Government of **Western Australia**
Department of **Health**

Health and Wellbeing of Adults in Western Australia 2012, Overview and Trends

Health Survey Unit
Epidemiology Branch
Department of Health, WA

Acknowledgements

Thanks are extended to the people of Western Australia who participated in the Health and Wellbeing Survey. Appreciation is extended to our colleagues and specialists in the field who contribute to the content and integrity of the system.

Suggested citation

Tomlin, Stephania and Joyce, Sarah 2013. Health and Wellbeing of Adults in Western Australia 2012, Overview and Trends. Department of Health, Western Australia.

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EXECUTIVE SUMMARY

This report describes the findings from the 2012 Health and Wellbeing Surveillance System and provides the health sector and the general public with important information about a number of aspects of health and wellbeing of the Western Australian adult population.

The Health and Wellbeing Surveillance System is a continuous data collection which was initiated in 2002 to monitor the health status of the general population. In 2012, almost 6,000 adults aged 16 years and over were interviewed via computer assisted telephone interviews between January and December, reflecting a participation rate of 92.1%. The sample is randomly selected and then weighted to reflect the Western Australian adult population.

Some key findings from the report include:

General health:

- Almost nine out of ten adults aged 16 and over reported that their health was the same or better than it had been the previous year (88.3%). This is similar to that reported in 2011 (86.8%).

Chronic health conditions:

- The prevalence of diabetes has increased significantly from 2002 (4.7%) to 2012 (6.4%) for adults aged 16 and over.
- In 2012, almost one-quarter of adult respondents reported having an injury in the past 12 months that required treatment by a health care professional and almost one-third of these injuries were due to falls.
- More than one in seven respondents (14.3%) reported being diagnosed with a mental health condition during the past 12 months. However, the prevalence of current mental health conditions has remained relatively stable since 2002.

- Over time the prevalence of cancer, excluding skin cancer increased significantly for females from 2008 (5.2%) to 2012 (7.7%).

Lifestyle and physiological risk factors:

- In 2012, males were significantly more likely to be current (daily or occasional) smokers compared with females (15.4% compared to 9.9%) and residents from the country were significantly more likely to be current smokers compared with metro residents (16.5% compared to 11.7%).
- However, overall there has been a significant decrease in smoking, with overall prevalence dropping from 21.8% in 2002 to a record low of 12.7% in 2012.
- According to the 2009 guidelines for alcohol consumption introduced by the National Health and Medical Research Council (NHMRC), 29.2% of the Western Australian population is drinking at levels likely to increase their risk of long-term alcohol-related harm and 11.8% drink at levels that increase their likelihood of short-term alcohol-related harm.
- There has been a significant increase in the proportion of both males and females who reported doing sufficient physical activity (150 moderate minutes over 5 or more sessions) in 2012 compared to 2006.
- There has been a significant increase in the prevalence of obesity in adults from 2002 to 2012, increasing from 21.0% to 28.3%.

Health service utilisation:

- In 2012, almost nine out of ten respondents visited a primary health care service in the last 12 months. Females were significantly more likely than males to visit primary, allied and alternative health care services.

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1. INTRODUCTION

The WA Health & Wellbeing Surveillance System (HWSS) is a continuous data collection system which was developed to monitor the health and wellbeing of Western Australians. Each month, at least 550 people throughout Western Australia are interviewed. The HWSS began in March 2002 and as at December 2012 about 65,000 adults have been interviewed.

People are asked questions on a range of indicators related to health and wellbeing. Topics include chronic health conditions, lifestyle risk factors, protective factors and socio-demographics. Information from the survey is used to monitor the health status of all Western Australians, to inform health education programs, to evaluate interventions and programs, to inform and support health policy development, to identify and monitor emerging trends and to inform and support health service planning and development.

The questions that are included on the HWSS are selected either to provide information about State or National indicators of health and wellbeing, or to provide information about areas of health, lifestyle and demography that are not available elsewhere and are necessary to understand the dynamics of healthy behaviours and outcomes.

This report presents what WA adults aged 16 years and over were saying about their health and wellbeing in 2012. All of the information provided in this report is based on self-reported data. Testing has shown that the responses to the questions on the survey are reliable but in a very few cases, may not be completely accurate. For example, people are likely to underestimate their weight and alcohol consumption[1,2,] but they do so consistently. This means that although the estimates for these are likely to be less than the 'true' estimate in the population, the estimates reliably show patterns of change over time. The identification of patterns over time is the basis of a monitoring and surveillance system.

Another feature of a surveillance system is that it is population based. That is, it is designed to examine trends at the population level and although major socio-

demographic group estimates are possible, it is not the purpose of the system. Therefore the information provided in this report is representative of the Western Australian population as a whole but it is unlikely to be reliably representative of small minority groups within the population such as Aboriginal people, the homeless or those without telephones. People requiring information about Aboriginal health are recommended to consult the results of the 2004-05 National Aboriginal and Torres Strait Islander Health survey[3], and the 2007-08 National Aboriginal and Torres Strait Islander Social Survey[4] which is more representative of that population.

2. METHODOLOGY

2.1 Mode of administration and sampling

The HWSS is conducted as a Computer Assisted Telephone Interview (CATI). Households are selected from the 2008-2009 White Pages by a stratified random process with over sampling representative of the population in rural and remote areas. An approach letter is sent to all selected households informing them about the survey and that their household has been selected to participate. The approach letter explains the purpose of the survey, gives the time within which they can expect to be contacted by the data collection agency and explains that one person from the household will be selected to participate. A specially prepared brochure is included with the letter, which explains about the HWSS and provides contact numbers for people to call for more information.

2.2 Weighting data

One of the most important features of a report describing the health and wellbeing of any population is the ability to make comparisons. In order to do this data must be weighted to the population that is being described, which in this case is the WA population.

The HWSS data are weighted to compensate for the over-sampling in the rural and remote areas of WA and then weighted by age and sex to the most recent Estimated

Resident population (ERP) for the year of the survey. For 2012, this was the 2011 ERP released by the Australian Bureau of Statistics (ABS) in August 2012.[5]

2.3 Response rates

A very important part of any survey is the response rate attained because low response rates may produce estimates that are not representative of the population or that are unreliable or biased. Each year since the HWSS began raw response rates of over 70% have been attained. The response rate for each month of 2012 is shown in Table 1.

The consistency of the response rates over the year provides an excellent basis for producing reliable estimates. These high response rates are also an indication of the willingness of the people of WA to respond to surveys that they judge to be important.

Table 1: Response rates for 2012 HWSS, by month

Month	Sample Frame	Out of Scope (a)	Eligible Sample	No answer after 10 attempts	Eligible Contacts (b)	Sample Frame	Interviews	Raw Response Rate	Adjusted Response Rate	Particip-ation Rate (c)
Jan	1197	392	805	96	709	51	610	75.8	86.0	92.3
Feb	1168	416	752	60	692	63	590	78.5	85.3	90.4
Mar	1168	418	750	70	680	51	563	75.1	82.8	91.7
Apr	1168	413	755	76	679	67	562	74.4	82.8	89.3
May	1169	439	730	66	664	55	553	75.8	83.3	91.0
Jun	1336	473	863	86	777	73	625	72.4	80.4	89.5
Jul	1234	472	762	55	707	76	557	73.1	78.8	88.0
Aug	1234	458	776	53	723	80	567	73.1	78.4	87.6
Sep	1234	460	774	91	683	69	542	70.0	79.4	88.7
Oct	1262	468	794	92	702	74	583	73.4	83.0	88.7
Nov	1460	596	864	99	795	95	624	72.2	78.5	86.8
Dec	1004	398	606	92	514	37	432	71.3	84.0	92.1

a) Non-operational, business or dedicated fax numbers. All other numbers were considered to be part of the eligible sample, which forms the denominator for the Raw Response Rate.

b) If the telephone is answered, the number is part of the eligible contacts. This forms the denominator of the Adjusted Response Rate.

c) The Participation Rate is the number of people interviewed divided by the number of people interviewed plus the number of refusals.

A full explanation of the methodology can be found in the paper titled WA Health and Wellbeing Surveillance System (WAHWSS), Design and Methodology, Technical Paper No 1. September 2011 – Version 2. This document is available both on the Epidemiology Website on the Department of Health (DoH) Intranet and the DoH internet at the following web addresses:

intranet.health.wa.gov.au/epidemiology/resources/index.cfm

health.wa.gov.au/publications/pop_surveys.cfm

3. HOW ESTIMATES ARE REPORTED

3.1 Percentage and prevalence

The information in this report is presented either as a percentage of the population who have a particular risk factor/demographic characteristic or as prevalence of the population who have a particular health condition. Prevalence is the description of the number or proportion of individuals in a community with a given condition and is usually expressed as a percentage. Prevalence is distinct from incidence, which is a measure of the number of new cases of a condition. Prevalence involves all affected individuals, regardless of the date of contraction, whereas incidence only involves individuals who have newly contracted the disease during a specified time interval. Surveys generally do not collect or report incidence of disease.

There are three main types of prevalence that are typically reported. Lifetime prevalence represents the proportion of the population that have ever had a condition, period prevalence represents the proportion of the population who have a condition within a specified period of time, e.g. twelve months, and point prevalence represents the proportion of the population who have a condition at the time of the survey. In this report, most of the prevalence estimates presented are period prevalence. With some conditions, such as asthma, both lifetime and point prevalence are reported. This is because a person may have had asthma at some point in their life but not have it currently. A copy of the questionnaire is available on the intranet at: intranet.health.wa.gov.au/epidemiology/resources/index.cfm

Non DoH employees are asked to contact the Health Survey Unit, Epidemiology Branch, (Health Department of Western Australia) for a copy of the questionnaire.

3.2 Confidence intervals

Each table presents the estimate of the prevalence of a condition or the estimate of the proportion of the population with a particular characteristic along with the 95% confidence interval around that estimate.

The 95 per cent confidence interval is the range between which the true estimate would lie 95 out of 100 times. Overlapping confidence intervals indicate that there is probably no difference in the estimates being compared. If the confidence intervals do not overlap, then the estimates are considered to be significantly different. Along with determining statistically significant differences confidence intervals can also be used to determine the level of stability around an estimate. The wider the confidence interval is around an estimate the less precise that estimate is and the more caution that should be applied with using it. In this report wide confidence intervals can be present for young age groups (16-44 years) for certain chronic health conditions, due to the fact that they are more likely to be present and detectable at older ages. It is also possible to see wide confidence intervals for in some variables that have multiple response options (4 or more), such as diabetes type and fast food intake for example. Information on how to determine whether or not a difference is statistically significant can be found at: health.wa.gov.au/publications/pop_surveys.cfm

Confidence intervals are considered to be a conservative measure of difference and where the upper and lower limits of the confidence interval were very close between two estimates, a Chi Square test was performed to confirm whether or not the difference was statistically significant. The Chi Square statistic is a more powerful statistic than the confidence interval and less likely to miss significant differences where they exist. Chi square statistics have been shown in brackets where they have been used.

3.3 Using this report

This report has been generated to be a reference document and therefore contains little interpretative text. The confidence intervals should be used to determine statistical significance if no text has been provided. If more detailed information is required or interpretation needed, please contact the Health Survey Unit, Epidemiology Branch, Health Department of Western Australia.

4. TRENDS OVER TIME

One of the strengths of the HWSS is its ability to show changes over time. Therefore, trends for selected major health conditions and risk factors have been provided.

The prevalence or proportion of males and females who reported a selected condition/risk factor of interest was derived for each year from 2002 to 2012.

As chronic conditions were not always asked of 16 to 24 year olds until 2006, chronic condition estimates are presented for 25 year olds and over to ensure comparability across years. To guarantee any changes in prevalence estimates are not the result of changes in the age and sex distribution of the population, all years have been standardised by weighting them to the 2006 Estimated Resident Population. As a result, 2012 estimates presented in trend tables may differ slightly from 2012 estimates presented in prevalence tables due to the standardising of estimates to different populations.

Physical activity trends are shown for adults aged between 16 and 64 years as until 2006, older adults were not asked the Active Australia questions that the physical activity estimates are based on.

Small changes in estimates from those presented in previous reports may occur due to the standardising of the estimates and updated population estimates.

5. DEMOGRAPHICS

The demographic characteristics of the adult sample that participated in the 2012 HWSS collection period are shown in Table 2. The table shows the unweighted number in the sample for each group and the weighted prevalence expressed as a percent.

Table 2: Demographic characteristics, 16 years & over, HWSS 2012

	Unweighted Sample (n)	Estimated Prevalence (%)
Age		
16 to 24 yrs	315	16.1
25 to 44 yrs	945	37.0
45 to 64 yrs	2,520	31.6
65 yrs & over	2,137	15.2
Gender		
Females	3,727	49.9
Males	2,190	50.1
Australian Born		
Yes	4,098	65.5
No	1,819	34.5
Aboriginal or Torres Strait Islander		
Yes	87	1.4
No	5,829	98.6
Marital Status		
Married	3,462	57.5
De facto	438	10.5
Widowed	711	3.5
Divorced	475	4.1
Separated	162	1.5
Never married	663	22.9
Region of Residence		
Metro	2,862	78.6
Rural	2,356	14.9
Remote	699	6.6
Health Region		
North Metro	1,400	37.5
South Metro	1,462	41.0
Kimberley	190	2.0
Pilbara	175	2.2
Midwest	397	2.6
Goldfields	334	2.4
Wheatbelt	470	2.8
Great Southern	477	3.0
South West	1,012	6.5

The socio-demographic characteristics of the sample and the weighted population estimates are shown in Table 3 and Table 4.

