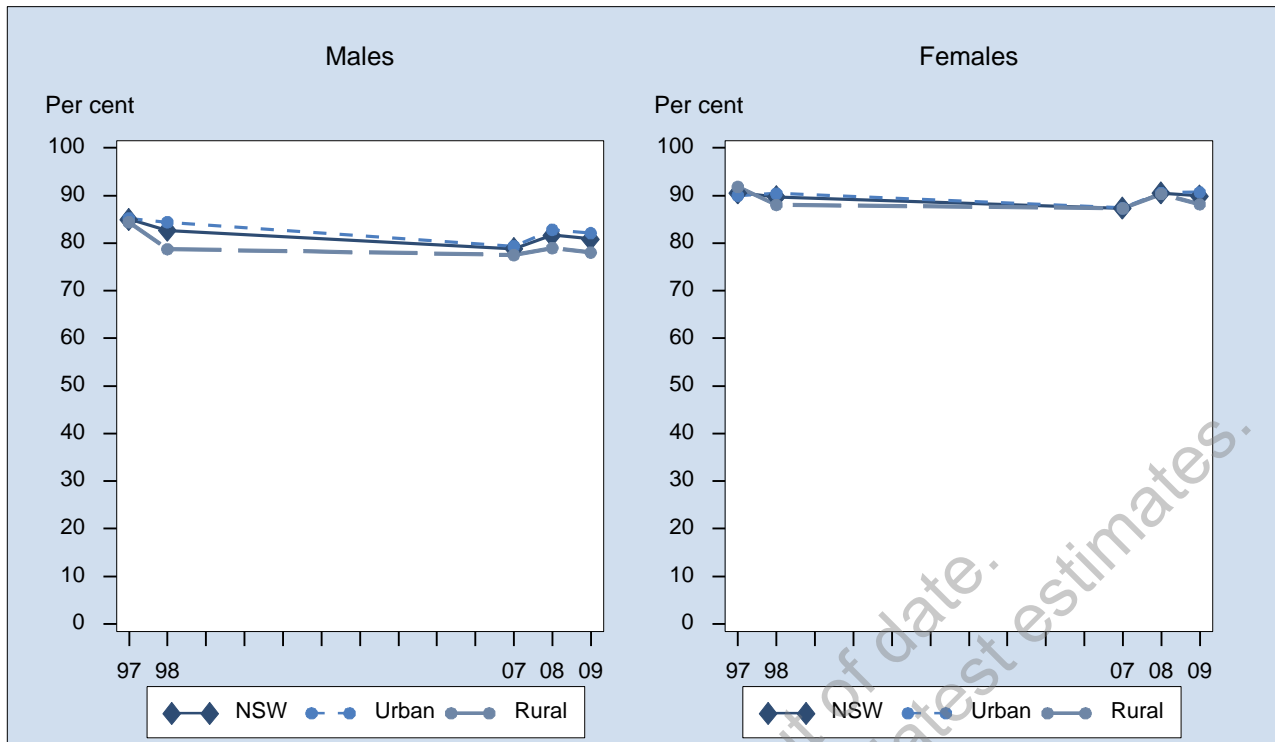
**Visited a general practice in the last 12 months by area health service, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 10,646 respondents in NSW. For this indicator 73 (0.68%) 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?

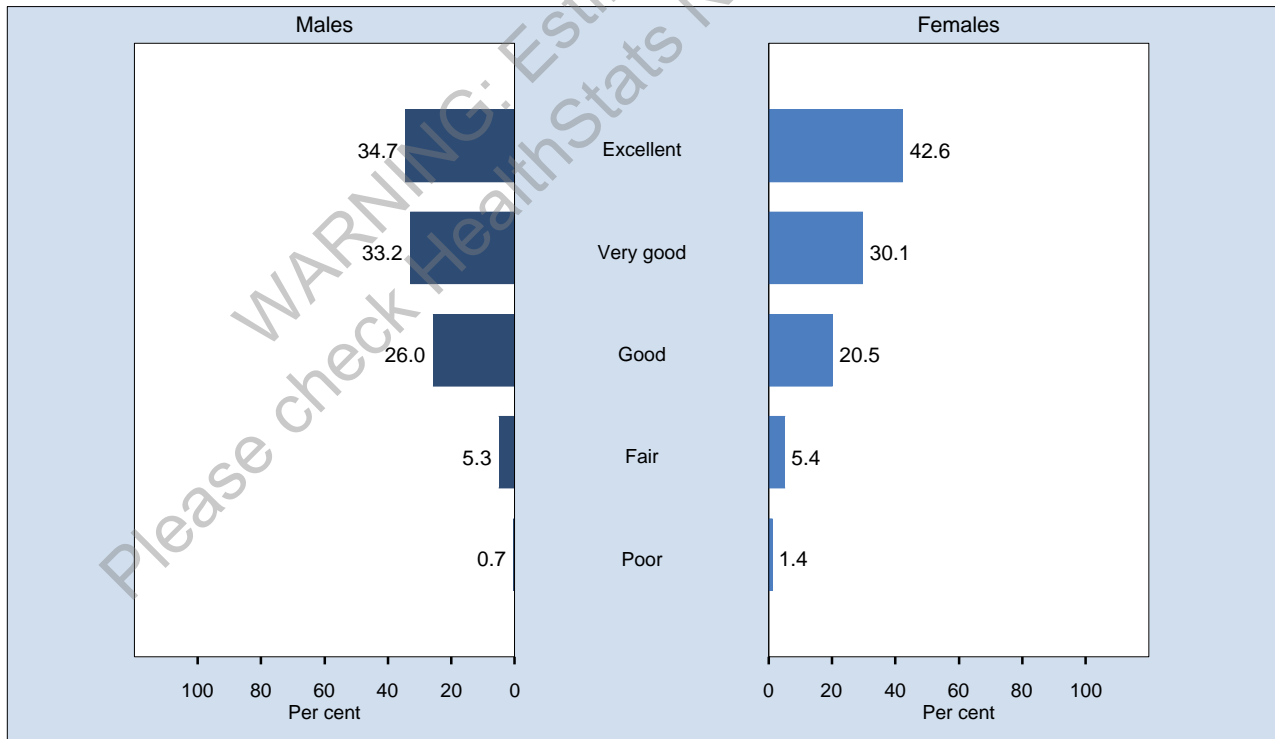
**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

**Visited a general practice in the last 12 months by year, adults aged 16 years and over, NSW, 1997-2009**



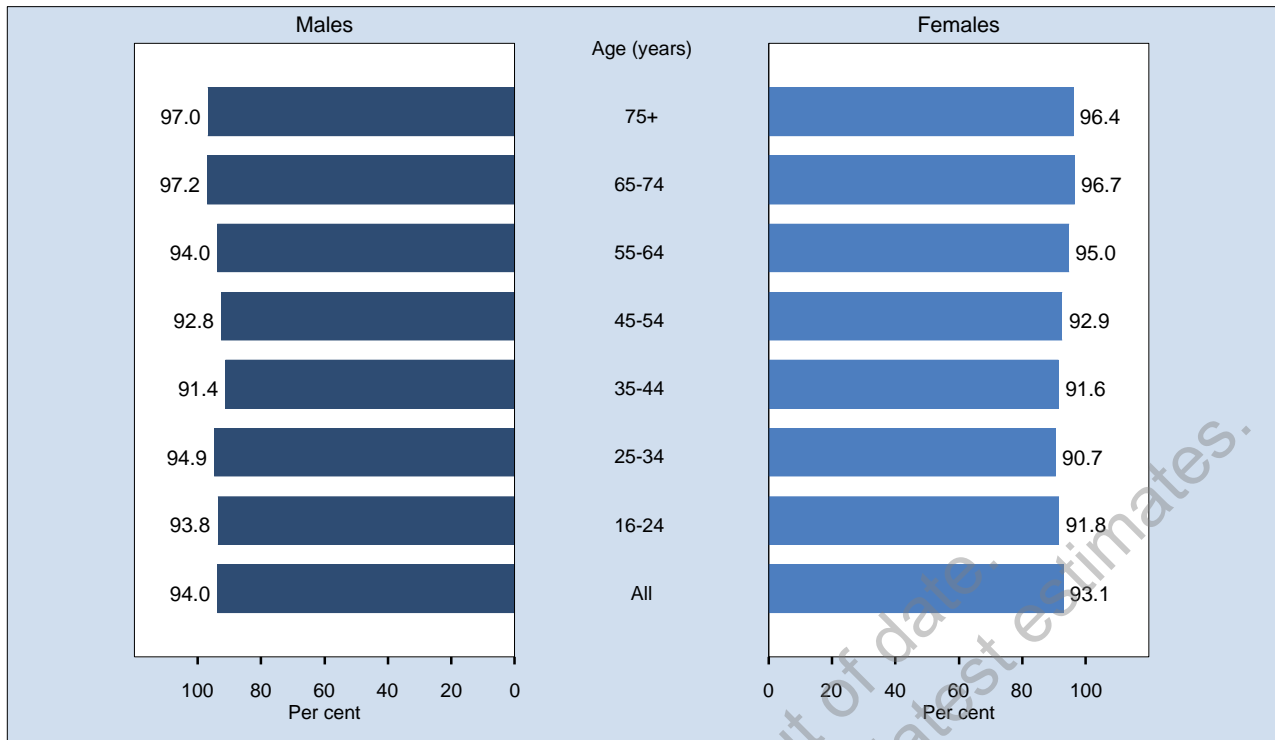
**Note:** Estimates are based on the following numbers of respondents for NSW: 1997 (17,470), 1998 (17,433), 2007 (13,097), 2008 (10,290), 2009 (10,646). The indicator includes those that have seen a general practitioner in the last 12 months. The question used to define the indicator was: In the last 12 months did you see a general practitioner?  
**Source:** New South Wales Population Health Survey 2009 (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, 2009**



**Note:** Estimates are based on 9,455 respondents in NSW. For this indicator 111 (1.16%) 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 2009 (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, 2009**



**Note:** Estimates are based on 9,455 respondents in NSW. For this indicator 111 (1.16%) 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 2009 (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, 2009**



**Note:** Estimates are based on 9,455 respondents in NSW. For this indicator 111 (1.16%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

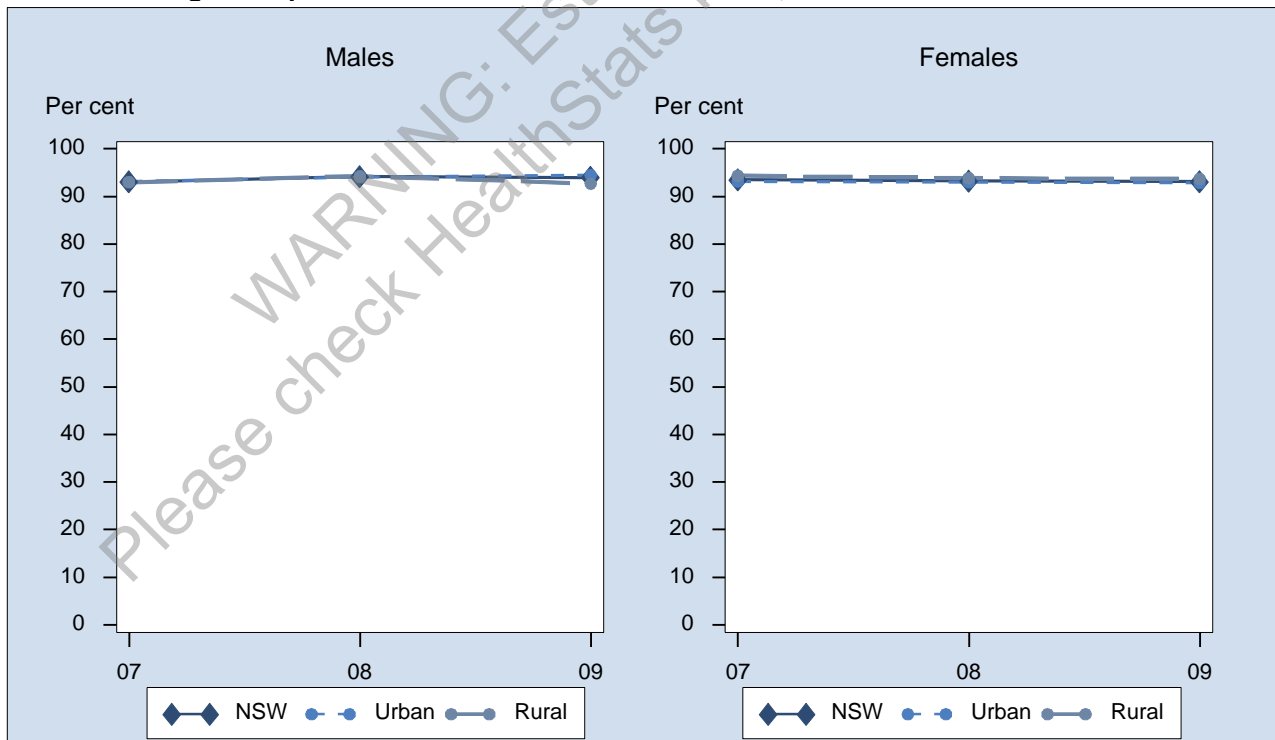
**General practice care rated as excellent, very good or good by area health service, adults aged 16 years or over who have visited a general practitioner in the last 12 months, NSW, 2009**



**Note:** Estimates are based on 9,455 respondents in NSW. For this indicator 111 (1.16%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

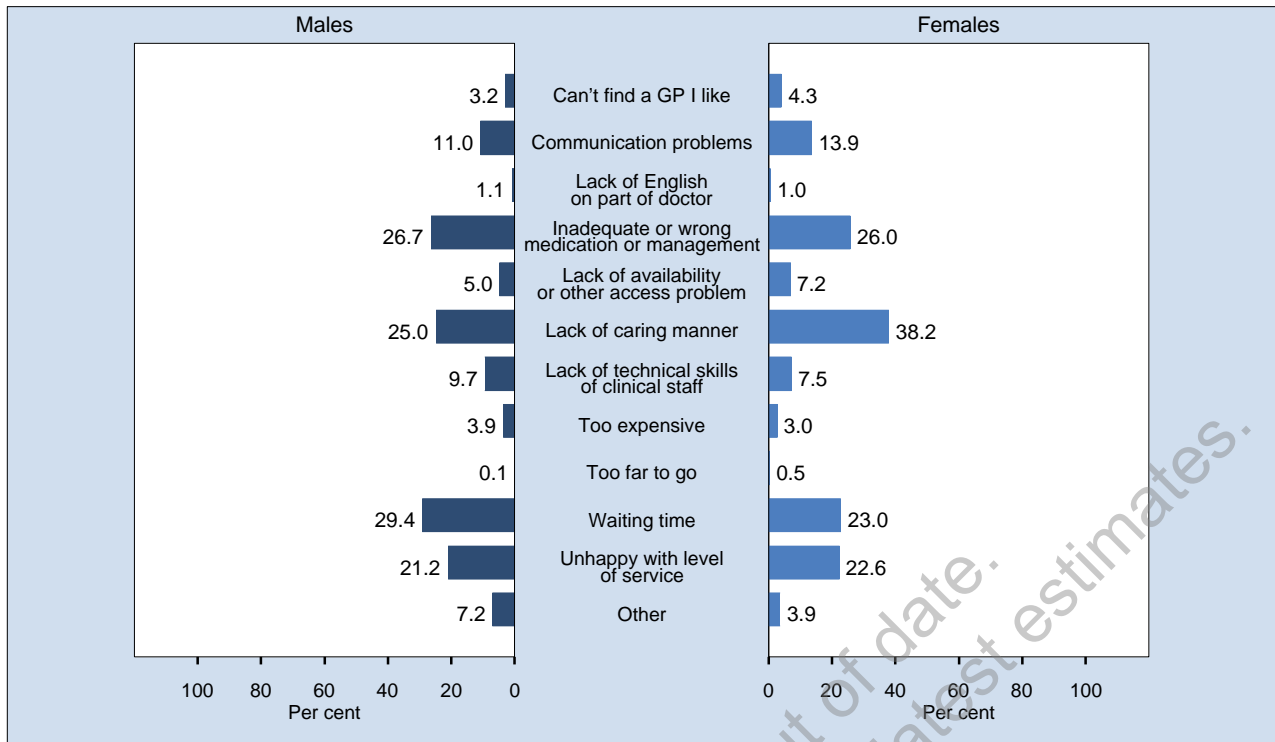
**General practice care rated as excellent, very good or good by year, adults aged 16 years or over who have visited a general practitioner in the last 12 months, NSW, 2007-2009**



**Note:** Estimates are based on the following numbers of respondents for NSW: 2007 (11,336), 2008 (9,121), 2009 (9,455). 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

**Reason for rating most recent general practice visit as fair or poor, adults aged 16 years or over who have visited a general practitioner in the last 12 months, NSW, 2009**



**Note:** Estimates are based on 549 respondents in NSW. For this indicator 41 (6.95%) were not stated (Don't know or Refused) in NSW. The indicator includes those who rated their most recent general practice visit as fair or poor. The questions used were: Did you see a general practitioner in the last 12 months? Overall, what do you think of the care received at the most recent general practitioner visit: Would you say excellent, very good, good, fair, or poor? Could you briefly describe why you rated the care received as fair or poor? Respondents could mention more than 1 response. Percentages may total more than 100%.

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

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



# Public dental service attendances

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## Introduction

New South Wales residents with a health care card or pensioner concession card are eligible for public dental care. To monitor the quality of care received in public dental services, the New South Wales Population Health Survey asks respondents questions about visits to public dental services and how they rate the care received at public dental services.

## Results

### *Attended a public dental service*

In 2009, the New South Wales Population Health Survey estimated that 5.3 per cent of adults 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 (8.9 per cent), and a significantly lower proportion of adults aged 45-54 years (4.1 per cent) and 55-64 years (3.9 per cent), attended a public dental service in the last 12 months.

A significantly lower proportion of adults in the first or least disadvantaged quintile (3.6 per cent) and second disadvantaged quintile (3.8 per cent), and significantly a higher proportion of adults in the fifth or most disadvantaged quintile (7.8 per cent), attended a public dental service in the last 12 months.

A significantly higher proportion of adults in rural health areas (6.3 per cent) than urban health areas (4.9 per cent) attended a public dental service in the last 12 months. A significantly higher proportion of adults in the Greater Western Area Health Service (7.3 per cent) attended a public dental service in the last 12 months.

Since 2002, there has been no significant change in the proportion of adults who attended a public dental service in the last 12 months.

### *Rating of public dental service care*

Those who attended a public dental service were asked to rate the care they received: 25.4 per cent rated their care as excellent, 35.7 per cent as very good, 27.4 per cent as good, 7.3 per cent as fair, and 4.3 per cent as poor. Responses of excellent, very good, and good were combined into a positive rating of care.

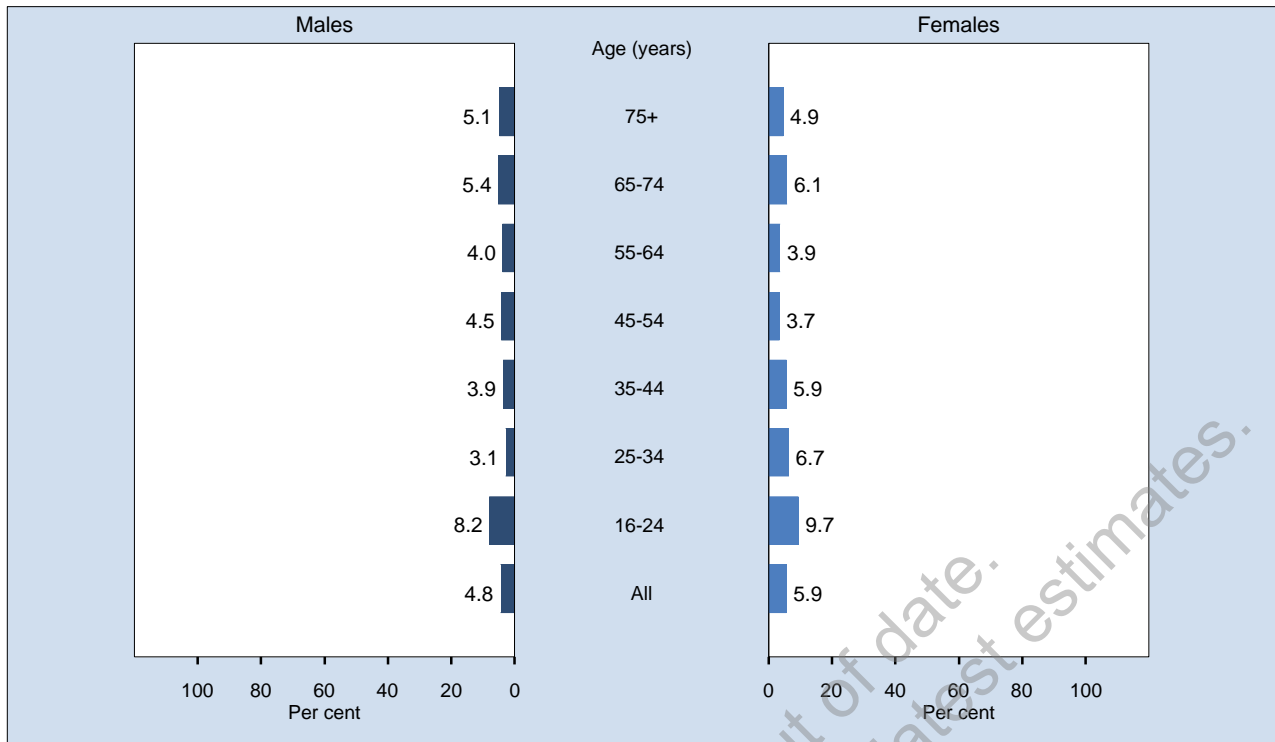
In 2009, among those adults who attended a public dental service in the last 12 months, 88.5 per cent gave a positive rating to the care they received. There was no significant difference between females and males. A significantly higher proportion of adults aged 16-24 years (97.9 per cent) gave a positive rating to the care they received, compared with the overall adult population.

There was no significant difference among quintiles of disadvantage, or between rural and urban health areas. A significantly higher proportion of adults in the Greater Southern (97.4 per cent) and Greater Western (94.7 per cent) Area Health Services, and a significantly lower proportion of adults in the North Coast Area Health Service (76.5 per cent), gave a positive rating to the care they received, compared with the overall adult population.

Since 2002, there has been a significant increase in the proportion of adults who gave a positive rating to the public dental service care they received (81.6 per cent to 88.5 per cent). The increase has been significant in rural health areas.

However, since 2008, there has been no significant change in the proportion of adults who gave a positive rating to the public dental service care they received.

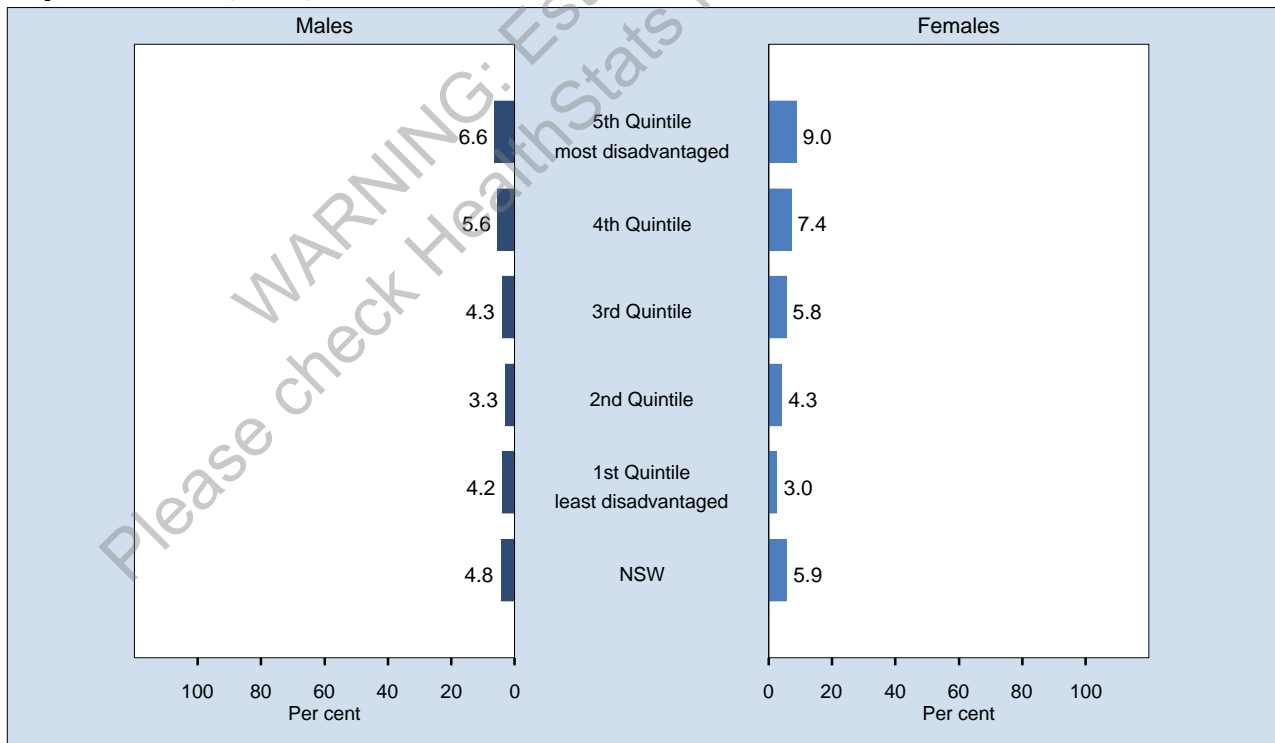
**Public dental service attendance in the last 12 months by age, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 10,646 respondents in NSW. For this indicator 73 (0.68%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

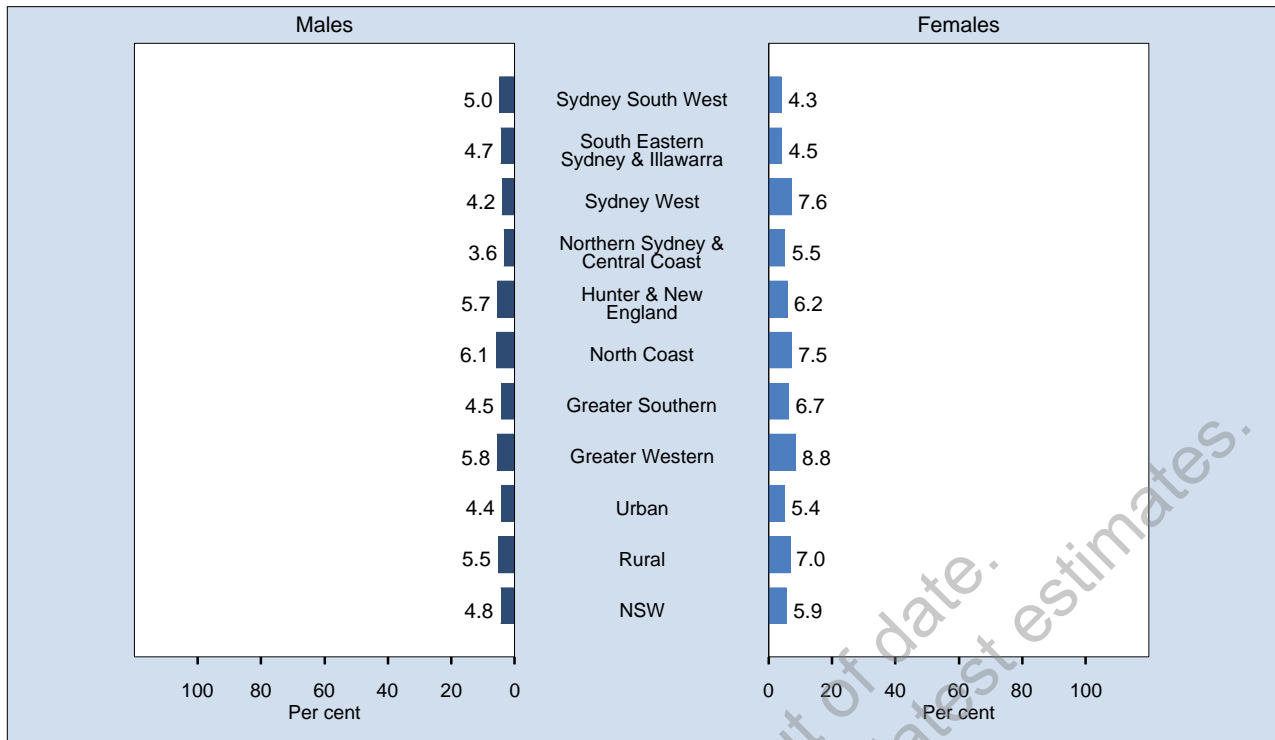
**Public dental service attendance in the last 12 months by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 10,646 respondents in NSW. For this indicator 73 (0.68%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

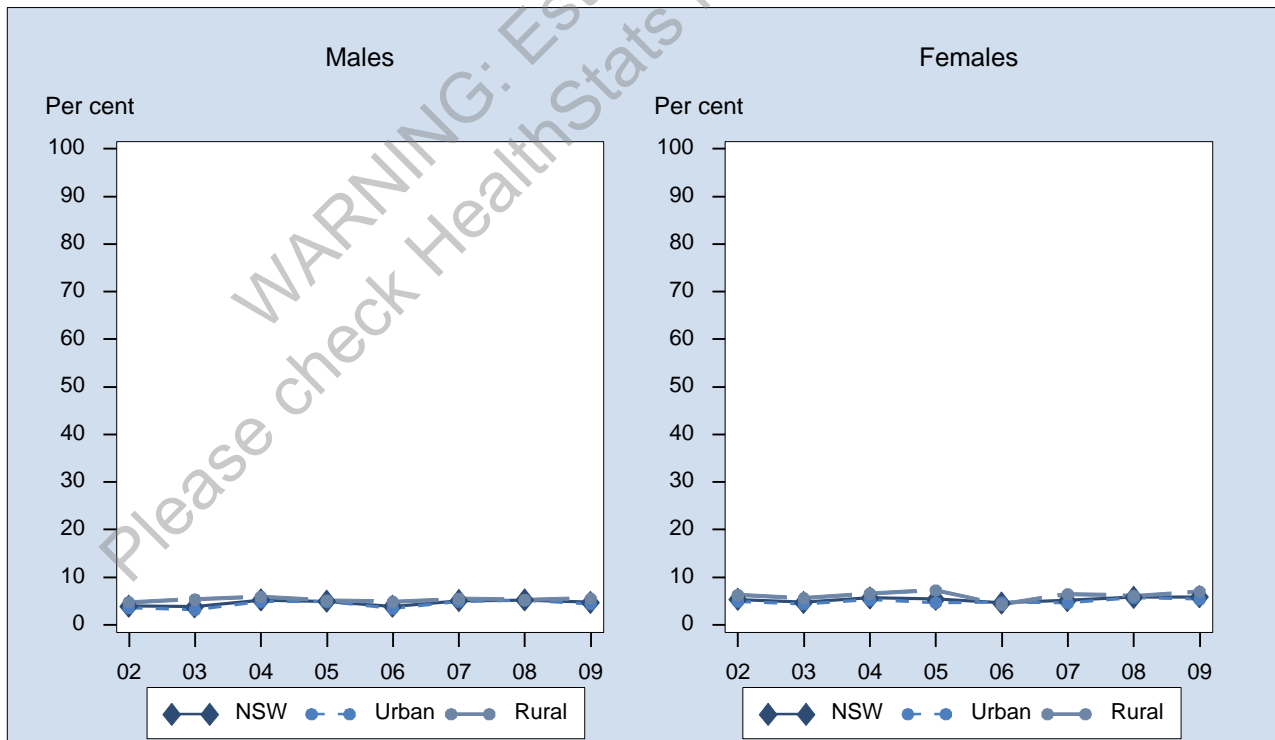
**Public dental service attendance in the last 12 months by area health service, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 10,646 respondents in NSW. For this indicator 73 (0.68%) 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 2009 (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, 2002-2009**



**Note:** Estimates are based on the following numbers of respondents for NSW: 2002 (12,603), 2003 (12,992), 2004 (9,412), 2005 (11,470), 2006 (7,941), 2007 (13,097), 2008 (10,290), 2009 (10,646). 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

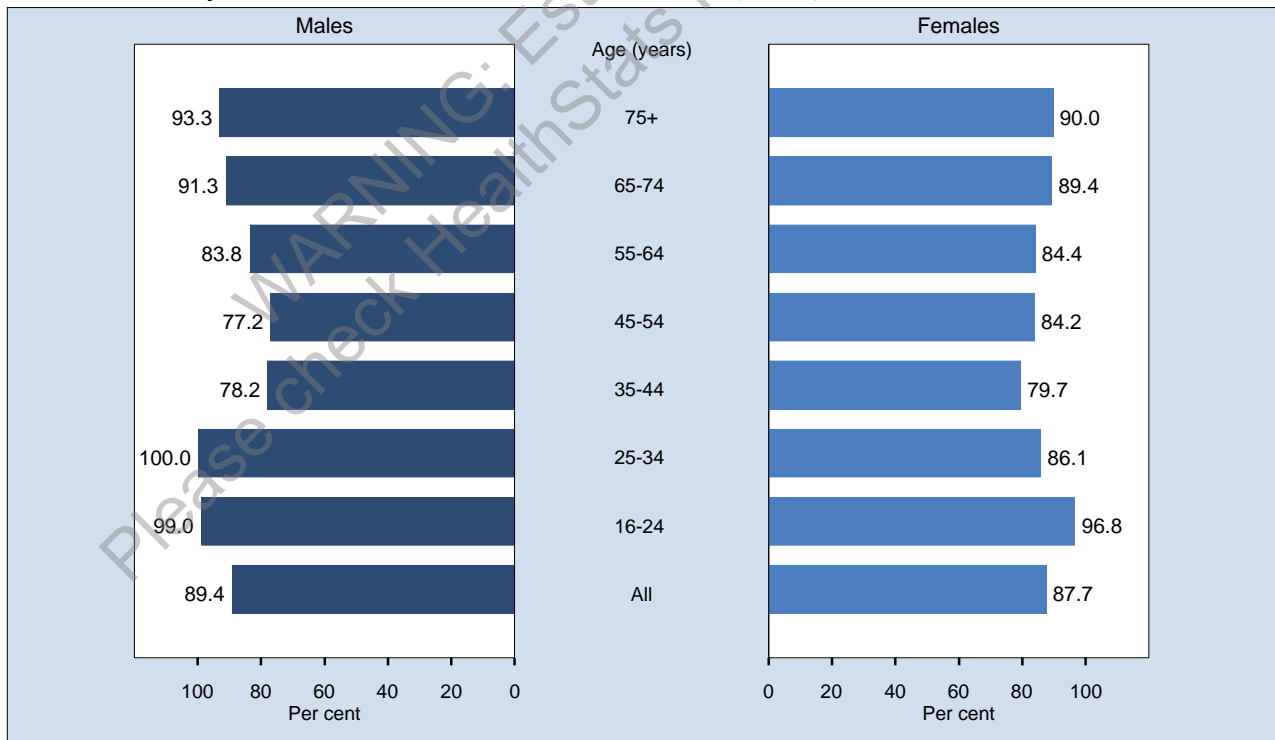
**Public dental service care rating, adults aged 16 years or over who attended a public dental service in the last 12 months, NSW, 2009**



**Note:** Estimates are based on 577 respondents in NSW. For this indicator 6 (1.03%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

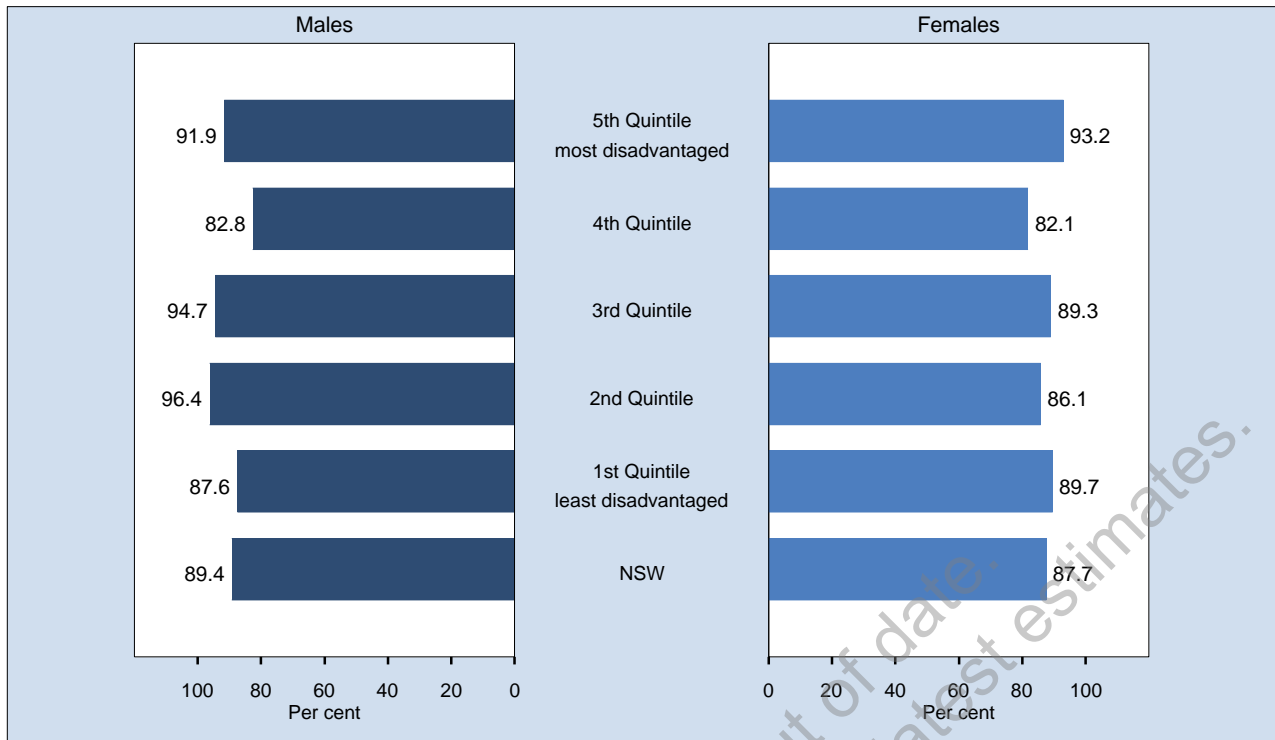
**Public dental service care rated as excellent, very good, or good by age, adults aged 16 years or over who attended a public dental service in the last 12 months, NSW, 2009**



**Note:** Estimates are based on 577 respondents in NSW. For this indicator 6 (1.03%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

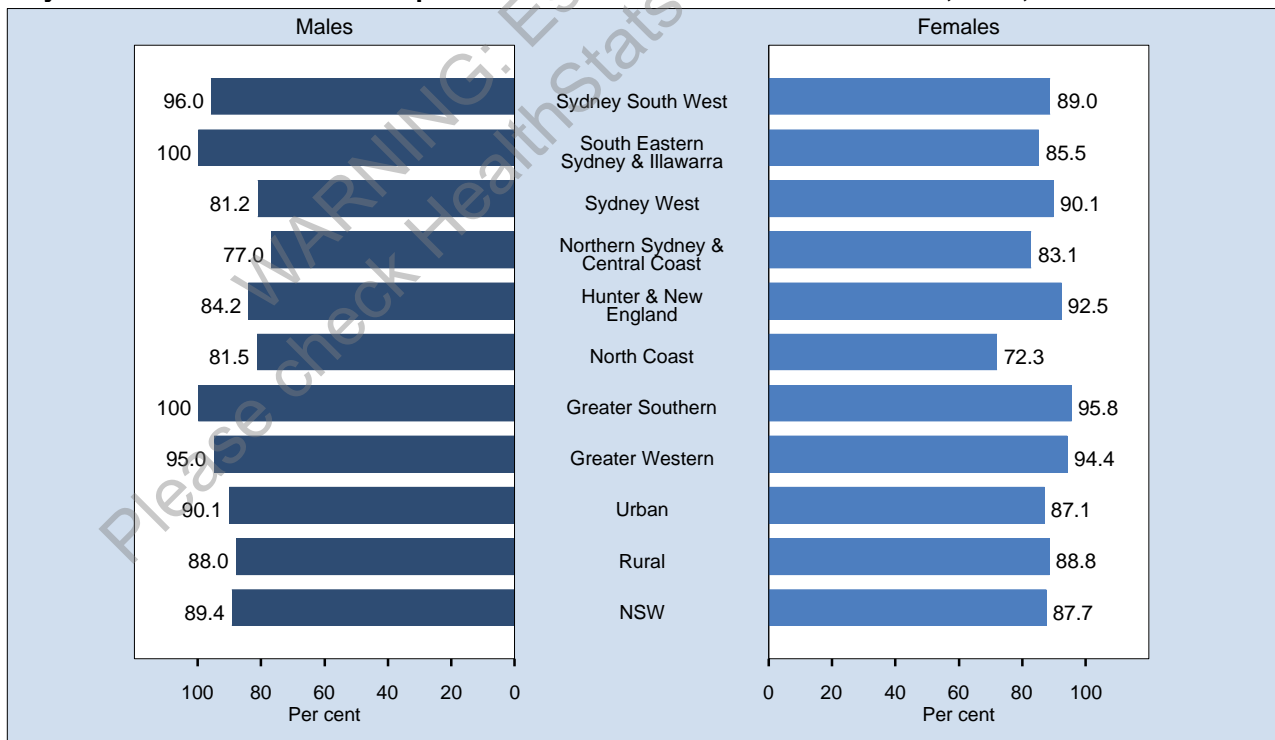
**Public dental service care rated as excellent, very good, or good by socioeconomic disadvantage, adults aged 16 years or over who attended a public dental service in the last 12 months, NSW, 2009**



**Note:** Estimates are based on 577 respondents in NSW. For this indicator 6 (1.03%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

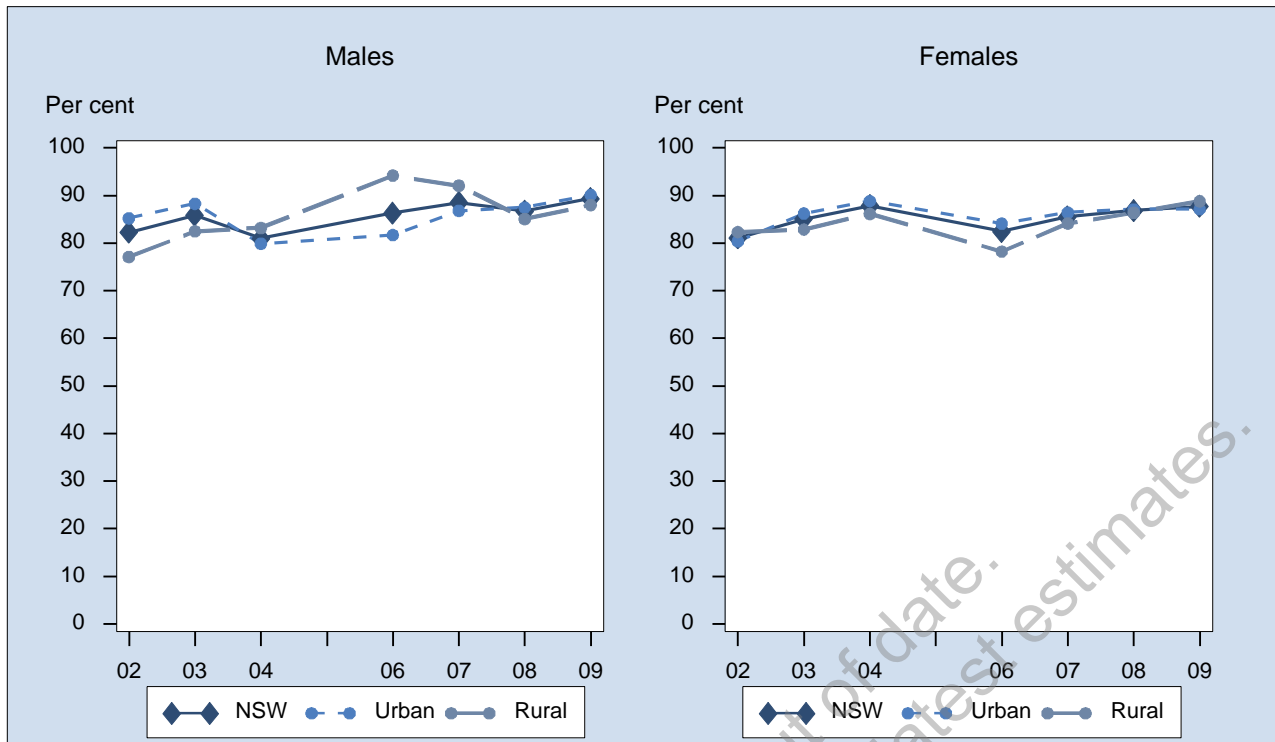
**Public dental service care rated as excellent, very good, or good by area health service, adults aged 16 years or over who attended a public dental service in the last 12 months, NSW, 2009**



**Note:** Estimates are based on 577 respondents in NSW. For this indicator 6 (1.03%) 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 2009 (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, 2002-2009**



**Note:** Estimates are based on the following numbers of respondents for NSW: 2002 (636), 2003 (656), 2004 (542), 2006 (331), 2007 (684), 2008 (574), 2009 (577). 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

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

# Community health centre attendances

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## Introduction

To monitor the quality of care received in community health centres, the New South Wales Population Health Survey asks respondents questions about visits to community health centres and how they rate the care received at community health centres.

## Results

### *Attended a community health centre*

In 2009, the New South Wales Population Health Survey estimated that 7.9 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 (6.2 per cent) than females (9.5 per cent) attended a community health centre in the last 12 months. 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 45-54 years (5.0 per cent), 55-64 years (7.3 per cent), 65-74 years (7.2 per cent), and 75 years and over (7.0 per cent), and a significantly higher proportion of those aged 25-34 years (15.1 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 (5.5 per cent), and a significantly higher proportion of adults in the fourth disadvantaged quintile (10.1 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 health areas (10.4 per cent) than urban health areas (6.8 per cent) attended a community health centre in the last 12 months. A significantly lower proportion of adults in the Sydney South West Area Health Service (5.8 per cent), and a significantly higher proportion of adults in the Greater Southern (12.1 per cent) and Greater Western (12.9 per cent) Area Health Services, 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 7.9 per cent). The increase has been significant in males, and in rural health areas.

However, since 2008, there has been no significant change in the proportion of adults who attended a community health centre in the last 12 months.

### *Rating of community health centre care*

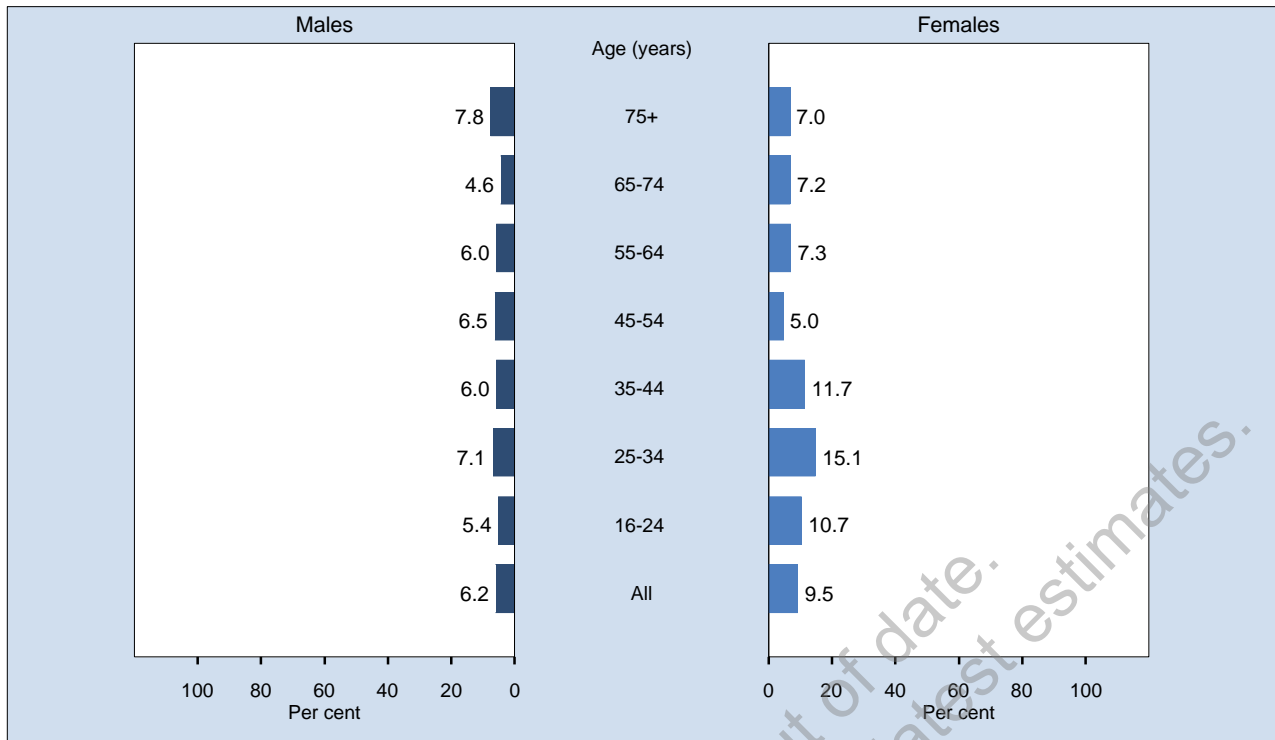
Those who attended a community health centre were asked to rate the care they received: 29.5 per cent rated their care as excellent, 36.0 per cent as very good, 24.2 per cent as good, 8.3 per cent as fair, and 2.0 per cent as poor. Responses of excellent, very good, and good were combined into a positive rating of care.

In 2009, among those adults who attended a community health centre in the last 12 months, 89.7 per cent gave a positive rating to the care they received. There was no significant difference between males and females. A significantly higher proportion of adults aged 75 years and over (96.9 per cent) gave a positive rating to the care they received, compared with the overall adult population.

There was no significant difference among quintiles of disadvantage, or between rural and urban health areas. A significantly higher proportion of adults in the Sydney South West (96.1 per cent), South Eastern Sydney & Illawarra (97.5 per cent), and Hunter & New England (95.2 per cent) Area Health Services, gave a positive rating to the care they received, compared with the overall adult population.

Since 2002, there has been no significant change in the proportion of adults who who gave a positive rating to the community health centre care they received.

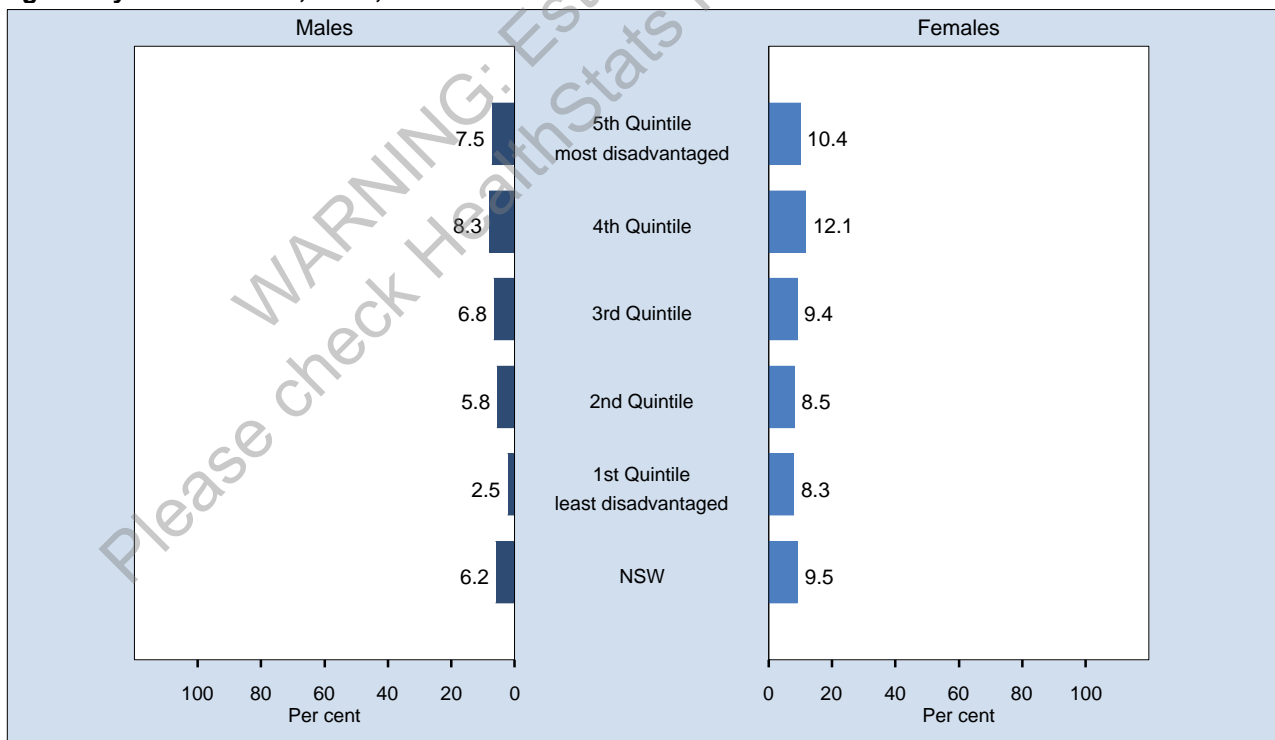
**Community health centre attendance in the last 12 months by age, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 10,646 respondents in NSW. For this indicator 73 (0.68%) 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 2009 (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, 2009**

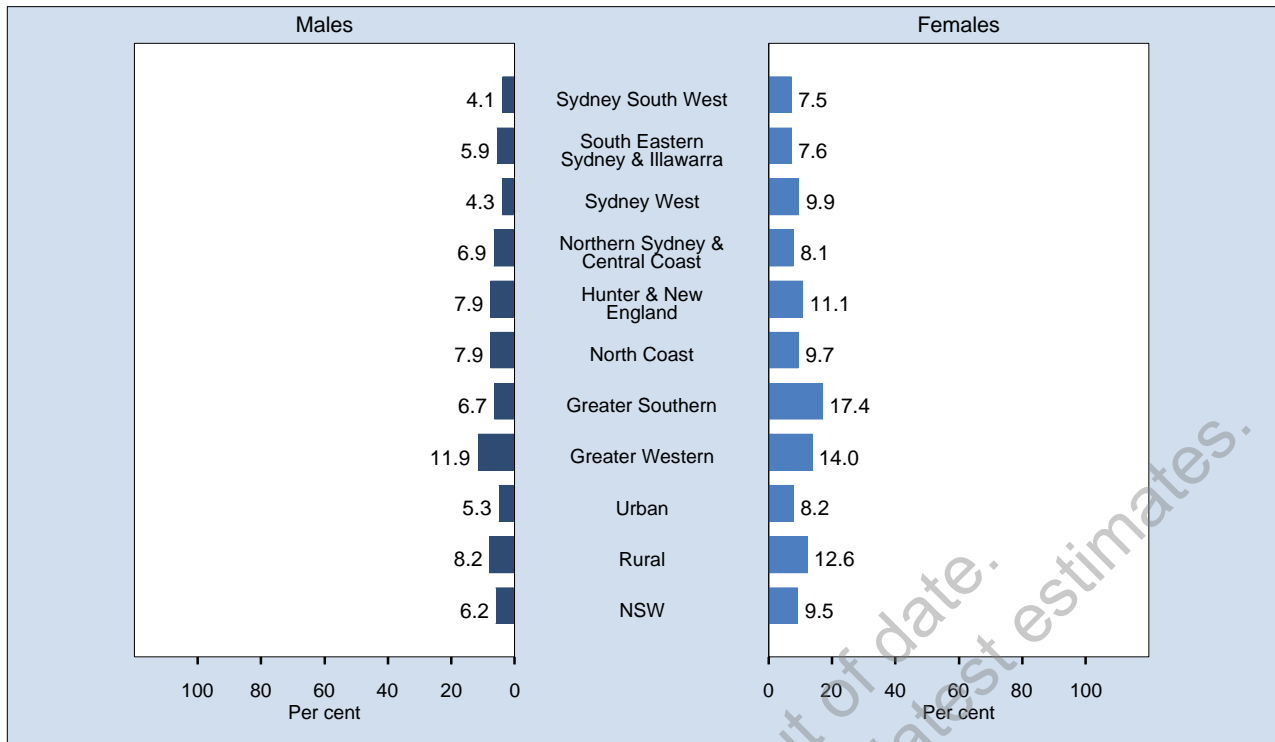


**Note:** Estimates are based on 10,646 respondents in NSW. For this indicator 73 (0.68%) were not stated (Don't know or Refused) in NSW. The indicator includes those who attended a community health centre in the last 12 months. The question used to define the indicator was: In the last 12 months, have you attended a government-run community health centre?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.



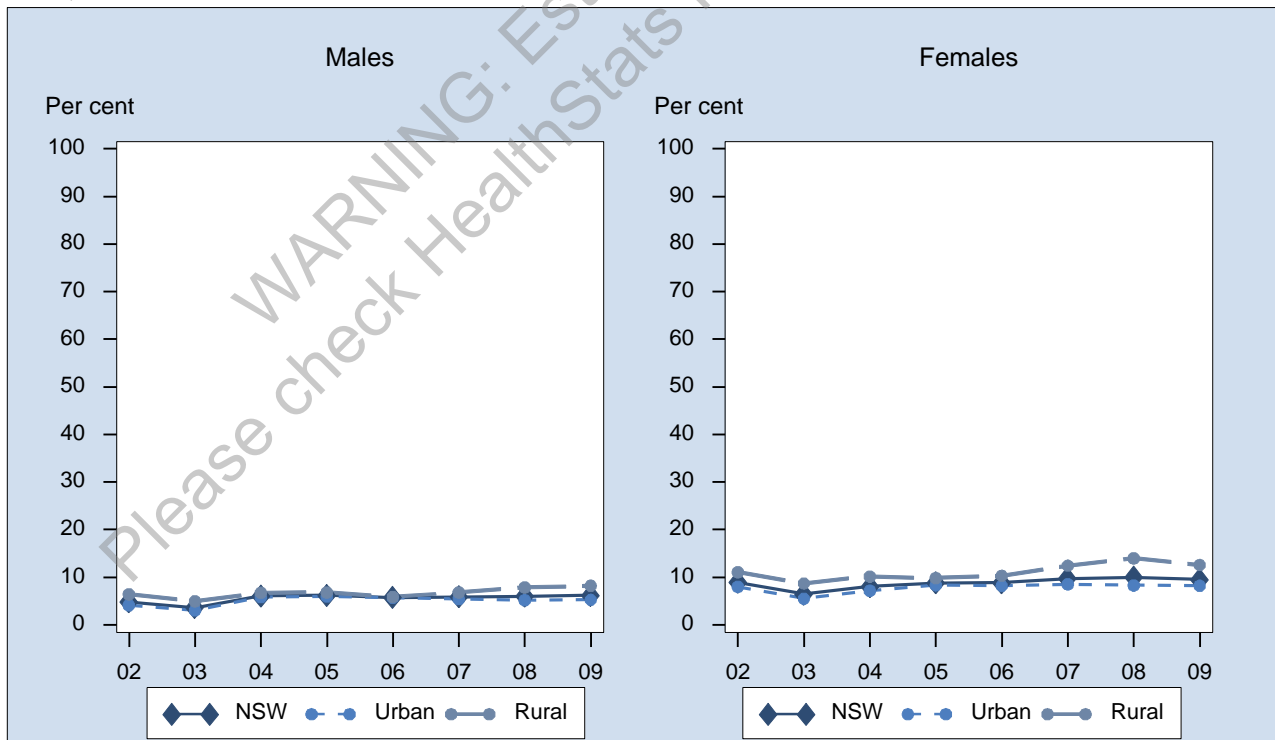
**Community health centre attendance in the last 12 months by area health service, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 10,646 respondents in NSW. For this indicator 73 (0.68%) 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 2009 (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, 2002-2009**



**Note:** Estimates are based on the following numbers of respondents for NSW: 2002 (12,603), 2003 (12,992), 2004 (9,412), 2005 (11,470), 2006 (7,941), 2007 (13,097), 2008 (10,290), 2009 (10,646). 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

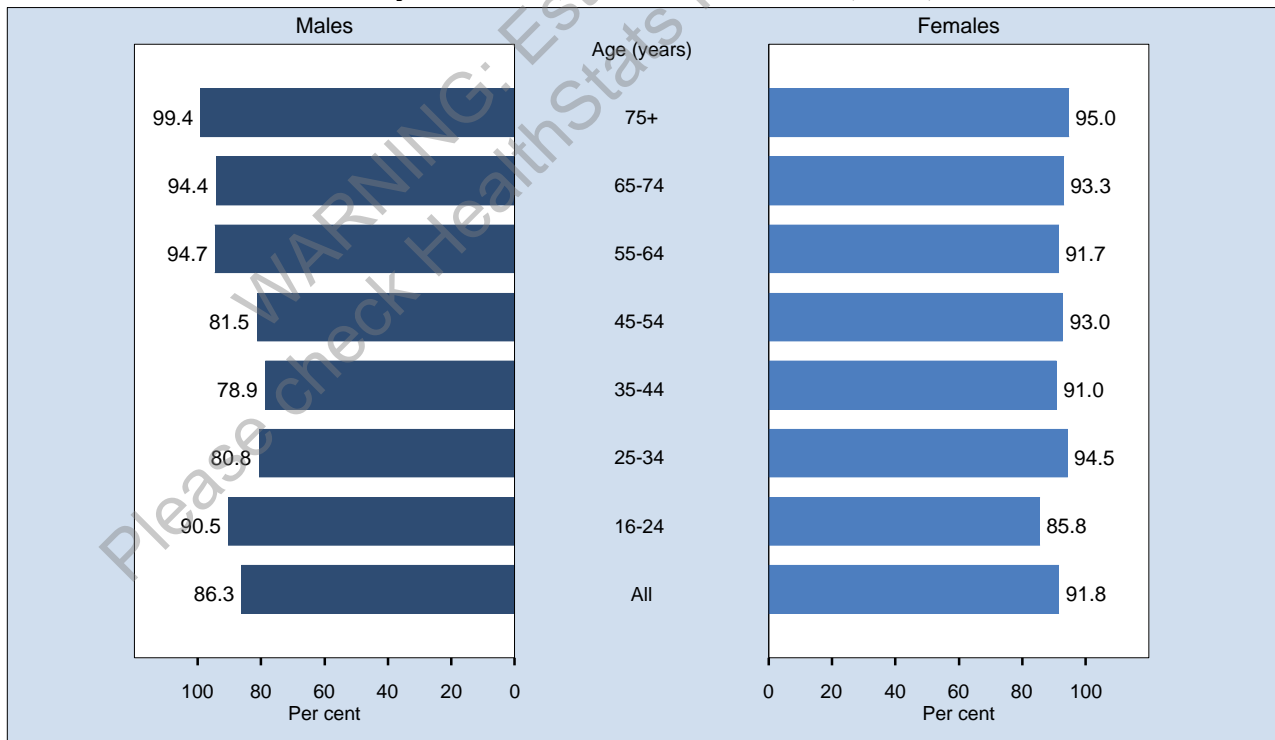
**Community health centre care ratings, adults aged 16 years or over who attended a community health centre in the last 12 months, NSW, 2009**



**Note:** Estimates are based on 873 respondents in NSW. For this indicator 16 (1.80%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

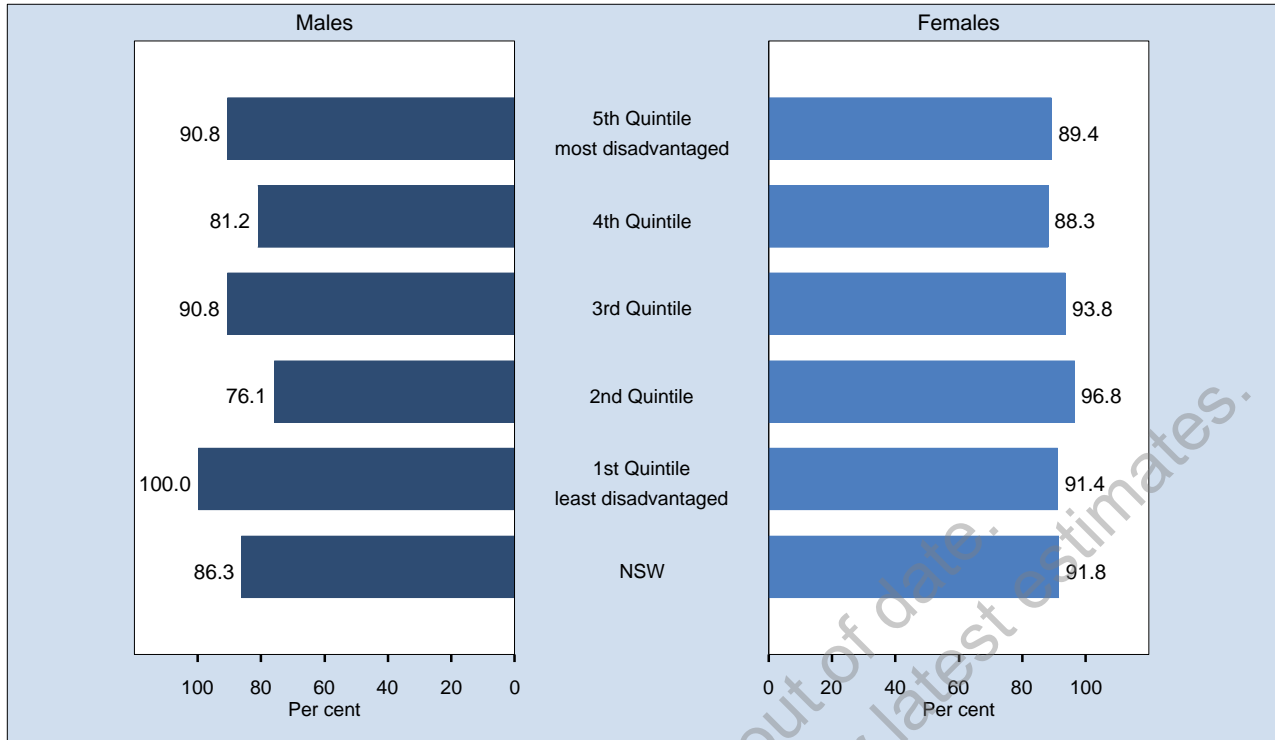
**Community health centre care rated as excellent, very good, or good by age, adults aged 16 years or over who attended a community health centre in the last 12 months, NSW, 2009**



**Note:** Estimates are based on 873 respondents in NSW. For this indicator 16 (1.80%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

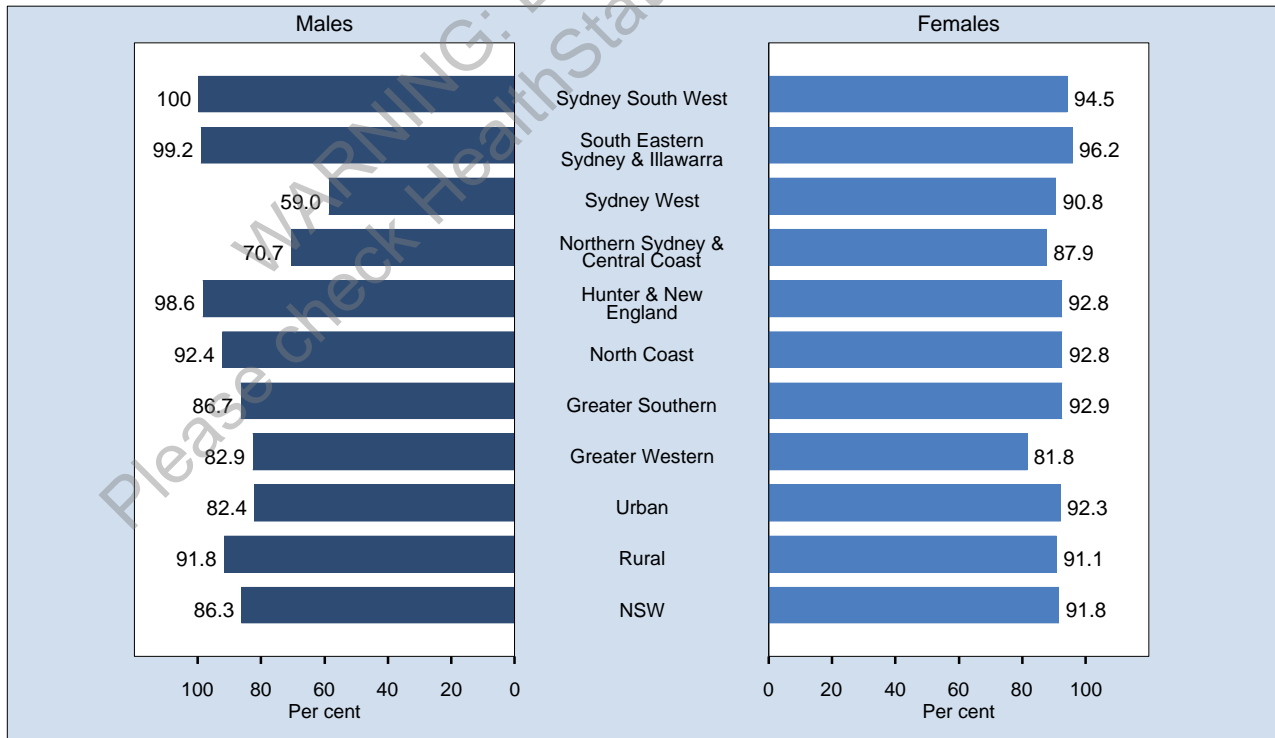
**Community health centre care rated as excellent, very good, or good by socioeconomic disadvantage, adults aged 16 years or over who attended a community health centre in the last 12 months, NSW, 2009**



**Note:** Estimates are based on 873 respondents in NSW. For this indicator 16 (1.80%) 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

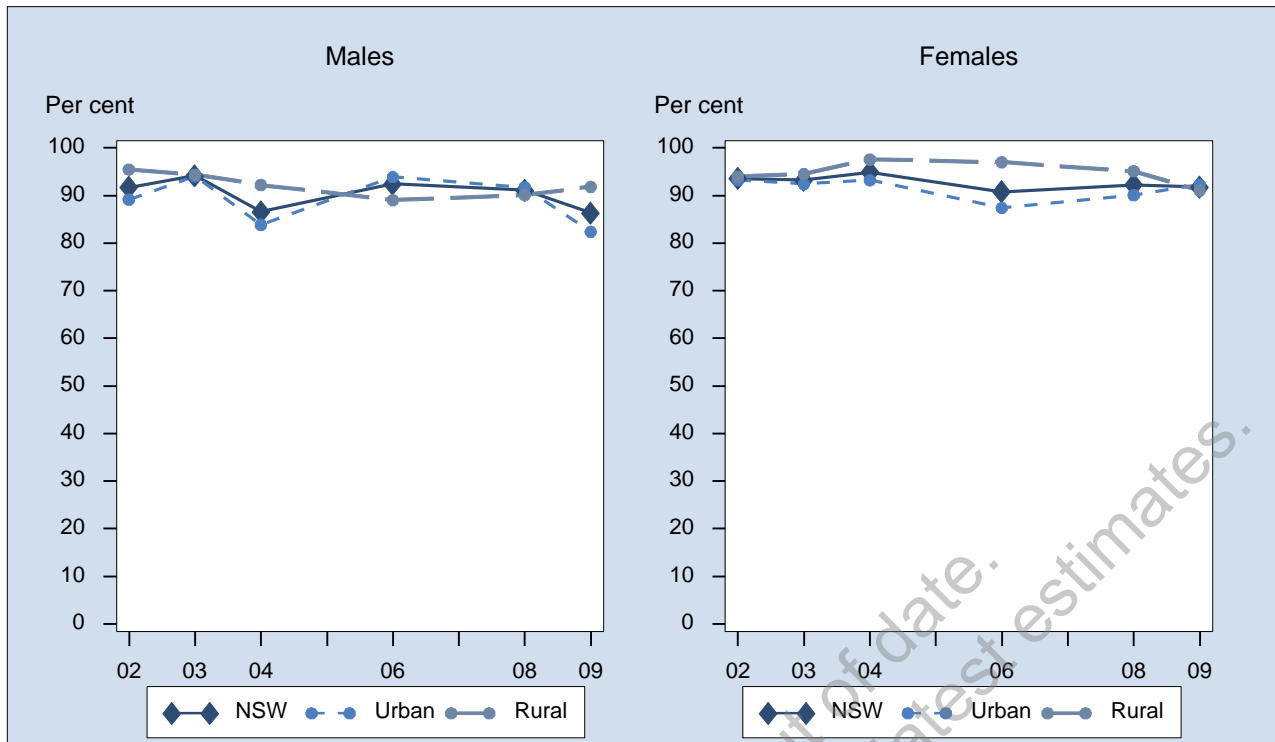
**Community health centre care rated as excellent, very good, or good by area health service, adults aged 16 years or over who attended a community health centre in the last 12 months, NSW, 2009**



**Note:** Estimates are based on 873 respondents in NSW. For this indicator 16 (1.80%) 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 2009 (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, 2002-2009**



**Note:** Estimates are based on the following numbers of respondents for NSW: 2002 (979), 2003 (852), 2004 (818), 2006 (609), 2008 (914), 2009 (873). 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 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

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

# Social capital

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Monitoring social capital within the population is an important way of measuring social connections and networks based on trust, mutual reciprocity, and norms of action. This sections reports on trust and safety, reciprocity and neighbourhood connection, and building harmonious communities.

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Please check HealthStats NSW for latest estimates.