Table 3: Socio-demographic characteristics, 16 years & over, HWSS 2012

	Unweighted Sample (n)	Estimated Prevalence (%)
Current Place of Living		
Rented from govt or public authority	225	2.3
Rented privately	569	14.9
Being paid off by you/your partner	1,471	35.9
Fully owned/outright owner	3,434	41.8
Other	185	5.1
Current Living Arrangment		
Living with parent(s)	304	14.7
Living with other family members	311	4.9
Living with friends	46	2.4
Living with a partner and children	1,369	34.1
Living with a partner but no children	2,395	32.1
Living alone	1,355	9.7
Living in a nursing home	7	0.1
Living in a retirement village	56	0.4
Other living arrangement	71	1.6
Household income		
Under $20,000	829	8.2
$20,000 to $40,000	980	13.8
$40,000 to $60,000	583	11.6
$60,000 to $80,000	516	11.9
$80,000 to $100,000	495	13.0
$100,000 to $120,000	372	11.1
$120,000 to $140,000	287	10.0
More than $140,000	603	20.5
Household spending		
Spend more money than earn/get	199	3.3
Have just enough money to get by	982	16.8
Spend left over money	397	7.4
Save a bit every now and then	1,634	26.5
Save some regularly	1,916	36.1
Save a lot	511	9.9

Table 4: Socio-demographic characteristics, 16 years & over, continued, HWSS 2012

	Unweighted Sample (n)	Estimated Prevalence (%)
Highest level of education (a)		
Less than Year 10	608	4.9
Year 10 or Year 11	1,118	13.3
Year 12	632	14.7
TAFE/Trade qualification	2,334	39.8
Tertiary degree or equivalent	1,138	27.3
Employment status		
Self employed	789	12.4
Employed for wages, salary or payment in kind	2,233	50.1
Unemployed for less than one year	65	1.5
Unemployed for more than one year	31	1.0
Engaged in home duties	327	6.5
Retired	2,128	16.6
Unable to work	136	2.1
A student	175	9.4
Other	28	0.3
Receiving a government pension		
Yes	2,038	19.8
No	3,864	80.2
Possess a government health care card		
Yes	2,317	24.8
No	3,583	75.2
Possess private health insurance		
Yes - Hospital only	158	3.1
- Ancillary only	333	5.0
- Both hospital and ancillary	3,485	62.8
No	1,871	29.0

(a) Excludes respondents who are currently still at school.

In 2008, a set of new questions were added about working patterns. People aged 16 to 64 years who were employed were asked whether they did fly-in fly-out work which took them away from home for a set period each week or month, and whether they were a shift worker. The prevalence of working away and shift work are shown in Table 5.

Table 5: Prevalence of working away and shiftwork, 16 to 64 years, HWSS, 2012

	Working Away		Shift Work	
	Unweighted Sample (n)	Estimated Prevalence (%)	Unweighted Sample (n)	Estimated Prevalence (%)
Age group				
16 to 44 years	34	4.6	72	8.8
45 to 64 years	54	4.7	138	8.3
16 to 64 years	88	4.6	210	8.6
Sex				
Males	72	7.7	112	9.6
Females	16	0.7	98	7.4
Persons	88	4.6	210	8.6

6. GENERAL HEALTH

Self-ratings of health are used internationally, with poor health ratings associated with increased mortality and psychological distress, and lower physical functioning compared with excellent or very good ratings.[6] Respondents were asked several questions regarding their general health, including their overall health status now and compared with one year ago, the SF8 (a quality of life measure) and questions regarding family members with disabilities. Table 6 shows respondents' self-reported general health status.

Table 6: Self-reported health status, by age and sex, HWSS 2012

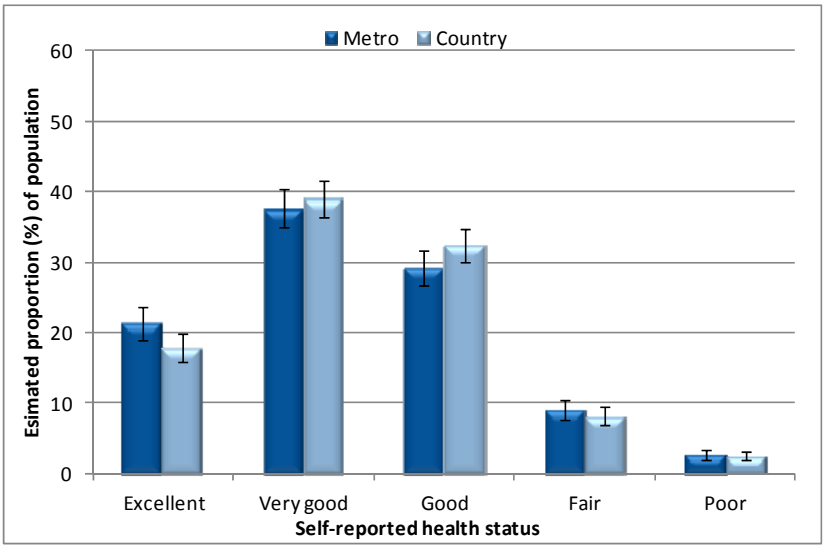
	Excellent		Very good		Good		Fair		Poor	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
16 to 44 yrs										
Males	25.4	(20.0 - 30.8)	41.7	(35.9 - 47.5)	26.5	(21.2 - 31.9)	5.1	(3.1 - 7.0)	1.3	(0.0 - 2.6)
Females	25.6	(21.4 - 29.8)	39.8	(35.0 - 44.5)	25.0	(20.8 - 29.1)	8.0	(5.0 - 11.0)	1.7	(0.4 - 2.9)
Persons	25.5	(22.1 - 29.0)	40.7	(37.0 - 44.5)	25.8	(22.4 - 29.2)	6.5	(4.7 - 8.3)	1.5	(0.6 - 2.4)
45 to 64 yrs										
Males	15.3	(12.1 - 18.5)	34.9	(30.8 - 39.0)	36.1	(32.0 - 40.2)	10.1	(7.4 - 12.8)	3.7	(2.3 - 5.1)
Females	17.3	(15.0 - 19.7)	37.2	(34.1 - 40.3)	32.0	(29.0 - 35.0)	9.6	(7.9 - 11.4)	3.8	(2.6 - 5.0)
Persons	16.3	(14.3 - 18.3)	36.0	(33.5 - 38.6)	34.1	(31.5 - 36.6)	9.9	(8.3 - 11.5)	3.7	(2.8 - 4.7)
65 yrs & over										
Males	10.6	(8.1 - 13.1)	32.2	(28.4 - 36.1)	36.9	(32.9 - 40.8)	15.1	(12.2 - 18.0)	5.2	(3.5 - 6.9)
Females	13.1	(10.9 - 15.4)	31.5	(28.5 - 34.6)	34.6	(31.5 - 37.7)	15.8	(13.4 - 18.2)	5.0	(3.5 - 6.4)
Persons	12.0	(10.3 - 13.7)	31.9	(29.4 - 34.3)	35.7	(33.2 - 38.1)	15.5	(13.6 - 17.3)	5.1	(4.0 - 6.2)
Total										
Males	20.1	(17.0 - 23.3)	38.2	(34.7 - 41.7)	31.0	(27.8 - 34.2)	8.1	(6.6 - 9.5)	2.6	(1.7 - 3.5)
Females	20.9	(18.6 - 23.3)	37.6	(34.9 - 40.3)	28.8	(26.4 - 31.2)	9.8	(8.1 - 11.5)	2.9	(2.1 - 3.7)
Persons	20.5	(18.6 - 22.5)	37.9	(35.7 - 40.1)	29.9	(27.9 - 31.9)	8.9	(7.8 - 10.1)	2.7	(2.2 - 3.3)

The proportion of respondents reporting their health status as excellent or very good decreased significantly with age, with those aged 16 to 44 years 1.5 times more likely to report this compared with respondents aged 65 years and over (66.2% compared with 43.9%).

About one in nine respondents (11.6%) reported that their health was fair or poor and there was a linear increase with age in the proportion reporting this.

Figure 1 shows respondents' self-reported general health by geographic areas of residence.

Figure 1: Self-reported health status, by geographic area of residence in WA, HWSS 2012



There were no significant differences between the metro and country areas for self-reported health status.

Respondents were asked how they would rate their health in general now compared to one year ago, as shown in Table 7.

Table 7: Self-reported health status compared with one year ago, by age and sex, HWSS 2012

	Much better		Somewhat better		About the same		Somewhat worse		Much worse	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
16 to 44 yrs										
Males	13.8	(9.6 - 17.9)	21.1	(16.1 - 26.2)	53.9	(47.9 - 59.8)	10.4	(7.0 - 13.8)	0.8	(0.0 - 1.7)
Females	12.2	(9.2 - 15.1)	20.3	(16.3 - 24.4)	59.2	(54.4 - 63.9)	7.1	(4.8 - 9.4)	1.2	(0.1 - 2.3)
Persons	13.0	(10.4 - 15.6)	20.7	(17.5 - 24.0)	56.4	(52.6 - 60.3)	8.8	(6.7 - 10.8)	1.0	(0.3 - 1.7)
45 to 64 yrs										
Males	7.8	(5.5 - 10.2)	13.6	(10.6 - 16.6)	65.2	(61.1 - 69.3)	11.9	(9.2 - 14.7)	1.5	(0.2 - 2.7)
Females	9.0	(7.1 - 10.8)	14.8	(12.5 - 17.1)	63.7	(60.6 - 66.8)	11.0	(9.0 - 13.0)	1.6	(0.9 - 2.2)
Persons	8.4	(6.9 - 9.9)	14.2	(12.3 - 16.1)	64.4	(61.9 - 67.0)	11.5	(9.8 - 13.2)	1.5	(0.8 - 2.2)
65 yrs & over										
Males	5.9	(3.9 - 7.9)	9.3	(6.9 - 11.7)	64.7	(60.7 - 68.6)	17.2	(14.1 - 20.3)	3.0	(1.7 - 4.3)
Females	5.0	(3.6 - 6.4)	9.9	(7.9 - 11.8)	62.5	(59.3 - 65.7)	19.0	(16.5 - 21.6)	3.6	(2.4 - 4.8)
Persons	5.4	(4.2 - 6.6)	9.6	(8.1 - 11.1)	63.5	(61.0 - 66.0)	18.2	(16.2 - 20.1)	3.3	(2.4 - 4.2)
Total										
Males	10.8	(8.4 - 13.2)	17.1	(14.2 - 20.0)	58.9	(55.4 - 62.5)	11.8	(9.8 - 13.9)	1.3	(0.7 - 2.0)
Females	10.0	(8.3 - 11.6)	16.9	(14.6 - 19.2)	61.1	(58.4 - 63.8)	10.3	(8.9 - 11.7)	1.7	(1.1 - 2.3)
Persons	10.4	(8.9 - 11.8)	17.0	(15.1 - 18.8)	60.0	(57.8 - 62.3)	11.1	(9.8 - 12.3)	1.5	(1.1 - 2.0)

While three in five respondents (60.0%) reported their health status as about the same as one year ago, one in ten (10.4%) regarded their health as much better. Improvement in health status decreased significantly with age, with respondents aged 16 to 44 years twice as likely as those aged 65 years and over to report their health status as much better or somewhat better (33.7% compared with 15.0%).

6.1 Mental and physical functioning

Health status was also measured using the SF8 instrument, a quality-of-life measure that determines the effects of physical and mental health on day-to-day functioning. Two overall scores were derived from the SF8: a Mental Component Score (MCS), which measures the level of emotional wellbeing (shown in Figure 2) and a Physical Component Score (PCS), which measures the level of physical functioning (shown in Figure 3). Scores are standardised. Scores greater than 50 indicate a better than average health functioning while scores less than 50 indicate a lower than average functioning.[7]

Figure 2: Mean mental component scores, by age, HWSS 2012

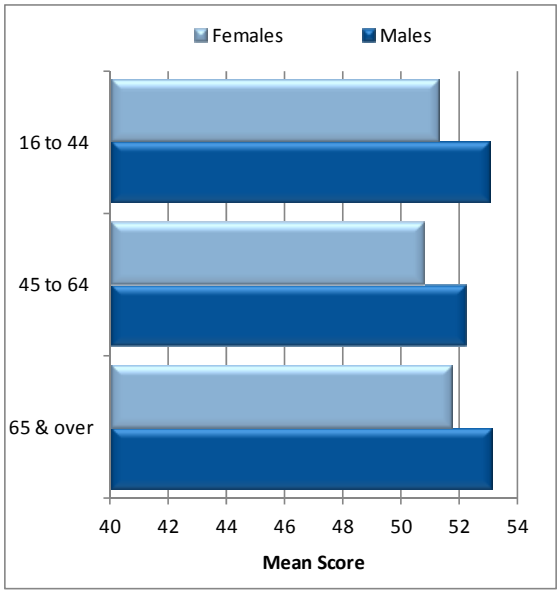
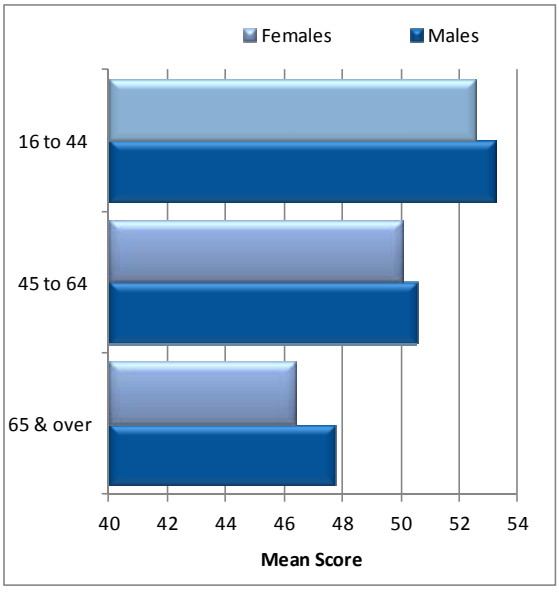


Figure 3: Mean physical component scores, by age, HWSS 2012



The PCS shows an age-related decrease in functioning for both males and females.