# Social capital

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## Introduction

Social capital is the raw material of civil society created from the interactions between people. It is not located within the person but in the space between people. It is not the property of the organisation, market, or state, but all these can engage in its production. It originates with people forming social connections and networks based on trust, mutual reciprocity, and norms of action. It is referred to as capital because that term invests it with the same status as other forms of capital: financial, physical, and human. The term capital is also appropriate because it can be measured and quantified in a way that distributes its benefits and avoids its losses.[1,2,3]

Most of the social capital questions used by New South Wales Population Health Survey are adapted from the social capital tool developed by Bullen and Onyx,[1] reported under the headings: trust and safety, and reciprocity and neighbourhood connection. In response to the NSW State Plan, the Survey also collects further information about the proportion of the adult population who participated in a group recreational, cultural, or religious activity in the last 12 months, and who have participated in a sport or physical activity in the last 12 months. This information is reported under the heading: building harmonious communities.[4]

## Results

### *Trust and safety*

#### **Most people can be trusted**

In 2009, 71.4 per cent of adults strongly agreed or agreed that most people can be trusted. There was no significant difference between males and females. A significantly higher proportion of adults aged 45-54 years (77.6 per cent) and 75 years and over (76.1 per cent), and a significantly lower proportion of adults aged 16-24 years (65.3 per cent) and 25-34 years (66.8 per cent), strongly agreed or agreed that most people can be trusted, compared with the overall adult population.

A significantly higher proportion of adults in the first or least disadvantaged quintile (82.4 per cent) and second disadvantaged quintile (74.6 per cent), and a significantly lower proportion of adults in the fifth or most disadvantaged quintile (59.0 per cent), strongly agreed or agreed that most people can be trusted, compared with the overall adult population.

A significantly higher proportion of adults in rural health areas (74.1 per cent) than urban health areas (70.2 per cent) strongly agreed or agreed that most people can be trusted. A significantly higher proportion of adults in the Northern Sydney & Central Coast (78.8 per cent) and Greater Southern (75.7 per cent) Area Health Services, and a significantly lower proportion of adults in the Sydney South West Area Health Service (64.6 per cent), strongly agreed or agreed that most people can be trusted, compared with the overall adult population.

Since 2002, there has been a significant increase in the proportion of adults who strongly agreed or agreed that most people can be trusted (65.7 per cent to 71.4 per cent). The increase has been significant in males and females, and in urban and rural health areas.

However, since 2008, there has been no significant change in the proportion of adults who strongly agreed or agreed that most people can be trusted.

#### **Feels safe walking down their street after dark**

In 2009, 73.1 per cent of adults felt safe walking down their street after dark. A significantly higher proportion of males (83.7 per cent) than females (62.8 per cent) felt safe walking down their street after dark. Among males, a significantly lower proportion of those aged 65-74 years (75.9 per cent) and 75 years and over (60.4 per cent), and a significantly higher proportion of those aged 16-24 years (87.8 per cent) and 25-34 years (90.3 per cent), felt safe walking down their street after dark, compared with the overall adult male population. Among females, a significantly higher proportion of those aged 35-44 years (70.6) and 45-54 years (71.5 per cent), and a significantly lower proportion of those aged 65-74 years (52.9 per cent) and 75 years and over (36.7 per cent), felt safe walking down their street after dark, compared with the overall adult female population.

A significantly higher proportion of adults in the first or least disadvantaged quintile (85.0 per cent) and second disadvantaged quintile (79.1 per cent), and a significantly lower proportion of adults in the fourth disadvantaged quintile (69.5 per cent) and fifth or most disadvantaged quintile (60.4 per cent), felt safe walking down their street after dark, compared with the overall adult population.

There was no significant difference between rural and urban health areas. A significantly higher proportion of adults in the South Eastern Sydney & Illawarra (77.4 per cent) and Northern Sydney & Central Coast (80.8 per cent) Area Health Services, and a significantly lower proportion of adults in the Sydney South West (67.4 per cent) and Greater Western (67.9 per cent) Area Health Services, felt safe walking down their street after dark, compared with the overall adult population.

Since 2002, there has been a significant increase in the proportion of adults who felt safe walking down their street after dark (67.4 per cent to 73.1 per cent). The increase has been significant in males and females, and in urban and rural health areas.

However, since 2008, there has been no significant change in the proportion of adults who felt safe walking down their street after dark.

### **Area has a reputation for being safe**

In 2009, 75.0 per cent of adults said their area has a reputation for being safe. There was no significant difference between males and females. A significantly higher proportion of adults aged 45-54 years (79.9 per cent), 55-64 years (79.1 per cent), 65-74 years (80.5 per cent), and 75 years and over (81.5 per cent), and a significantly lower proportion of adults aged 16-24 years (69.1 per cent) and 25-34 years (65.1 per cent), said their area has a reputation for being safe, compared with the overall adult population.

A significantly higher proportion of adults in the first or least disadvantaged quintile (87.6 per cent) and second disadvantaged quintile (80.8 per cent), and a significantly lower proportion of adults in the fifth or most disadvantaged quintile (56.4 per cent), said their area has a reputation for being safe, compared with the overall adult population.

A significantly higher proportion of adults in rural health areas (80.8 per cent) than urban health areas (72.4 per cent) said their area has a reputation for being safe. A significantly higher proportion of adults in the Northern Sydney & Central Coast (82.0 per cent), Hunter & New England (79.8 per cent), North Coast (79.2 per cent), and Greater Southern (85.6 per cent) Area Health Services, and a significantly lower proportion of adults in the Sydney South West (65.9 per cent) and Sydney West (69.9 per cent) Area Health Services, said their area has a reputation for being safe, compared with the overall adult population.

Since 2002, there has been no significant change in the proportion of adults who said their area has a reputation for being safe; however, there has been a significant increase in females, and in rural health areas.

However, since 2008, there has been no significant change in the proportion of adults who said their area has a reputation for being safe.

### ***Reciprocity and neighbourhood connection***

#### **Visited neighbours in the last week**

In 2009, 61.0 per cent of adults visited neighbours at least once in the last week. There was no significant difference between males and females. A significantly higher proportion of adults aged 65-74 years (70.3 per cent) visited neighbours at least once in the last week, compared with the overall adult population.

A significantly higher proportion of adults in the fourth disadvantaged quintile (65.5 per cent), and a significantly lower proportion of adults in the fifth or most disadvantaged quintile (57.4 per cent), visited neighbours at least once in the last week, compared with the overall adult population.

A significantly higher proportion of adults in rural health areas (67.5 per cent) than urban health areas (58.2 per cent) visited neighbours at least once in the last week. A significantly higher proportion of adults in the Hunter & New England (65.9 per cent), North Coast (69.5 per cent), Greater Southern (69.7 per cent), and Greater Western (65.2 per cent) Area Health Services, and a significantly lower proportion of adults in the Sydney South West Area Health Service (54.8 per cent), visited neighbours at least once in the last week, compared with the overall adult population.

Since 2002, there has been a significant decrease in the proportion of adults who visited neighbours at least once in the last week (66.3 per cent to 61.0 per cent). The decrease has been significant in males and females, and in urban and rural health areas.

However, since 2008, there has been no significant change in the proportion of adults who visited neighbours at least once in the last week.

### **Ran into friends and acquaintances while shopping**

In 2009, 81.9 per cent of adults ran into friends and acquaintances when shopping in their local area. A significantly lower proportion of males (79.6 per cent) than females (84.1 per cent) ran into friends and acquaintances when shopping in their local area. Among males, a significantly lower proportion of those aged 25-34 years (73.6 per cent) ran into friends and acquaintances when shopping in their local area, compared with the overall adult male population. Among females, a significantly higher proportion of those aged 45-54 years (87.4 per cent), and a significantly lower proportion of those aged 75 years and over (80.2 per cent), ran into friends and acquaintances when shopping in their local area, compared with the overall adult female population.

A significantly higher proportion of adults in the fourth disadvantaged quintile (87.4 per cent) ran into friends and acquaintances when shopping in their local area, compared with the overall adult population.

A significantly higher proportion of adults in rural health areas (89.3 per cent) than urban health areas (78.7 per cent) ran into friends and acquaintances when shopping in their local area. A significantly higher proportion of adults in the Hunter & New England (86.8 per cent), North Coast (88.6 per cent), Greater Southern (93.5 per cent), and Greater Western (90.8 per cent) Area Health Services, and a significantly lower proportion of adults in the Sydney South West (77.6 per cent), Sydney West (76.8 per cent), and Northern Sydney & Central Coast (78.1 per cent) Area Health Services, ran into friends and acquaintances when shopping in their local area, compared with the overall adult population.

Since 2002, there has been no significant change in the proportion of adults who ran into friends and acquaintances when shopping in their local area.

### **Sad if had to leave neighbourhood**

In 2009, 71.9 per cent of adults would feel sad if they had to leave their neighbourhood. A significantly lower proportion of males (69.0 per cent) than females (74.6 per cent) would feel sad if they had to leave their neighbourhood. Among males, a significantly higher proportion of those aged 55-64 years (74.6 per cent), 65-74 years (77.9 per cent), and 75 years and over (86.1 per cent), and a significantly lower proportion of those aged 16-24 years (59.3 per cent), would feel sad if they had to leave their neighbourhood, compared with the overall adult male population. Among females, a significantly higher proportion of those aged 45-54 years (78.6 per cent), 55-64 years (78.0 per cent), 65-74 years (84.0 per cent), and 75 years and over (84.3 per cent), and a significantly lower proportion of those aged 16-24 years (62.7 per cent) and 25-34 years (67.6 per cent), would feel sad if they had to leave their neighbourhood, compared with the overall adult female population.

A significantly higher proportion of adults in the first or least disadvantaged quintile (77.9 per cent) and second disadvantaged quintile (74.9 per cent), and a significantly lower proportion of adults in the third disadvantaged quintile (67.4 per cent) and fifth or most disadvantaged quintile (65.0 per cent), would feel sad if they had to leave their neighbourhood, compared with the overall adult population.

A significantly higher proportion of adults in rural health areas (75.0 per cent) than urban health areas (70.5 per cent) would feel sad if they had to leave their neighbourhood. A significantly higher proportion of adults in the Northern Sydney & Central Coast (75.4 per cent), North Coast (79.2 per cent), and Greater Western (76.2 per cent) Area Health Services, and a significantly lower proportion of adults in the Sydney South West (66.6 per cent) and Sydney West (67.0 per cent) Area Health Services, would feel sad if they had to leave their neighbourhood, compared with the overall adult population.

Since 2002, there has been no significant change in the proportion of adults who would feel sad if they had to leave their neighbourhood.

However, since 2008, there has been a significant decrease in the proportion of adults who would feel sad if they had to leave their neighbourhood (74.8 per cent to 71.9 per cent). The decrease has been significant in females, and in urban health areas.



## ***Building harmonious communities***

In 2009, adults participated in the following activities: recreational group or cultural group (28.7 per cent), community or special interest group (29.8 per cent), church or religious activities (27.9 per cent), went out to a cafe or restaurant or bar (85.9 per cent), took part in sport or physical activities (51.3 per cent), attended a sporting event as a spectator (47.3 per cent), visited a library or museum or art gallery (57.7 per cent), attended the movies or a theatre or a concert (69.1 per cent), visited a park or botanic gardens or zoo or theme park (69.9 per cent). Respondents could mention more than 1 response.

### **Participated in a group recreational, cultural, or religious activity**

In 2009, 54.0 per cent of adults participated in a group recreational, cultural, or religious activity in the last 12 months. A significantly lower proportion of males (51.1 per cent) than females (56.8 per cent) participated in a group recreational, cultural, or religious activity in the last 12 months. Among males, a significantly higher proportion of those aged 35-44 years (57.8 per cent) participated in a group recreational, cultural, or religious activity in the last 12 months, compared with the overall adult male population. Among females, a significantly higher proportion of those aged 65-74 years (65.1 per cent) and 75 years and over (63.9 per cent), and a significantly lower proportion of those aged 16-24 years (47.3 per cent), participated in a group recreational, cultural, or religious activity in the last 12 months, compared with the overall adult female population.

A significantly higher proportion of adults in the first or least disadvantaged quintile (59.2 per cent), and a significantly lower proportion of adults in the fifth or most disadvantaged quintile (51.1 per cent), participated in a group recreational, cultural, or religious activity in the last 12 months, compared with the overall adult population.

There was no significant difference between rural and urban health areas. A significantly higher proportion of adults in the Greater Southern Area Health Service (60.7 per cent), and a significantly lower proportion of adults in the Sydney South West (50.6 per cent) and Hunter & New England (50.5 per cent) Area Health Services, participated in a group recreational, cultural, or religious activity in the last 12 months, compared with the overall adult population.

Since 2007, there has been a significant decrease in the proportion of adults who participated in a group recreational, cultural, or religious activity in the last 12 months (57.9 per cent to 54.0 per cent). The decrease has been significant in males, and in urban health areas.

However, since 2008, there has been no significant change in the proportion of adults who participated in a group recreational, cultural, or religious activity in the last 12 months.

### **Participated in a sport or physical activity**

In 2009, 51.3 per cent of adults participated in a sport or physical activity in the last 12 months. A significantly higher proportion of males (56.7 per cent) than females (46.2 per cent) participated in a sport or physical activity in the last 12 months. Among males, a significantly higher proportion of those aged 16-24 years (72.8 per cent) and 35-44 years (64.2 per cent), and a significantly lower proportion of those aged 55-64 years (45.4 per cent), 65-74 years (43.1 per cent), and 75 years and over (29.3 per cent), participated in a sport or physical activity in the last 12 months, compared with the overall adult male population. Among females, a significantly higher proportion of those aged 16-24 years (60.8 per cent) and 35-44 years (54.9 per cent), and a significantly lower proportion of those aged 55-64 years (38.9 per cent), 65-74 years (34.3 per cent) and 75 years and over (19.7 per cent), participated in a sport or physical activity in the last 12 months, compared with the overall adult female population.

A significantly higher proportion of adults in the first or least disadvantaged quintile (61.4 per cent) and second disadvantaged quintile (54.3 per cent), and a significantly lower proportion of adults in the fifth or most disadvantaged quintile (40.9 per cent), participated in a sport or physical activity in the last 12 months, compared with the overall adult population.

There was no significant difference between rural and urban health areas. A significantly higher proportion of adults in the Northern Sydney & Central Coast Area Health Service (59.2 per cent), and a significantly lower proportion of adults in the Sydney South West (44.0 per cent) and Sydney West (47.9 per cent) Area Health Services, participated in a sport or physical activity in the last 12 months, compared with the overall adult population.

Since 2007, there has been a significant decrease in the proportion of adults who participated in a sport or physical activity in the last 12 months (60.4 per cent to 51.3 per cent). The decrease has been significant in males and females, and in urban and rural health areas.

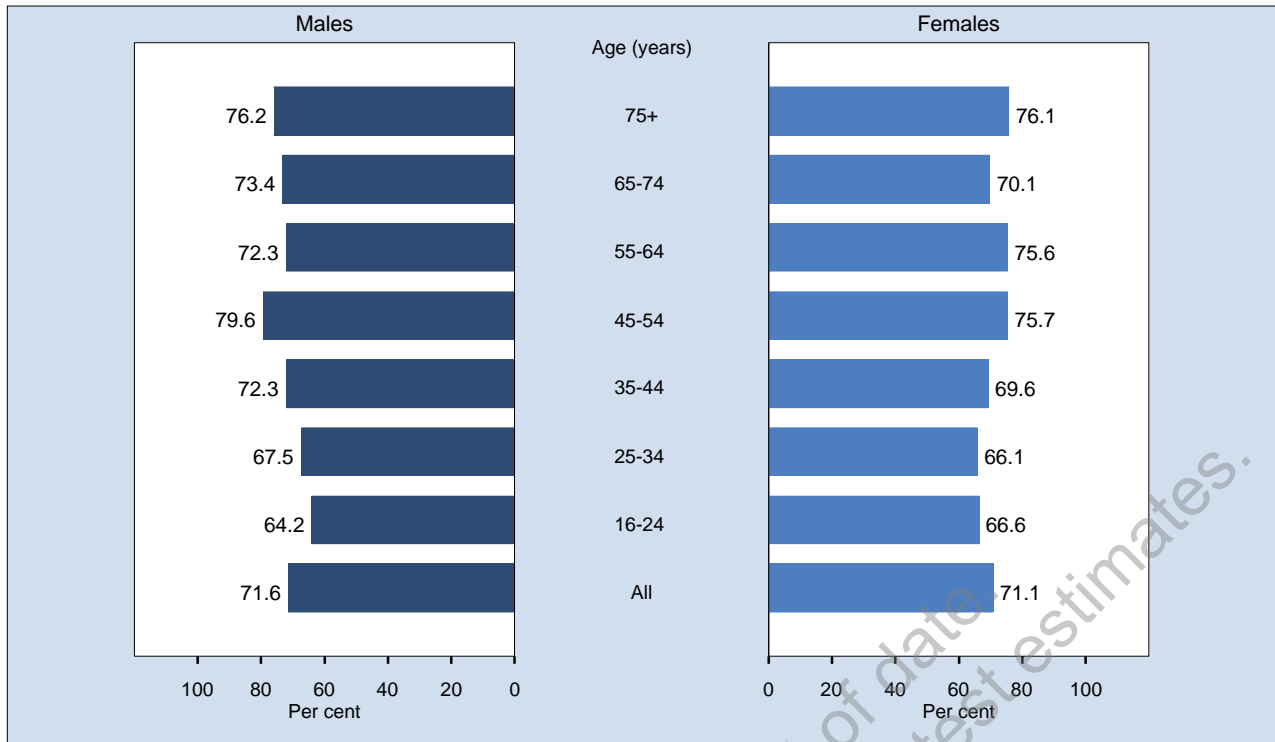
However, since 2008, there has been a significant decrease in the proportion of adults who participated in a sport or physical activity in the last 12 months (55.2 per cent to 51.3 per cent). The decrease has been significant in males and females, and in urban health areas.

## References

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2. World Bank Social Capital Website. *Measuring Social capital*. Available online at <http://web.worldbank.org> (accessed 10 September 2010).
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WARNING: Estimates out of date.  
Please check HealthStats NSW for latest estimates.

**Most people can be trusted by age, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 7,672 respondents in NSW. For this indicator 333 (4.16%) were not stated (Don't know or Refused) in NSW. The indicator includes those who strongly agree or agree that most people can be trusted. The question used was: Do you strongly agree, agree, disagree or strongly disagree with the statement "Most people can be trusted"?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

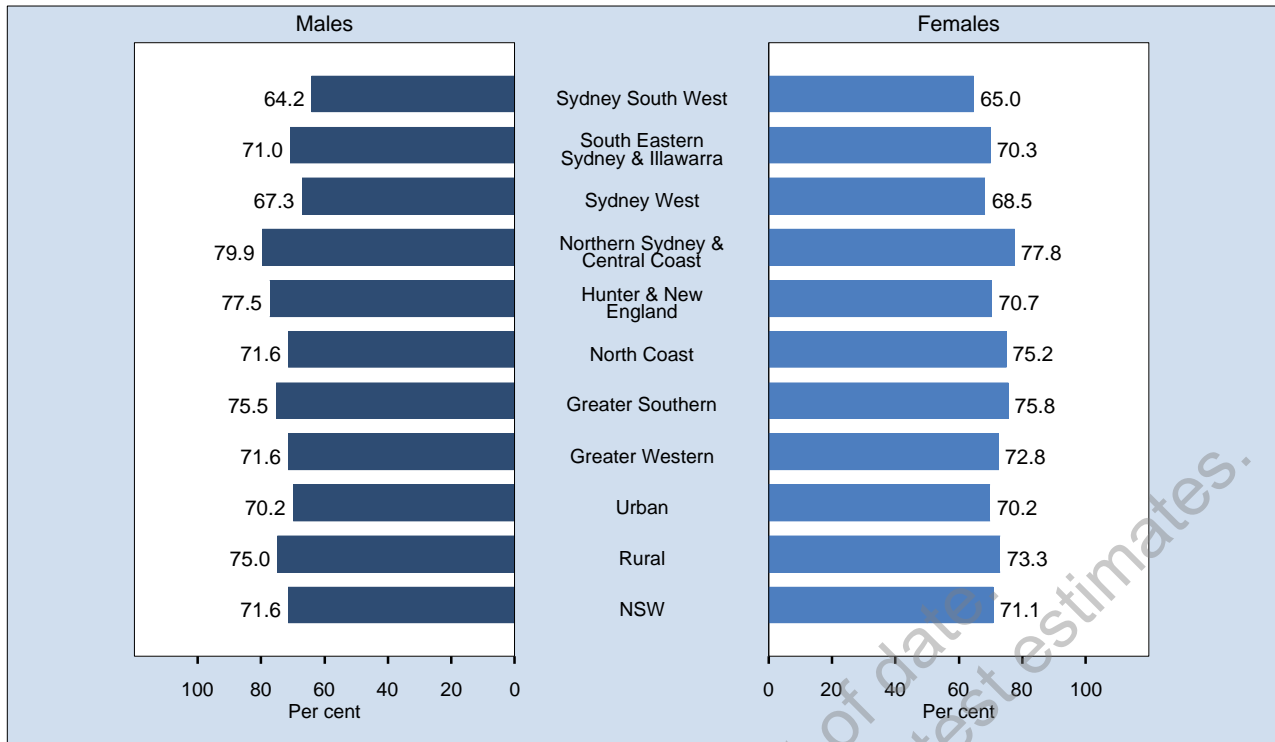
**Most people can be trusted by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 7,672 respondents in NSW. For this indicator 333 (4.16%) were not stated (Don't know or Refused) in NSW. The indicator includes those who strongly agree or agree that most people can be trusted. The question used was: Do you strongly agree, agree, disagree or strongly disagree with the statement "Most people can be trusted"?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

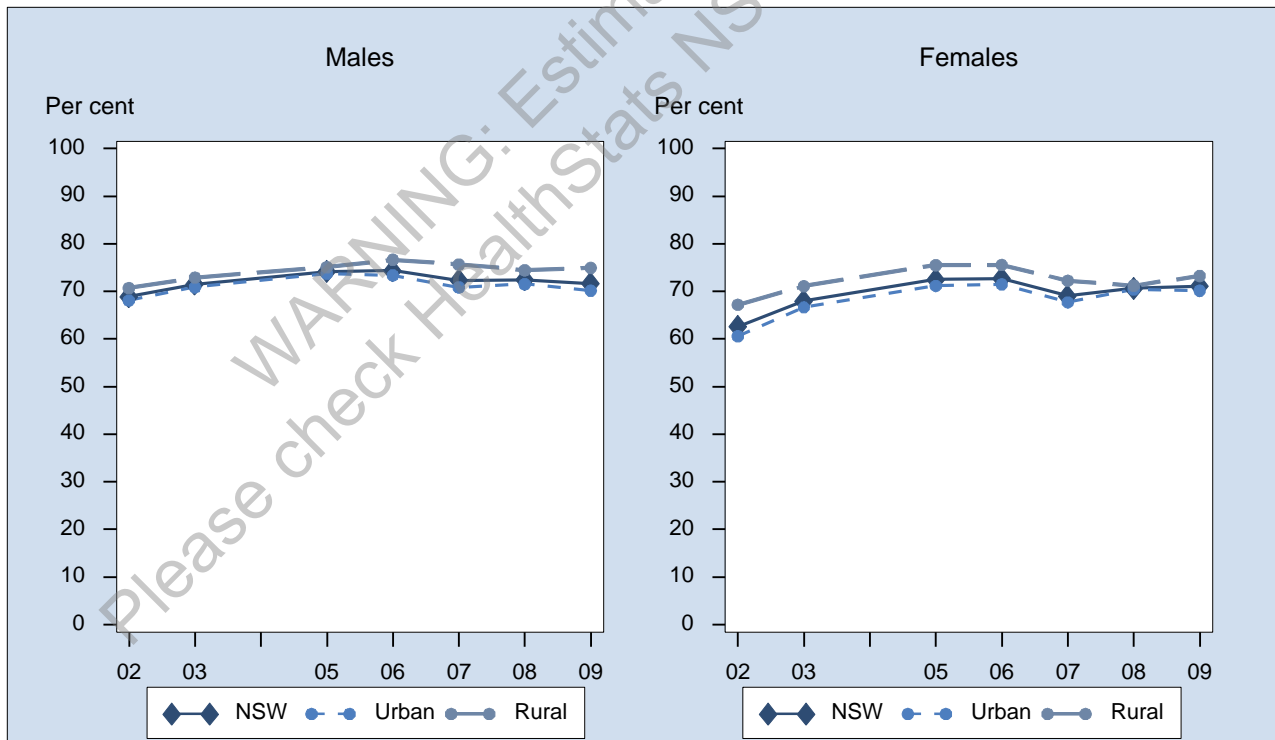
### Most people can be trusted by area health service, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 7,672 respondents in NSW. For this indicator 333 (4.16%) were not stated (Don't know or Refused) in NSW. The indicator includes those who strongly agree or agree that most people can be trusted. The question used was: Do you strongly agree, agree, disagree or strongly disagree with the statement "Most people can be trusted"?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

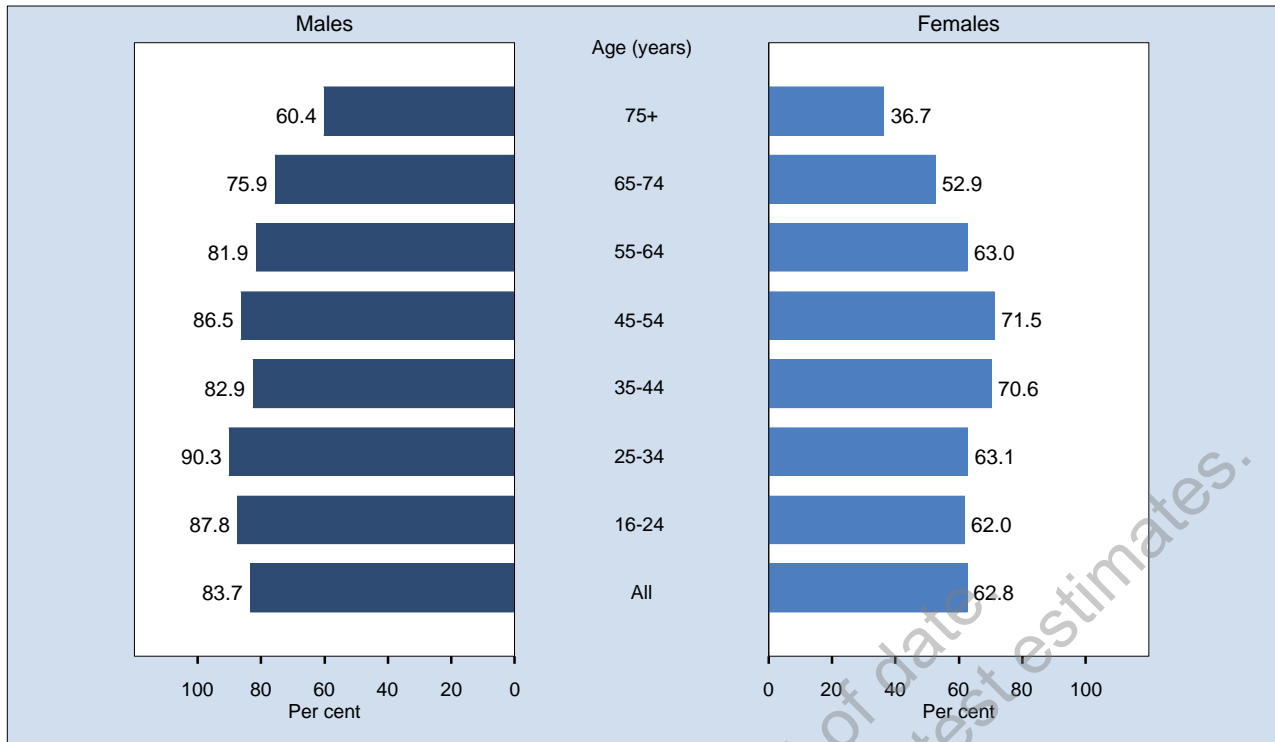
### Most people can be trusted by year, adults aged 16 years and over, NSW, 2002-2009



**Note:** Estimates are based on the following numbers of respondents for NSW: 2002 (12,251), 2003 (12,570), 2005 (11,203), 2006 (7,775), 2007 (7,204), 2008 (8,279), 2009 (7,672). The indicator includes those who strongly agree or agree that most people can be trusted. The question used was: Do you strongly agree, agree, disagree or strongly disagree with the statement "Most people can be trusted"?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

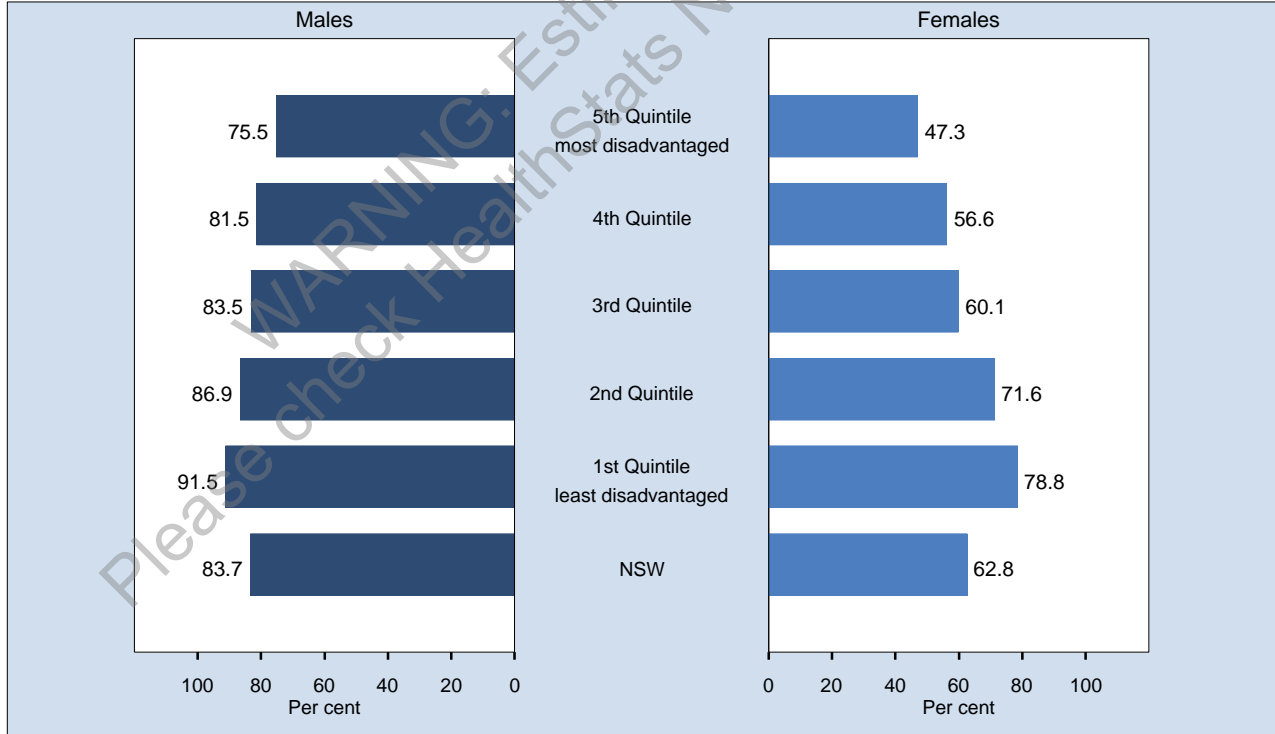
**Feels safe walking down their street after dark by age, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 7,617 respondents in NSW. For this indicator 388 (4.85%) were not stated (Don't know or Refused) in NSW. The indicator includes those who strongly agree or agree that they feel safe walking down their street after dark. The question used was: Do you strongly agree, agree, disagree or strongly disagree with the statement "I feel safe walking down my street after dark"?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

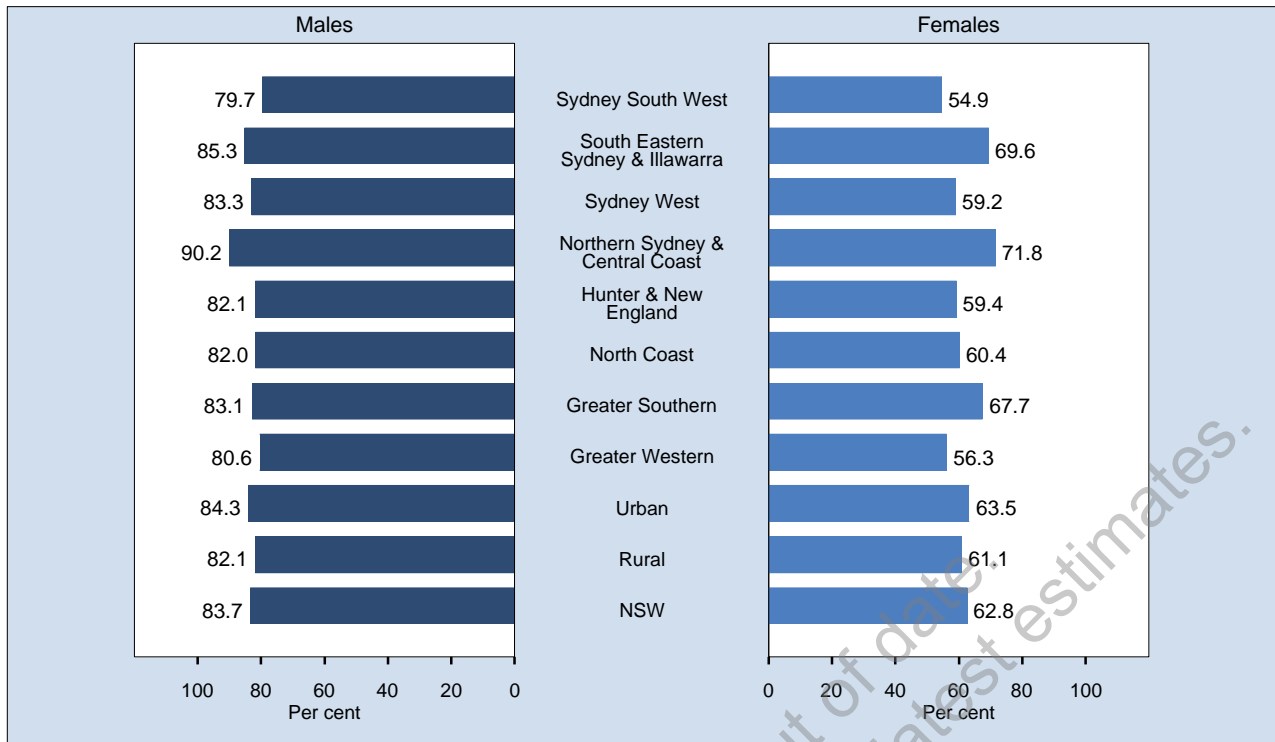
**Feels safe walking down their street after dark by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 7,617 respondents in NSW. For this indicator 388 (4.85%) were not stated (Don't know or Refused) in NSW. The indicator includes those who strongly agree or agree that they feel safe walking down their street after dark. The question used was: Do you strongly agree, agree, disagree or strongly disagree with the statement "I feel safe walking down my street after dark"?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

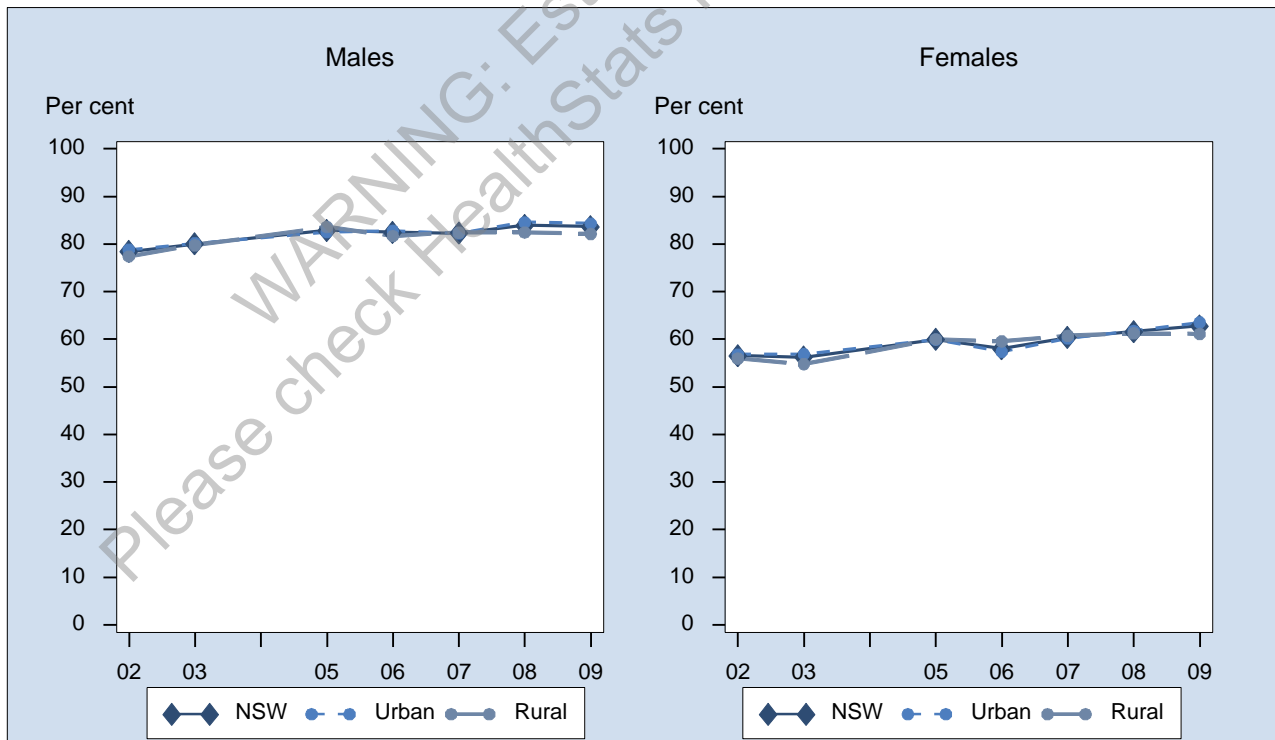
**Feels safe walking down their street after dark by area health service, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 7,617 respondents in NSW. For this indicator 388 (4.85%) were not stated (Don't know or Refused) in NSW. The indicator includes those who strongly agree or agree that they feel safe walking down their street after dark. The question used was: Do you strongly agree, agree, disagree or strongly disagree with the statement "I feel safe walking down my street after dark"?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

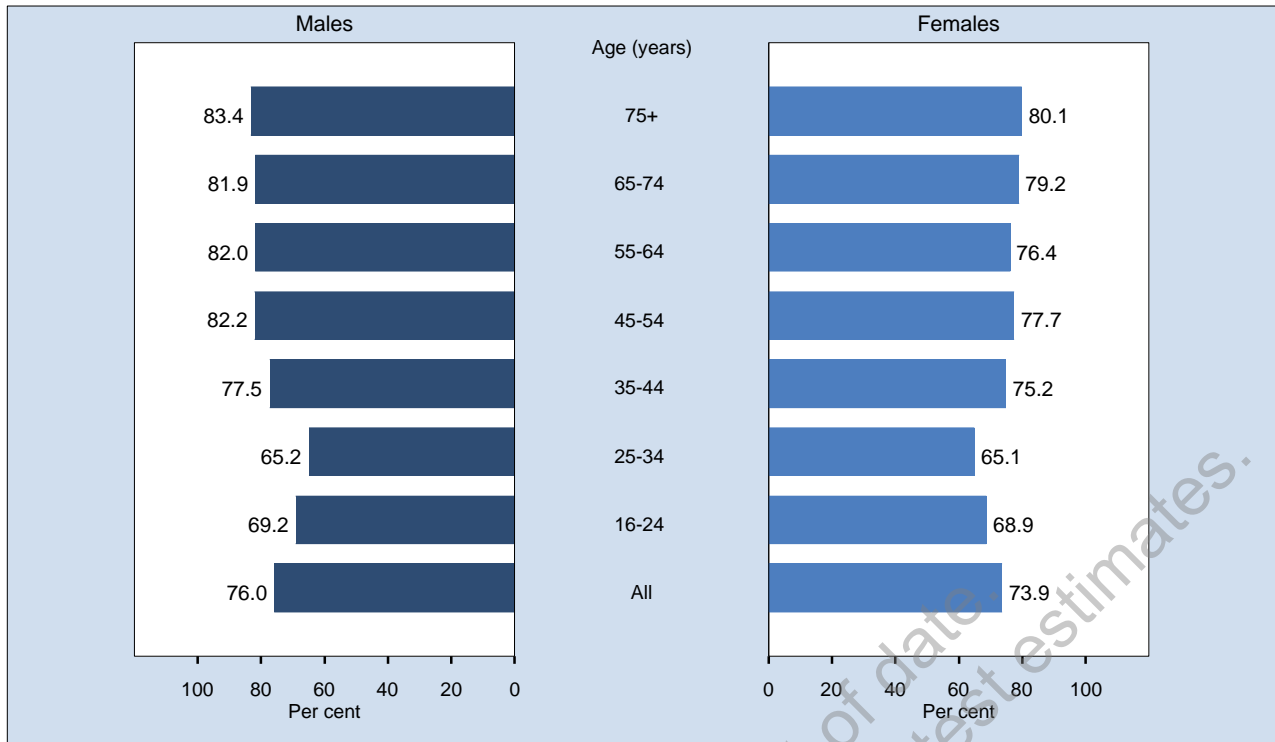
**Feels safe walking down their street after dark by year, adults aged 16 years and over, NSW, 2002-2009**



**Note:** Estimates are based on the following numbers of respondents for NSW: 2002 (12,220), 2003 (12,602), 2005 (11,160), 2006 (7,719), 2007 (7,136), 2008 (8,266), 2009 (7,617). The indicator includes those who strongly agree or agree that they feel safe walking down their street after dark. The question used was: Do you strongly agree, agree, disagree or strongly disagree with the statement "I feel safe walking down my street after dark"?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

**Area has a reputation for being a safe place by age, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 7,580 respondents in NSW. For this indicator 425 (5.31%) were not stated (Don't know or Refused) in NSW. The indicator includes those who strongly agree or agree that their area has a reputation for being a safe place. The question used was: Do you strongly agree, agree, disagree or strongly disagree with the statement "My area has a reputation for being a safe place"?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

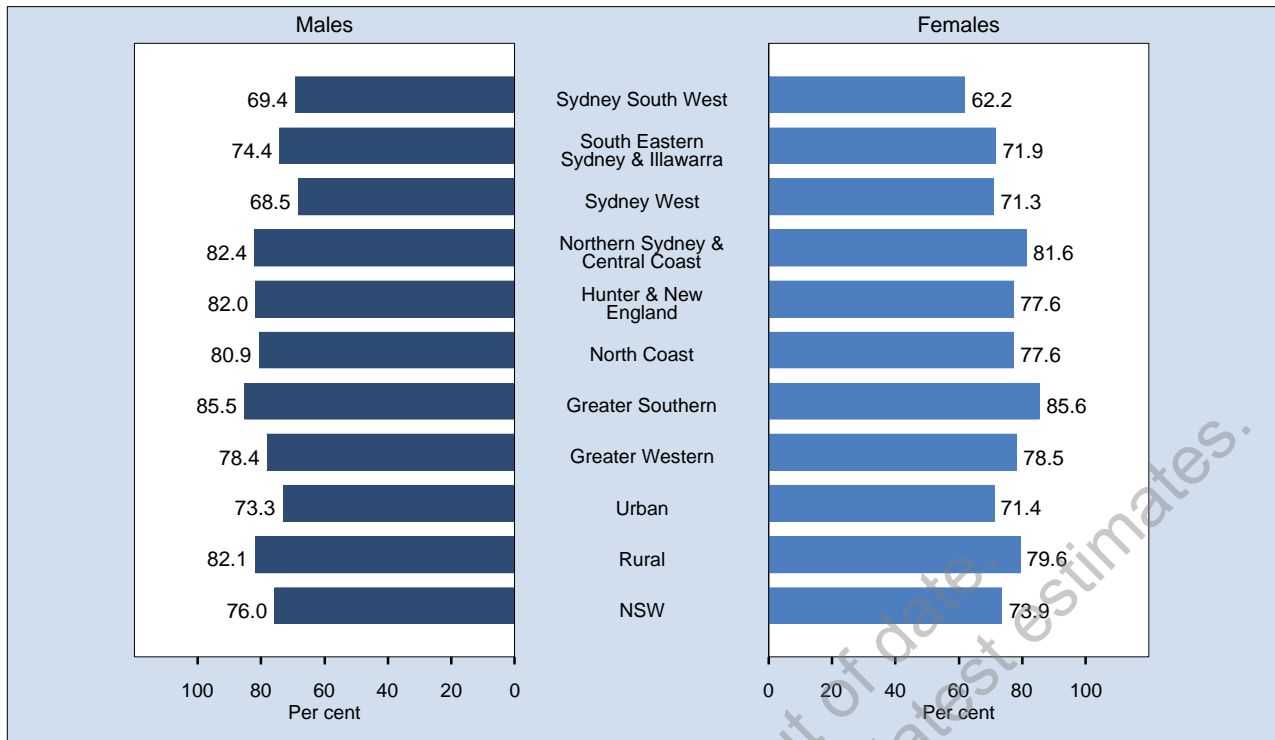
**Area has a reputation for being a safe place by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 7,580 respondents in NSW. For this indicator 425 (5.31%) were not stated (Don't know or Refused) in NSW. The indicator includes those who strongly agree or agree that their area has a reputation for being a safe place. The question used was: Do you strongly agree, agree, disagree or strongly disagree with the statement "My area has a reputation for being a safe place"?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

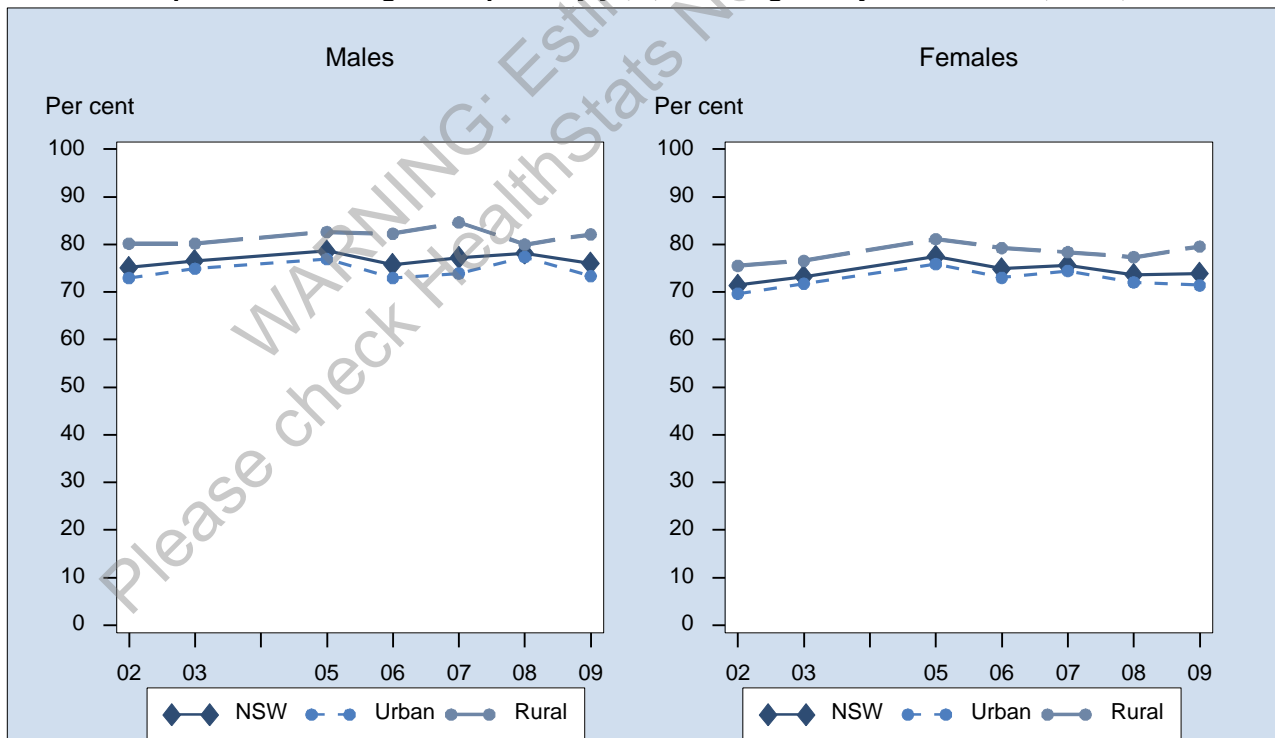
**Area has a reputation for being a safe place by area health service, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 7,580 respondents in NSW. For this indicator 425 (5.31%) were not stated (Don't know or Refused) in NSW. The indicator includes those who strongly agree or agree that their area has a reputation for being a safe place. The question used was: Do you strongly agree, agree, disagree or strongly disagree with the statement "My area has a reputation for being a safe place"?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

**Area has a reputation for being a safe place by year, adults aged 16 years and over, NSW, 2002-2009**

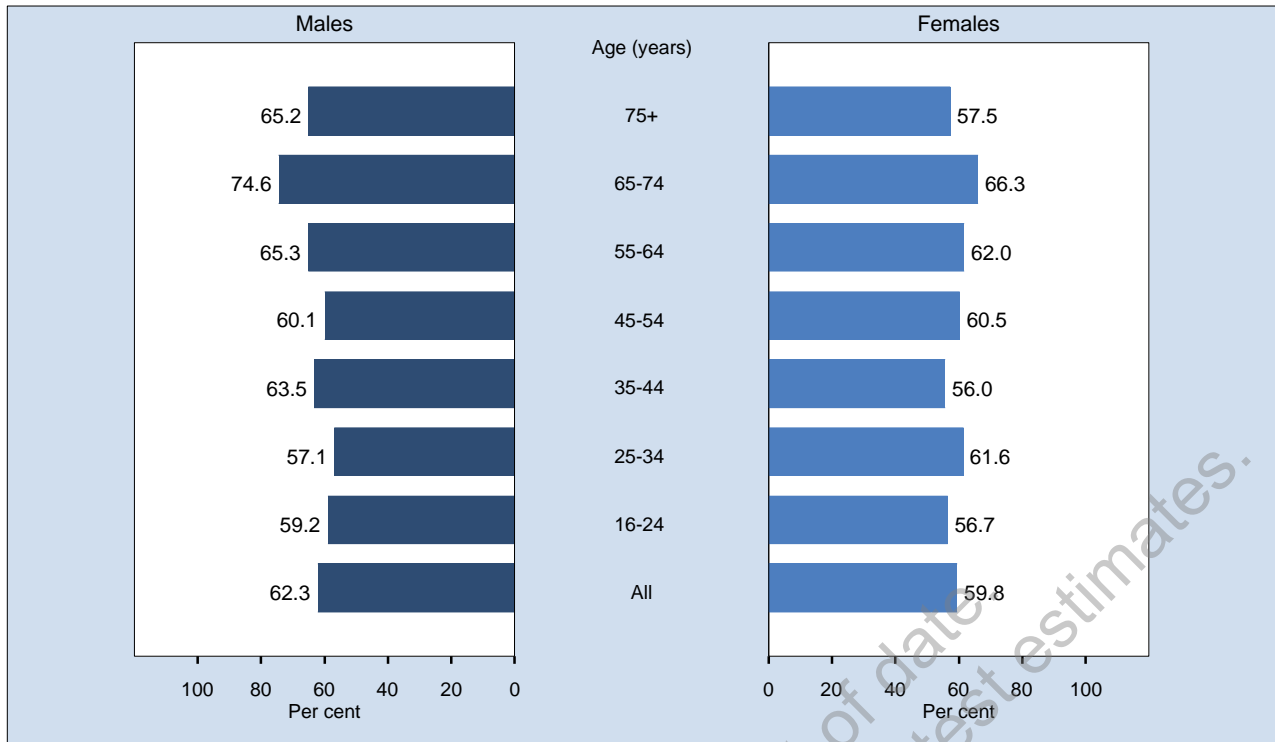


**Note:** Estimates are based on the following numbers of respondents for NSW: 2002 (12,184), 2003 (12,519), 2005 (11,038), 2006 (7,690), 2007 (7,104), 2008 (8,196), 2009 (7,580). The indicator includes those who strongly agree or agree that their area has a reputation for being a safe place. The question used was: Do you strongly agree, agree, disagree or strongly disagree with the statement "My area has a reputation for being a safe place"?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.



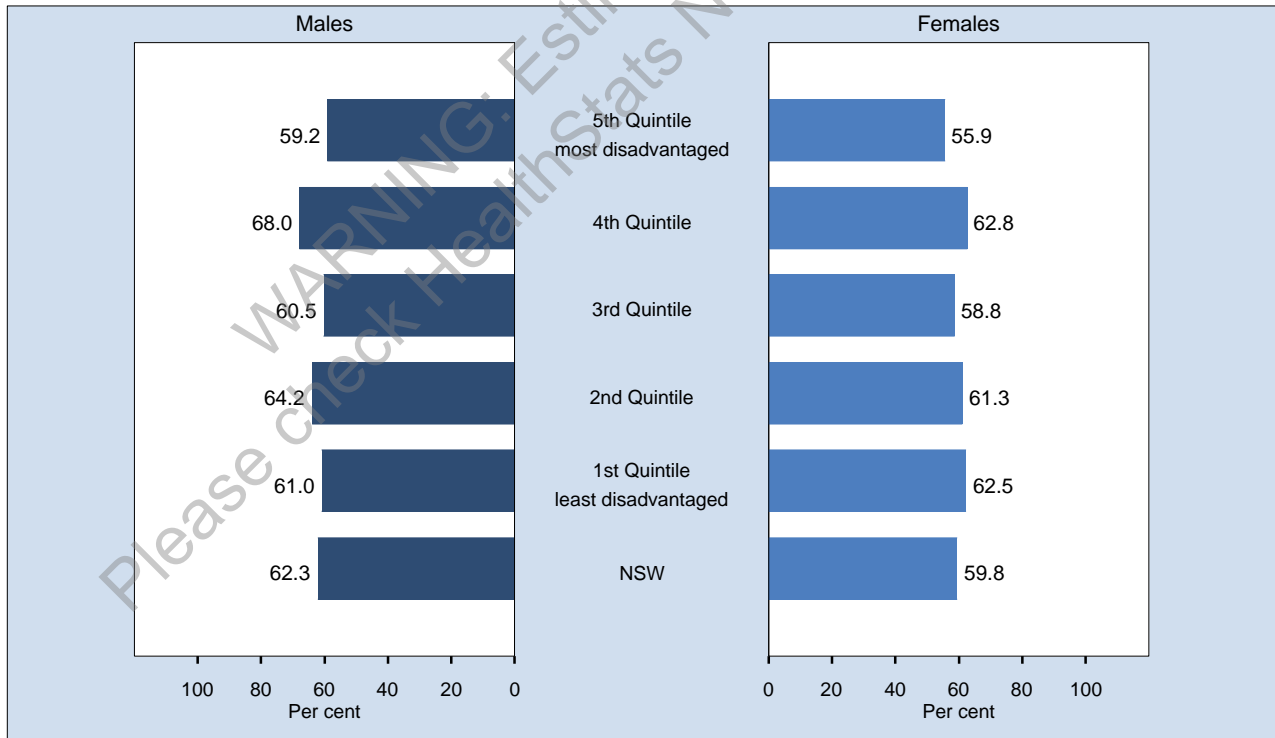
### Visited neighbours in the last week by age, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 7,949 respondents in NSW. For this indicator 56 (0.70%) were not stated (Don't know or Refused) in NSW. The indicator includes those who visited someone in their neighbourhood at least once in the last week. The question used was: How often have you visited someone in your neighbourhood in the last week?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

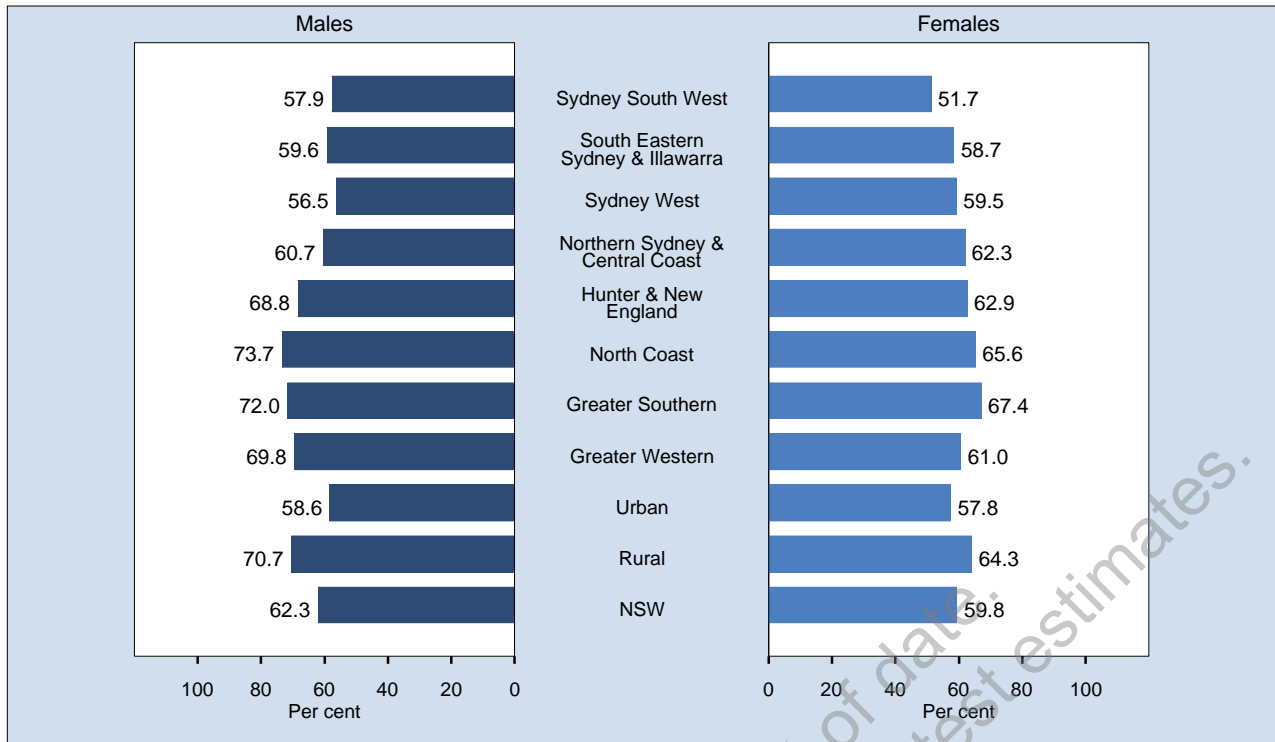
### Visited neighbours in the last week by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2009



**Note:** Estimates are based on 7,949 respondents in NSW. For this indicator 56 (0.70%) were not stated (Don't know or Refused) in NSW. The indicator includes those who visited someone in their neighbourhood at least once in the last week. The question used was: How often have you visited someone in your neighbourhood in the last week?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

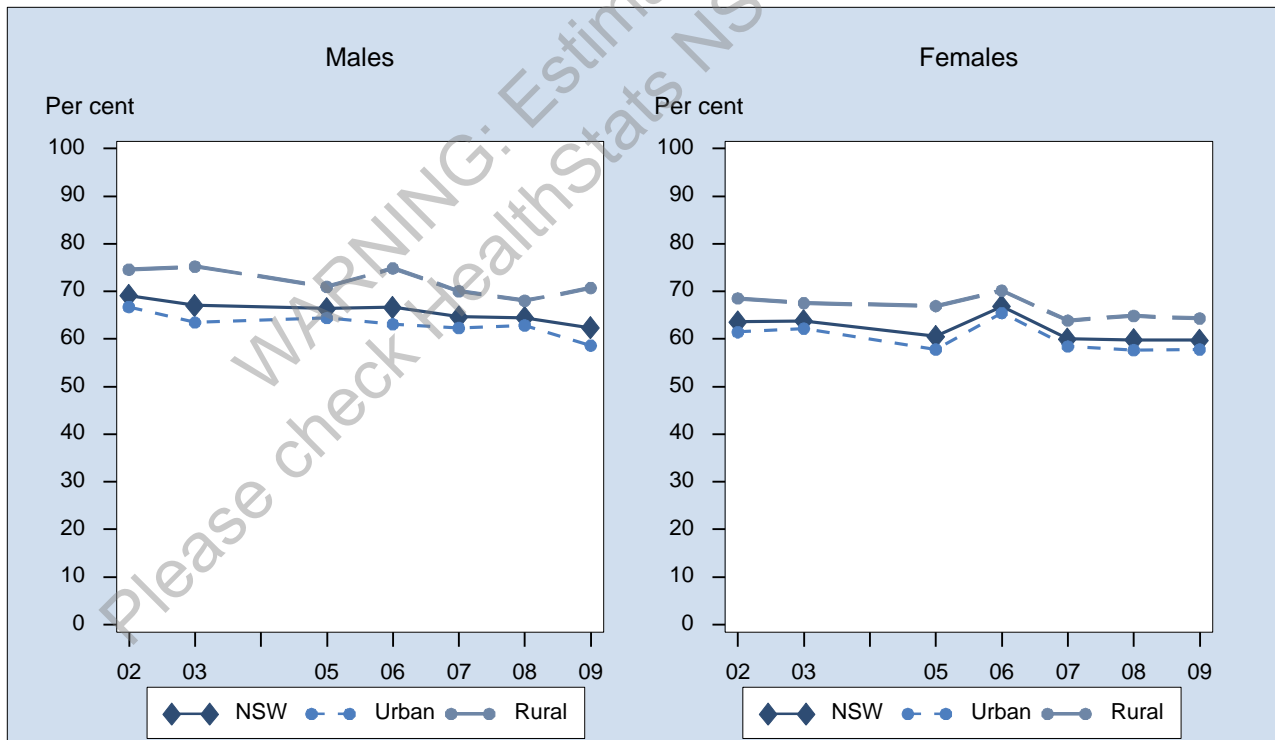
**Visited neighbours in the last week by area health service, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 7,949 respondents in NSW. For this indicator 56 (0.70%) were not stated (Don't know or Refused) in NSW. The indicator includes those who visited someone in their neighbourhood at least once in the last week. The question used was: How often have you visited someone in your neighbourhood in the last week?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

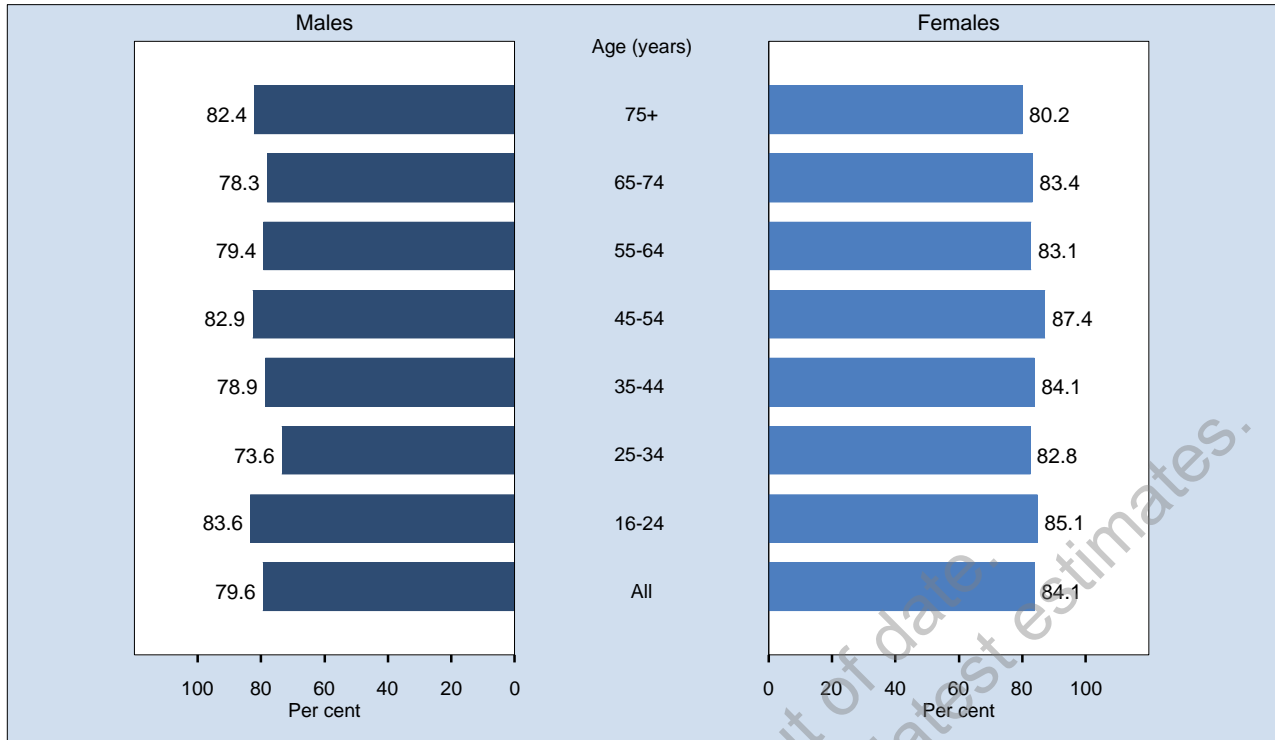
**Visited neighbours in the last week by year, adults aged 16 years and over, NSW, 2002-2009**



**Note:** Estimates are based on the following numbers of respondents for NSW: 2002 (12,602), 2003 (12,986), 2005 (11,476), 2006 (7,952), 2007 (7,380), 2008 (8,527), 2009 (7,949). The indicator includes those who visited someone in their neighbourhood at least once in the last week. The question used was: How often have you visited someone in your neighbourhood in the last week?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

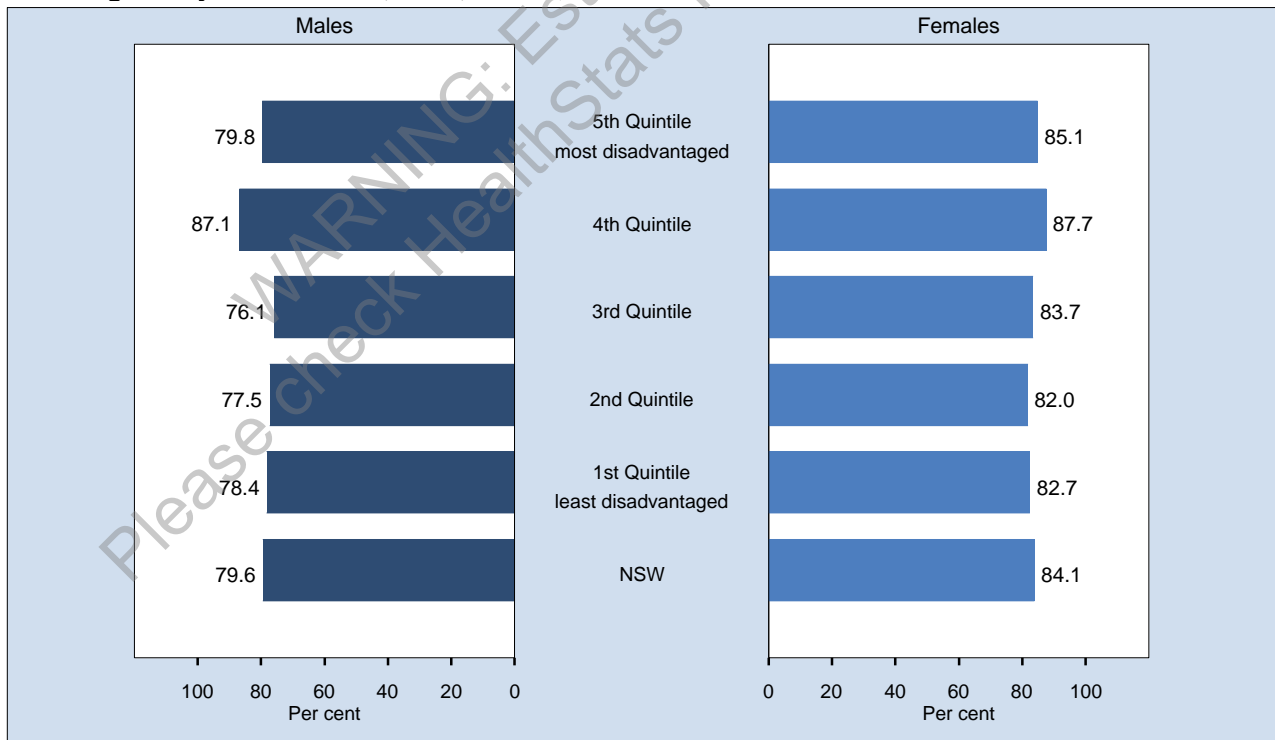
**Ran into friends and acquaintances when shopping in local area by age, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 7,925 respondents in NSW. For this indicator 80 (1.00%) were not stated (Don't know or Refused) in NSW. The indicator includes those who run into friends and acquaintances when shopping in their local area at least some of the time. The question used was: When you go shopping in your local area how often are you likely to run into friends and acquaintances?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

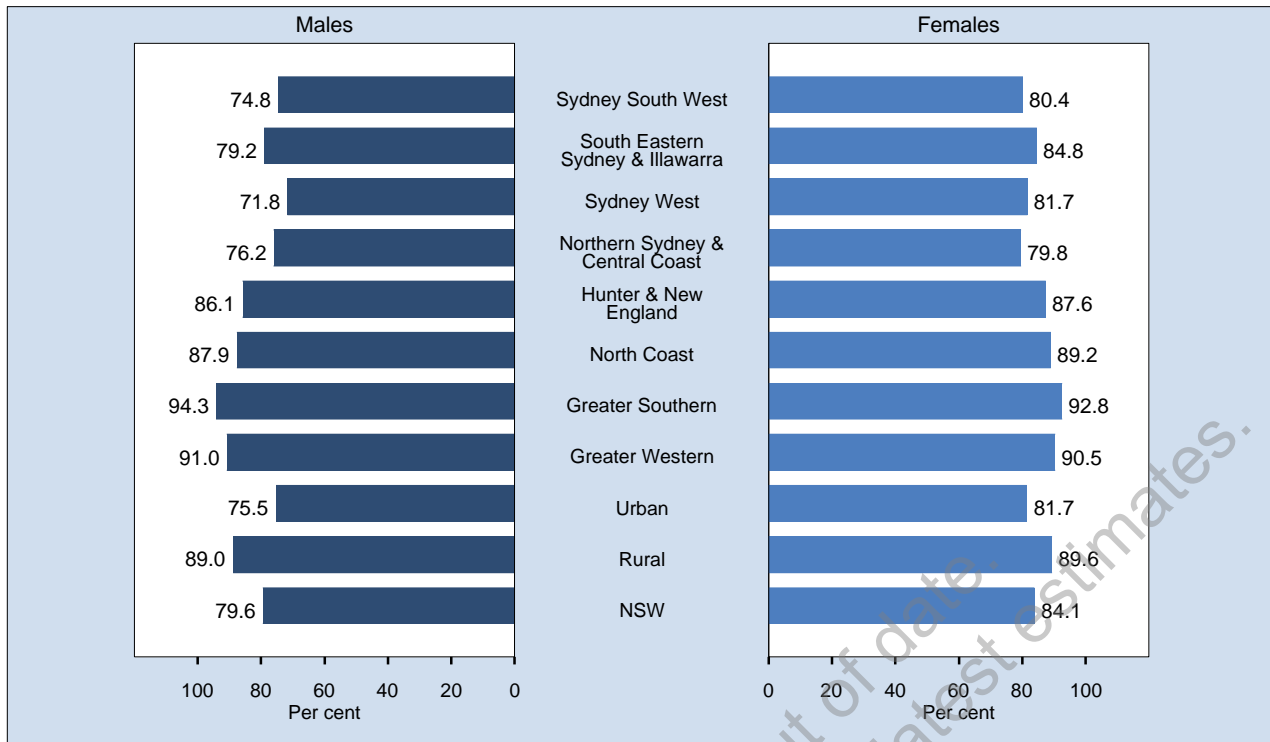
**Ran into friends and acquaintances when shopping in local area by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 7,925 respondents in NSW. For this indicator 80 (1.00%) were not stated (Don't know or Refused) in NSW. The indicator includes those who run into friends and acquaintances when shopping in their local area at least some of the time. The question used was: When you go shopping in your local area how often are you likely to run into friends and acquaintances?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

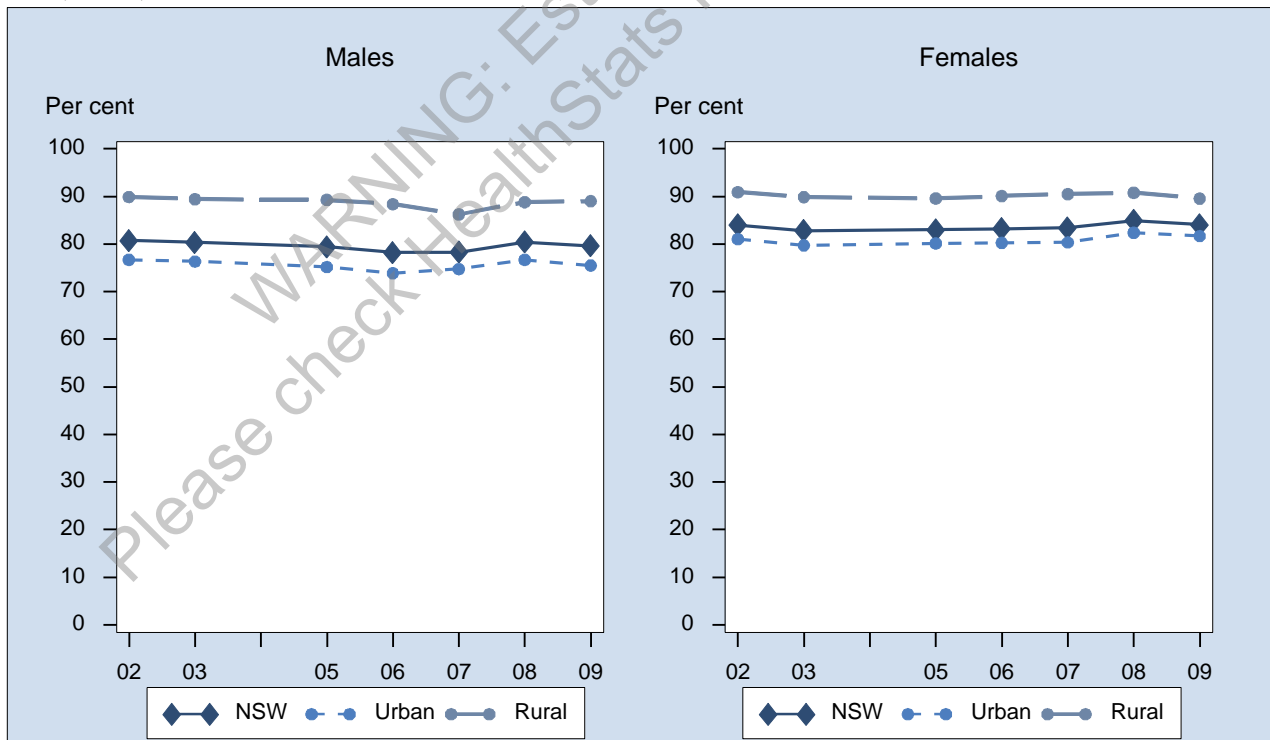
**Ran into friends and acquaintances when shopping in local area by area health service, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 7,925 respondents in NSW. For this indicator 80 (1.00%) were not stated (Don't know or Refused) in NSW. The indicator includes those who run into friends and acquaintances when shopping in their local area at least some of the time. The question used was: When you go shopping in your local area how often are you likely to run into friends and acquaintances?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

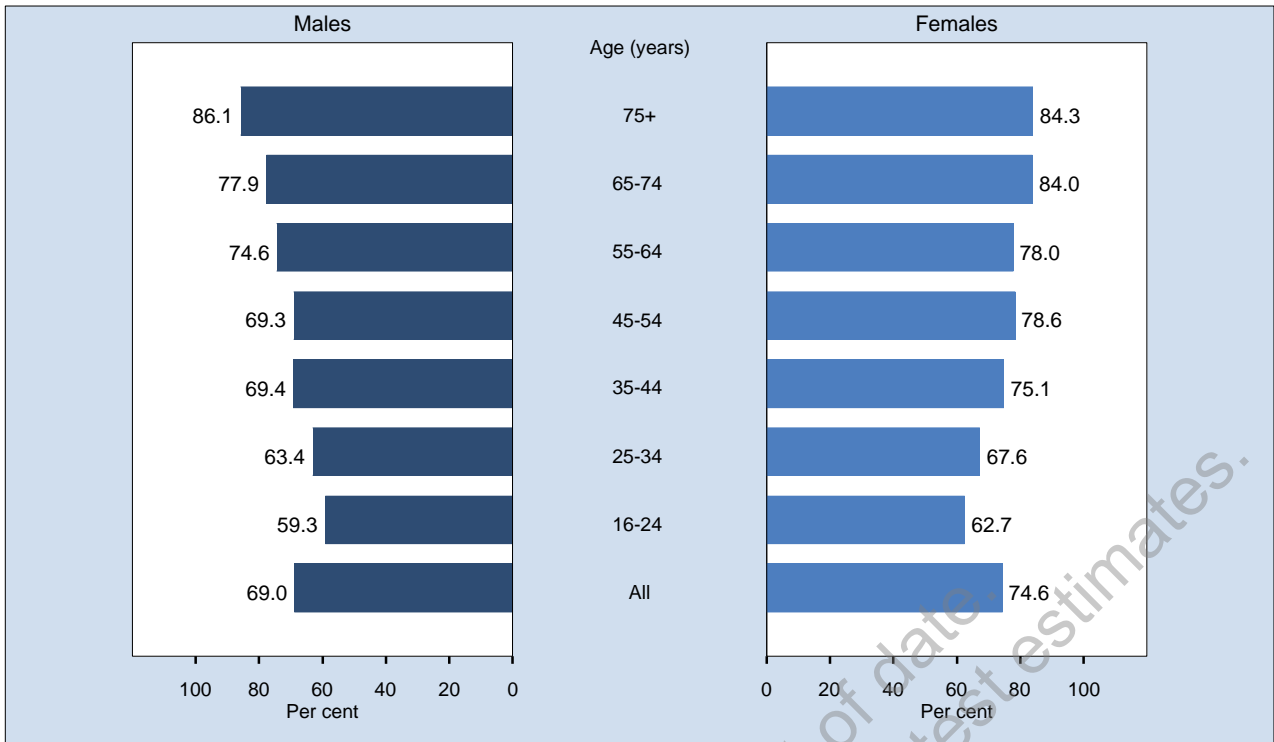
**Ran into friends and acquaintances when shopping in local area by year, adults aged 16 years and over, NSW, 2002-2009**



**Note:** Estimates are based on the following numbers of respondents for NSW: 2002 (12,556), 2003 (12,944), 2005 (11,447), 2006 (7,935), 2007 (7,365), 2008 (8,528), 2009 (7,925). The indicator includes those who run into friends and acquaintances when shopping in their local area at least some of the time. The question used was: When you go shopping in your local area how often are you likely to run into friends and acquaintances?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

**Would feel sad to leave their neighbourhood by age, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 7,714 respondents in NSW. For this indicator 291 (3.64%) were not stated (Don't know or Refused) in NSW. The indicator includes those who would be sad if they had to leave their neighbourhood. The question used was: Would you be sad if you had to leave this neighbourhood?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

**Would feel sad to leave their neighbourhood by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 7,714 respondents in NSW. For this indicator 291 (3.64%) were not stated (Don't know or Refused) in NSW. The indicator includes those who would be sad if they had to leave their neighbourhood. The question used was: Would you be sad if you had to leave this neighbourhood?