6.2 Disability

Disability may be experienced in terms of impairments of body functions and structures, activity limitations or participation restrictions.[6] Respondents were asked whether they or a family member had a disability, long-term illness or pain that put a burden on either them personally or on their family. Figure 4 shows the percent by gender. A significantly lower proportion of adults aged 16-44 years reported a family member with a disability compared with those aged 65 years and over (Males: 14.1% compared with 21.8%; Females: 16.4% compared with 27.4%). An estimated 370,943 Western Australians (19.9%) reported being in a family where at least one person had a disability. This is not significantly different to last year's estimate of 20.3%.[8]

Figure 4: Families where at least one person had a disability, long-term illness or pain that put a burden on either them personally or on their family, by age, HWSS 2012

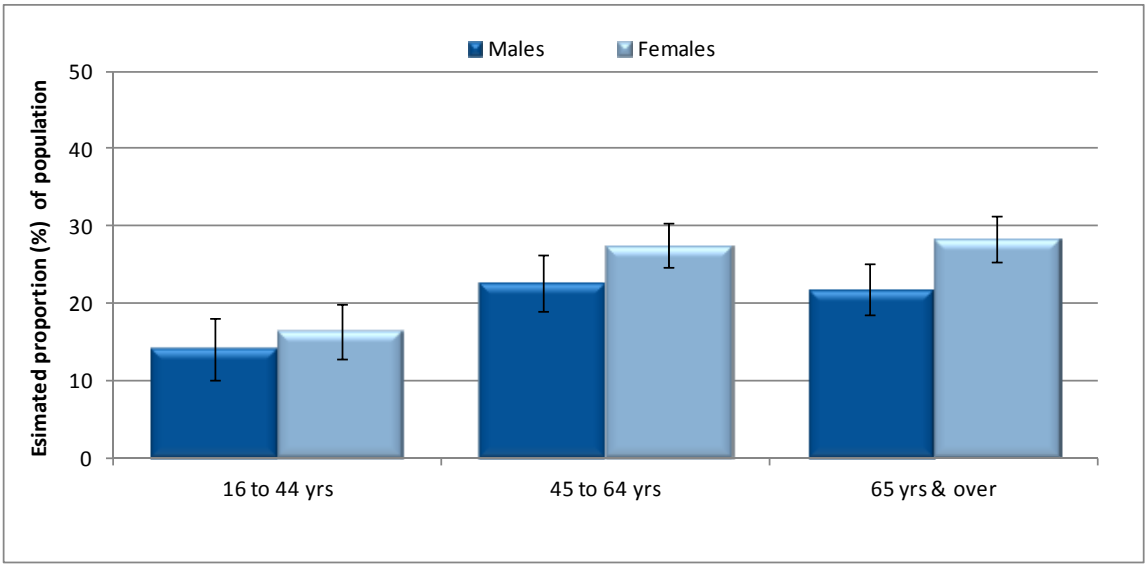


Figure 5 illustrates the proportion of the population affected by disability by geographic area of residence for adults 16 years and over. Compared with the State estimate the proportion of the population with a family member with a disability was similar in both metro and country areas.

Figure 5: Families where at least one person had a disability, long-term illness or pain that put a burden on either them personally or on their family, 16 years & over, by geographic area of residence in WA, HWSS 2012

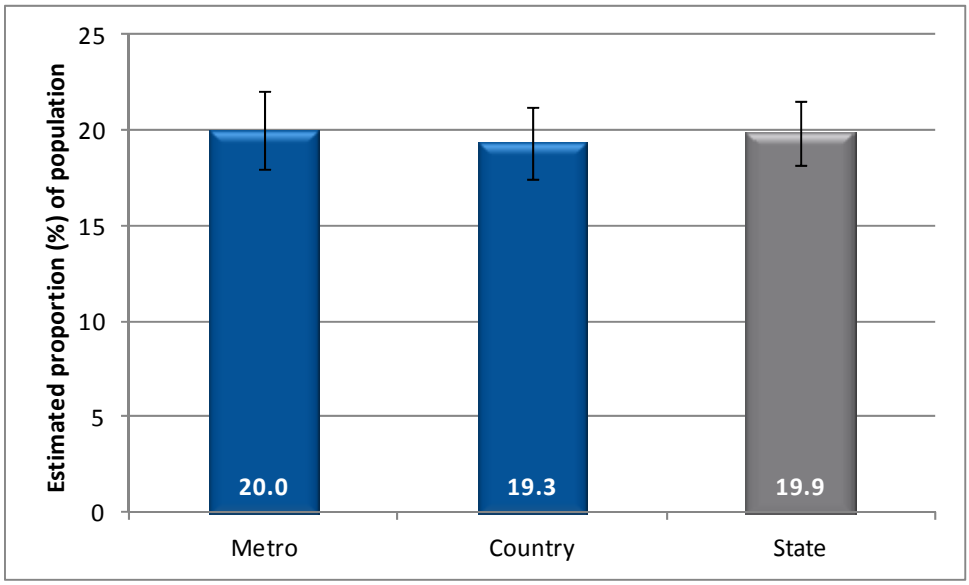


Table 8 shows how respondents rated the burden of the disability, long-term illness or pain that put a burden on either them personally, or on their family.

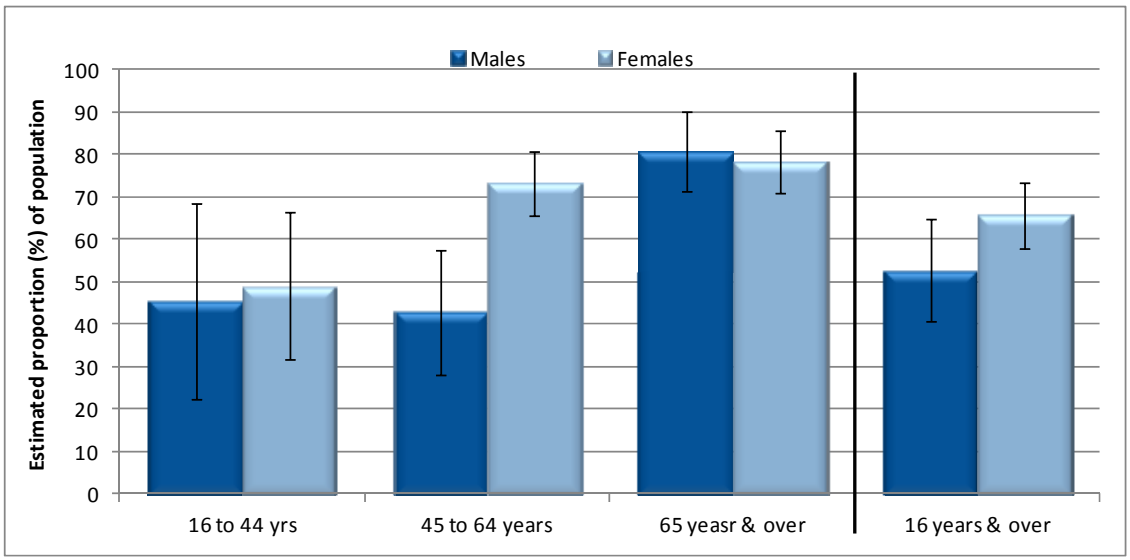
Table 8: Rating of burden on the family due to a disability, long-term illness or pain, age and sex, HWSS 2012

	Not much of a burden at all		A little burden		A fairly big burden		A big burden		A very big burden	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
16 to 44 yrs										
Males	14.0	(1.3 - 26.7)	46.4	(31.4 - 61.5)	19.3	(8.1 - 30.5)	10.2	(0.0 - 20.8)	10.0	(0.9 - 19.1)
Females	6.8	(2.6 - 11.1)	44.1	(32.6 - 55.6)	28.8	(17.9 - 39.7)	9.4	(2.8 - 16.0)	10.9	(3.1 - 18.6)
Persons	10.3	(3.7 - 16.8)	45.2	(35.8 - 54.5)	24.3	(16.4 - 32.2)	9.8	(3.7 - 15.9)	10.4	(4.5 - 16.4)
45 to 64 yrs										
Males	15.6	(9.4 - 21.8)	33.6	(24.9 - 42.3)	25.4	(17.9 - 32.9)	13.5	(6.7 - 20.2)	11.9	(5.9 - 17.9)
Females	11.2	(7.2 - 15.1)	28.7	(23.3 - 34.0)	36.0	(30.1 - 41.9)	15.2	(10.8 - 19.6)	9.0	(5.6 - 12.3)
Persons	13.2	(9.6 - 16.7)	30.9	(26.0 - 35.9)	31.2	(26.4 - 36.0)	14.4	(10.5 - 18.3)	10.3	(7.0 - 13.6)
65 yrs & over										
Males	20.0	(12.8 - 27.2)	35.1	(26.8 - 43.5)	28.0	(19.8 - 36.2)	8.8	(4.5 - 13.2)	8.1	(3.2 - 12.9)
Females	21.8	(16.3 - 27.3)	30.1	(24.2 - 36.1)	23.6	(18.1 - 29.0)	17.2	(12.3 - 22.1)	7.3	(4.0 - 10.6)
Persons	21.1	(16.7 - 25.4)	32.1	(27.2 - 37.0)	25.3	(20.7 - 29.9)	14.0	(10.5 - 17.5)	7.6	(4.8 - 10.3)
Total										
Males	15.7	(9.5 - 21.8)	39.4	(31.9 - 46.8)	23.2	(17.3 - 29.1)	11.3	(5.9 - 16.7)	10.4	(5.7 - 15.1)
Females	11.7	(9.1 - 14.4)	35.0	(29.8 - 40.2)	30.5	(25.5 - 35.5)	13.4	(10.1 - 16.7)	9.3	(6.0 - 12.7)
Persons	13.5	(10.4 - 16.7)	37.0	(32.6 - 41.4)	27.2	(23.4 - 31.1)	12.4	(9.4 - 15.5)	9.8	(7.0 - 12.6)

Of those respondents with a family member with some form of disability, long-term illness or pain, one in five report that this puts a big or very big burden on the family.

Respondents who reported themselves or a family member with a disability, long-term illness or pain that put a burden on themselves or their family were also asked if they are the principal carer of this family member, as shown in Figure 6.

Figure 6: Principal carers, by age, HWSS 2012



Respondents aged 16 to 44 years were significantly less likely to report being the principal carer compared with those aged 65 years and over (47.3% compared with 79.4%). Overall, females were more likely to be the principal carer compared to males (65.9% compared with 52.8%), however this difference was not statistically significant.

Respondents were asked whether they currently have any health problem that requires the use of special equipment, such as a cane, a wheelchair, a special bed or a special telephone, as shown in Table 9.

Table 9: Need aids or special equipment, by age and sex, HWSS 2012

	Yes		No	
	%	95% CI	%	95% CI
16 to 44 yrs				
Males	1.2	(0.0 - 2.4)	98.8	(97.6 - 100.0)
Females	0.3	(0.0 - 0.7)	99.7	(99.3 - 100.0)
Persons	0.8	(0.1 - 1.4)	99.2	(98.6 - 99.9)
45 to 64 yrs				
Males	6.1	(3.8 - 8.4)	93.9	(91.6 - 96.2)
Females	2.7	(1.9 - 3.6)	97.3	(96.4 - 98.1)
Persons	4.4	(3.2 - 5.6)	95.6	(94.4 - 96.8)
65 yrs & over				
Males	9.8	(7.5 - 12.1)	90.2	(87.9 - 92.5)
Females	15.6	(13.3 - 17.9)	84.4	(82.1 - 86.7)
Persons	12.9	(11.3 - 14.5)	87.1	(85.5 - 88.7)
Total				
Males	4.0	(2.9 - 5.0)	96.0	(95.0 - 97.1)
Females	3.6	(3.0 - 4.1)	96.4	(95.9 - 97.0)
Persons	3.8	(3.2 - 4.4)	96.2	(95.6 - 96.8)

While only 3.8% of the population reported that they had a health problem requiring the use of special equipment, such as a cane, a wheelchair, a special bed or a special telephone, this is equivalent to an estimated 70,452 people in WA.

7. CHRONIC HEALTH CONDITIONS

Chronic health conditions refer to long-term conditions (lasting more than six months) that can have a significant impact on a person's life. The chronic conditions collected by the HWSS are National Health Priority Areas due to their health impact and the potential to reduce their burden.[9] In the HWSS, chronic conditions were determined by asking respondents whether or not a doctor had ever diagnosed them with a number of common health conditions.

7.1 Arthritis and osteoporosis

Arthritis and osteoporosis are musculoskeletal conditions that can greatly reduce quality of life and hence are a National Health Priority Area. Arthritis causes inflammation of the joints, while osteoporosis is a disease where bone density and structural quality deteriorate, leading to an increased risk of fracture.[10] The lifetime prevalence of arthritis and osteoporosis are shown in Table 10.

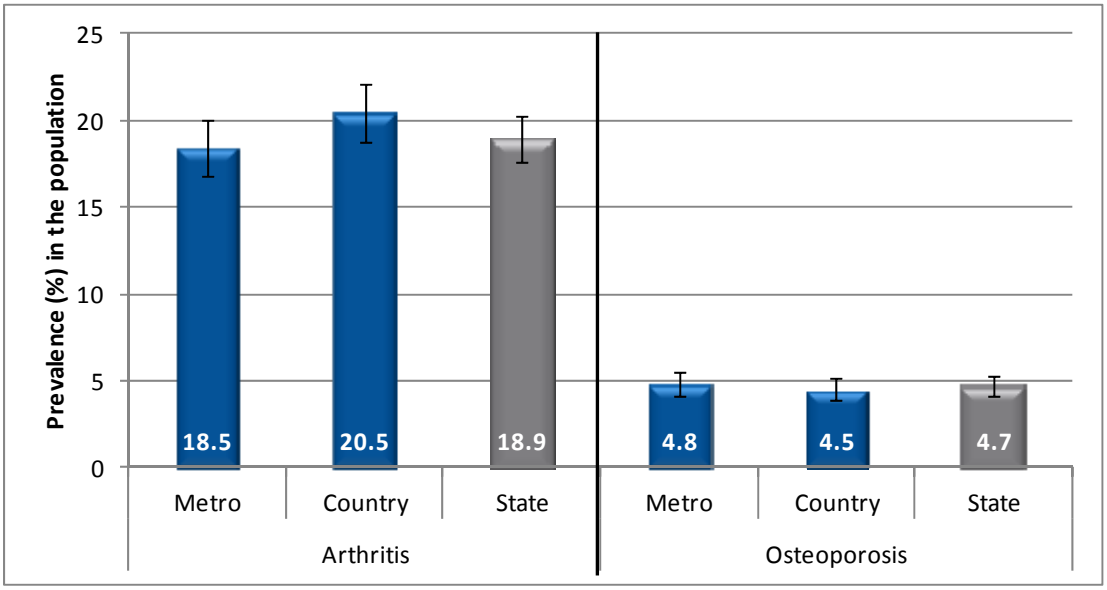
Table 10: Prevalence of arthritis and osteoporosis, 16 years & over, HWSS 2012

	Arthritis		Osteoporosis	
	%	95% CI	%	95% CI
16 to 44 yrs				
Males	4.7	(2.4 - 6.9)	0.2	(0.0 - 0.5)
Females	5.3	(3.3 - 7.4)	1.4	(0.3 - 2.4)
Persons	5.0	(3.5 - 6.5)	0.8	(0.2 - 1.3)
45 to 64 yrs				
Males	22.7	(19.1 - 26.2)	3.5	(2.1 - 4.8)
Females	30.8	(27.9 - 33.6)	7.2	(5.7 - 8.8)
Persons	26.7	(24.4 - 29.0)	5.3	(4.3 - 6.4)
65 yrs & over				
Males	41.8	(37.8 - 45.9)	7.6	(5.5 - 9.7)
Females	59.4	(56.2 - 62.7)	26.0	(23.1 - 28.9)
Persons	51.3	(48.7 - 53.9)	17.4	(15.5 - 19.3)
Total				
Males	15.5	(13.6 - 17.5)	2.3	(1.7 - 2.8)
Females	22.2	(20.4 - 24.0)	7.2	(6.3 - 8.2)
Persons	18.9	(17.6 - 20.2)	4.7	(4.2 - 5.3)

The prevalence of arthritis and osteoporosis increased significantly with age. Overall females were significantly more likely than males to report arthritis and osteoporosis and females aged 65 years and over were over three times more likely to report osteoporosis than males of the same age.

Figure 7 shows the lifetime prevalence of arthritis and osteoporosis by geographic area of residence.

Figure 7: Prevalence of arthritis and osteoporosis, 16 years & over, by geographic area of residence in WA, HWSS 2012



The standardised annual prevalence estimates of arthritis and osteoporosis for adults aged 25 years and over are shown in Table 11. The prevalence of arthritis has been lower for all persons since 2004. The prevalence of arthritis was significantly lower in males and all persons in 2012 compared to 2003. The prevalence of osteoporosis was highest in 2004 for females and all persons and was highest in 2007 for males.

Table 11: Trend for arthritis and osteoporosis, 25 years & over, HWSS 2002 – 2012

	Arthritis			Osteoporosis		
	Males	Females	Persons	Males	Females	Persons
2002	20.8	28.1	24.5	na	na	na
2003	23.1	28.5	25.8	2.1	8.0	5.1
2004	20.3	31.4	25.9	2.1	9.7	5.9
2005	22.0	28.3	25.2	2.8	8.8	5.8
2006	20.5	28.5	24.5	1.7	8.4	5.6
2007	20.1	28.1	24.1	2.9	8.2	5.5
2008	20.3	27.9	24.1	2.4	9.1	5.7
2009	19.7	27.2	23.5	2.4	8.5	5.5
2010	21.2	26.2	23.7	2.5	8.8	5.7
2011	18.2	26.9	22.6	2.6	8.0	5.3
2012	18.5	25.7	22.1	2.7	8.5	5.6
Average	20.3	27.8	24.1	2.6	8.8	5.7

na This information is not available in 2002.

7.2 Heart disease and stroke

Cardiovascular disease, such as heart disease and stroke, is the largest cause of premature death in Australia and accounts for the highest proportion of health system costs, much of which is preventable.[11] The lifetime prevalence of heart disease and stroke are shown in Table 12.

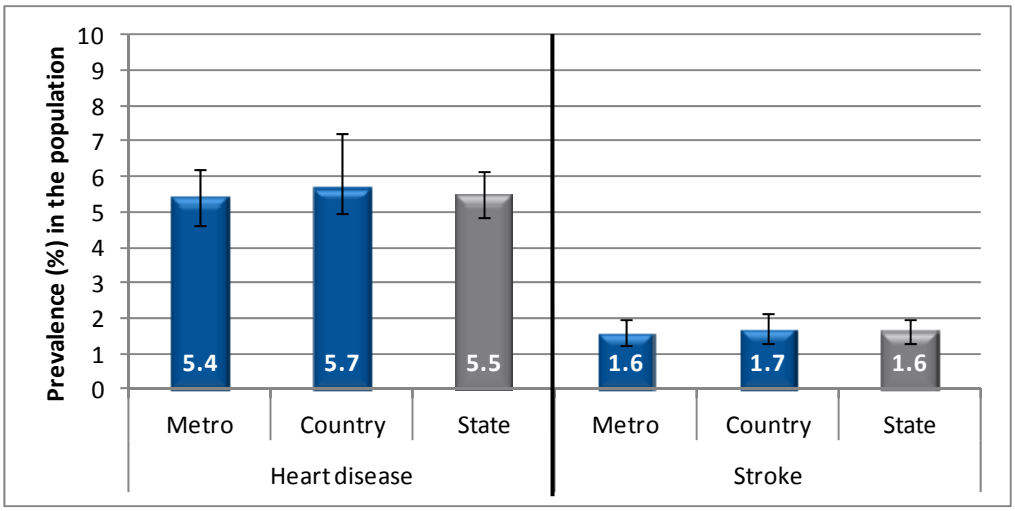
Table 12: Prevalence of heart disease and stroke, 16 years & over, HWSS 2012

	Heart Disease		Stroke	
	%	95% CI	%	95% CI
16 to 44 yrs				
Males	1.1	(0.1 - 2.1)	0.3	(0.0 - 0.9)
Females	0.6	(0.0 - 1.3)	0.1	(0.0 - 0.2)
Persons	0.9	(0.3 - 1.5)	0.2	(0.0 - 0.5)
45 to 64 yrs				
Males	7.2	(5.0 - 9.4)	1.7	(0.8 - 2.7)
Females	4.0	(2.8 - 5.2)	1.4	(0.6 - 2.1)
Persons	5.6	(4.3 - 6.9)	1.5	(1.0 - 2.1)
65 yrs & over				
Males	28.5	(24.8 - 32.2)	8.8	(6.5 - 11.2)
Females	15.2	(12.8 - 17.5)	5.0	(3.6 - 6.3)
Persons	21.3	(19.2 - 23.5)	6.8	(5.5 - 8.1)
Total				
Males	6.9	(5.7 - 8.0)	2.0	(1.4 - 2.5)
Females	4.1	(3.4 - 4.8)	1.3	(1.0 - 1.6)
Persons	5.5	(4.8 - 6.1)	1.6	(1.3 - 1.9)

The prevalence of heart disease and stroke increased significantly with age. Respondents aged 65 years and over were 23 times more likely to report heart disease and 34 times more likely to report stroke compared with those aged 16 to 44 years. The prevalence of heart disease was significantly greater in males compared with females (6.9% compared with 4.1%).

Figure 8 shows the prevalence of heart disease and stroke by geographic area. For both heart disease and stroke the prevalence in each geographic are was similar to the State.

Figure 8: Prevalence of heart disease and stroke, 16 years & over, by geographic area of residence in WA, HWSS 2012



The standardised annual prevalence estimates of heart disease and stroke for adults aged 25 years and older are shown in Table 13. For both heart disease and stroke the prevalence for all groups has remained relatively stable over time.

Table 13: Trend for heart disease and stroke, 25 years & over, HWSS 2002 – 2012

	Heart disease			Stroke		
	Males	Females	Persons	Males	Females	Persons
2002	9.1	6.4	7.7	2.2	1.3	1.7
2003	8.9	4.5	6.7	2.5	2.5	2.5
2004	9.6	6.4	8.0	3.1	2.1	2.6
2005	8.7	5.8	7.3	1.8	1.8	1.8
2006	9.3	5.2	7.6	2.7	1.6	2.1
2007	9.2	5.9	7.6	3.0	1.7	2.3
2008	7.8	5.0	6.4	2.6	2.2	2.4
2009	8.3	5.4	6.9	2.6	2.0	2.3
2010	8.9	5.0	6.9	2.4	1.6	2.0
2011	8.6	5.7	7.1	2.5	1.9	2.2
2012	8.3	4.8	6.5	2.3	1.5	1.9
Average	8.6	5.5	7.1	2.5	1.9	2.2

7.3 Cancer and skin cancer

Cancer is regarded as a complex set of diseases characterised by the abnormal proliferation of cells that do not respond to normal growth controls.[6] Cancer is a National Health Priority Area and skin cancer is one of the eight priority cancers.[12] Respondents were asked if they had ever been diagnosed with skin cancer or any other cancer other than skin cancer, as shown in Table 14.

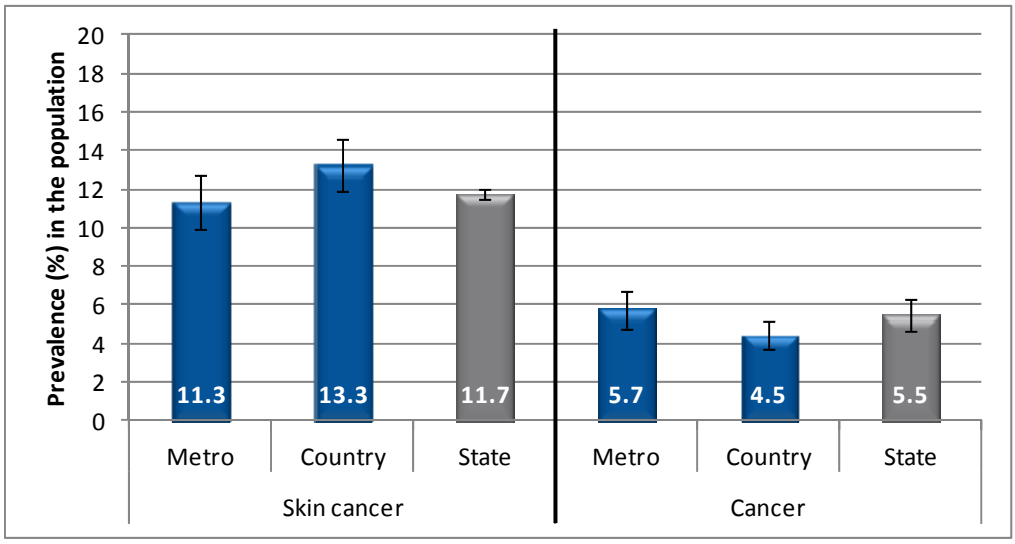
Table 14: Prevalence of cancer and skin cancer, 16 years & over, HWSS 2012

	Skin Cancer		Cancer	
	%	95% CI	%	95% CI
16 to 44 yrs				
Males	3.8	(0.9 - 6.7)	0.8	(0.0 - 1.6)
Females	2.0	(0.9 - 3.1)	3.7	(1.6 - 5.9)
Persons	2.9	(1.4 - 4.5)	2.2	(1.1 - 3.4)
45 to 64 yrs				
Males	17.7	(14.5 - 20.8)	5.3	(3.3 - 7.3)
Females	14.9	(12.7 - 17.1)	7.6	(5.9 - 9.3)
Persons	16.3	(14.4 - 18.2)	6.4	(5.1 - 7.7)
65 yrs & over				
Males	38.4	(34.4 - 42.4)	16.2	(13.1 - 19.3)
Females	28.4	(25.5 - 31.3)	13.6	(11.3 - 15.8)
Persons	33.1	(30.6 - 35.5)	14.8	(12.9 - 16.7)
Total				
Males	13.0	(11.0 - 15.1)	4.4	(3.4 - 5.3)
Females	10.4	(9.3 - 11.6)	6.6	(5.3 - 7.9)
Persons	11.7	(10.6 - 12.9)	5.5	(4.7 - 6.3)

The prevalence of skin cancer was higher than cancer for all age groups, significantly so for the 45 to 64 year olds (16.3% compared with 6.4%) and the 65 years and over age group (33.1% compared with 14.8%). Males were significantly more likely to report having skin cancer than females (13.0% compared with 10.4%, $x^2 = 9.869$, $df = 1$, $p = 0.02$). While females were significantly more likely to report any other type of cancer compared with males (6.6% compared with 4.4%, $x^2 = 13.917$, $df = 1$, $p = 0.005$).

Figure 9 shows the prevalence of skin cancer and cancer by geographic area. The prevalence of skin cancer was slightly higher in country areas in WA, but not statistically significant. The prevalence of all other cancers was significantly lower in the country compared with the metro (4.5% compared with 5.7%, x^2 = 3.054, *df* = 1, p = 0.04).

Figure 9: Prevalence of skin cancer and cancer, 16 years & over, by geographic area of residence in WA, HWSS 2012



The cancer information is not comparable from 2002 due to changes in the way the question was asked. However, since 2007 question wording has been consistent and the standardised annual prevalence estimates of cancer for adults aged 16 years and over since 2007 are shown in Table 15. Based on the yearly prevalence estimates for cancer, there were no statistically significant changes over time for males. For females and all persons the estimates reported in 2012 were significantly higher compared with 2008 for both and 2009 for all persons.