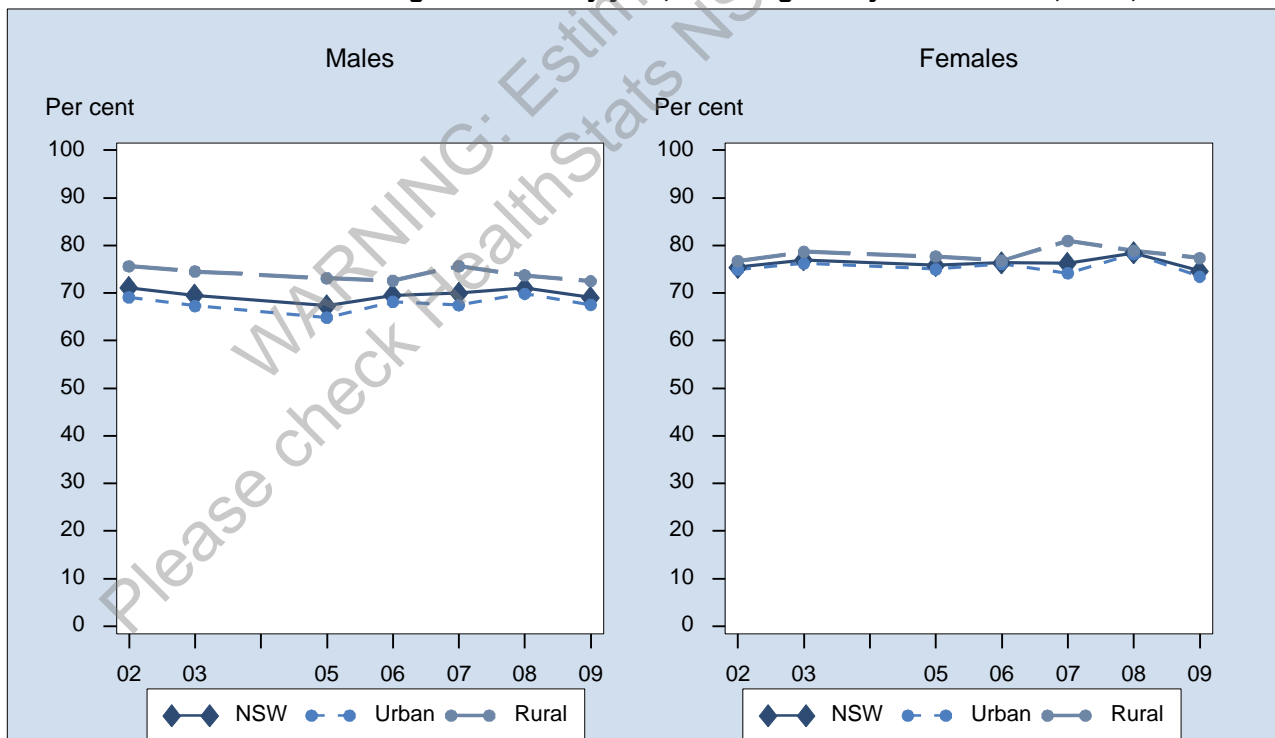
**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

**Would feel sad to leave their neighbourhood by area health service, adults aged 16 years and over, NSW, 2009**



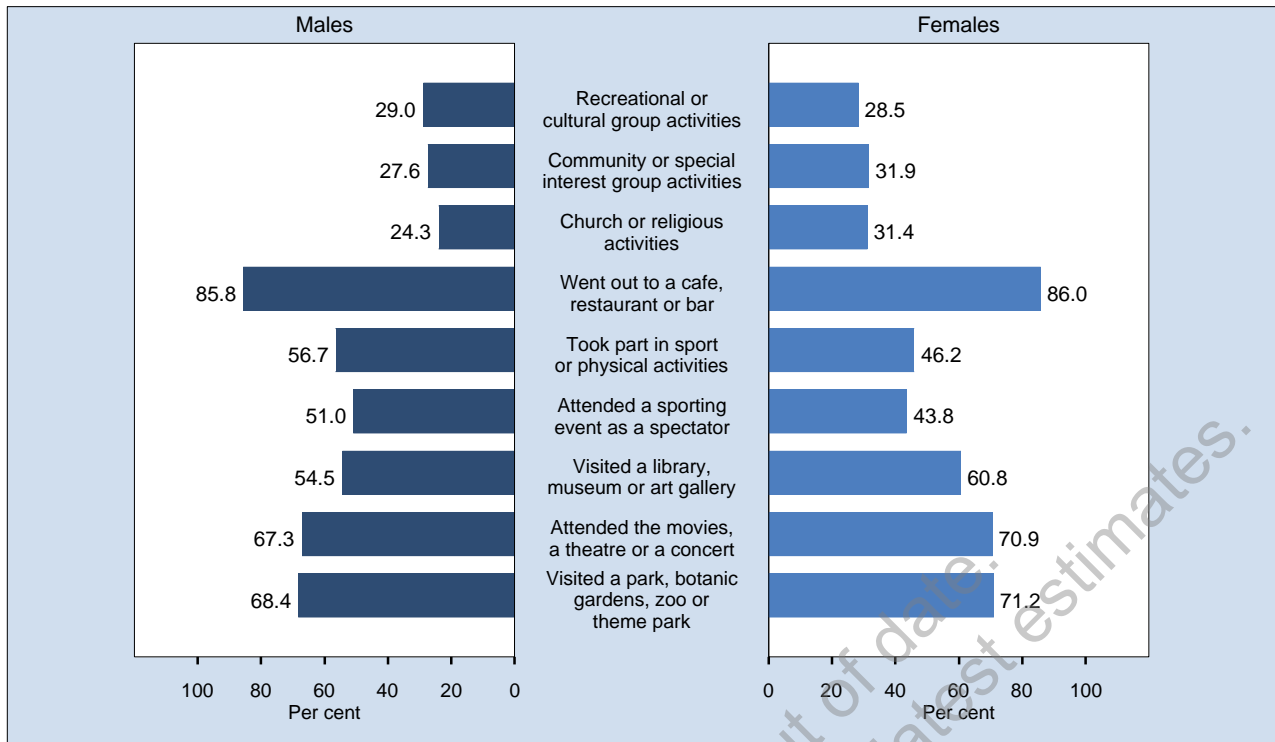
**Note:** Estimates are based on 7,714 respondents in NSW. For this indicator 291 (3.64%) were not stated (Don't know or Refused) in NSW. The indicator includes those who would be sad if they had to leave their neighbourhood. The question used was: Would you be sad if you had to leave this neighbourhood?  
**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

**Would feel sad to leave their neighbourhood by year, adults aged 16 years and over, NSW, 2002-2009**



**Note:** Estimates are based on the following numbers of respondents for NSW: 2002 (12,249), 2003 (12,642), 2005 (11,178), 2006 (7,735), 2007 (7,176), 2008 (8,323), 2009 (7,714). The indicator includes those who would be sad if they had to leave their neighbourhood. The question used was: Would you be sad if you had to leave this neighbourhood?  
**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

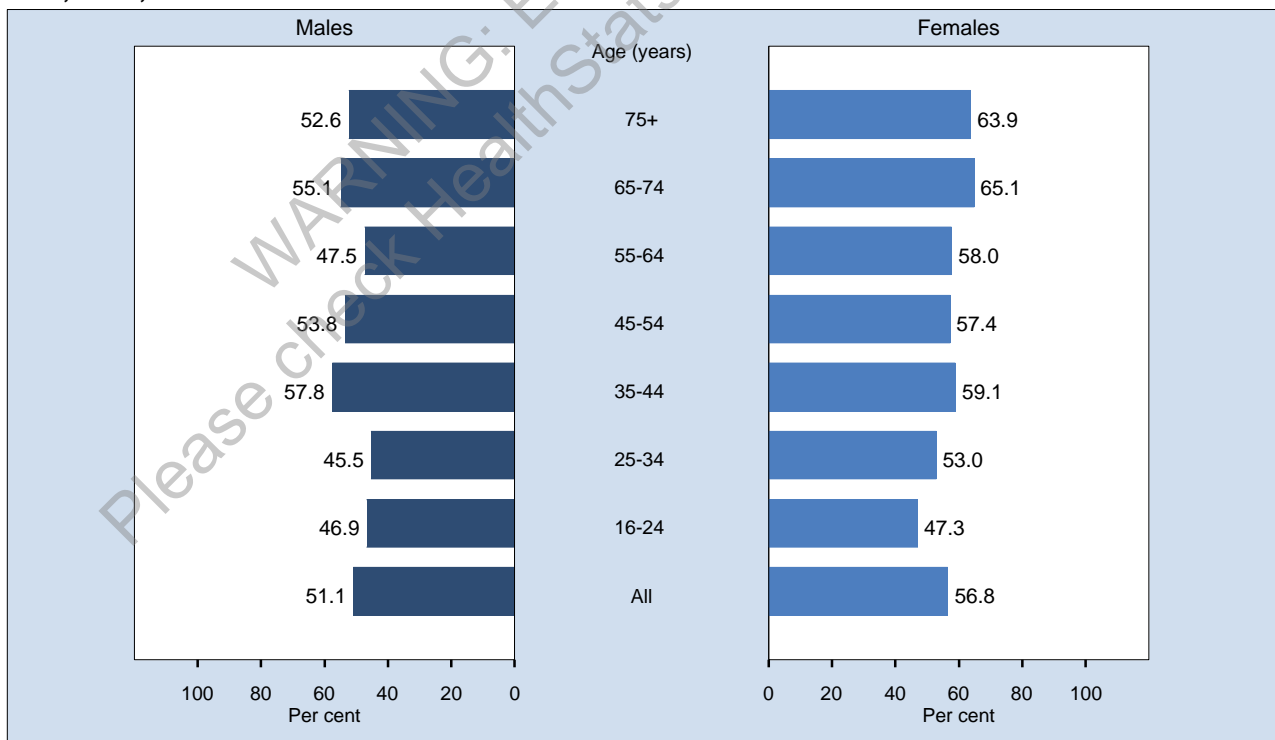
**Participated in group recreational, cultural, sporting, artistic, or religious activity in the last 12 months, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 10,681 respondents in NSW. For this indicator 38 (0.35%) were not stated (Don't know or Refused) in NSW. The questions used were: In the last 12 months, have you participated in any of the following activities: Recreational group or cultural group activities; community or special interest group activities; church or religious activities; went out to a cafe, restaurant or bar; took part in sport or physical activities; attended a sporting event as a spectator; visited a library, museum or art gallery; attended the movies, a theatre or a concert; visited a park, botanic gardens, zoo or theme park? Respondents could mention more than 1 response. Percentages may total more than 100%.

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

**Participated in a group recreational, cultural, or religious activity by age, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 10,681 respondents in NSW. For this indicator 38 (0.35%) were not stated (Don't know or Refused) in NSW. The indicator includes those who have participated in a recreational, cultural, or religious activity in the last 12 months. The questions used to define the indicator were: In the last 12 months, have you participated in any of the following activities: recreational group or cultural group activities; community or special interest group activities; church or religious activities?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

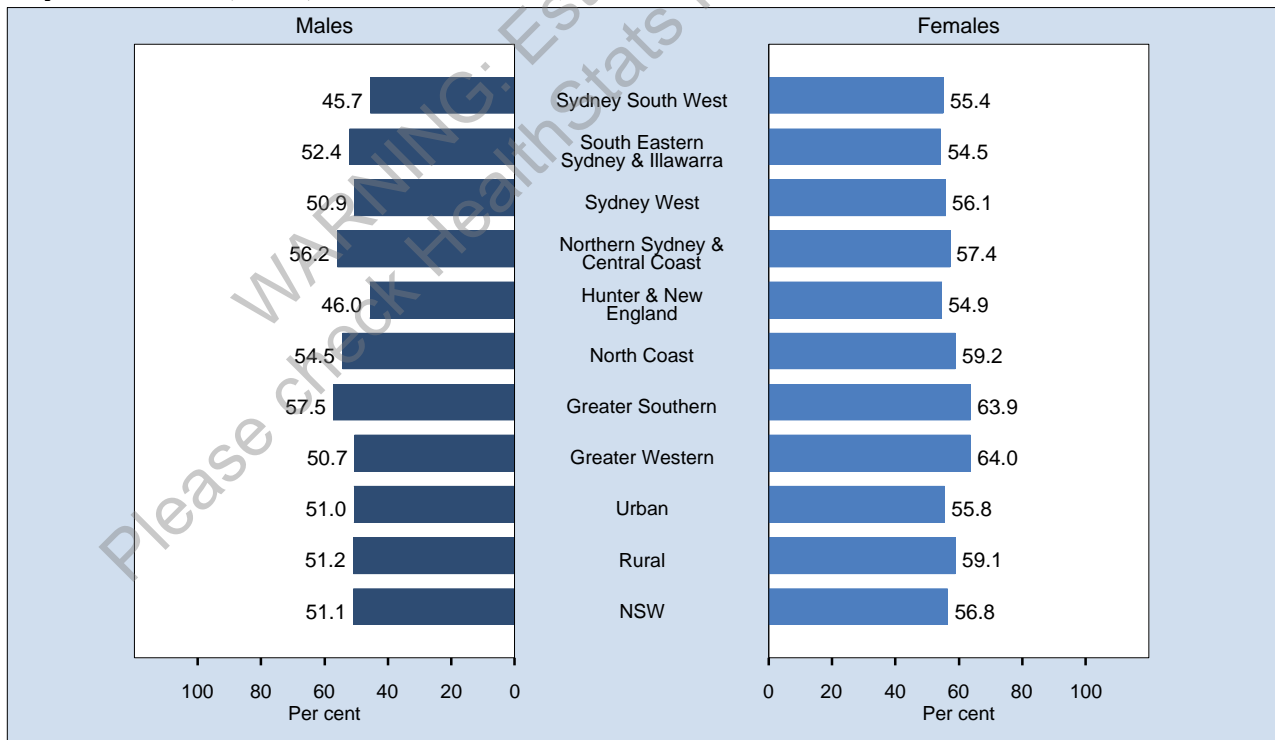
**Participated in a group recreational, cultural, or religious activity by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 10,681 respondents in NSW. For this indicator 38 (0.35%) were not stated (Don't know or Refused) in NSW. The indicator includes those who have participated in a recreational, cultural, or religious activity in the last 12 months. The questions used to define the indicator were: In the last 12 months, have you participated in any of the following activities: recreational group or cultural group activities; community or special interest group activities; church or religious activities?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

**Participated in a group recreational, cultural, or religious activity by area health service, adults aged 16 years and over, NSW, 2009**

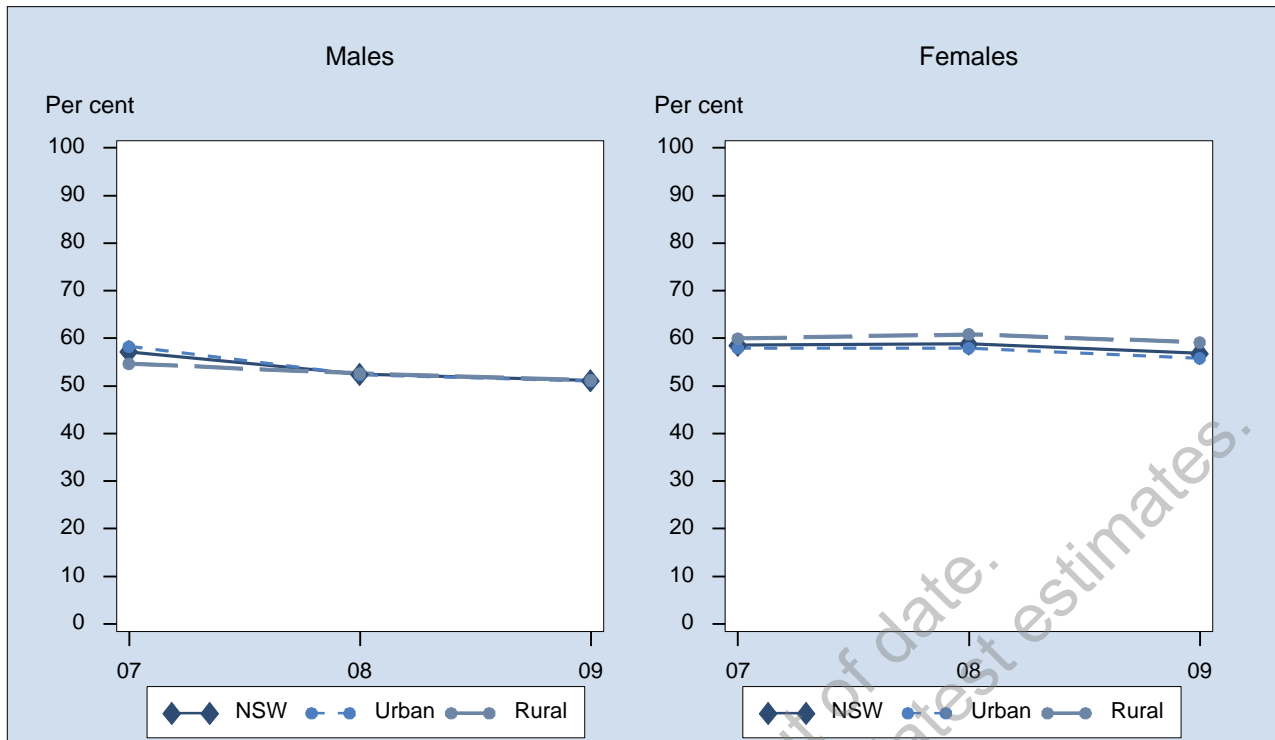


**Note:** Estimates are based on 10,681 respondents in NSW. For this indicator 38 (0.35%) were not stated (Don't know or Refused) in NSW. The indicator includes those who have participated in a recreational, cultural, or religious activity in the last 12 months. The questions used to define the indicator were: In the last 12 months, have you participated in any of the following activities: recreational group or cultural group activities; community or special interest group activities; church or religious activities?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.



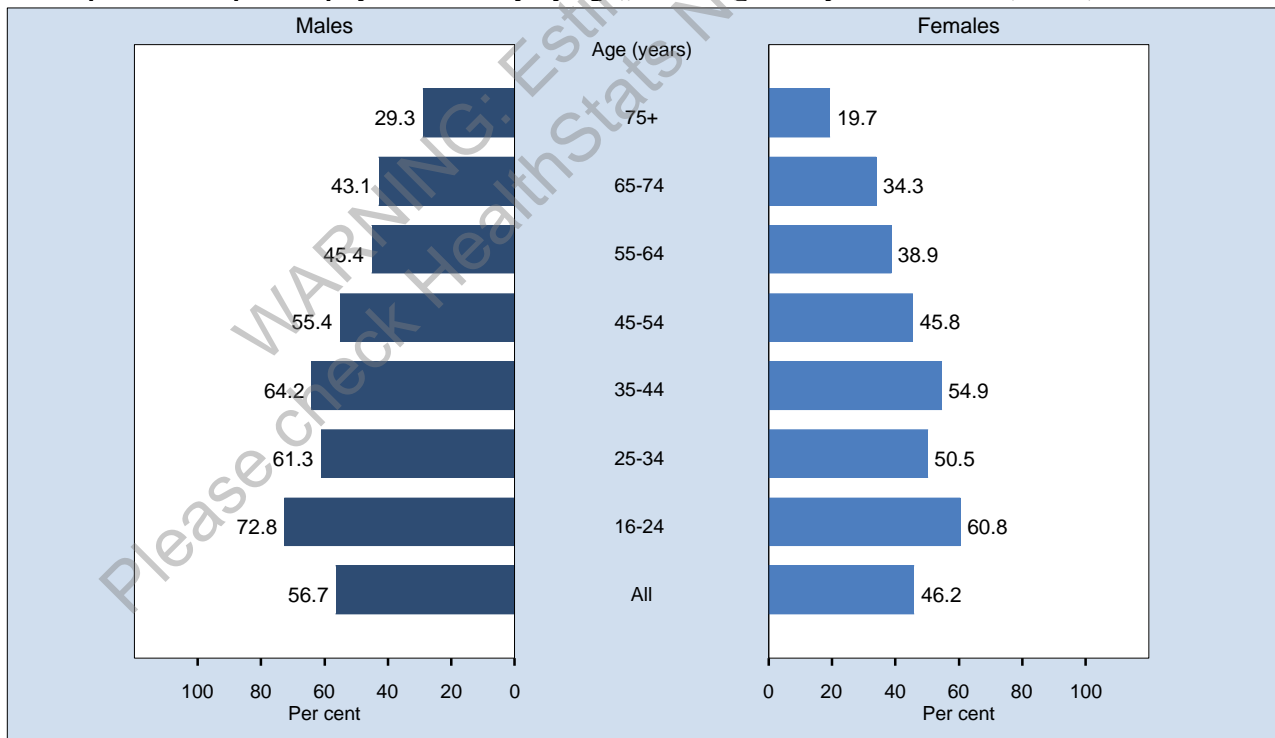
**Participated in a group recreational, cultural, or religious activity by year, adults aged 16 years and over, NSW, 2007-2009**



**Note:** Estimates are based on the following numbers of respondents for NSW: 2007 (5,100), 2008 (8,534), 2009 (10,681). The indicator includes those who have participated in a recreational, cultural, or religious activity in the last 12 months. The questions used to define the indicator were: In the last 12 months, have you participated in any of the following activities: recreational group or cultural group activities; community or special interest group activities; church or religious activities?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

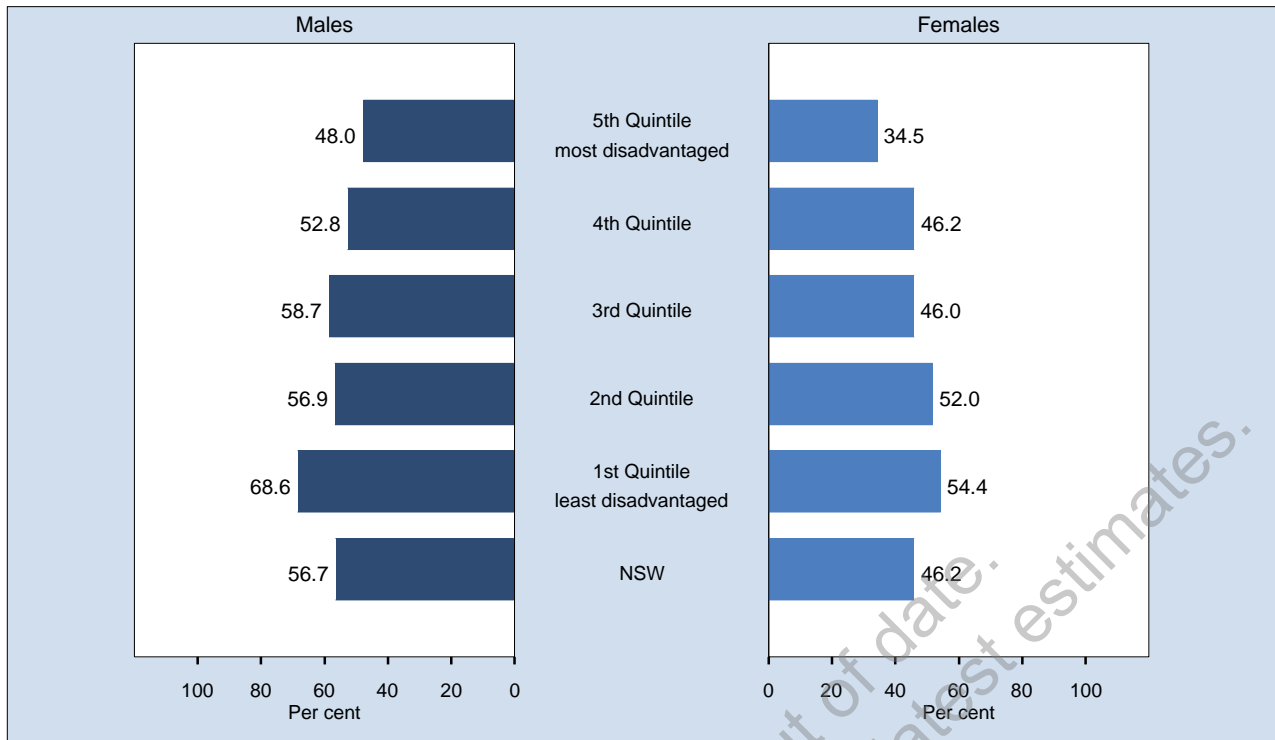
**Participated in a sport or physical activity by age, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 10,681 respondents in NSW. For this indicator 38 (0.35%) were not stated (Don't know or Refused) in NSW. The indicator includes those who took part in sport or physical activities in the last 12 months. The question used to define the indicator was: In the last 12 months, have you participated in the following activities: sport or physical activities?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

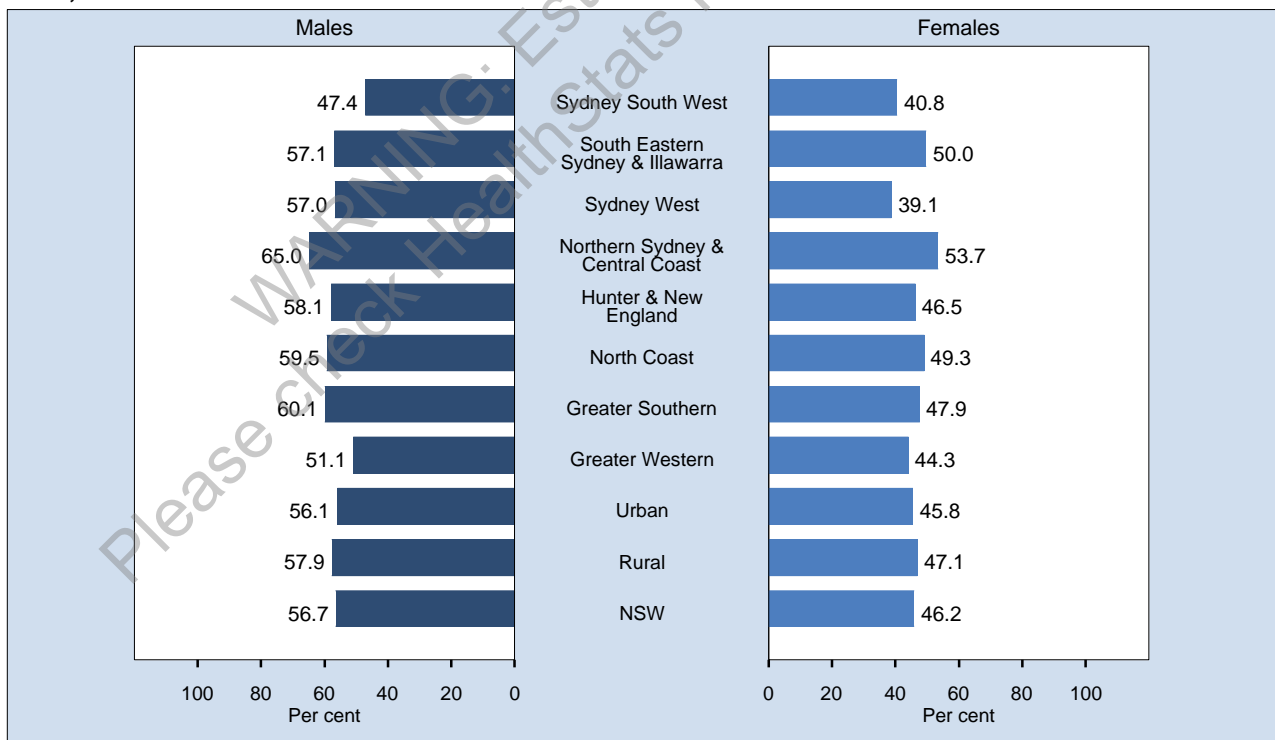
**Participated in a sport or physical activity by socioeconomic disadvantage, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 10,681 respondents in NSW. For this indicator 38 (0.35%) were not stated (Don't know or Refused) in NSW. The indicator includes those who took part in sport or physical activities in the last 12 months. The question used to define the indicator was: In the last 12 months, have you participated in the following activities: sport or physical activities?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

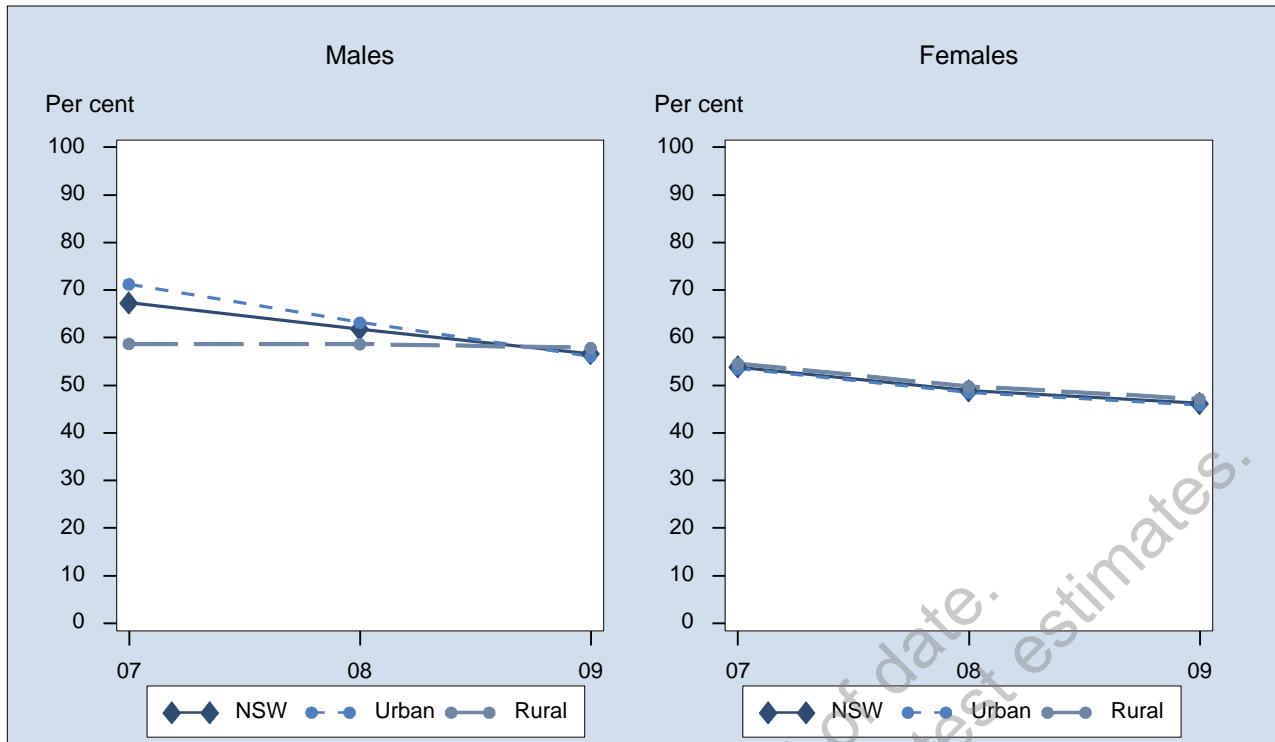
**Participated in a sport or physical activity by area health service, adults aged 16 years and over, NSW, 2009**



**Note:** Estimates are based on 10,681 respondents in NSW. For this indicator 38 (0.35%) were not stated (Don't know or Refused) in NSW. The indicator includes those who took part in sport or physical activities in the last 12 months. The question used to define the indicator was: In the last 12 months, have you participated in the following activities: sport or physical activities?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

**Participated in a sport or physical activity by year, adults aged 16 years and over, NSW, 2007-2009**



**Note:** Estimates are based on the following numbers of respondents for NSW: 2007 (5,100), 2008 (8,534), 2009 (10,681). The indicator includes those who took part in sport or physical activities in the last 12 months. The question used to define the indicator was: In the last 12 months, have you participated in the following activities: sport or physical activities?

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

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

# Conclusion

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The New South Wales Population Health Survey began as a continuous survey in 2002, following adult health surveys in 1997 and 1998. Most indicators are collected and reported annually but some are collected and reported biennially and triennially. In 2009, data were collected on demographics, health behaviours, health status, health service use and access, and social capital. Where possible, indicators have been aligned with those collected previously, so that trends can be examined.

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

# Trends in adult health

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## Health behaviours

Health behaviours influence health and wellbeing. There have been significant changes in some indicators of health behaviour, while other indicators have not changed significantly.