Table 15: Trend for cancer, excluding skin cancer, 25 years & over, HWSS 2007 – 2012

	Males	Females	Persons
2007	4.3	5.6	5.0
2008	4.4	5.2	4.8
2009	4.2	5.6	4.9
2010	4.8	5.7	5.3
2011	4.0	6.3	5.2
2012	5.3	7.7	6.5
Average	4.7	6.4	5.6

7.4 Diabetes

Diabetes is a condition where the body is unable to maintain normal blood glucose levels. Diabetes contributes significantly to ill health, disability and premature death in Australia and is a National Health Priority Area.[13] The lifetime prevalence of diabetes is shown in Table 16.

Table 16: Prevalence of diabetes, 16 years & over, HWSS 2012

	%	95% CI
16 to 44 yrs		
Males	0.5	(0.0 - 1.0)
Females	5.2	(3.2 - 7.3)
Persons	2.8	(1.7 - 3.9)
45 to 64 yrs		
Males	9.5	(7.2 - 11.9)
Females	6.7	(5.1 - 8.4)
Persons	8.1	(6.7 - 9.6)
65 yrs & over		
Males	18.3	(15.1 - 21.5)
Females	13.2	(11.0 - 15.4)
Persons	15.5	(13.7 - 17.4)
Total		
Males	5.8	(4.8 - 6.8)
Females	7.0	(5.8 - 8.3)
Persons	6.4	(5.6 - 7.2)

Just over one in fifteen respondents (6.4%) reported having ever been diagnosed with diabetes; this represents approximately 119,972 people, with three in four of these people being diagnosed with Type II diabetes (Table 17). Among 16 to 44 year olds, females were significantly more likely to report being diagnosed with diabetes than males (5.2% compared with 0.5%), however the majority of these (61.6%) were gestational diabetes (Table 17).

Figure 10 illustrates the prevalence of diabetes in WA adults by geographic area of residence. The prevalence of diabetes was slightly higher among metro residents (6.6%) compared with country residents (5.7%) however this difference was not statistically significant.

Figure 10: Prevalence of diabetes, 16 years & over, by geographic area of residence in WA, HWSS 2012

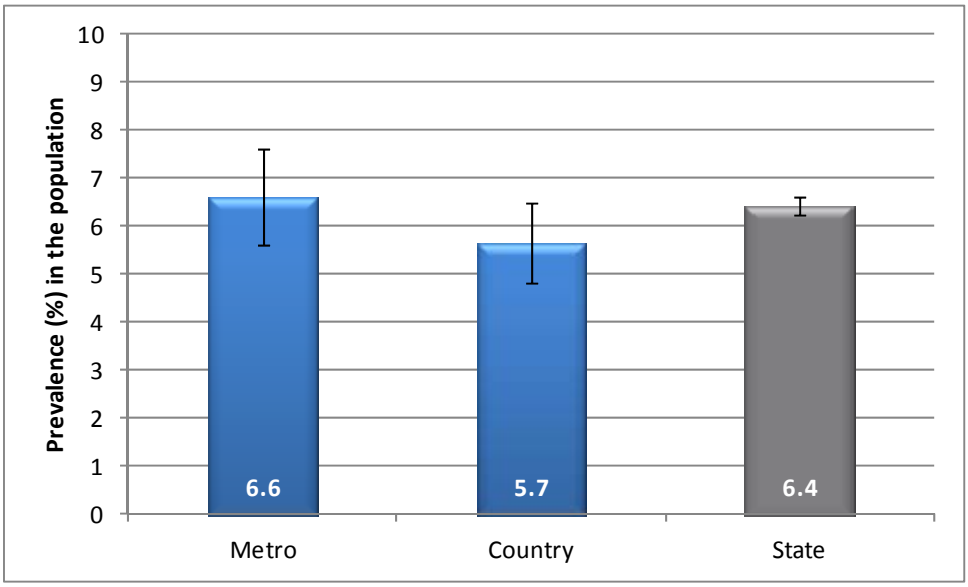


Table 17: Type of diabetes, 16 years & over, HWSS 2012

	Type I (a)		Type II (b)		Gestational		Other		Don't know	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
16 to 44 yrs										
Males	59.1	(5.7 - 100.0)	40.9	(0.0 - 94.3)	na		0.0	(0.0 - 0.0)	0.0	(0.0 - 0.0)
Females	5.6	(0.0 - 12.5)	29.6	(11.6 - 47.6)	61.6	(42.4 - 80.7)	0.0	(0.0 - 0.0)	3.2	(0.0 - 9.5)
Persons	10.0	(0.0 - 21.1)	30.5	(13.6 - 47.5)	na		0.0	(0.0 - 0.0)	3.0	(0.0 - 8.7)
45 to 64 yrs										
Males	15.4	(5.9 - 24.9)	84.6	(75.1 - 94.1)	na		0.0	(0.0 - 0.0)	0.0	(0.0 - 0.0)
Females	8.2	(1.8 - 14.6)	76.3	(66.1 - 86.5)	12.4	(4.4 - 20.4)	2.0	(0.0 - 5.0)	1.1	(0.0 - 3.2)
Persons	12.4	(6.2 - 18.6)	81.2	(74.2 - 88.1)	na		0.8	(0.0 - 2.1)	0.4	(0.0 - 1.3)
65 yrs & over										
Males	0.2	(0.0 - 0.6)	95.9	(91.9 - 99.9)	na		2.0	(0.0 - 4.8)	2.0	(0.0 - 4.8)
Females	5.8	(1.7 - 9.8)	92.2	(87.8 - 96.7)	1.1	(0.0 - 2.5)	0.8	(0.0 - 2.0)	0.2	(0.0 - 0.5)
Persons	2.7	(0.8 - 4.6)	94.2	(91.2 - 97.2)	na		1.4	(0.0 - 3.1)	1.1	(0.0 - 2.7)
Total										
Males	10.5	(3.9 - 17.2)	87.7	(80.9 - 94.5)	na		0.9	(0.0 - 2.1)	0.9	(0.0 - 2.1)
Females	6.4	(2.9 - 10.0)	63.0	(53.1 - 73.0)	28.0	(17.7 - 38.3)	0.9	(0.0 - 1.8)	1.6	(0.0 - 4.2)
Persons	8.3	(4.6 - 12.0)	74.3	(67.5 - 81.0)	na		0.9	(0.1 - 1.6)	1.3	(0.0 - 2.8)

(a) Insulin dependent, juvenile onset.

(b) Non-insulin dependent, mature onset.

na data not collected for males and presentation of persons not applicable.

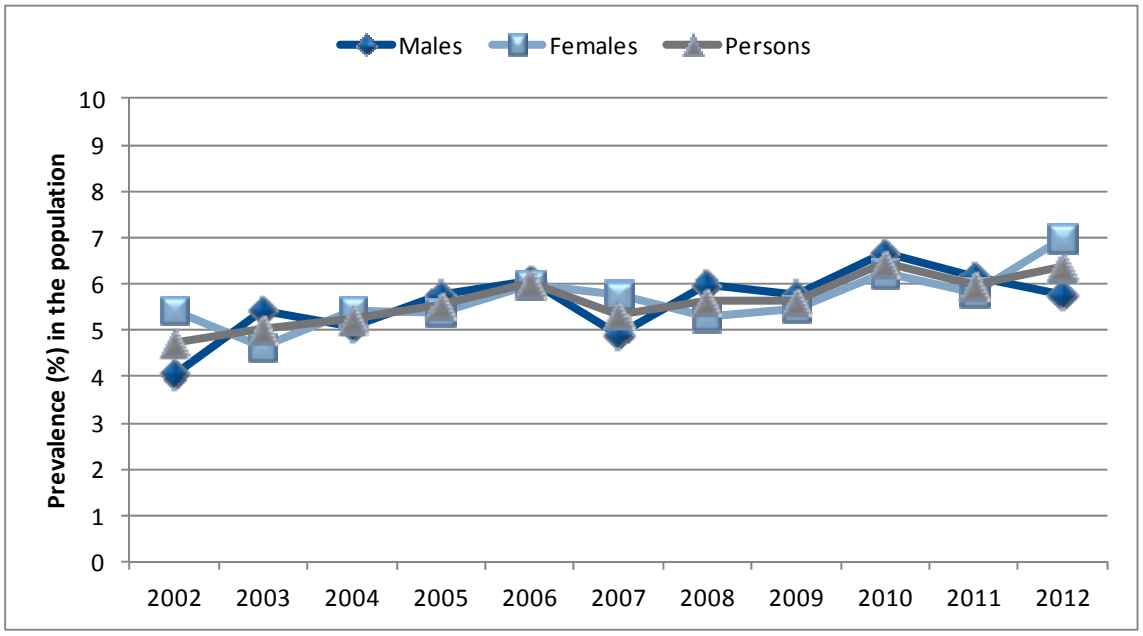
Note: These figures are based on small numbers, particularly the 16 to 44 year old age group, and for the categories other than Type II.

The standardised annual prevalence estimates of diabetes for adults aged 16 years and over are shown in Table 18 and Figure 11. For males and all persons the prevalence of diabetes increased significantly from 2002 compared with 2012, while in females the 2012 prevalence was the highest recorded and was significantly higher compared to the prevalence in 2003.

Table 18: Trend for diabetes, 16 years and over, HWSS 2002-2012

	Males	Females	Persons
2002	4.0	5.4	4.7
2003	5.4	4.6	5.0
2004	5.1	5.4	5.3
2005	5.8	5.4	5.6
2006	6.1	6.0	6.0
2007	4.9	5.8	5.3
2008	6.0	5.3	5.6
2009	5.8	5.5	5.6
2010	6.7	6.3	6.5
2011	6.1	5.8	6.0
2012	5.8	7.0	6.4
Average	5.7	5.7	5.7

Figure 11: Trends for diabetes, by year, 16 years and over, HWSS 2002-2012



7.5 Injury

Injury is a leading cause of hospitalisation and death in Australia and is a National Health Priority Area. One of the major contributors to the injury burden arises from the management of injuries in older people that resulted from falls.[14] Respondents were asked whether they had injuries in the past 12 months that required treatment from a health professional and if so, whether these injuries were due to falls, shown in Table 19.

Table 19: Prevalence of injuries and falls in past 12 months, 16 years & over, HWSS 2012

	Injury		Proportion of injuries due to falls (a)		Injury due to falls, all respondents (b)	
	%	95% CI	%	95% CI	%	95% CI
16 to 44 yrs						
Males	33.8	(28.0 - 39.6)	37.3	(26.0 - 48.6)	12.6	(7.8 - 17.4)
Females	23.2	(19.0 - 27.3)	23.8	(15.1 - 32.5)	5.5	(3.3 - 7.8)
Persons	28.6	(25.0 - 32.3)	32.0	(24.1 - 39.8)	9.2	(6.4 - 11.9)
45 to 64 yrs						
Males	21.7	(18.2 - 25.2)	20.5	(13.3 - 27.7)	4.4	(2.7 - 6.1)
Females	22.4	(19.6 - 25.2)	27.8	(21.8 - 33.8)	6.2	(4.8 - 7.7)
Persons	22.0	(19.8 - 24.3)	24.2	(19.5 - 28.9)	5.3	(4.2 - 6.4)
65 yrs & over						
Males	12.6	(9.9 - 15.3)	30.6	(20.1 - 41.0)	3.8	(2.3 - 5.4)
Females	16.1	(13.7 - 18.5)	53.8	(45.8 - 61.9)	8.6	(6.9 - 10.4)
Persons	14.5	(12.7 - 16.3)	44.5	(37.9 - 51.0)	6.4	(5.2 - 7.6)
Total						
Males	27.0	(23.6 - 30.4)	32.6	(24.4 - 40.7)	8.8	(6.1 - 11.5)
Females	21.8	(19.4 - 24.1)	28.7	(23.4 - 34.1)	6.3	(5.0 - 7.5)
Persons	24.4	(22.3 - 26.5)	30.9	(25.7 - 36.0)	7.5	(6.0 - 9.0)

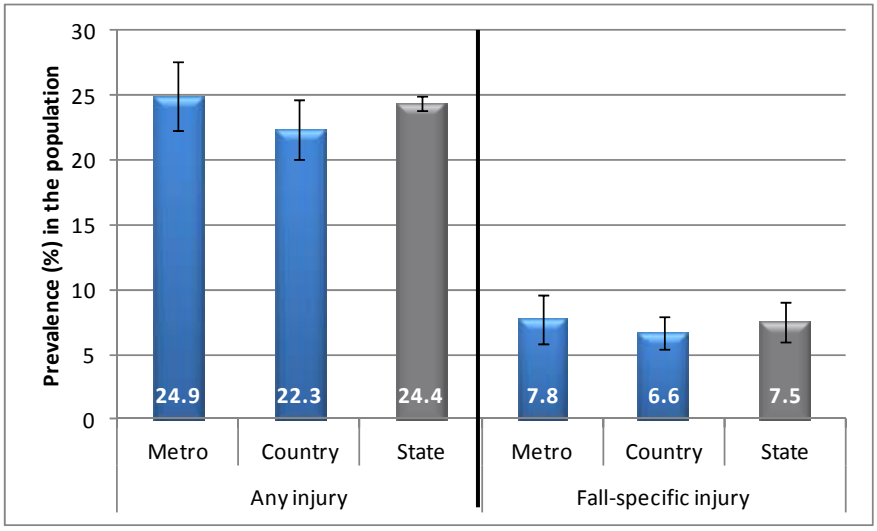
(a) As a proportion of respondents reporting an injury.

(b) As a proportion of all respondents.

Nearly one in four respondents (24.4%) reported an injury in the past 12 months that required treatment from a health professional, with almost one-third of these (30.9%) being the result of a fall.

Figure 12 show the prevalence of injuries and falls in the past 12 months by geographic area of residence. There were no statistically significant differences in injuries or falls by geographic area, however, descriptively the prevalence estimates were slightly higher in the metro compared to the country.

Figure 12: Prevalence of any injury and fall in the past 12 months, 16 years & over, by geographic area of residence in WA, HWSS 2012



The standardised annual prevalence estimates of injury requiring treatment by a health professional for adults aged 16 years and over are shown in Table 20 and the mean numbers of injuries are shown in Table 21. There were no significant differences over time.

Table 20: Trend for injuries (a) in the last year, 16 years & over, HWSS 2002 – 2012

	Males	Females	Persons
2002	30.2	19.4	24.9
2003	30.6	19.0	24.8
2004	24.5	17.6	21.0
2005	26.7	16.8	21.8
2006	27.1	17.7	22.4
2007	29.2	19.5	24.4
2008	26.4	18.7	22.5
2009	24.5	18.7	21.6
2010	25.4	20.8	23.1
2011	27.4	21.7	24.6
2012	26.8	21.8	24.3
Average	27.3	19.9	23.6

(a) Injuries in the past 12 months that required treatment from a health professional

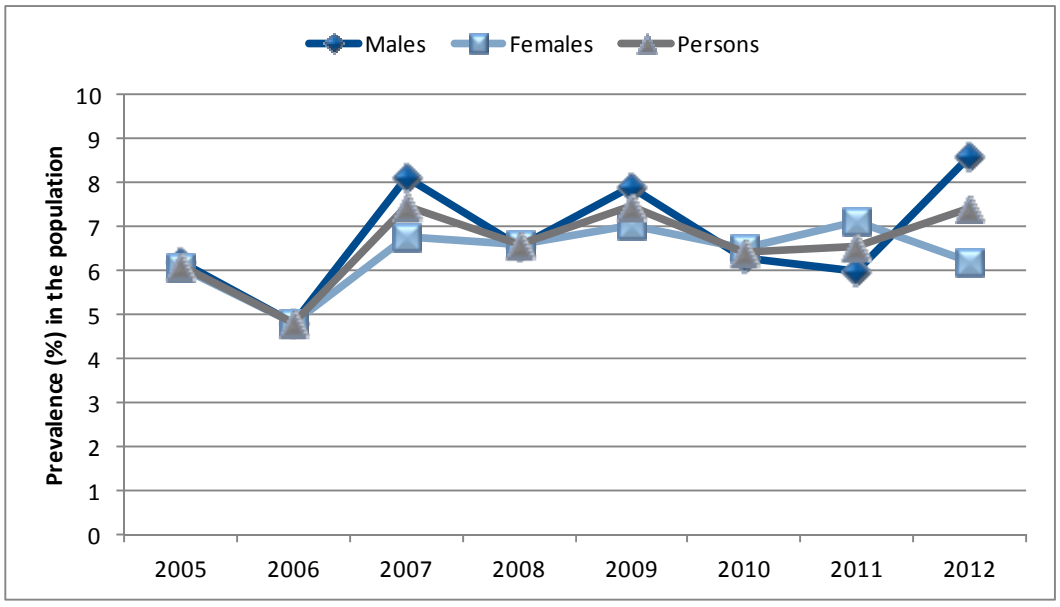
Table 21: Trend for mean number of injuries (a) in the last year, 16 years & over, HWSS 2002 – 2012

	Males	Females	Persons
2002	0.5	0.3	0.4
2003	0.5	0.3	0.4
2004	0.4	0.2	0.3
2005	0.4	0.2	0.3
2006	0.4	0.2	0.3
2007	0.5	0.3	0.4
2008	0.4	0.3	0.3
2009	0.3	0.3	0.3
2010	0.4	0.3	0.3
2011	0.5	0.3	0.4
2012	0.5	0.3	0.4
Average	0.4	0.3	0.4

(a) Injuries in the past 12 months that required treatment from a health professional

It is possible to have a mean number of injuries that is less than one as the majority of respondents do not experience any injury in the previous year. However this still equates to 648, 272 injuries that requires treatment by a health care professional in 2012 alone. Figure 13 illustrates the annual trend in the prevalence of falls in the past 12 months. For all persons, the prevalence of falls requiring treatment by a healthcare professional increased significantly from 2006 (4.8%) to 2012 (7.4%).

Figure 13: Trend for falls (a) in the last year, 16 years & over, HWSS 2005 – 2012



(a) Falls in the past 12 months that required treatment from a health professional

7.6 Asthma

Asthma is a common chronic condition and one of the National Health Priority Areas. It is a reversible narrowing of the airways in the lungs, with symptoms which include wheezing, coughing, tightness of the chest, breathing difficulty and shortness of breath.[15] Respondents were asked whether a doctor had ever told them they had asthma and whether they had symptoms or had taken treatment for asthma during the past 12 months. The prevalence of asthma is shown in Table 22.

Table 22: Prevalence of asthma, 16 years & over, HWSS 2012

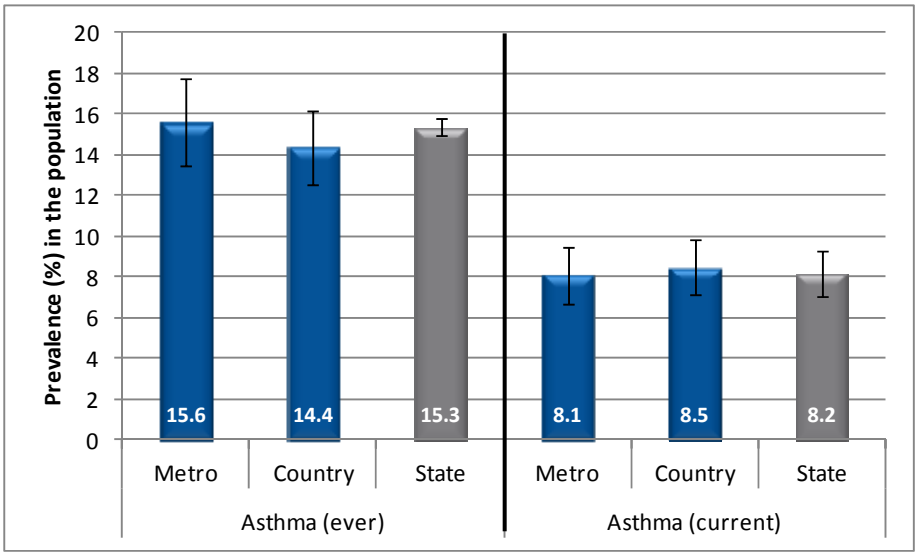
	Lifetime (ever)			Period (current) (a)		
	%	95% CI		%	95% CI	
16 to 44 yrs						
Males	17.4	12.7	22.2	5.6	3.2	8.1
Females	19.1	15.2	23.0	10.7	7.6	13.7
Persons	18.3	15.2	21.3	8.1	6.1	10.0
45 to 64 yrs						
Males	8.5	6.3	10.7	5.1	3.4	6.8
Females	15.5	13.2	17.9	11.4	9.3	13.5
Persons	12.0	10.4	13.6	8.2	6.9	9.6
65 yrs & over						
Males	8.7	6.5	10.9	5.1	3.5	6.8
Females	14.9	12.6	17.2	11.3	9.2	13.4
Persons	12.0	10.4	13.7	8.4	7.1	9.8
Total						
Males	13.4	10.7	16.1	5.4	3.9	6.8
Females	17.3	15.1	19.5	11.0	9.3	12.7
Persons	15.3	13.6	17.1	8.2	7.0	9.3

(a) Current asthma is defined as having had symptoms of, or treatment for, asthma in the previous twelve months.

Approximately one in twelve respondents (8.2%) reported having symptoms of or taking treatment for asthma in the past 12 months, the definition of current asthma. This is equivalent to over 152,898 people. Respondents in the 16 to 44 year age group were significantly more likely to report ever having symptoms of asthma than those aged 45 years and older. Females were twice as likely to report current asthma as males (11% compared to 5.4%).

Figure 14 show the prevalence of asthma by geographic area of residence. There were no statistically significant differences in the prevalence of asthma (ever or current) by geographic area.

Figure 14: Prevalence of asthma, 16 years & over, by geographic area of residence in WA, HWSS 2012



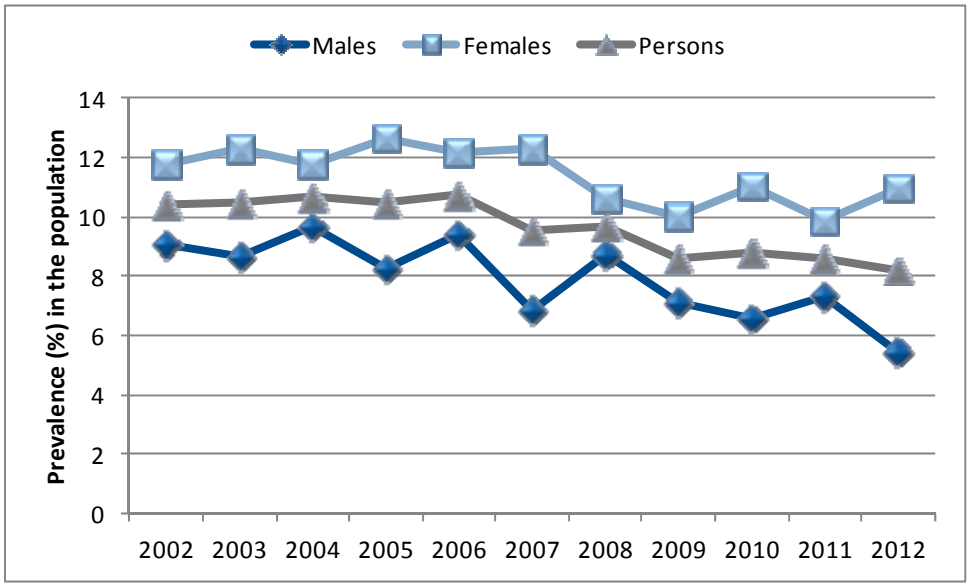
The standardised annual prevalence estimates of asthma for adults aged 16 years and over are shown in Table 23 and Figure 15. The prevalence of current asthma was significantly lower for males in 2012 (5.4%) compared with 2002 to 2006. No other changes were statistically significant.

Table 23: Trend for asthma, 16 years & over, HWSS 2002-2012

	Lifetime (ever)			Period (current) (a)		
	Males	Females	Persons	Males	Females	Persons
2002	16.3	17.7	17.0	9.1	11.8	10.4
2003	16.0	18.4	17.2	8.6	12.3	10.5
2004	17.0	18.7	17.9	9.7	11.8	10.7
2005	14.7	18.1	16.4	8.3	12.7	10.5
2006	16.4	18.2	17.3	9.4	12.2	10.8
2007	15.5	21.3	18.4	6.9	12.3	9.6
2008	16.7	17.9	17.3	8.8	10.6	9.7
2009	13.9	16.3	15.1	7.1	10.0	8.6
2010	14.3	17.3	15.8	6.6	11.0	8.8
2011	13.2	17.2	15.2	7.3	9.9	8.6
2012	13.3	17.2	15.3	5.4	11.0	8.2
Average	15.0	18.2	16.6	7.8	11.6	9.7

(a) Current asthma is defined as having had symptoms of, or treatment for, asthma in the previous twelve months.

Figure 15: Trend for current asthma (a), 16 years & over, HWSS 2002 – 2012



(a) Current asthma is defined as having had symptoms of, or treatment for, asthma in the previous twelve months.

7.7 Respiratory condition other than asthma

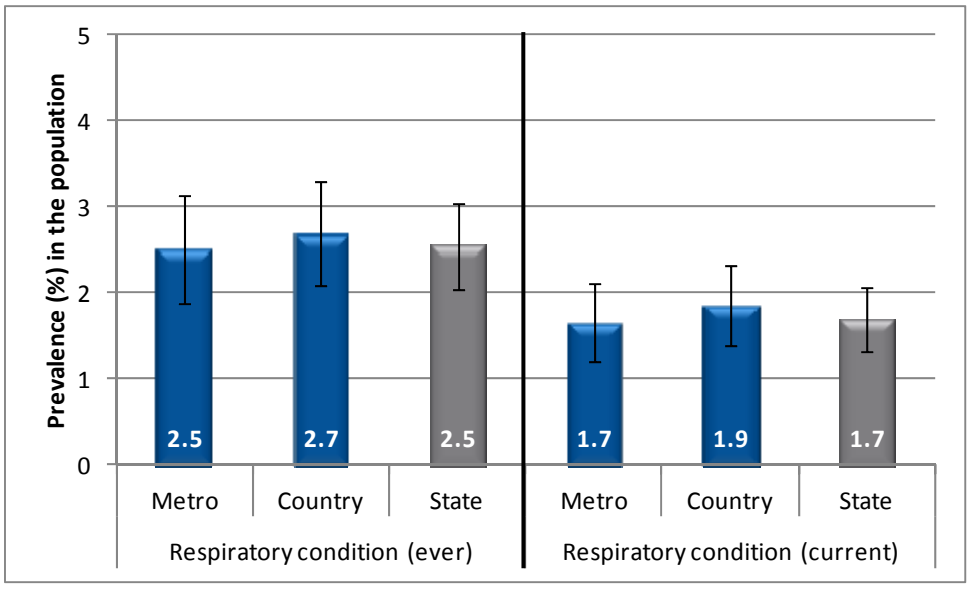
Respondents were asked whether a doctor had told them they had a respiratory problem other than asthma, such as chronic bronchitis, emphysema, or chronic lung disease that lasted six months or more. The prevalence of respiratory problems is shown in Table 24. Both the prevalence of ever having respiratory problems and currently having respiratory problems increased significantly with age.