Since the first year of data collection, there have been significant increases in: use of public water supply as usual source of drinking water, hand washing with soap after preparing raw meat, vaccinated against influenza (persons aged 50 years and over), vaccinated against influenza (persons aged 65 years and over), vaccinated against pneumococcal disease (persons aged 50 years and over), vaccinated against pneumococcal disease (persons aged 65 years and over), homes with a smoke alarm or detector, consumes 2 or more serves of fruit a day, consumes 5 or more serves of vegetables a day, usually consumes low or reduced fat or skim milk, adequate physical activity, lives in smoke-free home, and bans smoke in car.

Since the first year of data collection, there have been significant decreases in: risk drinking behaviour, consumes bread once a day or more, food insecurity, current smoking, and daily smoking.

Since the first year of data collection, there have been no significant changes in: drank more than 2 standard drinks on a day when they drink alcohol, current cannabis smoking, homes with an escape plan practiced in the last 12 months, consumes rice or pasta or noodles or other cooked cereals once a day or more, consumes breakfast cereals 2 times a week or more, and doctor advised to quit smoking.

Since 2008, there have been significant increases in: use of public water supply as usual source of drinking water, consumption of rice or pasta or noodles or other cooked cereals 7 times a week or more, doctor advised to quit smoking, lives in smoke-free home, and bans smoke in car.

Since 2008, there have been significant decreases in: risk alcohol drinking, vaccinated against pneumococcal disease (persons aged 50 years and over), consumes bread once a day or more, and consumes breakfast cereals 2 times a week or more.

In 2009, 4 new indicators were reported for health behaviours: consumes more than 2 standard drinks on any occasion when drinking alcohol, had a faecal occult blood test to screen for colorectal cancer in the last 2 years, exposure to road traffic noise, and vaccinated against H1N1 influenza (swine flu) since 1 October 2009.

## Health status

Monitoring the health status of a population helps detect emerging patterns of illness and disease and provides information to inform health policy and planning of health services. There have been significant changes in some indicators of health status, while other indicators have not changed significantly.

Since the first year of data collection, there have been significant increases in: ever diagnosed with asthma, diabetes or high blood glucose, visited a dental professional in the last 12 months, overweight, obese, and overweight or obese.

Since the first year of data collection, there have been significant decreases in: positive self-rated health, current smoking in adults with current asthma, urinary incontinence in the last 4 weeks, and all natural teeth missing.

Since the first year of data collection, there have been no significant changes in: current asthma, and high or very high psychological distress.

Since 2008, there have been significant increases in: diabetes or high blood glucose.

In 2009, 3 new indicators were reported for health status: written asthma action plan, private health insurance for dental expenses, and paid for some or all of last dental visit.

## Health service use and access

Information about the use of and access to health services assists in formulating health policy and health service planning. There have been significant changes in some health service indicators, while other indicators have not changed significantly.

Since the first year of data collection, there have been significant increases in: private health insurance, difficulties getting health care, emergency department presentations, hospital admissions, positive rating of public dental service care, and community health centre attendances.

Since the first year of data collection, there have been significant decreases in: visited a general practice in the last 12 months.

Since the first year of data collection, there have been no significant changes in: positive rating of emergency department care, positive rating of hospital care, visited a general practice in the last 2 weeks, positive rating of general practice care, public dental service attendances, and positive rating of community health centre care.

Since 2008, there have been significant decreases in: visited a general practice in the last 2 weeks.

## Social capital

Social capital is created from the everyday interactions between people. It is called capital because it can be measured and quantified in a way that can distribute its benefits and avoid its losses. There have been significant changes in some indicators of social capital, while other indicators have not changed significantly.

Since the first year of data collection, there have been significant increases in the proportion of adults who: said most people can be trusted, and felt safe walking down their street after dark.

Since the first year of data collection, there have been significant decreases in the proportion of adults who: visited neighbours in the last week, participated in group recreational, cultural, religious, or artistic activities, and participated in group sport or physical activities.

Since the first year of data collection, there have been no significant changes in the proportion of adults who: said their local area has a reputation for being a safe place, ran into friends and acquaintances when shopping in their local area, would feel sad if they had to leave their neighbourhood.

Since 2008, there have been significant decreases in the proportion of adults who: would feel sad if they had to leave their neighbourhood, and participated in sport or physical activities.

## The future

The collection and reporting plan for the New South Wales Population Health Survey to 2012 can be found at [www.health.nsw.gov.au/publichealth/surveys/index.asp](http://www.health.nsw.gov.au/publichealth/surveys/index.asp). The continued monitoring of indicators via the Survey will provide information to assist health professionals, health service planners and those involved in development of health policy.

## Trends in health behaviours NSW, 2009

Indicator	Year	Males % (95% CI)	Females % (95% CI)	Urban % (95% CI)	Rural % (95% CI)	All % (95% CI)	
Risk alcohol drinking	1997	50.6 (49.1-52.0)	34.3 (33.1-35.6)	40.0 (38.8-41.3)	47.5 (46.2-48.9)	42.3 (41.3-43.3)	
	1998	50.4 (48.8-52.0)	36.3 (35.0-37.6)	41.7 (40.4-43.0)	46.6 (45.2-48.0)	43.2 (42.2-44.2)	
	2002	39.3 (37.3-41.2)	30.2 (28.6-31.8)	33.1 (31.4-34.7)	38.4 (36.6-40.2)	34.7 (33.4-35.9)	
	2003	41.2 (39.3-43.1)	30.2 (28.7-31.6)	33.7 (32.1-35.2)	40.0 (38.4-41.6)	35.6 (34.4-36.8)	
	2004	40.3 (38.0-42.6)	30.3 (28.5-32.0)	34.2 (32.2-36.1)	37.6 (35.7-39.6)	35.2 (33.8-36.7)	
	2005	37.2 (35.3-39.2)	27.3 (25.8-28.7)	30.3 (28.7-31.9)	36.4 (34.8-38.1)	32.1 (30.9-33.3)	
	2006	37.3 (35.0-39.6)	28.4 (26.7-30.2)	30.9 (29.1-32.8)	37.2 (35.2-39.3)	32.8 (31.4-34.2)	
	2007	37.2 (34.7-39.7)	27.0 (25.2-28.8)	29.6 (27.7-31.6)	37.0 (34.7-39.3)	31.9 (30.3-33.4)	
	2008	38.9 (36.6-41.3)	29.0 (27.2-30.7)	32.0 (30.1-33.8)	38.2 (36.1-40.3)	33.8 (32.4-35.3)	
	2009	41.4 (39.2-43.6)	19.8 (18.3-21.2)	28.2 (26.4-29.9)	35.5 (33.6-37.5)	30.4 (29.1-31.7)	
More than 2 standard drinks on a day when drinking alcohol	2002	43.2 (41.3-45.2)	21.2 (19.7-22.6)	30.7 (29.1-32.3)	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)	35.2 (33.6-36.8)	32.3 (31.1-33.5)	
	2004	42.7 (40.4-44.9)	21.2 (19.6-22.8)	30.7 (28.9-32.6)	34.1 (32.2-36.1)	31.8 (30.4-33.2)	
	2005	41.5 (39.5-43.5)	19.0 (17.6-20.3)	29.0 (27.4-30.6)	32.4 (30.7-34.1)	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)	33.9 (31.8-35.9)	30.7 (29.3-32.2)	
	2007	42.7 (40.2-45.3)	19.5 (17.8-21.1)	29.4 (27.4-31.3)	33.4 (31.2-35.6)	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)	33.3 (31.1-35.4)	31.2 (29.7-32.7)	
	2009	41.4 (39.2-43.6)	19.8 (18.3-21.2)	28.2 (26.4-29.9)	35.5 (33.6-37.5)	30.4 (29.1-31.7)	
	Current cannabis smoking (16 to 34 years)	2007	6.7 (3.4-10.1)	4.0 (1.7-6.2)	3.6 (1.6-5.7)	8.8 (4.5-13.1)	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 (1.8-5.0)	4.7 (3.0-6.3)	6.2 (3.9-8.6)	5.1 (3.7-6.4)	
Had a faecal occult blood test to screen for colorectal cancer in the last 2 years (50 years and over)	2009	20.4 (17.3-23.6)	18.5 (16.1-20.9)	17.9 (15.4-20.4)	22.5 (19.5-25.5)	19.4 (17.5-21.4)	
	2009			86.3 (84.3-88.3)	68.7 (66.1-71.3)	80.9 (79.3-82.5)	
Use public water as usual source of water	2002			86.6 (85.5-87.7)	68.7 (67.2-70.1)	81.2 (80.3-82.1)	
	2003			84.2 (83.0-85.5)	66.1 (64.6-67.7)	78.8 (77.8-79.8)	
	2005			87.6 (86.3-88.9)	67.9 (66.0-69.8)	81.7 (80.6-82.8)	
	2006			89.6 (88.3-90.9)	70.5 (68.5-72.5)	83.8 (82.7-84.9)	
	2007			88.7 (87.5-90.0)	69.1 (67.2-71.0)	82.7 (81.7-83.8)	
	2008			91.2 (90.1-92.4)	72.5 (70.6-74.4)	85.6 (84.6-86.6)	
	2009			45.3 (42.4-48.3)	46.3 (44.0-48.5)	46.9 (44.6-49.2)	42.8 (40.1-45.5)
Washes hands with soap after preparing raw meat	2003	56.3 (54.2-58.5)	64.3 (62.8-65.8)	62.6 (61.0-64.3)	56.4 (54.7-58.1)	60.7 (59.4-62.0)	
	2006	61.4 (58.9-63.9)	70.8 (69.0-72.5)	67.8 (65.9-69.7)	63.6 (61.5-65.7)	66.5 (65.1-68.0)	
	2009	67.8 (65.1-70.4)	74.8 (73.2-76.5)	73.0 (71.1-74.9)	68.7 (66.5-70.9)	71.7 (70.2-73.2)	
Vaccinated against influenza in the last 12 months (50 years and over)	1997	32.1 (30.0-34.3)	36.8 (34.9-38.8)	34.0 (32.0-35.9)	35.8 (33.9-37.8)	34.6 (33.2-36.0)	
	1998	36.8 (34.5-39.0)	43.6 (41.6-45.6)	39.0 (37.0-41.1)	42.9 (40.9-44.8)	40.3 (38.9-41.8)	
	2002	43.4 (41.0-45.9)	49.8 (47.6-51.9)	45.9 (43.6-48.1)	48.3 (46.2-50.4)	46.7 (45.1-48.3)	
	2003	46.2 (43.7-48.8)	53.1 (51.0-55.3)	50.2 (47.9-52.5)	49.0 (47.1-51.0)	49.8 (48.2-51.5)	
	2004	45.8 (42.9-48.8)	51.8 (49.4-54.2)	48.0 (45.3-50.6)	50.7 (48.3-53.2)	48.9 (47.0-50.8)	
	2005	46.6 (44.2-49.1)	50.6 (48.6-52.5)	48.8 (46.6-50.9)	48.5 (46.7-50.4)	48.7 (47.1-50.2)	
	2006	44.2 (41.5-46.9)	51.5 (49.2-53.7)	47.7 (45.3-50.2)	48.4 (46.1-50.7)	48.0 (46.2-49.7)	
	2007	41.9 (39.1-44.8)	49.1 (46.9-51.4)	44.7 (42.3-47.2)	47.5 (45.1-49.8)	45.7 (43.9-47.4)	
	2008	43.0 (40.5-45.5)	50.1 (48.0-52.1)	45.5 (43.3-47.7)	48.8 (46.6-51.0)	46.7 (45.0-48.3)	
	2009	43.5 (41.2-45.9)	51.3 (49.4-53.1)	46.8 (44.8-48.8)	49.0 (47.1-50.9)	47.6 (46.1-49.0)	

Indicator	Year	Males % (95% CI)	Females % (95% CI)	Urban % (95% CI)	Rural % (95% CI)	All % (95% CI)	
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)	57.6 (54.6-60.6)	56.1 (53.2-59.0)	57.1 (54.9-59.3)	
	1998	61.9 (58.4-65.3)	64.5 (61.9-67.2)	62.4 (59.5-65.3)	65.0 (62.3-67.7)	63.3 (61.2-65.5)	
	2002	74.6 (71.6-77.6)	75.8 (73.3-78.2)	76.1 (73.5-78.8)	73.6 (71.1-76.2)	75.2 (73.3-77.1)	
	2003	76.0 (73.0-79.0)	75.9 (73.5-78.3)	76.7 (74.0-79.3)	74.7 (72.4-77.1)	76.0 (74.1-77.9)	
	2004	75.9 (72.5-79.4)	75.5 (72.6-78.3)	75.7 (72.7-78.8)	75.6 (72.7-78.5)	75.7 (73.5-77.9)	
	2005	75.3 (72.6-78.1)	74.5 (72.2-76.8)	75.2 (72.8-77.6)	74.4 (72.0-76.7)	74.9 (73.1-76.7)	
	2006	73.8 (70.5-77.1)	75.9 (73.3-78.4)	75.4 (72.6-78.2)	74.2 (71.5-76.9)	75.0 (72.9-77.0)	
	2007	71.1 (67.6-74.7)	74.2 (71.5-76.9)	72.2 (69.2-75.2)	73.9 (71.1-76.6)	72.8 (70.6-75.0)	
	2008	69.7 (66.5-73.0)	73.1 (70.6-75.5)	71.4 (68.6-74.1)	72.0 (69.4-74.6)	71.6 (69.6-73.6)	
	2009	70.0 (67.1-72.8)	74.8 (72.6-77.0)	71.9 (69.4-74.3)	73.9 (71.6-76.1)	72.6 (70.8-74.4)	
Vaccinated against H1N1 influenza since 1 October 2009	2009	13.4 (9.7-17.1)	18.0 (14.0-22.1)	14.4 (10.8-18.0)	17.6 (13.3-21.8)	15.6 (12.9-18.4)	
Vaccinated against pneumococcal disease in the last 5 years (50 years and over)	2002	17.4 (15.6-19.2)	20.9 (19.3-22.6)	19.2 (17.6-20.8)	19.3 (17.7-20.9)	19.2 (18.0-20.5)	
	2003	21.5 (19.5-23.5)	26.0 (24.2-27.8)	23.5 (21.7-25.3)	24.6 (22.9-26.2)	23.9 (22.5-25.2)	
	2004	20.1 (17.9-22.4)	27.4 (25.2-29.5)	22.8 (20.7-24.8)	26.1 (23.9-28.3)	23.9 (22.4-25.5)	
	2005	24.5 (22.5-26.4)	30.7 (29.0-32.5)	26.8 (25.0-28.6)	29.6 (27.9-31.3)	27.7 (26.4-29.0)	
	2006	30.2 (27.7-32.6)	33.9 (31.8-36.0)	30.9 (28.7-33.1)	34.4 (32.2-36.5)	32.1 (30.5-33.7)	
	2007	27.2 (24.7-29.6)	33.7 (31.6-35.8)	28.4 (26.3-30.5)	34.7 (32.5-37.0)	30.6 (29.0-32.2)	
	2008	28.6 (26.3-30.9)	33.9 (31.9-35.8)	29.4 (27.4-31.4)	35.1 (32.9-37.2)	31.4 (29.9-32.9)	
	2009	25.9 (23.9-27.9)	32.0 (30.3-33.7)	27.0 (25.3-28.7)	33.1 (31.3-34.9)	29.1 (27.9-30.4)	
	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)	39.5 (36.5-42.6)	37.1 (34.2-40.0)	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)	46.6 (43.8-49.4)	47.1 (44.9-49.4)
2004		43.3 (39.2-47.5)	50.4 (47.1-53.8)	47.0 (43.4-50.5)	47.8 (44.2-51.4)	47.3 (44.6-49.9)	
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)	59.6 (56.3-62.9)	63.0 (60.0-66.0)	60.9 (58.5-63.2)	
2007		56.7 (52.7-60.7)	61.1 (58.1-64.1)	56.1 (52.7-59.5)	64.5 (61.4-67.6)	59.1 (56.7-61.6)	
2008		55.1 (51.4-58.7)	61.8 (59.0-64.6)	56.0 (52.9-59.1)	63.4 (60.6-66.3)	58.8 (56.6-61.1)	
2009		53.7 (50.4-56.9)	57.9 (55.3-60.5)	52.7 (49.9-55.5)	61.6 (59.1-64.2)	56.0 (54.0-58.1)	
Live in homes with a smoke alarm or detector		1997			54.5 (53.3-55.8)	66.6 (65.4-67.8)	58.2 (57.3-59.2)
		1998			61.4 (60.1-62.7)	69.8 (68.6-71.1)	64.0 (63.0-65.0)
	2002			70.5 (69.0-72.0)	78.7 (77.3-80.0)	73.0 (71.9-74.1)	
	2003			71.1 (69.6-72.5)	76.7 (75.4-78.1)	72.8 (71.7-73.9)	
	2004			69.6 (67.7-71.4)	76.0 (74.3-77.6)	71.5 (70.1-72.9)	
	2005			74.8 (73.3-76.3)	81.6 (80.3-82.9)	76.9 (75.8-78.0)	
	2006			85.5 (84.1-86.9)	90.0 (88.8-91.2)	86.9 (85.8-87.9)	
	2007			92.7 (91.6-93.8)	93.4 (92.2-94.6)	92.9 (92.0-93.7)	
	2008			92.8 (91.7-93.8)	95.6 (94.7-96.4)	93.6 (92.8-94.4)	
	2009			93.1 (92.0-94.1)	95.2 (94.2-96.1)	93.7 (92.9-94.5)	
Lives in home with an emergency escape plan practiced in the last 12 months	2006			4.1 (3.3-4.8)	7.8 (6.6-9.0)	5.2 (4.5-5.9)	
	2007			4.7 (3.8-5.6)	6.2 (5.0-7.3)	5.1 (4.4-5.9)	
	2008			3.6 (2.9-4.3)	6.6 (5.5-7.6)	4.5 (3.9-5.1)	
	2009			3.8 (3.0-4.6)	7.4 (6.2-8.6)	4.9 (4.2-5.6)	
Two or more serves of fruit a day	1997	39.7 (38.3-41.1)	52.4 (51.1-53.7)	47.0 (45.7-48.3)	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)	45.3 (44.0-46.6)	45.3 (43.9-46.6)	45.3 (44.3-46.3)	
	2002	41.4 (39.4-43.3)	51.2 (49.5-52.9)	47.3 (45.7-49.0)	44.0 (42.3-45.8)	46.3 (45.0-47.6)	
	2003	40.1 (38.2-42.0)	54.5 (52.9-56.0)	48.4 (46.8-50.0)	45.1 (43.5-46.7)	47.4 (46.2-48.6)	
	2004	40.6 (38.2-42.9)	53.3 (51.4-55.2)	48.0 (46.0-50.0)	44.7 (42.7-46.6)	47.0 (45.5-48.5)	



Indicator	Year	Males % (95% CI)	Females % (95% CI)	Urban % (95% CI)	Rural % (95% CI)	All % (95% CI)
	2005	44.6 (42.6-46.5)	57.5 (55.9-59.1)	51.1 (49.5-52.8)	51.2 (49.6-52.9)	51.2 (49.9-52.4)
	2006	47.0 (44.7-49.3)	59.6 (57.7-61.5)	53.8 (51.9-55.8)	52.3 (50.3-54.4)	53.4 (51.9-54.9)
	2007	48.4 (45.8-50.9)	59.8 (57.9-61.8)	55.0 (52.9-57.1)	52.9 (50.7-55.2)	54.4 (52.8-56.0)
	2008	52.0 (49.7-54.4)	60.9 (59.0-62.8)	57.4 (55.5-59.4)	54.7 (52.5-56.8)	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)	55.9 (54.0-57.8)	56.8 (55.4-58.2)
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 (9.7-11.4)	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)	9.6 (8.8-10.5)	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)	9.2 (8.3-10.1)	7.5 (6.9-8.1)
	2003	8.1 (7.1-9.1)	11.4 (10.4-12.4)	9.4 (8.4-10.3)	10.7 (9.8-11.6)	9.8 (9.1-10.5)
	2004	6.0 (5.0-7.0)	10.2 (9.1-11.4)	7.2 (6.2-8.1)	10.5 (9.3-11.7)	8.2 (7.4-8.9)
	2005	4.7 (3.9-5.4)	10.1 (9.2-10.9)	6.5 (5.7-7.2)	9.6 (8.7-10.5)	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 (10.9-13.2)	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)	13.5 (12.2-14.9)	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)	12.3 (11.1-13.5)	10.2 (9.4-11.0)
	2009	7.5 (6.4-8.6)	13.2 (12.2-14.2)	8.8 (7.8-9.8)	14.1 (12.9-15.3)	10.4 (9.6-11.2)
Consumes bread once a day or more	2002	86.2 (84.8-87.7)	83.9 (82.6-85.1)	83.6 (82.4-84.9)	88.3 (87.2-89.5)	85.0 (84.1-86.0)
	2003	87.1 (85.7-88.4)	83.5 (82.3-84.7)	83.9 (82.7-85.1)	88.4 (87.4-89.4)	85.3 (84.4-86.1)
	2004	85.2 (83.5-86.8)	79.1 (77.6-80.7)	80.9 (79.4-82.5)	84.8 (83.4-86.2)	82.1 (81.0-83.3)
	2005	83.0 (81.5-84.5)	75.2 (73.8-76.6)	77.6 (76.2-79.0)	82.5 (81.3-83.7)	79.0 (78.0-80.1)
	2006	81.0 (79.1-82.8)	72.9 (71.2-74.6)	76.0 (74.3-77.6)	79.0 (77.4-80.7)	76.9 (75.6-78.2)
	2007	80.7 (78.7-82.8)	72.3 (70.5-74.1)	75.7 (73.9-77.5)	77.8 (75.9-79.7)	76.3 (75.0-77.7)
	2008	80.6 (78.7-82.5)	73.1 (71.4-74.7)	75.5 (73.9-77.2)	79.5 (77.8-81.1)	76.7 (75.5-78.0)
	2009	78.9 (76.8-81.1)	70.2 (68.5-72.0)	73.9 (72.1-75.7)	75.9 (74.0-77.7)	74.5 (73.1-75.9)
Consumes pasta, rice, noodles, or other cooked cereals 7 times a week or more	2002	14.3 (12.8-15.8)	15.4 (14.0-16.8)	18.2 (16.8-19.6)	7.1 (6.2-8.1)	14.9 (13.8-15.9)
	2003	13.9 (12.4-15.4)	15.5 (14.2-16.8)	18.1 (16.8-19.5)	6.8 (5.9-7.7)	14.7 (13.7-15.7)
	2004	12.3 (10.5-14.0)	13.8 (12.2-15.3)	15.8 (14.2-17.4)	6.7 (5.7-7.7)	13.0 (11.9-14.2)
	2005	15.8 (14.2-17.5)	15.1 (13.8-16.5)	18.9 (17.5-20.3)	7.5 (6.6-8.5)	15.5 (14.4-16.5)
	2006	14.1 (12.4-15.8)	15.4 (13.8-17.0)	18.7 (17.1-20.3)	5.6 (4.6-6.7)	14.7 (13.6-15.9)
	2007	17.7 (15.5-19.8)	14.7 (13.2-16.2)	19.7 (18.0-21.5)	8.0 (6.6-9.3)	16.1 (14.8-17.4)
	2008	14.4 (12.5-16.3)	14.2 (12.7-15.6)	17.8 (16.2-19.4)	6.2 (5.2-7.3)	14.3 (13.1-15.5)
	2009	16.9 (14.7-19.0)	15.7 (14.1-17.3)	20.5 (18.7-22.3)	6.3 (5.1-7.5)	16.3 (14.9-17.6)
Consumes breakfast cereals 2 times a week or more	2002	64.0 (62.1-65.9)	63.2 (61.6-64.9)	62.9 (61.2-64.5)	65.3 (63.5-67.0)	63.6 (62.3-64.9)
	2003	64.3 (62.4-66.2)	65.8 (64.3-67.3)	64.4 (62.8-66.0)	66.6 (65.0-68.2)	65.1 (63.9-66.3)
	2004	68.0 (65.7-70.2)	65.5 (63.6-67.3)	66.0 (64.0-67.9)	68.4 (66.5-70.3)	66.7 (65.3-68.2)
	2005	66.3 (64.4-68.2)	65.7 (64.2-67.3)	65.1 (63.4-66.7)	68.3 (66.7-69.8)	66.0 (64.8-67.3)
	2006	67.0 (64.7-69.2)	69.9 (68.1-71.6)	67.2 (65.3-69.1)	71.2 (69.3-73.1)	68.4 (67.0-69.8)
	2007	68.6 (66.2-71.0)	67.4 (65.4-69.3)	67.0 (65.1-69.0)	70.0 (67.9-72.1)	68.0 (66.4-69.5)
	2008	67.8 (65.5-70.0)	67.0 (65.1-68.8)	67.4 (65.5-69.2)	67.3 (65.3-69.4)	67.4 (65.9-68.8)
	2009	64.9 (62.4-67.3)	64.6 (62.7-66.5)	63.7 (61.7-65.7)	67.1 (65.0-69.2)	64.7 (63.2-66.3)
Usually consumes lower fat or skim milk	1997	37.2 (35.8-38.6)	53.6 (52.3-55.0)	46.8 (45.5-48.1)	42.6 (41.2-43.9)	45.5 (44.6-46.5)
	1998	38.6 (37.0-40.1)	52.3 (50.9-53.6)	46.6 (45.3-48.0)	43.0 (41.6-44.3)	45.5 (44.5-46.5)
	2002	35.6 (33.7-37.4)	50.6 (48.9-52.3)	44.5 (42.8-46.2)	40.0 (38.3-41.8)	43.2 (41.9-44.4)
	2003	37.2 (35.3-39.0)	50.9 (49.3-52.5)	44.6 (43.0-46.2)	43.2 (41.6-44.8)	44.2 (42.9-45.4)
	2004	38.9 (36.6-41.2)	53.2 (51.3-55.2)	47.8 (45.8-49.8)	42.4 (40.5-44.4)	46.2 (44.6-47.7)
	2005	37.4 (35.5-39.2)	50.4 (48.8-52.0)	44.5 (42.9-46.1)	42.8 (41.2-44.4)	44.0 (42.7-45.2)
	2006	40.7 (38.5-43.0)	53.9 (52.0-55.8)	48.4 (46.5-50.4)	44.9 (42.9-46.9)	47.3 (45.9-48.8)

Indicator	Year	Males % (95% CI)	Females % (95% CI)	Urban % (95% CI)	Rural % (95% CI)	All % (95% CI)
	2007	38.5 (36.0-40.9)	52.3 (50.3-54.3)	45.5 (43.5-47.6)	46.0 (43.8-48.2)	45.7 (44.1-47.2)
	2008	40.9 (38.6-43.3)	54.4 (52.5-56.3)	49.3 (47.4-51.3)	44.5 (42.4-46.5)	47.9 (46.4-49.4)
	2009	42.3 (40.2-44.4)	53.9 (52.2-55.5)	48.6 (46.8-50.4)	47.2 (45.3-49.0)	48.2 (46.8-49.5)
Food insecurity in the last 12 months	2002	5.3 (4.4-6.1)	6.1 (5.3-6.9)	5.2 (4.5-6.0)	6.7 (5.8-7.7)	5.7 (5.1-6.3)
	2003	5.3 (4.5-6.2)	6.8 (6.0-7.6)	5.7 (5.0-6.4)	6.9 (6.1-7.7)	6.1 (5.5-6.6)
	2004	5.3 (4.3-6.3)	6.1 (5.2-7.1)	5.6 (4.7-6.5)	6.0 (5.0-7.0)	5.7 (5.0-6.4)
	2005	4.0 (3.2-4.8)	6.5 (5.7-7.4)	5.2 (4.5-6.0)	5.4 (4.7-6.2)	5.3 (4.7-5.9)
	2006	5.2 (4.1-6.3)	6.0 (5.1-6.9)	5.5 (4.6-6.5)	5.8 (4.8-6.8)	5.6 (4.9-6.3)
	2007	2.8 (2.1-3.6)	5.9 (4.9-6.9)	4.2 (3.4-5.0)	4.9 (4.0-5.8)	4.4 (3.8-5.0)
	2008	4.5 (3.5-5.4)	5.8 (4.8-6.7)	4.6 (3.8-5.5)	6.3 (5.2-7.3)	5.1 (4.5-5.8)
	2009	3.7 (2.7-4.8)	5.8 (4.9-6.7)	4.5 (3.7-5.4)	5.3 (4.4-6.3)	4.8 (4.1-5.5)
Adequate physical activity	1998	52.5 (51.0-54.0)	43.4 (42.1-44.7)	48.6 (47.3-49.9)	46.3 (44.9-47.6)	47.9 (46.9-48.9)
	2002	51.0 (49.1-53.0)	43.4 (41.8-45.1)	47.0 (45.4-48.7)	47.6 (45.8-49.3)	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)	42.6 (40.9-44.2)	44.7 (43.5-46.0)
	2004	57.0 (54.7-59.4)	47.9 (45.9-49.8)	53.3 (51.3-55.3)	50.3 (48.4-52.3)	52.4 (50.9-53.9)
	2005	56.6 (54.6-58.5)	47.3 (45.7-49.0)	52.5 (50.8-54.2)	50.3 (48.6-52.0)	51.9 (50.6-53.1)
	2006	60.4 (58.1-62.7)	49.6 (47.6-51.5)	55.0 (53.1-57.0)	54.7 (52.6-56.7)	54.9 (53.4-56.4)
	2007	62.1 (59.3-65.0)	47.6 (45.2-50.0)	54.6 (52.2-57.0)	55.4 (52.7-58.0)	54.8 (52.9-56.7)
	2008	61.3 (59.0-63.6)	48.9 (47.0-50.9)	55.5 (53.6-57.5)	53.9 (51.8-56.1)	55.1 (53.5-56.6)
	2009	60.7 (58.5-62.9)	49.8 (48.1-51.5)	55.6 (53.8-57.4)	54.2 (52.3-56.2)	55.2 (53.8-56.6)
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 (22.7-25.0)	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 (21.6-24.6)	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 (22.2-25.1)	22.3 (21.2-23.3)
	2004	22.5 (20.5-24.4)	19.3 (17.8-20.8)	20.9 (19.3-22.6)	20.7 (19.1-22.3)	20.9 (19.6-22.1)
	2005	22.6 (20.9-24.3)	17.6 (16.3-18.8)	19.0 (17.7-20.4)	22.5 (21.0-24.0)	20.1 (19.0-21.1)
	2006	19.2 (17.3-21.1)	16.2 (14.8-17.7)	17.1 (15.6-18.6)	19.1 (17.4-20.8)	17.7 (16.5-18.9)
	2007	21.9 (19.8-24.0)	15.4 (14.0-16.7)	18.5 (16.8-20.1)	18.8 (17.0-20.5)	18.6 (17.3-19.8)
	2008	19.7 (17.8-21.6)	17.2 (15.7-18.7)	17.9 (16.3-19.5)	19.7 (17.9-21.5)	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)	18.7 (17.1-20.3)	17.2 (16.1-18.3)
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)	18.3 (17.3-19.3)	19.4 (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)	18.3 (16.9-19.7)	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 (18.0-20.7)	17.8 (16.8-18.7)
	2004	17.3 (15.6-19.1)	15.4 (14.0-16.7)	16.1 (14.6-17.6)	16.9 (15.4-18.4)	16.3 (15.2-17.4)
	2005	17.5 (16.0-19.0)	14.1 (13.0-15.3)	14.6 (13.4-15.8)	18.5 (17.1-19.9)	15.8 (14.8-16.7)
	2006	15.0 (13.3-16.7)	12.9 (11.6-14.2)	13.1 (11.7-14.5)	15.8 (14.2-17.3)	13.9 (12.8-15.0)
	2007	17.0 (15.1-18.9)	12.2 (11.0-13.5)	14.2 (12.7-15.6)	15.5 (13.8-17.1)	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)	16.3 (14.6-17.9)	13.9 (12.8-14.9)
	2009	15.8 (14.1-17.4)	11.4 (10.3-12.5)	12.8 (11.5-14.0)	15.4 (13.9-16.8)	13.5 (12.6-14.5)
Doctor advised to quit smoking	2005	42.0 (37.4-46.6)	46.9 (42.6-51.3)	44.6 (40.3-48.9)	43.4 (39.1-47.7)	44.2 (41.0-47.4)
	2006	45.7 (40.1-51.3)	51.6 (46.6-56.5)	49.2 (44.2-54.3)	46.8 (41.9-51.7)	48.4 (44.7-52.2)
	2007	52.7 (47.3-58.2)	46.9 (42.1-51.8)	50.5 (45.6-55.4)	49.8 (44.5-55.1)	50.3 (46.5-54.0)
	2008	40.0 (34.5-45.4)	40.1 (35.2-44.9)	38.3 (33.5-43.2)	43.5 (38.5-48.6)	40.0 (36.3-43.7)
	2009	46.4 (41.3-51.4)	46.0 (41.5-50.5)	45.8 (41.2-50.4)	47.1 (42.3-52.0)	46.2 (42.7-49.7)
Live in smoke-free households	1997			70.1 (68.9-71.3)	68.7 (67.5-70.0)	69.7 (68.8-70.6)
	1998			73.6 (72.4-74.7)	72.1 (70.9-73.4)	73.1 (72.3-74.0)

Indicator	Year	Males % (95% CI)	Females % (95% CI)	Urban % (95% CI)	Rural % (95% CI)	All % (95% CI)
	2002			81.4 (80.1-82.7)	79.2 (77.8-80.6)	80.8 (79.8-81.8)
	2003			83.2 (82.0-84.4)	81.2 (80.0-82.4)	82.6 (81.7-83.5)
	2004			84.5 (83.2-85.9)	83.5 (82.1-84.9)	84.2 (83.2-85.3)
	2005			86.1 (84.9-87.3)	86.1 (85.0-87.2)	86.1 (85.2-87.0)
	2006			88.2 (86.9-89.4)	86.5 (85.2-87.9)	87.7 (86.7-88.6)
	2007			88.3 (87.0-89.6)	88.0 (86.6-89.3)	88.2 (87.2-89.2)
	2008			89.7 (88.5-90.9)	88.9 (87.7-90.2)	89.5 (88.6-90.4)
	2009			91.9 (90.9-93.0)	91.6 (90.6-92.7)	91.9 (91.1-92.6)
Bans smoking in car	2003			81.8 (80.4-83.1)	80.0 (78.6-81.3)	81.2 (80.2-82.2)
	2004			83.9 (82.4-85.5)	85.4 (84.0-86.8)	84.4 (83.2-85.5)
	2005			84.8 (83.5-86.1)	84.9 (83.6-86.2)	84.8 (83.9-85.8)
	2006			88.0 (86.6-89.3)	86.9 (85.5-88.4)	87.7 (86.6-88.7)
	2007			87.4 (86.0-88.8)	88.0 (86.6-89.4)	87.6 (86.5-88.7)
	2008			88.4 (87.0-89.8)	87.9 (86.5-89.3)	88.2 (87.2-89.3)
	2009			91.6 (90.5-92.7)	91.0 (89.9-92.1)	91.4 (90.6-92.2)

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

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

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## Trends in health status NSW, 2009