Table 24: Prevalence of respiratory conditions other than asthma, 16 years & over, HWSS 2012

	Lifetime (ever)		Period (current)	
	%	95% CI	%	95% CI
16 to 44 yrs				
Males	1.0	(0.1 - 1.9)	0.7	(0.0 - 1.5)
Females	1.3	(0.2 - 2.4)	0.4	(0.0 - 0.9)
Persons	1.2	(0.5 - 1.9)	0.6	(0.1 - 1.0)
45 to 64 yrs				
Males	3.1	(1.7 - 4.5)	2.1	(1.0 - 3.2)
Females	2.8	(1.8 - 3.9)	1.6	(0.9 - 2.3)
Persons	3.0	(2.1 - 3.8)	1.9	(1.2 - 2.5)
65 yrs & over				
Males	6.9	(4.9 - 8.9)	5.8	(3.9 - 7.6)
Females	6.2	(4.6 - 7.7)	5.1	(3.6 - 6.5)
Persons	6.5	(5.3 - 7.8)	5.4	(4.2 - 6.6)
Total				
Males	2.5	(1.8 - 3.2)	1.9	(1.2 - 2.5)
Females	2.6	(1.9 - 3.3)	1.5	(1.1 - 2.0)
Persons	2.5	(2.0 - 3.1)	1.7	(1.3 - 2.1)

Figure 16 shows the prevalence of respiratory conditions, excluding asthma, by geographic area of residence. There were no statistically significant differences in the prevalence of respiratory conditions (ever or current) by geographic area.

Figure 16: Prevalence of respiratory conditions, other than asthma, 16 years & over, by geographic area of residence in WA, HWSS 2012



The respiratory condition information is not comparable over time from 2002 due to changes in the way the question was asked. However, the standardised annual prevalence estimates of a respiratory condition other than asthma for adults aged 16 years and over since 2007 are shown in Table 25. The prevalence estimates in 2012 are the lowest recorded since 2007, for ever and current respiratory conditions. However the estimates have not changed significantly over time.

Table 25: Trend for respiratory conditions other than asthma, 16 years & over, HWSS 2007 – 2012

	Lifetime (ever)			Period (current)		
	Males	Females	Persons	Males	Females	Persons
2007	3.6	3.2	3.4	2.6	1.9	2.2
2008	3.7	3.4	3.6	2.4	2.2	2.3
2009	3.9	3.0	3.4	2.5	1.6	2.1
2010	2.6	3.3	2.9	1.7	1.9	1.8
2011	3.8	3.3	3.5	2.7	1.9	2.3
2012	2.5	2.6	2.5	1.9	1.5	1.7
Average	3.6	3.4	3.5	2.5	2.0	2.3

7.8 Mental health

Mental health problems include both short-term problems, such as depression and anxiety and long-term conditions, such as chronic depression and schizophrenia. As mental health problems are associated with higher rates of death, poorer physical health and increased exposure to health risk factors they are a National Health Priority Area.

Respondents were asked whether or not a doctor had diagnosed them with a number of common mental health conditions during the past 12 months. The prevalence of each condition is shown in Table 26. Respondents were also asked whether they were currently receiving treatment for any of their mental health problems, as shown in Table 27.

Table 26: Prevalence of mental health conditions, 16 years & over, HWSS 2012

	Anxiety problem		Depression		Stress-related problem		Other mental health problem	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
16 to 44 yrs								
Males	6.3	(3.1 - 9.6)	7.3	(3.7 - 10.8)	6.9	(3.8 - 9.9)	0.6	(0.0 - 1.2)
Females	10.6	(7.7 - 13.6)	11.1	(8.0 - 14.2)	9.8	(7.1 - 12.5)	3.0	(1.2 - 4.8)
Persons	8.4	(6.2 - 10.6)	9.1	(6.8 - 11.5)	8.3	(6.2 - 10.3)	1.8	(0.8 - 2.7)
45 to 64 yrs								
Males	5.3	(3.4 - 7.2)	6.7	(4.5 - 8.9)	6.7	(4.6 - 8.8)	2.0	(0.8 - 3.2)
Females	8.2	(6.6 - 9.9)	9.1	(7.3 - 10.9)	11.8	(9.7 - 13.9)	1.5	(0.8 - 2.2)
Persons	6.8	(5.5 - 8.0)	7.9	(6.5 - 9.3)	9.3	(7.8 - 10.7)	1.8	(1.1 - 2.5)
65 yrs & over								
Males	4.2	(2.6 - 5.8)	3.9	(2.4 - 5.5)	4.4	(2.7 - 6.1)	0.6	(0.0 - 1.2)
Females	5.5	(4.1 - 7.0)	5.4	(4.0 - 6.8)	5.6	(4.2 - 7.1)	1.0	(0.3 - 1.7)
Persons	4.9	(3.8 - 6.0)	4.7	(3.7 - 5.8)	5.1	(4.0 - 6.2)	0.8	(0.3 - 1.3)
Total								
Males	5.7	(3.8 - 7.6)	6.6	(4.6 - 8.7)	6.5	(4.7 - 8.3)	1.1	(0.5 - 1.6)
Females	9.0	(7.4 - 10.7)	9.5	(7.8 - 11.3)	9.7	(8.2 - 11.3)	2.2	(1.2 - 3.2)
Persons	7.4	(6.1 - 8.6)	8.1	(6.7 - 9.4)	8.1	(6.9 - 9.3)	1.6	(1.1 - 2.2)

Adults aged 16-44 years had significantly higher prevalence of anxiety problems, depression and stress-related problems compared with adults aged 65 years and

over. Females were more likely than males to report being diagnosed with anxiety, depression, stress-related problems or other mental health problems during the past 12 months, although the differences were not statistically significant.

Table 27: Current mental health status, 16 years & over, HWSS 2012

	Any mental health problem (a)		Any problem currently receiving treatment for (a)	
	%	95% CI	%	95% CI
16 to 44 yrs				
Males	14.6	(10.0 - 19.2)	6.0	(3.4 - 8.5)
Females	17.0	(13.4 - 20.5)	7.9	(5.4 - 10.4)
Persons	15.7	(12.9 - 18.6)	6.9	(5.1 - 8.7)
45 to 64 yrs				
Males	10.9	(8.3 - 13.5)	7.7	(5.3 - 10.0)
Females	17.8	(15.2 - 20.3)	9.0	(7.2 - 10.9)
Persons	14.3	(12.5 - 16.2)	8.3	(6.8 - 9.9)
65 yrs & over				
Males	8.2	(6.0 - 10.5)	4.8	(3.1 - 6.6)
Females	10.3	(8.4 - 12.3)	5.4	(3.9 - 6.8)
Persons	9.4	(7.9 - 10.8)	5.1	(4.0 - 6.3)
Total				
Males	12.5	(9.9 - 15.2)	6.3	(4.7 - 7.9)
Females	16.1	(14.1 - 18.1)	7.8	(6.4 - 9.3)
Persons	14.3	(12.7 - 16.0)	7.1	(6.0 - 8.2)

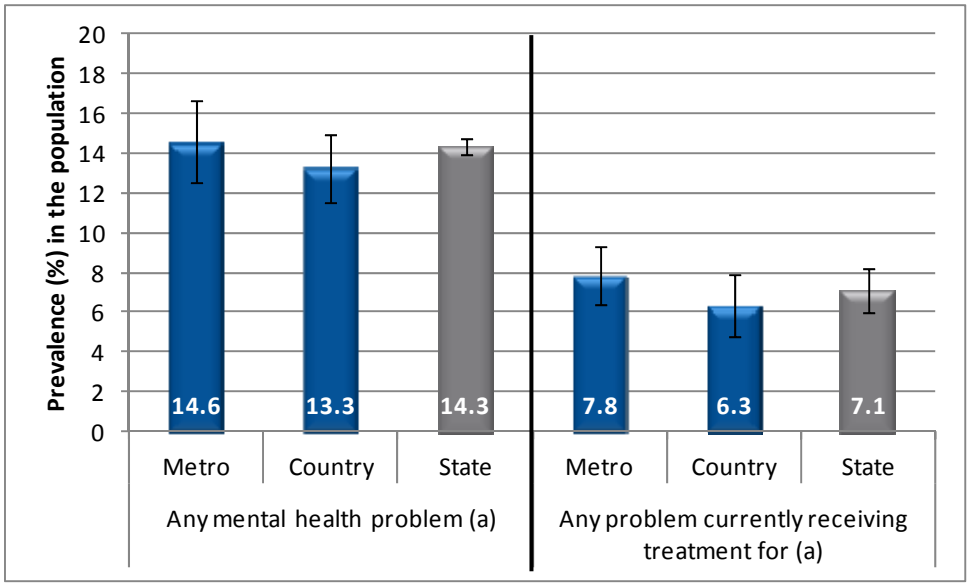
(a) People who reported that they had been diagnosed with a mental health problem in the previous 12 months and people reporting that they are currently receiving treatment for a mental health problem.

More than one in seven respondents (14.3%) reported having been diagnosed with a mental health problem during the past 12 months. Over one-half of these respondents (or 7.1% of all respondents) were currently receiving treatment for such a mental health problem.

A significantly lower proportion of respondents aged 65 years and over reported being diagnosed with any mental health problem in the past 12 months compared with younger respondents (9.4% compared with 15.7%). A higher proportion of females reported a mental health problem and receiving treatment compared to males, however this difference was not statistically significant.

Figure 17 shows the prevalence of mental health conditions and current treatment by geographic area of residence. There were no significant differences by geographic area.

Figure 17: Prevalence of current mental health conditions, by geographic area of residence in WA, HWSS 2012



The standardised annual prevalence estimates for a current mental health condition for adults aged 16 years and over are shown in Table 28. For males, females and all persons the prevalence has remained relatively stable over time. However, the prevalence of current mental health problems in 2012 for males was the highest prevalence recorded since 2002.

Table 28: Trends for a current mental health condition*, 16 years & over, HWSS 2002 – 2012

	Males	Females	Persons
2002	10.0	16.2	13.1
2003	10.8	18.5	14.6
2004	9.9	17.0	13.5
2005	na	na	na
2006	8.2	16.2	12.2
2007	10.8	15.9	13.3
2008	9.2	17.6	13.4
2009	10.6	16.7	13.7
2010	11.3	18.2	14.8
2011	10.7	18.2	14.4
2012	12.5	16.2	14.3
Average	10.8	17.6	14.2

na This information is not available for 2005.

* Refers to people diagnosed with depression, anxiety, stress or other mental health problem in the last year.

8. LIFESTYLE BEHAVIOURS

There are many factors that influence a person's health, including genetics, lifestyle, environmental and social factors. These factors may have a positive effect on health, such as a high consumption of fruit and vegetables, or a negative effect, such as smoking and physical inactivity.[7] Modifiable lifestyle behaviours are also associated with the onset of physiological risk factors, such as high cholesterol, high blood pressure and obesity.

8.1 Smoking

Smoking increases the risk of a number of health conditions, including respiratory disease, coronary heart disease, stroke and several cancers, such as lung and mouth cancers.[16] Respondents were asked their smoking status, including cigarettes, cigars and pipes and whether or not people smoke in their home. Current smoking status is shown in Table 29.

The table shows that females were significantly more likely to report never smoking compared with males (58.5% compared with 48.3%). Males were significantly more likely to report smoking daily compared with females (11.9% compared with 7.6%).

Table 29: Current smoking status, HWSS 2012

	I smoke daily		I smoke occasionally		I don't smoke now but I used to		I've tried it a few times but never smoked		I've never smoked	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
16 to 44 yrs										
Males	11.9	(7.5 - 16.3)	4.2	(1.8 - 6.5)	16.4	(12.1 - 20.6)	10.6	(7.1 - 14.1)	56.9	(51.0 - 62.9)
Females	7.1	(4.6 - 9.6)	3.0	(1.4 - 4.6)	17.3	(13.8 - 20.8)	8.3	(5.7 - 10.9)	64.3	(59.7 - 68.8)
Persons	9.6	(7.0 - 12.1)	3.6	(2.2 - 5.1)	16.8	(14.0 - 19.6)	9.5	(7.3 - 11.7)	60.5	(56.7 - 64.3)
45 to 64 yrs										
Males	15.0	(12.0 - 18.0)	3.2	(1.7 - 4.8)	33.9	(29.8 - 38.0)	8.2	(5.8 - 10.5)	39.7	(35.4 - 43.9)
Females	10.3	(8.5 - 12.2)	1.8	(1.1 - 2.4)	30.8	(27.9 - 33.8)	6.4	(4.9 - 7.9)	50.7	(47.5 - 53.9)
Persons	12.7	(10.9 - 14.5)	2.5	(1.7 - 3.3)	32.4	(29.9 - 34.9)	7.3	(5.9 - 8.7)	45.1	(42.5 - 47.8)
65 yrs & over										
Males	5.2	(3.4 - 6.9)	1.4	(0.5 - 2.4)	53.1	(49.0 - 57.2)	5.8	(3.9 - 7.6)	34.6	(30.7 - 38.5)
Females	4.1	(2.8 - 5.4)	1.0	(0.3 - 1.7)	31.8	(28.8 - 34.9)	7.6	(5.9 - 9.4)	55.4	(52.1 - 58.7)
Persons	4.6	(3.5 - 5.7)	1.2	(0.6 - 1.8)	41.7	(39.1 - 44.2)	6.8	(5.5 - 8.1)	45.8	(43.2 - 48.3)
Total										
Males	11.9	(9.4 - 14.5)	3.5	(2.1 - 4.9)	27.1	(24.2 - 29.9)	9.2	(7.1 - 11.2)	48.3	(44.8 - 51.9)
Females	7.6	(6.2 - 9.1)	2.3	(1.4 - 3.2)	24.0	(21.8 - 26.1)	7.6	(6.1 - 9.1)	58.5	(55.8 - 61.2)
Persons	9.8	(8.3 - 11.3)	2.9	(2.1 - 3.7)	25.5	(23.7 - 27.3)	8.4	(7.1 - 9.6)	53.4	(51.2 - 55.6)

Current smoking status was re-categorised into those who smoke (daily or occasionally), ex-smokers and those who have never smoked regularly. Respondents who had tried cigarettes and had smoked 100 or more cigarettes in their lifetime were classified as ex-smokers, while those who had smoked less than 100 cigarettes were classified as having never smoked, or never smoked regularly (Table 30).