Indicator	Year	Males % (95% CI)	Females % (95% CI)	Urban % (95% CI)	Rural % (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 (84.8-86.5)	83.5 (82.6-84.5)	85.0 (84.4-85.7)
	1998	85.0 (84.0-86.0)	83.1 (82.2-84.0)	84.3 (83.4-85.2)	83.5 (82.5-84.4)	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)	81.5 (80.1-82.8)	81.0 (80.0-81.9)
	2003	81.8 (80.4-83.2)	79.6 (78.4-80.9)	80.5 (79.2-81.7)	81.2 (80.0-82.5)	80.7 (79.8-81.6)
	2004	79.4 (77.6-81.3)	79.3 (77.9-80.8)	79.6 (78.0-81.1)	79.0 (77.4-80.6)	79.4 (78.2-80.6)
	2005	83.3 (81.9-84.7)	78.7 (77.4-80.0)	81.0 (79.7-82.2)	80.9 (79.6-82.2)	80.9 (80.0-81.9)
	2006	82.5 (80.9-84.2)	78.1 (76.6-79.7)	80.3 (78.8-81.8)	80.4 (78.8-81.9)	80.3 (79.2-81.4)
	2007	83.3 (82.0-84.7)	78.8 (77.6-80.0)	81.6 (80.4-82.8)	79.8 (78.5-81.2)	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)	80.4 (78.9-81.8)	80.2 (79.2-81.3)
	2009	81.4 (79.8-83.1)	78.4 (77.1-79.8)	79.8 (78.4-81.2)	80.2 (78.8-81.6)	79.9 (78.9-81.0)
Ever diagnosed with asthma	1997	15.2 (14.1-16.2)	18.4 (17.4-19.5)	15.6 (14.7-16.6)	19.5 (18.4-20.6)	16.8 (16.1-17.6)
	1998	15.5 (14.3-16.6)	18.2 (17.2-19.2)	15.8 (14.9-16.8)	19.2 (18.1-20.3)	16.8 (16.1-17.6)
	2002	18.6 (17.1-20.1)	21.1 (19.7-22.4)	19.0 (17.7-20.3)	21.8 (20.4-23.3)	19.8 (18.8-20.9)
	2003	19.3 (17.7-20.8)	22.6 (21.3-23.9)	19.9 (18.6-21.2)	23.3 (21.9-24.8)	21.0 (19.9-22.0)
	2004	18.1 (16.2-19.9)	22.5 (20.9-24.1)	19.2 (17.6-20.8)	22.9 (21.2-24.5)	20.3 (19.1-21.5)
	2005	17.9 (16.4-19.4)	20.4 (19.1-21.7)	18.2 (16.9-19.5)	21.4 (20.1-22.8)	19.2 (18.2-20.2)
	2006	18.4 (16.6-20.2)	20.1 (18.6-21.6)	18.2 (16.7-19.7)	21.8 (20.0-23.6)	19.3 (18.1-20.4)
	2007	19.3 (17.3-21.3)	21.1 (19.6-22.7)	18.9 (17.3-20.5)	23.4 (21.5-25.3)	20.2 (19.0-21.5)
	2008	17.9 (16.0-19.7)	21.9 (20.3-23.5)	19.5 (18.0-21.1)	20.8 (19.1-22.5)	19.9 (18.7-21.1)
	2009	17.2 (15.6-18.8)	22.0 (20.6-23.3)	18.3 (16.9-19.6)	22.7 (21.1-24.3)	19.6 (18.5-20.7)
Current asthma	1997	8.8 (7.9-9.6)	12.1 (11.2-13.0)	9.9 (9.1-10.7)	11.8 (10.9-12.7)	10.5 (9.8-11.1)
	1998	8.9 (8.0-9.8)	11.0 (10.2-11.7)	9.2 (8.4-9.9)	11.6 (10.7-12.5)	9.9 (9.4-10.5)
	2002	9.2 (8.1-10.4)	12.1 (11.1-13.2)	9.8 (8.8-10.7)	12.8 (11.6-14.0)	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	8.8 (7.4-10.3)	11.9 (10.7-13.1)	9.8 (8.6-11.0)	11.7 (10.4-13.0)	10.4 (9.4-11.3)
	2005	8.8 (7.7-9.9)	12.0 (11.0-13.0)	9.7 (8.7-10.7)	12.1 (11.0-13.1)	10.4 (9.7-11.2)
	2006	9.9 (8.5-11.3)	11.8 (10.6-13.0)	10.1 (8.9-11.2)	12.7 (11.2-14.1)	10.9 (9.9-11.8)
	2007	8.9 (7.5-10.4)	11.8 (10.6-13.1)	9.6 (8.4-10.8)	12.4 (10.9-13.9)	10.5 (9.5-11.4)
	2008	8.4 (7.1-9.7)	12.6 (11.4-13.8)	10.1 (9.0-11.3)	11.3 (10.0-12.6)	10.5 (9.6-11.4)
	2009	8.5 (7.3-9.6)	12.5 (11.4-13.6)	9.9 (8.9-10.9)	11.8 (10.7-13.0)	10.5 (9.7-11.3)
Written asthma action plan	2009	23.8 (17.7-29.8)	32.5 (28.2-36.9)	27.9 (23.0-32.7)	31.0 (26.1-35.9)	29.0 (25.4-32.6)
Current smoking	1997	22.1 (18.0-26.2)	26.2 (22.8-29.7)	23.8 (20.3-27.4)	25.8 (22.2-29.4)	24.5 (21.9-27.2)
	1998	23.7 (19.2-28.2)	24.8 (21.6-28.0)	24.5 (20.8-28.2)	24.1 (20.5-27.6)	24.3 (21.7-27.0)
	2002	26.5 (22.3-30.6)	22.1 (19.2-25.1)	23.3 (20.1-26.5)	25.8 (22.2-29.5)	24.1 (21.7-26.6)
	2003	27.1 (22.9-31.3)	24.3 (21.4-27.2)	23.5 (20.3-26.7)	29.6 (26.1-33.1)	25.6 (23.1-28.0)
	2004	22.0 (17.3-26.6)	24.1 (20.8-27.5)	23.9 (20.0-27.7)	21.8 (18.4-25.3)	23.2 (20.4-25.9)
	2005	23.8 (19.8-27.8)	20.2 (17.4-22.9)	21.1 (17.8-24.3)	23.3 (20.2-26.4)	21.8 (19.4-24.2)
	2006	19.8 (13.7-25.9)	16.4 (12.1-20.7)	18.9 (13.8-24.0)	16.1 (11.9-20.2)	17.9 (14.3-21.5)
	2007	22.4 (19.0-25.7)	15.7 (13.5-17.9)	19.1 (16.5-21.8)	18.7 (16.0-21.4)	19.0 (17.0-21.0)
	2008	22.2 (17.9-26.5)	16.5 (13.8-19.3)	18.5 (15.3-21.7)	20.6 (17.2-24.0)	19.1 (16.7-21.6)
	2009	19.9 (14.4-25.3)	18.5 (14.9-22.1)	16.5 (12.6-20.4)	23.9 (19.1-28.6)	19.0 (16.0-22.1)
Diabetes or high blood glucose	1997	5.2 (4.6-5.7)	4.2 (3.7-4.8)	4.6 (4.1-5.1)	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)	4.3 (3.8-4.9)	4.7 (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 (4.7-6.1)	7.3 (6.5-8.1)	6.0 (5.5-6.5)
	2003	7.0 (6.2-7.8)	5.6 (5.0-6.2)	6.0 (5.3-6.6)	7.1 (6.3-7.8)	6.3 (5.8-6.8)
	2004	8.1 (7.0-9.2)	5.4 (4.6-6.1)	6.5 (5.6-7.3)	7.2 (6.3-8.2)	6.7 (6.0-7.4)
	2005	8.4 (7.4-9.3)	6.9 (6.1-7.6)	7.5 (6.7-8.3)	7.8 (7.0-8.6)	7.6 (7.0-8.2)
	2006	8.5 (7.4-9.7)	6.4 (5.6-7.2)	7.5 (6.6-8.5)	7.3 (6.4-8.1)	7.4 (6.7-8.1)
	2007	7.8 (6.7-8.9)	6.5 (5.7-7.3)	6.5 (5.6-7.3)	8.6 (7.5-9.6)	7.1 (6.4-7.8)
	2008	7.9 (6.9-8.8)	6.8 (6.0-7.5)	6.6 (5.9-7.4)	8.8 (7.8-9.8)	7.3 (6.7-7.9)
	2009	9.4 (8.4-10.4)	7.0 (6.3-7.7)	7.9 (7.1-8.7)	8.8 (7.9-9.7)	8.2 (7.6-8.8)
Urinary incontinence in the last 4 weeks (40 years and over)	2003	11.3 (9.9-12.8)	32.1 (30.4-33.9)	22.3 (20.7-23.9)	21.5 (20.1-22.9)	22.0 (20.9-23.2)
	2006	11.9 (10.2-13.5)	29.2 (27.3-31.1)	20.8 (19.0-22.5)	20.6 (18.9-22.2)	20.7 (19.4-22.0)
	2009	11.0 (9.5-12.5)	28.1 (26.2-29.9)	19.4 (17.7-21.1)	20.6 (18.9-22.3)	19.8 (18.6-21.1)
High and very high psychological distress	1997	9.2 (8.4-10.0)	13.0 (12.1-13.9)	10.9 (10.1-11.7)	11.6 (10.8-12.5)	11.2 (10.5-11.8)
	1998	9.0 (8.1-9.9)	12.1 (11.2-12.9)	10.8 (9.9-11.6)	10.1 (9.3-11.0)	10.6 (10.0-11.2)
	2002	10.5 (9.3-11.6)	14.2 (13.0-15.4)	12.4 (11.3-13.5)	12.2 (11.0-13.4)	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)	11.1 (10.0-12.1)	11.1 (10.3-11.8)
	2004	11.8 (10.2-13.3)	14.7 (13.3-16.1)	13.5 (12.1-14.9)	12.6 (11.2-14.0)	13.2 (12.2-14.3)
	2005	9.7 (8.4-10.9)	14.1 (12.9-15.3)	12.1 (11.0-13.2)	11.5 (10.4-12.6)	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)	10.4 (9.2-11.7)	10.7 (9.8-11.6)
	2007	10.9 (9.4-12.5)	13.2 (11.9-14.5)	11.9 (10.6-13.2)	12.7 (11.2-14.2)	12.1 (11.1-13.1)
	2008	8.5 (7.2-9.8)	12.6 (11.3-13.9)	10.2 (9.0-11.4)	11.3 (10.0-12.7)	10.6 (9.6-11.5)
	2009	10.7 (9.2-12.1)	12.3 (11.2-13.4)	11.6 (10.4-12.8)	11.3 (10.0-12.5)	11.5 (10.6-12.4)
All natural teeth missing	1998	5.7 (5.1-6.4)	10.6 (9.9-11.3)	6.8 (6.2-7.4)	11.4 (10.6-12.2)	8.2 (7.7-8.7)
	2002	4.9 (4.3-5.6)	7.8 (7.1-8.6)	5.3 (4.7-5.9)	8.9 (8.1-9.7)	6.4 (5.9-6.9)
	2003	4.4 (3.7-5.0)	7.8 (7.1-8.4)	4.8 (4.2-5.3)	9.1 (8.4-9.9)	6.1 (5.7-6.6)
	2004	4.7 (3.9-5.4)	7.7 (6.8-8.5)	5.2 (4.5-5.9)	8.5 (7.6-9.4)	6.2 (5.6-6.7)
	2005	4.2 (3.6-4.8)	6.8 (6.2-7.4)	4.7 (4.2-5.2)	7.5 (6.9-8.2)	5.6 (5.1-6.0)
	2006	3.7 (3.1-4.3)	5.9 (5.2-6.5)	3.8 (3.2-4.3)	7.1 (6.3-7.9)	4.8 (4.3-5.2)
	2007	3.9 (3.3-4.5)	6.4 (5.7-7.1)	4.2 (3.6-4.8)	7.4 (6.5-8.2)	5.1 (4.7-5.6)
	2008	4.0 (3.4-4.7)	6.2 (5.6-6.8)	4.2 (3.7-4.8)	7.2 (6.4-8.0)	5.1 (4.7-5.6)
2009	4.5 (3.6-5.4)	6.0 (5.2-6.8)	4.5 (3.8-5.3)	7.4 (6.4-8.4)	5.3 (4.7-5.9)	
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)	51.5 (49.7-53.3)	55.8 (54.5-57.1)

Indicator	Year	Males % (95% CI)	Females % (95% CI)	Urban % (95% CI)	Rural % (95% CI)	All % (95% CI)
	2003	56.0 (54.1-58.0)	60.5 (59.0-62.0)	60.7 (59.1-62.3)	52.8 (51.2-54.4)	58.3 (57.1-59.5)
	2004	58.1 (55.7-60.4)	63.2 (61.4-65.1)	62.9 (61.0-64.8)	55.6 (53.6-57.6)	60.7 (59.2-62.1)
	2005	60.2 (58.2-62.1)	63.9 (62.4-65.5)	64.4 (62.8-66.0)	56.7 (55.0-58.3)	62.1 (60.9-63.3)
	2006	56.4 (54.1-58.7)	59.8 (57.9-61.6)	60.3 (58.4-62.2)	53.0 (51.0-55.1)	58.1 (56.6-59.6)
	2007	52.9 (50.4-55.4)	59.0 (57.1-60.9)	57.8 (55.7-59.8)	51.9 (49.7-54.1)	56.0 (54.4-57.6)
	2008	57.7 (55.3-60.0)	59.9 (58.1-61.8)	61.9 (60.0-63.9)	51.5 (49.4-53.6)	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 (52.9-58.3)	59.6 (57.8-61.5)
Has private health insurance for dental expenses	2009	49.6 (46.6-52.6)	49.2 (47.0-51.5)	52.5 (50.2-54.8)	41.2 (38.5-43.9)	49.4 (47.6-51.3)
Patient paid for some or all of last dental visit	2009	81.9 (79.5-84.3)	82.6 (80.8-84.3)	81.4 (79.5-83.3)	84.5 (82.5-86.4)	82.2 (80.8-83.7)
Overweight	1997	38.3 (36.9-39.7)	22.8 (21.7-23.9)	29.8 (28.6-31.0)	32.4 (31.1-33.7)	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)	32.2 (30.9-33.5)	30.1 (29.1-31.0)
	2002	38.8 (36.9-40.8)	23.8 (22.4-25.2)	30.7 (29.2-32.3)	33.0 (31.3-34.7)	31.4 (30.2-32.6)
	2003	40.2 (38.3-42.1)	24.6 (23.2-25.9)	31.1 (29.6-32.7)	35.3 (33.7-36.9)	32.4 (31.2-33.6)
	2004	40.3 (38.0-42.7)	25.7 (24.1-27.4)	32.5 (30.6-34.4)	34.6 (32.6-36.5)	33.1 (31.7-34.6)
	2005	40.2 (38.2-42.1)	26.1 (24.7-27.5)	32.4 (30.8-34.0)	34.8 (33.2-36.5)	33.1 (31.9-34.3)
	2006	39.4 (37.1-41.6)	25.9 (24.3-27.6)	32.3 (30.5-34.2)	33.6 (31.7-35.6)	32.7 (31.3-34.1)
	2007	41.3 (38.8-43.7)	26.2 (24.5-27.9)	32.7 (30.7-34.6)	35.8 (33.6-38.0)	33.7 (32.2-35.2)
	2008	42.1 (39.8-44.4)	26.5 (24.9-28.2)	33.3 (31.5-35.2)	36.6 (34.6-38.7)	34.3 (32.9-35.8)
	2009	40.1 (37.9-42.3)	26.0 (24.6-27.5)	32.4 (30.6-34.1)	34.8 (32.9-36.6)	33.1 (31.7-34.4)
Obese	1997	11.0 (10.1-11.8)	11.3 (10.6-12.1)	10.2 (9.5-11.0)	13.2 (12.4-14.1)	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)	14.2 (13.3-15.2)	12.0 (11.4-12.6)
	2002	14.6 (13.3-16.0)	14.4 (13.3-15.5)	13.8 (12.7-14.9)	16.1 (14.9-17.3)	14.5 (13.6-15.4)
	2003	15.5 (14.2-16.8)	16.4 (15.3-17.6)	15.0 (13.9-16.2)	18.2 (16.9-19.4)	16.0 (15.1-16.9)
	2004	16.0 (14.4-17.7)	15.0 (13.7-16.3)	14.5 (13.2-15.9)	17.7 (16.2-19.2)	15.5 (14.4-16.5)
	2005	17.3 (15.8-18.8)	16.2 (15.1-17.3)	15.0 (13.8-16.1)	20.8 (19.4-22.1)	16.7 (15.8-17.6)
	2006	18.0 (16.2-19.8)	17.4 (15.9-18.8)	17.2 (15.7-18.7)	18.9 (17.3-20.5)	17.7 (16.6-18.9)
	2007	17.6 (15.7-19.5)	18.5 (17.0-19.9)	16.5 (15.0-18.0)	21.4 (19.6-23.2)	18.0 (16.8-19.2)
	2008	18.0 (16.3-19.7)	19.2 (17.8-20.7)	16.8 (15.4-18.2)	22.8 (21.0-24.6)	18.6 (17.5-19.7)
	2009	19.4 (17.7-21.1)	19.4 (18.1-20.7)	18.1 (16.7-19.5)	22.5 (20.9-24.0)	19.4 (18.3-20.5)
Overweight or obese	1997	49.3 (47.8-50.7)	34.2 (32.9-35.4)	40.1 (38.8-41.3)	45.6 (44.3-47.0)	41.8 (40.8-42.7)
	1998	49.8 (48.3-51.4)	34.1 (32.9-35.4)	40.1 (38.8-41.4)	46.4 (45.0-47.8)	42.0 (41.0-43.1)
	2002	53.4 (51.4-55.4)	38.2 (36.6-39.8)	44.5 (42.8-46.2)	49.1 (47.3-51.0)	45.9 (44.6-47.2)
	2003	55.7 (53.7-57.6)	41.0 (39.5-42.6)	46.2 (44.5-47.8)	53.5 (51.8-55.1)	48.4 (47.1-49.6)
	2004	56.4 (54.0-58.7)	40.7 (38.8-42.6)	47.0 (45.0-49.0)	52.3 (50.2-54.3)	48.6 (47.1-50.2)
	2005	57.5 (55.5-59.5)	42.3 (40.7-43.9)	47.4 (45.7-49.1)	55.6 (53.9-57.3)	49.9 (48.6-51.1)
	2006	57.4 (55.0-59.7)	43.3 (41.4-45.2)	49.5 (47.5-51.5)	52.5 (50.4-54.6)	50.4 (48.9-52.0)
	2007	58.8 (56.3-61.4)	44.7 (42.7-46.6)	49.2 (47.1-51.3)	57.2 (55.0-59.5)	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 (51.4-54.5)
	2009	59.5 (57.3-61.8)	45.4 (43.7-47.1)	50.5 (48.6-52.3)	57.2 (55.3-59.2)	52.5 (51.1-53.9)

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

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

## Trends in health services NSW, 2009

Indicator	Year	Males % (95% CI)	Females % (95% CI)	Urban % (95% CI)	Rural % (95% CI)	All % (95% CI)
Private health insurance	1997	42.7 (41.2-44.1)	41.4 (40.1-42.7)	44.3 (43.0-45.6)	36.9 (35.6-38.2)	42.0 (41.1-43.0)
	1998	40.5 (39.0-42.0)	41.3 (40.0-42.6)	43.6 (42.2-44.9)	34.9 (33.6-36.2)	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)	44.2 (42.4-45.9)	53.1 (51.8-54.4)
	2003	53.2 (51.3-55.1)	54.2 (52.6-55.8)	57.4 (55.7-59.0)	45.4 (43.7-47.0)	53.7 (52.5-55.0)
	2004	54.6 (52.2-56.9)	54.1 (52.2-56.0)	57.9 (55.9-59.8)	46.4 (44.4-48.4)	54.4 (52.9-55.9)
	2005	54.3 (52.3-56.3)	54.9 (53.3-56.5)	58.4 (56.8-60.1)	45.8 (44.1-47.4)	54.6 (53.3-55.9)
	2006	53.2 (50.9-55.6)	55.9 (54.0-57.8)	58.2 (56.3-60.2)	46.2 (44.2-48.2)	54.6 (53.1-56.1)
	2007	55.8 (53.9-57.7)	54.4 (52.9-55.9)	57.8 (56.2-59.3)	49.0 (47.3-50.7)	55.1 (53.9-56.3)
	2008	56.8 (54.6-58.9)	57.0 (55.3-58.8)	60.4 (58.7-62.2)	48.8 (46.9-50.8)	56.9 (55.5-58.3)
	2009	56.4 (54.2-58.6)	56.2 (54.5-57.9)	59.5 (57.7-61.3)	48.8 (46.9-50.7)	56.3 (54.9-57.7)
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)	14.0 (13.1-14.9)	9.9 (9.4-10.5)
	1998	8.5 (7.8-9.3)	11.8 (11.0-12.5)	8.0 (7.4-8.7)	15.0 (14.1-15.9)	10.2 (9.6-10.7)
	2002	10.8 (9.6-11.9)	14.3 (13.2-15.4)	9.6 (8.6-10.5)	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)	20.8 (19.5-22.2)	13.3 (12.5-14.0)
	2004	12.7 (11.3-14.2)	15.0 (13.8-16.3)	10.1 (8.9-11.2)	22.7 (21.0-24.3)	13.9 (12.9-14.9)
	2005	11.1 (10.0-12.3)	15.0 (13.9-16.1)	9.9 (9.0-10.9)	20.5 (19.1-21.8)	13.1 (12.3-13.9)
	2006	11.9 (10.5-13.3)	14.6 (13.3-15.9)	9.5 (8.4-10.7)	21.9 (20.2-23.6)	13.2 (12.3-14.2)
	2007	14.7 (13.4-16.0)	19.2 (18.1-20.4)	12.5 (11.4-13.5)	27.6 (26.1-29.1)	17.9 (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 (25.6-28.9)	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)	27.6 (25.9-29.3)	17.6 (16.6-18.6)
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)	18.9 (17.8-20.0)	13.9 (13.2-14.6)
	1998	13.9 (12.9-14.9)	12.0 (11.2-12.8)	11.2 (10.4-12.0)	17.0 (15.9-18.0)	13.0 (12.3-13.6)
	2002	14.7 (13.4-16.0)	13.8 (12.7-14.9)	12.6 (11.5-13.7)	18.1 (16.7-19.4)	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)	17.7 (16.4-18.9)	13.6 (12.7-14.4)
	2004	15.5 (13.9-17.1)	13.7 (12.4-15.0)	13.3 (12.0-14.6)	17.5 (16.0-19.0)	14.6 (13.6-15.6)
	2005	14.0 (12.7-15.3)	13.3 (12.2-14.4)	12.4 (11.3-13.5)	16.6 (15.3-17.8)	13.6 (12.8-14.5)
	2006	14.1 (12.5-15.7)	14.0 (12.8-15.3)	12.4 (11.1-13.7)	17.8 (16.3-19.3)	14.1 (13.0-15.1)
	2007	16.5 (15.1-17.9)	14.6 (13.6-15.6)	13.8 (12.7-14.8)	19.6 (18.2-20.9)	15.5 (14.7-16.4)
	2008	17.5 (15.9-19.1)	17.0 (15.7-18.3)	15.2 (13.9-16.5)	22.0 (20.4-23.6)	17.3 (16.2-18.3)
	2009	19.4 (17.7-21.1)	16.4 (15.2-17.7)	16.2 (14.9-17.6)	21.7 (20.1-23.2)	17.9 (16.8-18.9)
Emergency department care rated as excellent, very good or good	1997	80.4 (77.5-83.3)	79.6 (76.6-82.7)	77.4 (74.2-80.6)	83.9 (81.6-86.2)	80.1 (78.0-82.2)
	1998	82.5 (79.5-85.5)	78.6 (75.7-81.5)	77.4 (74.3-80.6)	85.6 (83.4-87.9)	80.7 (78.6-82.8)
	2002	79.8 (75.8-83.7)	72.6 (68.7-76.6)	75.5 (71.6-79.4)	77.5 (73.8-81.3)	76.3 (73.5-79.1)
	2003	80.2 (76.1-84.3)	77.9 (74.2-81.5)	74.2 (70.0-78.3)	86.6 (84.1-89.0)	79.1 (76.3-81.8)
	2004	77.0 (72.0-82.0)	81.8 (77.9-85.6)	76.7 (72.1-81.3)	83.7 (79.9-87.4)	79.3 (76.1-82.5)
	2005	85.7 (82.0-89.3)	75.6 (71.5-79.8)	77.4 (73.3-81.4)	86.3 (83.5-89.2)	80.7 (77.9-83.5)
	2006	84.0 (79.6-88.3)	78.4 (73.9-82.8)	77.8 (73.2-82.5)	86.4 (83.4-89.5)	81.1 (78.0-84.3)
	2007	81.1 (77.3-84.9)	77.5 (74.2-80.8)	77.8 (74.2-81.4)	81.9 (78.8-85.0)	79.4 (76.9-81.9)
	2008	77.3 (73.1-81.5)	78.3 (74.5-82.1)	75.2 (71.2-79.3)	81.8 (78.3-85.3)	77.8 (75.0-80.6)
	2009	81.3 (77.5-85.1)	76.6 (73.2-80.1)	78.6 (75.1-82.2)	79.9 (76.4-83.4)	79.1 (76.5-81.7)
Hospital admission in the last 12 months	1997	11.3 (10.4-12.1)	14.6 (13.7-15.5)	12.1 (11.3-12.8)	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)	15.0 (14.1-15.9)	13.4 (12.7-14.0)
	2002	11.0 (9.9-12.2)	16.0 (14.8-17.3)	13.0 (11.9-14.1)	14.8 (13.6-16.0)	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 (10.8-13.7)	14.8 (13.4-16.2)	12.8 (11.5-14.1)	15.3 (13.9-16.6)	13.5 (12.5-14.6)
	2005	11.5 (10.4-12.7)	15.7 (14.6-16.9)	13.4 (12.3-14.4)	14.4 (13.2-15.5)	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)	15.0 (13.6-16.4)	14.1 (13.1-15.1)
	2007	12.0 (10.9-13.1)	16.1 (15.0-17.2)	13.5 (12.5-14.4)	15.5 (14.4-16.7)	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)	15.7 (14.4-17.0)	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)	15.5 (14.2-16.8)	14.7 (13.8-15.7)
Hospital care rated as excellent, very good or good	1997	90.2 (87.8-92.7)	89.9 (87.9-91.9)	89.3 (87.1-91.5)	91.4 (89.6-93.2)	90.0 (88.5-91.6)
	1998	92.6 (90.4-94.7)	89.9 (88.0-91.8)	90.7 (88.8-92.7)	91.6 (89.7-93.5)	91.0 (89.6-92.5)
	2002	93.4 (90.6-96.2)	88.9 (85.9-91.9)	90.4 (87.6-93.2)	91.4 (88.2-94.6)	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 (89.7-94.2)	91.3 (89.5-93.0)
	2004	91.4 (88.1-94.8)	90.6 (87.6-93.6)	90.8 (87.7-93.9)	91.4 (88.7-94.0)	91.0 (88.8-93.2)
	2005	93.6 (91.1-96.1)	90.5 (88.0-93.0)	91.8 (89.5-94.1)	91.7 (89.0-94.4)	91.8 (90.0-93.6)
	2006	91.0 (87.5-94.6)	89.5 (86.5-92.5)	89.6 (86.4-92.7)	91.5 (88.9-94.2)	90.2 (87.9-92.5)
	2007	91.3 (88.7-93.8)	88.3 (85.9-90.7)	89.4 (87.0-91.8)	89.9 (87.7-92.1)	89.6 (87.8-91.3)
	2008	91.7 (88.4-94.9)	86.3 (83.1-89.5)	88.3 (85.2-91.4)	88.5 (85.2-91.9)	88.4 (86.0-90.7)
	2009	92.0 (89.2-94.8)	89.2 (86.6-91.8)	89.9 (87.3-92.5)	91.6 (89.4-93.8)	90.4 (88.5-92.3)
Visited a general practice in the last 2 weeks	1997	21.6 (20.4-22.8)	27.4 (26.2-28.5)	25.5 (24.4-26.6)	22.2 (21.1-23.4)	24.5 (23.7-25.4)
	1998	19.9 (18.7-21.0)	27.4 (26.2-28.5)	24.3 (23.2-25.4)	22.2 (21.1-23.2)	23.7 (22.8-24.5)
	2007	19.9 (18.5-21.4)	26.8 (25.6-28.1)	24.3 (23.0-25.6)	21.5 (20.2-22.8)	23.5 (22.5-24.4)
	2008	22.1 (20.4-23.8)	28.1 (26.6-29.6)	25.9 (24.4-27.4)	23.6 (22.0-25.1)	25.2 (24.0-26.3)
	2009	19.1 (17.6-20.6)	27.8 (26.4-29.3)	23.5 (22.1-24.9)	23.6 (22.1-25.1)	23.5 (22.5-24.6)
	1997	85.0 (83.9-86.0)	90.6 (89.8-91.3)	87.7 (86.8-88.5)	88.1 (87.3-89.0)	87.8 (87.2-88.4)
Visited a general practice in the last 12 months	1998	82.7 (81.5-83.8)	89.7 (88.9-90.5)	87.5 (86.6-88.4)	83.4 (82.4-84.5)	86.2 (85.5-86.9)
	2007	78.8 (77.2-80.4)	87.3 (86.3-88.4)	83.4 (82.2-84.7)	82.5 (81.0-83.9)	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)	84.7 (83.2-86.3)	86.2 (85.1-87.2)
	2009	80.9 (79.0-82.7)	89.9 (88.9-91.0)	86.5 (85.1-87.8)	83.2 (81.6-84.8)	85.5 (84.4-86.5)
	2007	93.1 (92.0-94.1)	93.5 (92.7-94.3)	93.1 (92.3-94.0)	93.7 (92.8-94.6)	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)	94.0 (93.1-95.0)	93.7 (92.9-94.4)
2009	94.0 (92.8-95.1)	93.1 (92.2-94.1)	93.6 (92.7-94.6)	93.2 (92.2-94.3)	93.5 (92.8-94.3)	
Public dental service attendance in the last 12 months	2002	3.9 (3.1-4.7)	5.3 (4.5-6.1)	4.2 (3.5-4.9)	5.5 (4.7-6.3)	4.6 (4.1-5.2)

Indicator	Year	Males % (95% CI)	Females % (95% CI)	Urban % (95% CI)	Rural % (95% CI)	All % (95% CI)
	2003	3.8 (3.2-4.4)	4.7 (4.1-5.4)	3.8 (3.2-4.3)	5.4 (4.7-6.2)	4.3 (3.8-4.7)
	2004	5.2 (4.2-6.1)	5.7 (4.8-6.5)	5.1 (4.2-5.9)	6.2 (5.2-7.2)	5.4 (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 (3.3-4.8)	4.5 (3.6-5.5)	4.2 (3.6-4.8)
	2007	5.1 (4.3-5.9)	5.1 (4.5-5.8)	4.7 (4.1-5.4)	6.0 (5.1-6.8)	5.1 (4.6-5.6)
	2008	5.2 (4.2-6.2)	5.8 (5.0-6.6)	5.4 (4.6-6.2)	5.7 (4.8-6.5)	5.5 (4.9-6.1)
	2009	4.8 (3.9-5.7)	5.9 (5.1-6.7)	4.9 (4.1-5.7)	6.3 (5.3-7.2)	5.3 (4.7-5.9)
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 (76.5-88.3)	80.1 (73.7-86.5)	81.6 (77.1-86.0)
	2003	85.8 (80.5-91.2)	85.1 (80.1-90.0)	87.1 (82.2-92.0)	82.7 (77.5-87.9)	85.4 (81.8-89.0)
	2004	81.0 (72.8-89.3)	87.9 (82.9-92.8)	84.6 (78.0-91.1)	84.8 (78.6-90.9)	84.6 (79.9-89.4)
	2006	86.4 (77.5-95.2)	82.4 (76.0-88.9)	83.1 (75.9-90.3)	86.6 (80.0-93.1)	84.2 (78.9-89.5)
	2007	88.5 (83.2-93.9)	85.6 (81.6-89.5)	86.6 (82.0-91.3)	87.7 (84.0-91.5)	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)	85.8 (79.8-91.7)	86.8 (82.5-91.1)
	2009	89.4 (83.3-95.5)	87.7 (83.1-92.4)	88.5 (83.2-93.7)	88.5 (83.9-93.0)	88.5 (84.7-92.2)
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 (7.8-9.7)	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	6.1 (5.0-7.2)	8.1 (7.1-9.1)	6.5 (5.5-7.5)	8.5 (7.4-9.5)	7.1 (6.3-7.8)
	2005	6.2 (5.3-7.2)	8.8 (7.9-9.7)	7.2 (6.3-8.0)	8.4 (7.5-9.2)	7.5 (6.9-8.2)
	2006	5.7 (4.7-6.8)	8.8 (7.7-9.9)	7.0 (5.9-8.0)	8.1 (7.1-9.2)	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 (8.7-10.6)	7.8 (7.2-8.4)
	2008	6.0 (5.0-6.9)	10.0 (9.0-11.0)	6.8 (5.9-7.6)	11.0 (9.8-12.2)	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)	10.4 (9.3-11.6)	7.9 (7.2-8.6)
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 (92.3-96.8)	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)	94.5 (92.1-96.9)	93.6 (91.3-95.9)
	2004	86.6 (80.3-92.9)	94.9 (91.8-98.0)	89.1 (84.3-93.9)	95.5 (93.0-98.0)	91.4 (88.2-94.6)
	2006	92.4 (88.1-96.7)	90.8 (86.5-95.1)	90.0 (85.6-94.5)	94.2 (90.9-97.4)	91.4 (88.3-94.6)
	2008	91.1 (86.5-95.7)	92.2 (89.2-95.3)	90.7 (86.8-94.6)	93.3 (90.6-96.1)	91.8 (89.2-94.4)
	2009	86.3 (80.1-92.6)	91.8 (89.0-94.7)	88.6 (84.0-93.1)	91.4 (88.2-94.5)	89.7 (86.7-92.7)

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

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

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

## Trends in social capital NSW, 2009

Indicator	Year	Males % (95% CI)	Females % (95% CI)	Urban % (95% CI)	Rural % (95% CI)	All % (95% CI)
Most people can be trusted	2002	68.9 (67.1-70.7)	62.6 (60.9-64.3)	64.3 (62.7-66.0)	68.9 (67.3-70.6)	65.7 (64.5-67.0)
	2003	71.5 (69.7-73.3)	68.0 (66.5-69.5)	68.8 (67.2-70.3)	72.0 (70.5-73.5)	69.7 (68.6-70.9)
	2005	74.2 (72.4-76.0)	72.5 (71.0-74.0)	72.5 (70.9-74.0)	75.3 (73.8-76.8)	73.3 (72.2-74.5)
	2006	74.4 (72.3-76.5)	72.7 (71.0-74.5)	72.4 (70.6-74.2)	76.1 (74.3-77.9)	73.5 (72.2-74.9)
	2007	72.3 (70.0-74.6)	69.1 (67.2-71.0)	69.2 (67.3-71.2)	73.9 (71.9-76.0)	70.7 (69.2-72.2)
	2008	72.5 (70.3-74.6)	70.7 (68.9-72.5)	71.0 (69.1-72.8)	72.8 (70.9-74.7)	71.5 (70.1-73.0)
	2009	71.6 (69.3-74.0)	71.1 (69.3-72.9)	70.2 (68.2-72.1)	74.1 (72.2-76.1)	71.4 (69.9-72.9)
Feels safe walking down their street after dark	2002	78.4 (76.8-80.0)	56.5 (54.9-58.2)	67.8 (66.2-69.3)	66.7 (65.1-68.3)	67.4 (66.3-68.6)
	2003	80.0 (78.6-81.5)	56.3 (54.7-57.8)	68.3 (66.9-69.8)	67.3 (65.8-68.8)	68.0 (66.9-69.1)
	2005	82.9 (81.4-84.3)	59.9 (58.4-61.5)	71.1 (69.7-72.6)	71.6 (70.2-73.1)	71.3 (70.2-72.4)
	2006	82.4 (80.8-84.1)	58.0 (56.2-59.9)	70.1 (68.3-71.8)	70.6 (68.8-72.4)	70.2 (68.9-71.6)
	2007	82.3 (80.5-84.1)	60.3 (58.4-62.3)	70.9 (69.1-72.7)	71.5 (69.6-73.5)	71.1 (69.7-72.5)
	2008	83.9 (82.3-85.5)	61.6 (59.8-63.4)	73.0 (71.3-74.7)	71.8 (70.0-73.6)	72.6 (71.4-73.9)
	2009	83.7 (81.9-85.4)	62.8 (60.9-64.7)	73.8 (72.1-75.6)	71.5 (69.6-73.4)	73.1 (71.8-74.5)
Area has a reputation for being a safe place	2002	75.2 (73.5-76.9)	71.4 (69.9-73.0)	71.3 (69.8-72.8)	77.9 (76.4-79.3)	73.3 (72.2-74.4)
	2003	76.5 (74.9-78.2)	73.2 (71.8-74.6)	73.3 (71.9-74.8)	78.4 (77.0-79.8)	74.9 (73.8-75.9)
	2005	78.6 (77.0-80.3)	77.5 (76.1-78.9)	76.4 (75.0-77.8)	81.9 (80.5-83.2)	78.1 (77.0-79.1)
	2006	75.8 (73.7-77.8)	74.9 (73.2-76.6)	73.0 (71.2-74.8)	80.8 (79.1-82.4)	75.3 (74.0-76.7)
	2007	77.2 (75.1-79.4)	75.6 (73.9-77.4)	74.2 (72.4-76.0)	81.5 (79.8-83.2)	76.4 (75.1-77.8)
	2008	78.2 (76.2-80.2)	73.6 (71.9-75.4)	74.7 (72.9-76.4)	78.6 (76.8-80.5)	75.9 (74.6-77.2)
	2009	76.0 (73.7-78.3)	73.9 (72.1-75.7)	72.4 (70.4-74.3)	80.8 (79.1-82.5)	75.0 (73.5-76.4)
Visited neighbours in the last week	2002	69.1 (67.3-70.9)	63.6 (62.0-65.2)	64.1 (62.5-65.7)	71.5 (70.0-73.1)	66.3 (65.1-67.5)
	2003	67.1 (65.2-68.9)	63.8 (62.3-65.3)	62.8 (61.2-64.4)	71.4 (69.9-72.8)	65.4 (64.2-66.6)
	2005	66.4 (64.5-68.3)	60.6 (59.0-62.2)	61.1 (59.4-62.7)	68.9 (67.3-70.5)	63.4 (62.2-64.7)
	2006	66.6 (64.4-68.9)	66.9 (65.1-68.6)	64.3 (62.4-66.2)	72.5 (70.7-74.3)	66.7 (65.3-68.2)
	2007	64.7 (62.2-67.2)	60.1 (58.1-62.0)	60.3 (58.3-62.3)	66.9 (64.8-69.1)	62.3 (60.7-63.9)
	2008	64.5 (62.2-66.7)	59.8 (57.9-61.7)	60.2 (58.3-62.1)	66.4 (64.5-68.4)	62.1 (60.6-63.6)
	2009	62.3 (59.8-64.8)	59.8 (57.9-61.7)	58.2 (56.1-60.3)	67.5 (65.4-69.6)	61.0 (59.5-62.6)
Ran into friends and acquaintances when shopping in local area	2002	80.7 (79.2-82.3)	84.0 (82.8-85.2)	78.9 (77.6-80.2)	90.4 (89.2-91.6)	82.4 (81.4-83.4)
	2003	80.3 (78.8-81.9)	82.8 (81.6-84.0)	78.1 (76.7-79.4)	89.7 (88.7-90.7)	81.6 (80.6-82.6)
	2005	79.4 (77.7-81.1)	83.0 (81.8-84.2)	77.7 (76.3-79.1)	89.4 (88.4-90.5)	81.2 (80.2-82.3)
	2006	78.2 (76.3-80.2)	83.2 (81.8-84.6)	77.1 (75.5-78.7)	89.2 (88.0-90.5)	80.8 (79.5-82.0)
	2007	78.3 (76.2-80.4)	83.4 (81.9-84.8)	77.6 (75.9-79.4)	88.4 (86.9-89.9)	80.9 (79.6-82.2)
	2008	80.4 (78.5-82.3)	84.9 (83.6-86.3)	79.6 (78.0-81.2)	89.8 (88.6-91.0)	82.7 (81.5-83.9)
	2009	79.6 (77.5-81.7)	84.1 (82.7-85.5)	78.7 (77.0-80.4)	89.3 (88.0-90.6)	81.9 (80.6-83.1)
Would feel sad to leave their neighbourhood	2002	71.1 (69.3-72.9)	75.5 (74.0-76.9)	72.0 (70.5-73.6)	76.2 (74.6-77.8)	73.3 (72.1-74.5)
	2003	69.5 (67.7-71.3)	76.9 (75.6-78.3)	71.9 (70.4-73.4)	76.6 (75.2-78.0)	73.3 (72.2-74.4)
	2005	67.3 (65.4-69.3)	75.8 (74.4-77.2)	70.0 (68.5-71.6)	75.5 (74.0-77.0)	71.7 (70.5-72.9)
	2006	69.5 (67.3-71.7)	76.3 (74.7-78.0)	72.2 (70.4-74.0)	74.7 (72.9-76.6)	73.0 (71.6-74.3)
	2007	70.0 (67.6-72.4)	76.2 (74.5-78.0)	71.0 (69.0-72.9)	78.3 (76.5-80.2)	73.2 (71.7-74.7)
	2008	71.0 (68.8-73.3)	78.4 (76.9-80.0)	74.2 (72.4-75.9)	76.3 (74.4-78.2)	74.8 (73.5-76.2)
	2009	69.0 (66.6-71.5)	74.6 (72.8-76.4)	70.5 (68.5-72.5)	75.0 (72.9-77.0)	71.9 (70.4-73.4)
Participated in a group recreational, cultural, or religious activity	2007	57.2 (54.1-60.2)	58.5 (56.2-60.9)	58.1 (55.6-60.6)	57.4 (54.7-60.0)	57.9 (55.9-59.8)
	2008	52.4 (50.1-54.8)	58.8 (56.9-60.7)	55.2 (53.3-57.1)	56.8 (54.7-58.9)	55.7 (54.2-57.2)
	2009	51.1 (48.9-53.3)	56.8 (55.1-58.5)	53.5 (51.7-55.2)	55.2 (53.3-57.1)	54.0 (52.6-55.4)
Participated in a sport or physical activity	2007	67.3 (64.6-70.1)	53.8 (51.5-56.2)	62.2 (59.8-64.5)	56.6 (54.0-59.2)	60.4 (58.6-62.3)
	2008	61.8 (59.6-64.0)	48.8 (47.0-50.7)	55.6 (53.7-57.6)	54.2 (52.1-56.2)	55.2 (53.7-56.7)
	2009	56.7 (54.5-58.8)	46.2 (44.5-47.9)	50.9 (49.1-52.7)	52.4 (50.6-54.3)	51.3 (50.0-52.7)

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

**Source:** New South Wales Population Health Survey 2009 (HOIST). Centre for Epidemiology and Research, NSW Department of Health.



# Question modules

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The survey questions used in the New South Wales Population Health Survey in 2009 are available as individual question modules, including: alcohol and cannabis, asthma, cancer screening (breast and cervical), demographics, diabetes or high blood glucose, environmental health (usual source of drinking water), health services use and access (including private health insurance and difficulties getting health care), immunisation (influenza and pneumococcal), injury prevention (fire safety in the home), mental health (psychological distress), nutrition, oral health, overweight and obesity, physical activity, self-rated health, smoking (including passive smoking), and social capital.

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

# Alcohol and cannabis

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Q1. How often do you usually drink alcohol?

1. \_\_\_\_\_ number of days
  2. Less than once per week
  3. I don't drink alcohol → Q6
- X Don't know → Q6  
R Refused → Q6

Q2. Alcoholic drinks are measured in terms of a standard drink. 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. On a day when you drink alcohol, how many standard drinks do you usually have?

1. \_\_\_\_\_ number of drinks
- X Don't know  
R Refused

Q3. In the last 4 weeks have you had more than [4 if male/2 if female] drinks in a day?

1. Yes
  2. No → Q6
- X Don't know → Q6  
R Refused → Q6

Q4. In the last 4 weeks how often have you had [11 or more if male/7 or more if female] drinks in a day?

1. \_\_\_\_\_ number of times
  2. Not at all
- X Don't know  
R Refused

Q5. In the last 4 weeks how often have you had [7-10 if male/5-6 if female] drinks in a day?

1. \_\_\_\_\_ number of times
  2. Not at all
- X Don't know  
R Refused

Q6. Which of the following best describes your marijuana or hashish smoking status? [ASKED IF 16-34 YEARS: READ OUT]

1. I smoke daily
  2. I smoke occasionally
  3. I don't smoke now, but I used to → END OF MODULE
  4. I've tried it a few times but never smoked regularly → END OF MODULE
  5. I've never smoked marijuana or hashish → END OF MODULE
- X Don't know → END OF MODULE  
R Refused → END OF MODULE

Q7. When you smoke marijuana or hashish do you mix it with tobacco? [ASKED IF 16-34 YEARS: READ OUT]

1. Always
  2. Sometimes
  3. Rarely
  4. Never
- X Don't know  
R Refused

Q8. How soon after you wake do you have your first smoke of marijuana or hashish? [ASKED IF 16-34 YEARS: READ OUT]

1. Less than or equal to 5 minutes
  2. 6-30 minutes
  3. 31-60 minutes
  4. Longer than 60 minutes
- X Don't know  
R Refused

## Cancer screening: colorectal

---

Q1. Bowel cancer is a common cancer which, if found, can be treated at an early stage. Bowel cancer may be detected by using several different types of investigations. Have you ever had: [READ OUT. MULTIPLE RESPONSE. IF NEEDED: A colonoscopy is a test which involves a doctor passing a long tube through your back passage to examine the inside of your bowel.]

1. A faecal occult blood test
  2. A colonoscopy
  3. A sigmoidoscopy
  4. A CT Colonography
  5. A barium enema
  6. None of the above → END OF MODULE
- X Don't know → END OF MODULE  
R Refused → END OF MODULE

Q2. When did you have your last faecal occult blood test

1. Within the last 12 months → Q3
  2. 13 months to 2 years ago → Q3
  3. More than 2 years ago to 5 years ago → Q3
  4. More than 5 years ago → Q3
  5. Never had a faecal occult blood test → Q3
- X Don't know → Q3  
R Refused → Q3

Q3. Can you tell me all the reasons why you had [this/these] investigations for bowel cancer? [MULTIPLE RESPONSE]

1. One or more relatives had bowel cancer
  2. Regular check up (seeing doctor)
  3. Due for screening test for bowel cancer
  4. Doctor recommended it
  5. Publicity about bowel cancer and screening
  6. Urged by a friend-relative to go
  7. Blood in the toilet bowl-stool-on toilet paper
  8. Other bowel problem such as pain, polyps or inflammatory bowel disease
  9. I have had bowel cancer in the past
  10. Inclusion in National Bowel Survey Screening Program
  11. Other (Specify)
- X Don't know  
R Refused

## Environmental health

---

Q1. What is your normal source of drinking water?

1. Public water supply
  2. Bottled water
  3. Rainwater
  4. Private bore, spring, or well
  5. Other private supply [for example, creek or farm dam]
  6. Combination of different water sources
  7. Other [SPECIFY] \_\_\_\_\_
- X Don't know  
R Refused

Q2. Do you treat your water before drinking? [IF YES, HOW?]

1. No
2. Sometimes
3. Yes: boiling
4. Yes: filtering
5. Yes: boil and filter
6. Yes: other [SPECIFY] \_\_\_\_\_

X Don't know  
R Refused

Q3. When you are in your home or yard, are you exposed to road traffic noise?

1. Yes
  2. No → END OF MODULE
- X Don't know → END OF MODULE  
R Refused → END OF MODULE

Q4. What type of vehicle is the source of most road traffic noise in your home or yard? [READ OUT]

1. Car → Q5
  2. Hoon car → Q5
  3. Truck → Q5
  4. Motorbike → Q5
  5. Sirens or horns → Q5
  6. Other [SPECIFY] \_\_\_\_\_
- X Don't know → Q5  
R Refused → Q5

Q5. Does road traffic noise cause you ... [READ OUT. MULTIPLE RESPONSE]

1. Disturbed sleep
  2. Stress
  3. Headache
  4. Annoyance
  5. Difficulty reading or studying
  6. Depression
  7. Anxiety
  8. Other impacts [SPECIFY] \_\_\_\_\_
  9. You can hear road traffic noises but it does not disturb you
- X Don't know  
R Refused

## Food handling

---

Q1. Thinking about the last time you prepared raw meat or chicken when cooking, after preparing it did you [READ OUT]

1. Wipe your hands or rinse them WITHOUT using soap
  2. Wash your hands with soap
  3. Continue cooking without cleaning your hands
  4. Don't handle raw meat or don't cook
- X Don't know  
R Refused

## Immunisation

---

Q1. Were you vaccinated or immunised against flu in the past 12 months? [ASK IF 50 YEARS OR OVER]

1. Yes
  2. No
- X Don't know  
R Refused

Q2. When were you last vaccinated or immunised against pneumonia? [ASK IF 50 YEARS OR OVER]

1. Within the last 12 months
  2. 12 months to 5 years ago
  3. More than 5 years ago
  4. Never vaccinated
- X Don't know  
R Refused

Q3. Have you been vaccinated against human swine flu?

- 1. Yes
- 2. No
- X Don't know
- R Refused

## Injury prevention

---

Q1. Do you have smoke alarms installed in your home? [IF YES ASKED: BATTERY OPERATED, HARD WIRED, OR BOTH?]

- 1. Yes: battery operated → Q2
- 2. Yes: hard wired → Q4
- 3. Yes: battery operated and hard wired → Q2
- 4. No → Q7
- X Don't know → Q7
- R Refused → Q7

Q2. When did you last test the battery operated smoke alarms?

- 1. Within the last month
- 2. More than a month but less than 6 months ago
- 3. Six months to a year ago
- 4. More than a year ago
- 5. Never tested
- 6. No battery currently in alarm
- X Don't know
- R Refused

Q3. How many battery operated smoke alarms do you have?

- 1. \_\_\_\_\_ [SPECIFY]
- X Don't know
- R Refused

Q4. When did you last test the hard wired smoke alarms?

- 1. Within the last month
- 2. More than a month but less than 6 months ago
- 3. Six months to a year ago
- 4. More than a year ago
- 5. Never tested
- X Don't know
- R Refused

Q5. How many hard wired smoke alarms do you have?

- 1. \_\_\_\_\_ [SPECIFY]
- X Don't know
- R Refused

Q6. Does your household have: [READ OUT]

- 1. A written home escape plan
- 2. A home escape plan which is not written down
- 3. No home escape plan → END OF MODULE
- X Don't know → END OF MODULE
- R Refused → END OF MODULE

Q7. When did your household last practice your home escape plan?

- 1. Within the last month
- 2. More than a month but less than 6 months ago
- 3. Six months to a year ago
- 4. More than a year ago
- 5. Never practiced the plan
- X Don't know
- R Refused

# Nutrition

---

Q1. How many serves of fruit do you usually eat each day? [1 serve = 1 medium piece or 2 small pieces of fruit or 1 cup of diced pieces]

1. \_\_\_\_\_ serves per day
  2. \_\_\_\_\_ serves per week
  3. Don't eat fruit
- X Don't know  
R Refused

Q2. How many serves of vegetables do you usually eat each day? [1 serve = 1/2 cup cooked or 1 cup of salad vegetables]

1. \_\_\_\_\_ serves per day
  2. \_\_\_\_\_ serves per week
  3. Don't eat vegetables
- X Don't know  
R Refused

Q3. How often do you usually eat bread? [Include bread rolls, flat breads, crumpets, bagels, English or bread-type muffins.]

1. \_\_\_\_\_ times per day
  2. \_\_\_\_\_ times per week
  3. \_\_\_\_\_ times per month
  4. Rarely or never
- X Don't know  
R Refused

Q4. How often do you usually eat breakfast cereal? [Ready made, home made or cooked]

1. \_\_\_\_\_ times per day
  2. \_\_\_\_\_ times per week
  3. \_\_\_\_\_ times per month
  4. Rarely or never
- X Don't know  
R Refused

Q5. How often do you eat pasta, rice, noodles or other cooked cereals (not including cooked breakfast cereals)?

1. \_\_\_\_\_ times per day
  2. \_\_\_\_\_ times per week
  3. \_\_\_\_\_ times per month
  4. Rarely or never
- X Don't know  
R Refused

Q6. How often do you eat processed meat products such as sausages, frankfurts, devon, salami, meat pies, bacon or ham?

1. \_\_\_\_\_ times per day
  2. \_\_\_\_\_ times per week
  3. \_\_\_\_\_ times per month
  4. Rarely or never
- X Don't know  
R Refused

Q7. How often do you eat hot chips, french fries, wedges, or fried potatoes?

1. \_\_\_\_\_ times per day
  2. \_\_\_\_\_ times per week
  3. \_\_\_\_\_ times per month
  4. Rarely or never
- X Don't know  
R Refused

Q8. How often do you eat potato crisps or other salty snacks (such as twisties or corn chips)?

1. \_\_\_\_\_ times per day
2. \_\_\_\_\_ times per week
3. \_\_\_\_\_ times per month
4. Rarely or never

X Don't know

R Refused

Q9. What type of milk do you usually have?

1. Regular milk (whole or full cream)
2. Low- or reduced-fat milk
3. Skim milk
4. Evaporated or sweetened milk
5. Other [SPECIFY] \_\_\_\_\_
6. Don't have milk

X Don't know

R Refused

Q10. How many cups of soft drink, cordials or sports drink such as lemonade or Gatorade do you usually drink in a day? [1 cup = 250 ml, 1 can of soft drink = 1.5 cups, 1 x 500 ml bottle of Gatorade = 2 cups]

1. \_\_\_\_\_ cups per day
2. \_\_\_\_\_ cups per week
3. Doesn't drink soft drink

X Don't know

R Refused

Q11. How often do you have meals or snacks such as burgers, pizza, chicken or chips from take-away places like McDonalds, Hungry Jacks, Pizza Hut, KFC, Red Rooster, or local take-away places?

1. \_\_\_\_\_ times per week
2. \_\_\_\_\_ times per month
3. Rarely or never

X Don't know

R Refused

Q12. How many cups of fruit juice do you usually drink in a day? [1 cup = 250 ml, a household cup, or a large popper]

1. \_\_\_\_\_ cups per day
2. \_\_\_\_\_ cups per week
3. Doesn't drink juice

X Don't know

R Refused

Q13. How many cups of water do you usually drink in a day? [1 cup = 250 ml or a household tea cup, 1 average bottle of water = 1.5 cups]

1. \_\_\_\_\_ cups per day
2. \_\_\_\_\_ cups per week
3. Doesn't drink water

X Don't know

R Refused

Q14. How often do you eat red meat such as beef, lamb, liver and kidney but not pork or ham?

1. \_\_\_\_\_ times per day
2. \_\_\_\_\_ times per week
3. \_\_\_\_\_ times per month
4. Rarely or never

X Don't know

R Refused

Q15. In the last 12 months were there any times that you ran out of food and couldn't afford to buy more?

1. Yes
2. No

X Don't know

R Refused

# Physical activity

---

Q1. 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?

1. \_\_\_\_\_ number of times [If = 0 → Q3]

X Don't know → Q3

R Refused → Q3

Q2. What do you estimate was the total time you spent walking in this way in the last week? [In hours and minutes]

1. \_\_\_\_\_ hours \_\_\_\_\_ minutes

X Don't know

R Refused

Q3. The next question excludes gardening. In the last week, how many times did you do any vigorous household chores which made you breathe harder or puff and pant?

1. \_\_\_\_\_ number of times [If = 0 → Q5]

X Don't know → Q5

R Refused → Q5

Q4. What do you estimate was the total time you spent doing these vigorous household chores in the last week? [In hours and minutes]

1. \_\_\_\_\_ hours \_\_\_\_\_ minutes

X Don't know

R Refused

Q5. In the last week, how many times did you do any vigorous gardening or heavy work around the yard which made you breathe harder or puff and pant?

1. \_\_\_\_\_ number of times [If = 0 → Q7]

X Don't know → Q7

R Refused → Q7

Q6. What do you estimate was the total time you spent doing this vigorous gardening or heavy work around the yard in the last week? [In hours and minutes]

1. \_\_\_\_\_ hours \_\_\_\_\_ minutes

X Don't know

R Refused

Q7. The next question excludes household chores or gardening. In the last week, how many times did you do any vigorous physical activity which made you breathe harder or puff and pant? [For example: football, tennis, netball, squash, athletics, cycling, jogging, keep-fit exercises, and vigorous swimming]

1. \_\_\_\_\_ number of times [If = 0 → Q9]

X Don't know → Q9

R Refused → Q9

Q8. What do you estimate was the total time you spent doing this vigorous physical activity in the last week? [In hours and minutes]

1. \_\_\_\_\_ hours \_\_\_\_\_ minutes

X Don't know

R Refused

Q9. This next question does not include household chores or gardening. In the last week, how many times did you do any other more moderate physical activity that you haven't already mentioned? [For example: lawn bowls, golf, tai chi, and sailing]

1. \_\_\_\_\_ number of times [If = 0 → Q11]

X Don't know → Q11

R Refused → Q11

Q10. What do you estimate was the total time that you spent doing these activities in the last week? [In hours and minutes]

1. \_\_\_\_\_ hours \_\_\_\_\_ minutes

X Don't know

R Refused



Q11. How do you usually get to work? [MULTIPLE RESPONSE]

1. Train
  2. Bus
  3. Ferry
  4. Tram (including light rail)
  5. Taxi
  6. Car (as driver)
  7. Car (as passenger)
  8. Truck
  9. Motor bike or motor scooter
  10. Bicycle
  11. Walk only
  12. Work from home
  13. Walk part of the way
  14. Other
- X Don't know  
R Refused

## Smoking

---

Q1. Which of the following best describes your smoking status? This includes cigarettes, cigars and pipes. [READ OUT]

1. I smoke daily
  2. I smoke occasionally
  3. I don't smoke now, but I used to → Q5
  4. I've tried it a few times but never smoked regularly → Q5
  5. I've never smoked → Q5
- X Don't know → Q5  
R Refused → Q5

Q2. The last time you went to your general practitioner, did the doctor discuss your smoking and advise you to quit smoking?

1. Yes
  2. No
- X Don't know  
R Refused

Q3. Which of the following best describes your home situation? [READ OUT]

1. My home is smoke-free (includes smoking is allowed outside only)
  2. People occasionally smoke in the house
  3. People frequently smoke in the house
- X Don't know  
R Refused

Q4. Are people allowed to smoke in your car?

1. Yes
  2. No
  3. Don't have a car
- X Don't know  
R Refused

## Health-related quality of life

---

Q1. Overall, how would you rate your health during the last 4 weeks? [READ OUT]

1. Excellent
2. Very good
3. Good
4. Fair
5. Poor
6. Very poor

X Don't know  
R Refused

## Asthma

---

Q1. Have you ever been told by a doctor or hospital you have asthma?

1. Yes
2. No → END OF MODULE
- X Don't know → END OF MODULE
- R Refused → END OF MODULE

Q2. Have you had symptoms of or treatment for asthma in the last 12 months?

1. Yes: symptoms
2. Yes: treatment
3. Yes: both
4. No → END OF MODULE
- X Don't know → END OF MODULE
- R Refused → END OF MODULE

Q3. Do you have an asthma action plan, written instructions of what to do if your asthma is worse or out of control?

1. Yes
2. No
- X Don't know
- R Refused

## Diabetes or high blood glucose

---

Q1. Have you ever been told by a doctor or hospital you have diabetes?

1. Yes [IF FEMALE → Q3; IF MALE → Q5]
2. No
3. Only during pregnancy → END OF MODULE
- X Don't know
- R Refused

Q2. Have you ever been told by a doctor or hospital you have high blood glucose?

1. Yes [IF MALE → Q5]
2. No → END OF MODULE
3. Borderline → [IF FEMALE → Q3; IF MALE → END OF MODULE]
4. Only during pregnancy → END OF MODULE
- X Don't know → END OF MODULE
- R Refused → END OF MODULE

Q3. Were you pregnant when you were told you had diabetes or high blood glucose?

1. Yes
2. No → Q5
- X Don't know → END OF MODULE
- R Refused → END OF MODULE

Q4. Have you ever had diabetes or high blood glucose apart from when you were pregnant?

1. Yes
2. No → END OF MODULE
- X Don't know → END OF MODULE
- R Refused → END OF MODULE

Q5. What type of diabetes were you told you had?

1. Type 1
2. Type 2
3. Gestational
4. Other \_\_\_\_\_ [SPECIFY]
- X Don't know

R Refused

Q6. Have any other members of your immediate family or other relatives been diagnosed with diabetes?

1. None
2. Grandparent, aunt, uncle, or first cousin
3. Parent, brother, sister, or own child
4. Other \_\_\_\_\_ [SPECIFY]

X Don't know

R Refused

## Incontinence

---

Q1. In the last 4 weeks, how often have you had a urine leak when you were physically active, exerted yourself, or coughed or sneezed during the day or night? [READ OUT]

1. Most of the time
2. Some of the time
3. None of the time

X Don't know

R Refused

## Mental health

---

Q1. In the last 4 weeks, about how often did you feel tired out for no good reason? [READ OUT]

1. All of the time
2. Most of the time
3. Some of the time
4. A little of the time
5. None of the time

X Don't know

R Refused

Q2. In the last 4 weeks, about how often did you feel nervous? [READ OUT]

1. All of the time
2. Most of the time
3. Some of the time
4. A little of the time
5. None of the time → Q4

X Don't know → Q4

R Refused → Q4

Q3. In the last 4 weeks, about how often did you feel so nervous that nothing could calm you down? [READ OUT]

1. All of the time
2. Most of the time
3. Some of the time
4. A little of the time
5. None of the time

X Don't know

R Refused

Q4. In the last 4 weeks, about how often did you feel hopeless? [READ OUT]

1. All of the time
2. Most of the time
3. Some of the time
4. A little of the time
5. None of the time

X Don't know

R Refused

Q5. In the last 4 weeks, about how often did you feel restless or fidgety? [READ OUT]

- 1. All of the time
- 2. Most of the time
- 3. Some of the time
- 4. A little of the time
- 5. None of the time → Q7
- X Don't know → Q7
- R Refused → Q7

Q6. In the last 4 weeks, about how often did you feel so restless you could not sit still? [READ OUT]

- 1. All of the time
- 2. Most of the time
- 3. Some of the time
- 4. A little of the time
- 5. None of the time
- X Don't know
- R Refused

Q7. In the last 4 weeks, about how often did you feel depressed? [READ OUT]

- 1. All of the time
- 2. Most of the time
- 3. Some of the time
- 4. A little of the time
- 5. None of the time
- X Don't know
- R Refused

Q8. In the last 4 weeks, about how often did you feel that everything was an effort? [READ OUT]

- 1. All of the time
- 2. Most of the time
- 3. Some of the time
- 4. A little of the time
- 5. None of the time
- X Don't know
- R Refused

Q9. In the last 4 weeks, about how often did you feel so sad that nothing could cheer you up? [READ OUT]

- 1. All of the time
- 2. Most of the time
- 3. Some of the time
- 4. A little of the time
- 5. None of the time
- X Don't know
- R Refused

Q10. In the last 4 weeks, about how often did you feel worthless? [READ OUT]

- 1. All of the time
- 2. Most of the time
- 3. Some of the time
- 4. A little of the time
- 5. None of the time
- X Don't know
- R Refused

Q11. In the last 4 weeks, how many days were you totally unable to work, study or manage your day-to-day activities because of these feelings?

- 1. \_\_\_\_\_ number of days
- X Don't know
- R Refused

Q12. Aside from [that day-those days], in the last 4 weeks, how many days were you able to work, study or manage your day-to-day activities, but had to cut down on what you did because of these feelings?

- 1. \_\_\_\_\_ number of days
- X Don't know

R Refused

Q13. In the last 4 weeks, how many times have you seen a doctor or other health professional about these feelings?

1. \_\_\_\_\_ number of consultations

X Don't know

R Refused

Q14. In the last 4 weeks, how often have physical health problems been the main cause of these feelings?

[READ OUT]

1. All of the time

2. Most of the time

3. Some of the time

4. A little of the time

5. None of the time

X Don't know

R Refused

## Oral health

---

Q1. Are any of your natural teeth missing?

1. Yes: have some natural teeth missing

2. Yes: have all natural teeth missing

3. No: have no natural teeth missing → Q3

X Don't know → Q3

R Refused → Q3

Q2. When did you last visit a dental professional about your teeth, dentures or gums? [A dental professional includes dentist, dental specialist, dental hygienist, dental technician, dental mechanic, denturist or dental therapist.] [READ OUT]

1. Less than 12 months ago → Q4

2. One year to less than 2 years ago → Q4

3. Two to less than 5 years ago → Q4

4. Five to less than 10 years ago → Q4

5. Ten years ago or more → Q4

6. Never → Q5

X Don't know → Q5

R Refused → Q5

Q3. Was your last dental visit made at a... [READ OUT]

1. Private dental practice

2. Community dental practice

3. Health fund dental clinic

4. Dental hospital

5. Any other place [SPECIFY] \_\_\_\_\_

X Don't know

R Refused

Q4. Do you have private health insurance cover for your dental expenses?

1. Yes

2. No

X Don't know

R Refused

Q5. Did the government or an insurance fund pay any part of the expenses for your last dental visit?

1. No: paid all own expenses

2. Yes: Insurance fund paid some, patient paid some

3. Yes: Insurance fund paid all, patient paid none

4. Yes: Government paid some, patient or insurance paid some

5. Yes: Government paid all, patient paid none

6. Other payment arrangement [SPECIFY] \_\_\_\_\_

X Don't know

R Refused

Q6. How much did your last dental visit cost before any insurance rebate?

1. [SPECIFY] \_\_\_\_\_

X Don't know

R Refused

## Population weight status

---

Q1. How tall are you without shoes?

1. \_\_\_\_\_ centimetres or feet and inches

X Don't know (probe for best estimate before accepting)

R Refused

Q2. How much do you weigh without clothes or shoes?

1. \_\_\_\_\_ kilograms or stones and pounds

X Don't know (probe for best estimate before accepting)

R Refused

Q3. What is your waist measurement?

1. \_\_\_\_\_ centimetres or inches

X Don't know (probe for best estimate before accepting)

R Refused

## Health service use and access

---

Q1. In the last 12 months have you attended any of the following services? [READ OUT - MULTIPLE RESPONSE]

1. Stayed at least 1 night in hospital → Q2

2. A hospital emergency department (or casualty) for your own medical care → Q5

3. A government run community health centre → Q7

4. A government run public dental service or dental hospital → Q9

5. A general practitioner → Q11

6. Did not attend any of these services → Q14

X Don't know → Q14

R Refused → Q14

*If Q1 = 1 [Stayed at least 1 night in hospital]*

Q2. Can you tell me if the overnight stay was at a public or private hospital?

1. Public hospital

2. Private hospital

3. Private hospital attached to a public hospital

X Don't know

R Refused

Q3. Overall, what do you think of the care you received at the last hospital you attended? [READ OUT]

1. Excellent → Q5

2. Very good → Q5

3. Good → Q5

4. Fair

5. Poor

X Don't know → Q5

R Refused → Q5

Q4. Could you briefly describe why you rated the care you received as fair or poor?

1. [SPECIFY] \_\_\_\_\_

X Don't know

R Refused

*If Q1 = 2 [Attended a hospital emergency department (or casualty) for your own medical care]*

Q5. Overall, what do you think of the care you received at the last emergency department you attended?

- 1. Excellent → Q7
- 2. Very good → Q7
- 3. Good → Q7
- 4. Fair
- 5. Poor
- X Don't know → Q7
- R Refused → Q7

Q6. Could you briefly describe why you rated the care you received as fair or poor?

- 1. [SPECIFY] \_\_\_\_\_
- X Don't know
- R Refused

*If Q1 = 3 [Attended a government run community health centre]*

Q7. Overall, what do you think of the care you received at the community health centre you last attended?

- 1. Excellent → Q9
- 2. Very good → Q9
- 3. Good → Q9
- 4. Fair
- 5. Poor
- X Don't know → Q9
- R Refused → Q9

Q8. Could you briefly describe why you rated the care you received as fair or poor?

- 1. [SPECIFY] \_\_\_\_\_
- X Don't know
- R Refused

*If Q1 = 4 [Attended a government run public dental service or dental hospital]*

Q9. Overall, what do you think of the care you received at the most recent public dental service visit?

- 1. Excellent → Q11
- 2. Very good → Q11
- 3. Good → Q11
- 4. Fair
- 5. Poor
- X Don't know → Q11
- R Refused → Q11

Q10. Could you briefly describe why you rated the care you received as fair or poor?

- 1. [SPECIFY] \_\_\_\_\_
- X Don't know
- R Refused

*If Q1 = 5 [Attended a general practitioner]*

Q11. When did you last see a general practitioner?

- 1. Within the last week
- 2. 1 to 2 weeks ago
- 3. 2 weeks to 1 month ago
- 4. Between 1 and 6 months
- 5. 6 to 12 months ago
- X Don't know → Q14
- R Refused → Q14

Q12. Overall, what do you think of the care you received at the most recent general practitioner visit?

- 1. Excellent → Q14
- 2. Very good → Q14
- 3. Good → Q14
- 4. Fair
- 5. Poor
- X Don't know → Q14
- R Refused → Q14

Q13. Could you briefly describe why you rated the care you received as fair or poor?

1. [SPECIFY] \_\_\_\_\_

X Don't know

R Refused

Q14. Apart from Medicare, are you covered by private health insurance?

1. Yes

2. No

X Don't know

R Refused

Q15. Do you have any difficulties getting health care when you need it?

1. Yes

2. No → Q17

3. Don't need health care → Q17

X Don't know → Q17

R Refused → Q17

Q16. Please describe the difficulties you have.

1. Comments \_\_\_\_\_

Q17. Do you have any comments on the health services in your local area?

1. Comments \_\_\_\_\_

## Social capital

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Q1. In the last 12 months, have you participated in any of the following activities? [READ OUT - MULTIPLE RESPONSE]

1. Recreational group or cultural group activities

2. Community or special interest group activities

3. Church or religious activities

4. Went out to a cafe, restaurant or bar

5. Took part in sport or physical activities

6. Attended a sporting event as a spectator

7. Visited a library, museum or art gallery

8. Attended the movies, a theatre or a concert

9. Visited a park, botanic gardens, zoo or theme park

10. None of these activities

X Don't know

R Refused

Q2. Are you an active member of a local organisation, church or club, such as a sport, craft, or social club? [READ OUT]

1. Yes, very active

2. Yes, somewhat active

3. Yes, a little active

4. No, not an active member

X Don't know

R Refused

Q3. Most people can be trusted. Do you agree or disagree?

1. Strongly agree

2. Agree

3. Disagree

4. Strongly disagree

X Don't know

R Refused

Q4. I feel safe walking down my street after dark. Do you agree or disagree?

1. Strongly agree

2. Agree

3. Disagree



4. Strongly disagree

X Don't know

R Refused

Q5. My area has a reputation for being a safe place. Do you agree or disagree?

1. Strongly agree

2. Agree

3. Disagree

4. Strongly disagree

X Don't know

R Refused

Q6. How often have you visited someone in your neighbourhood in the last week? [READ OUT]

1. Frequently

2. A few times

3. At least once

4. Never (in the last week)

X Don't know

R Refused

Q8. When you go shopping in your local area how often are you likely to run into friends and acquaintances? [READ OUT]

1. Nearly always

2. Most of the time

3. Some of the time

4. Rarely or never

X Don't know

R Refused

Q9. Would you be sad if you had to leave this neighbourhood?

1. Yes

2. No

X Don't know

R Refused

Q10. In the last 12 months, have you participated in any of the following activities? [READ OUT. MULTIPLE RESPONSE]

1. Recreational group or cultural group activities

2. Community or special interest group activities

3. Church or religious activities

4. Went out to a cafe, restaurant or bar

5. Took part in sport or physical activities

6. Attended a sporting event as a spectator

7. Visited a library, museum or art gallery

8. Attended the movies, a theatre or a concert

9. Visited a park, botanic gardens, zoo or theme park

10. None of these activities

X Don't know

R Refused

## Demographics

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Q1. Could you please tell me how old you are today?

1. \_\_\_ age in years

X Don't know

R Refused

Q2. Are you male or female? [ONLY ASKED IF UNSURE]

1. Male

2. Female

Q3. How many of children under 16 years of age live in this household?

1. \_\_\_ number of people

X Don't know

R Refused

Q4. How many children under 6 years of age live in this household?

1. \_\_\_ number of people

X Don't know

R Refused

Q5. How many people aged 65 years old or over live in this household?

1. \_\_\_ number of people

X Don't know

R Refused

Q6. Besides yourself, who else lives in your household? [MULTIPLE RESPONSE]

1. No one else: lives alone

2. Mother

3. Father

4. Respondent's partner

5. Stepmother

6. Stepfather

7. Grandparents

8. Sons or daughters

9. Brothers or sisters

10. Stepbrothers or stepsisters

11. Other relatives

12. Non-family members

13. Other [SPECIFY] \_\_\_\_\_

X Don't know

R Refused

Q7. What is your current formal marital status?

1. Married

2. Widowed

3. Separated but not divorced

4. Divorced

5. Never married

X Don't know

R Refused

Q8. In which country were you born?

1. Australia

2. Other country [SPECIFY] \_\_\_\_\_

X Don't know

R Refused

Q9. In which country was your natural mother born?

1. Australia

2. Other country [SPECIFY] \_\_\_\_\_

X Don't know

R Refused

Q10. In which country was your natural father born?

1. Australia

2. Other country [SPECIFY] \_\_\_\_\_

X Don't know

R Refused

Q11. Do you usually speak a language other than English at home?

1. Yes

2. No → Q13

X Don't know → Q13

R Refused → Q13

Q12. What language do you usually speak at home?

1. Language [SPECIFY] \_\_\_\_\_

X Don't know

R Refused

Q13. Are you of Aboriginal or Torres Strait Island origin?

1. Aboriginal but not Torres Strait Islander

2. Torres Strait Islander but not Aboriginal origin

3. Aboriginal and Torres Strait Islander origin

X Don't know

R Refused

Q14. What is the level of the highest qualification you have completed?

1. Completed School Certificate or Intermediate or Year 10 or 4th Form

2. Completed Higher School Certificate or Leaving or Year 12 or 6th Form

3. TAFE certificate or diploma

4. University, College of Advanced Education, or some other tertiary institute degree or higher

5. Other [SPECIFY] \_\_\_\_\_

6. Completed primary school

7. Completed Years 7 to 9

X Don't know

R Refused

Q15. In the last week, which of the following best describes your employment status? [READ OUT]

1. A salary or wage earner or conducting a business → Q17

2. A salary or wage earner or conducting a business but absent on paid leave (including unpaid maternity), holidays, on strike or stood down → Q17

3. Unpaid work in a family business → Q17

4. Other unpaid work

5. Did not have a job

X Don't know or not sure

R Refused

Q16. Were you actively looking for work in the last week?

1. Yes: looked for full-time work → Q18

2. Yes: looked for part-time work → Q18

3. No: did not look for work → Q18

X Don't know → Q18

R Refused → Q18

Q17. In the last week, how many hours did you work in all jobs?

1. Number of hours [SPECIFY] \_\_\_\_\_

X Don't know

R Refused

Q18. Do you currently receive a government pension, allowance or benefit? [ONLY ASKED OF 65 AND OVER]

1. Yes

2. No

X Don't know

R Refused

Q19. I would now like to ask you about your household's income. What is your annual household income before tax? Would it be:

1. Less than \$20,000

2. \$20,000 to \$40,000

3. \$40,000 to \$60,000

4. \$60,000 to \$80,000

5. More than \$80,000

X Don't know

R Refused

Q20. How long have you lived in your local area?

1. \_\_\_\_ years

X Don't know

R Refused

Q21. What is the name of your local council or shire?

1. \_\_\_\_\_

X Don't know

R Refused

Q22. What is the name of the town or suburb where you live?

1. \_\_\_\_\_

X Don't know

R Refused

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