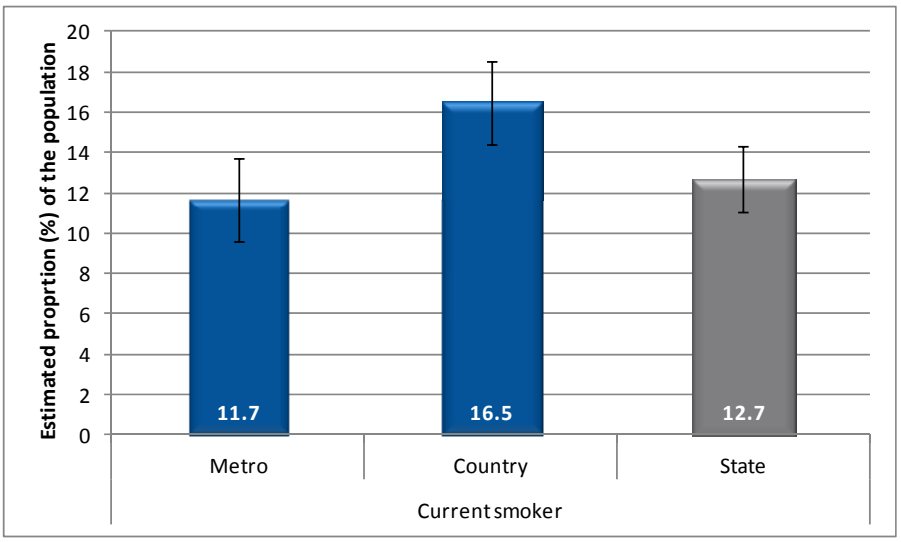
Table 30: Lifetime smoking status, HWSS 2012

	Smoker		Ex-smoker		Never smoked or never smoked regularly	
	%	95% CI	%	95% CI	%	95% CI
16 to 44 yrs						
Males	16.1	(11.3 - 20.9)	16.4	(12.1 - 20.7)	67.5	(61.9 - 73.2)
Females	10.2	(7.2 - 13.1)	16.7	(13.3 - 20.0)	73.2	(69.0 - 77.3)
Persons	13.2	(10.3 - 16.0)	16.5	(13.8 - 19.2)	70.3	(66.7 - 73.9)
45 to 64 yrs						
Males	18.3	(15.0 - 21.5)	35.1	(31.0 - 39.2)	46.6	(42.3 - 50.9)
Females	12.1	(10.1 - 14.0)	31.2	(28.2 - 34.1)	56.7	(53.6 - 59.9)
Persons	15.2	(13.3 - 17.1)	33.2	(30.6 - 35.7)	51.7	(49.0 - 54.3)
65 yrs & over						
Males	6.6	(4.6 - 8.5)	51.7	(47.7 - 55.8)	41.7	(37.6 - 45.7)
Females	5.1	(3.7 - 6.6)	31.0	(28.0 - 34.1)	63.8	(60.7 - 67.0)
Persons	5.8	(4.6 - 7.0)	40.6	(38.0 - 43.1)	53.6	(51.0 - 56.2)
Total						
Males	15.4	(12.6 - 18.3)	27.3	(24.4 - 30.1)	57.3	(53.8 - 60.8)
Females	9.9	(8.3 - 11.6)	23.6	(21.5 - 25.7)	66.5	(64.0 - 68.9)
Persons	12.7	(11.0 - 14.3)	25.4	(23.7 - 27.2)	61.9	(59.7 - 64.0)

Males were significantly more likely to report being a smoker compared with females (15.4% compared to 9.9%). Respondents aged 65 years and over were less likely to be current smokers than people aged 16 to 64 years. Respondents aged 16 to 44 years were more likely to have never smoked or never smoked regularly compared to people aged 45 years and over.

Figure 18 shows the proportion of current smoking by geographic area of residence. Residents of country WA had a significantly higher prevalence of current smoking compared with both metro WA residents and the State as a whole.

Figure 18: Proportion of current smokers, 16 years & over, by geographic area, HWSS 2012



Respondents were asked about whether or not they smoked in their home (Table 31). Almost all respondents reported never smoking in the home (95.4%).

Table 31: Smoking within the home, HWSS 2012

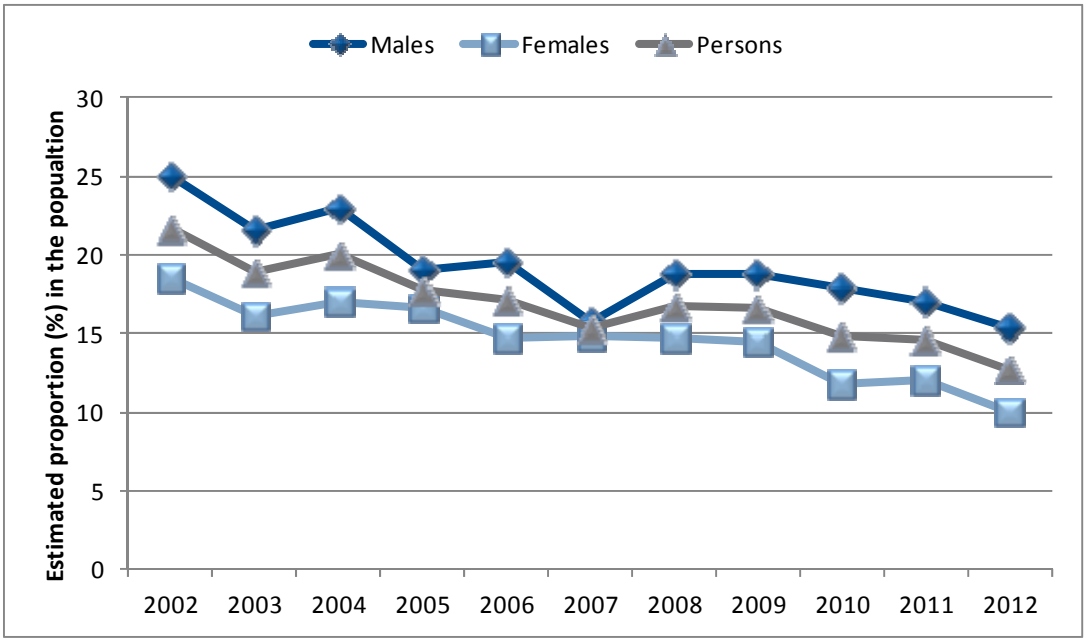
	Never		Occasionally		Frequently	
	%	95% CI	%	95% CI	%	95% CI
16 to 44 yrs						
Males	96.8	(95.0 - 98.7)	1.5	(0.2 - 2.8)	1.7	(0.4 - 3.0)
Females	94.7	(92.5 - 96.9)	1.9	(0.5 - 3.2)	3.5	(1.7 - 5.2)
Persons	95.8	(94.4 - 97.2)	1.7	(0.7 - 2.6)	2.5	(1.5 - 3.6)
45 to 64 yrs						
Males	93.5	(91.6 - 95.5)	2.4	(1.2 - 3.5)	4.1	(2.5 - 5.7)
Females	94.8	(93.4 - 96.3)	1.9	(1.0 - 2.8)	3.3	(2.1 - 4.4)
Persons	94.2	(95.8 - 97.6)	2.1	(1.4 - 2.8)	3.7	(2.7 - 4.7)
65 yrs & over						
Males	96.5	(95.2 - 97.9)	1.3	(0.5 - 2.1)	2.2	(1.0 - 3.3)
Females	96.8	(95.7 - 97.9)	1.6	(0.8 - 2.5)	1.5	(0.8 - 2.3)
Persons	96.7	(95.8 - 97.6)	1.5	(0.9 - 2.1)	1.8	(1.2 - 2.5)
Total						
Males	95.8	(94.6 - 96.9)	1.7	(0.9 - 2.5)	2.5	(1.6 - 4.1)
Females	95.1	(93.8 - 96.3)	1.8	(1.1 - 2.6)	3.1	(2.1 - 4.1)
Persons	95.4	(94.6 - 96.3)	1.8	(1.2 - 2.3)	2.8	(2.1 - 3.5)

The standardised annual prevalence estimates of current smoking for adults aged 16 years and over are shown in Table 32 and Figure 19. In all three groups the proportion of people smoking in 2012 was lowest that has ever been recorded in the HWSS. For males the 2012 estimate was significantly lower compared to estimates recorded from 2002 to 2004. For females the proportion of smokers in 2012 was significantly lower compared to estimates recorded from 2002 to 2009.

Table 32: Trend for smoking, 16 years & over, HWSS 2002 – 2012

	Males	Females	Persons
2002	25.0	18.5	21.8
2003	21.6	16.1	18.9
2004	22.9	17.0	20.0
2005	19.0	16.6	17.8
2006	19.5	14.8	17.1
2007	15.8	14.9	15.3
2008	18.8	14.7	16.8
2009	18.8	14.4	16.6
2010	17.9	11.8	14.9
2011	17.0	12.1	14.5
2012	15.3	10.0	12.7
Average	19.8	14.9	17.4

Figure 19: Trend for smoking, 16 years & over, HWSS 2002 – 2012



8.2 Alcohol

Excessive alcohol consumption increases the risk of some health conditions, including coronary heart disease, stroke, blood pressure, liver and pancreatic disease, as well as the risk of accidents and mental illness.[6] The current guidelines for the consumption of alcohol in Australia were developed by the National Health and Medical Research Council (NHMRC) in 2009.[17]

Respondents were asked about their alcohol drinking habits, including how many days a week they usually drink and how many drinks they usually have. The alcohol information was categorised into risk levels based on the 2009 guidelines which categorises any drinking by adults aged less than 18 years as risky. The first is the potential for alcohol-related harm over a lifetime of drinking (Table 33) and the second is the risk of injury due to a single occasion of drinking (Table 34).

Table 33: Risk of long-term alcohol related harm, 16 years & over, HWSS 2012

	Doesn't drink/ drinking level undetermined		Low risk (a)		High risk (b)	
	%	95% CI	%	95% CI	%	95% CI
16 to 44 yrs						
Males	29.5	(24.1 - 34.8)	25.4	(20.4 - 30.4)	45.1	(39.1 - 51.1)
Females	46.5	(41.7 - 51.4)	28.3	(24.1 - 32.5)	25.2	(21.0 - 29.3)
Persons	37.8	(34.1 - 41.5)	26.8	(23.5 - 30.1)	35.4	(31.6 - 39.2)
45 to 64 yrs						
Males	23.8	(20.2 - 27.5)	37.2	(33.1 - 41.4)	38.9	(34.7 - 43.1)
Females	38.2	(35.1 - 41.3)	46.7	(43.5 - 49.9)	15.0	(12.7 - 17.4)
Persons	31.0	(28.6 - 33.4)	42.0	(39.3 - 44.6)	27.0	(24.6 - 29.5)
65 yrs & over						
Males	30.5	(26.7 - 34.3)	48.9	(44.8 - 53.0)	20.6	(17.3 - 23.9)
Females	49.8	(46.5 - 53.1)	45.0	(41.8 - 48.3)	5.1	(3.7 - 6.6)
Persons	40.9	(38.4 - 43.4)	46.8	(44.2 - 49.4)	12.3	(10.5 - 14.1)
Total						
Males	27.8	(24.6 - 31.0)	32.5	(29.3 - 35.6)	39.7	(36.1 - 43.3)
Females	44.4	(41.7 - 47.2)	36.9	(34.3 - 39.4)	18.7	(16.4 - 21.0)
Persons	36.1	(34.0 - 38.3)	34.7	(32.6 - 36.7)	29.2	(27.0 - 31.4)

(a) Drinks two or less standard drinks on any one day.

(b) Drinks more than two standard drinks on any one day.

Table 34: Risk of short-term alcohol related harm, 16 years & over, HWSS 2012

	Doesn't drink/ drinking level undetermined		Low risk (a)		High risk (b)	
	%	95% CI	%	95% CI	%	95% CI
16 to 44 yrs						
Males	29.5	(24.1 - 34.8)	48.4	(42.4 - 54.3)	22.2	(17.1 - 27.3)
Females	46.5	(41.7 - 51.4)	43.4	(38.6 - 48.1)	10.1	(7.3 - 12.9)
Persons	37.8	(34.1 - 41.5)	45.9	(42.1 - 49.8)	16.3	(13.3 - 19.3)
45 to 64 yrs						
Males	23.8	(20.2 - 27.5)	61.3	(57.1 - 65.5)	14.8	(11.7 - 17.9)
Females	38.2	(35.1 - 41.3)	59.9	(56.8 - 63.1)	1.8	(1.0 - 2.7)
Persons	31.0	(28.6 - 33.4)	60.6	(58.0 - 63.3)	8.4	(6.7 - 10.0)
65 yrs & over						
Males	30.5	(26.7 - 34.3)	63.6	(59.6 - 67.5)	5.9	(3.9 - 7.9)
Females	49.8	(46.5 - 53.1)	49.6	(46.3 - 52.9)	0.6	(0.1 - 1.1)
Persons	40.9	(38.4 - 43.4)	56.0	(53.5 - 58.6)	3.1	(2.1 - 4.0)
Total						
Males	27.8	(24.6 - 31.0)	54.6	(51.0 - 58.2)	17.6	(14.6 - 20.5)
Females	44.4	(41.7 - 47.2)	49.6	(46.8 - 52.4)	5.9	(4.4 - 7.4)
Persons	36.1	(34.0 - 38.3)	52.1	(49.9 - 54.4)	11.8	(10.1 - 13.5)

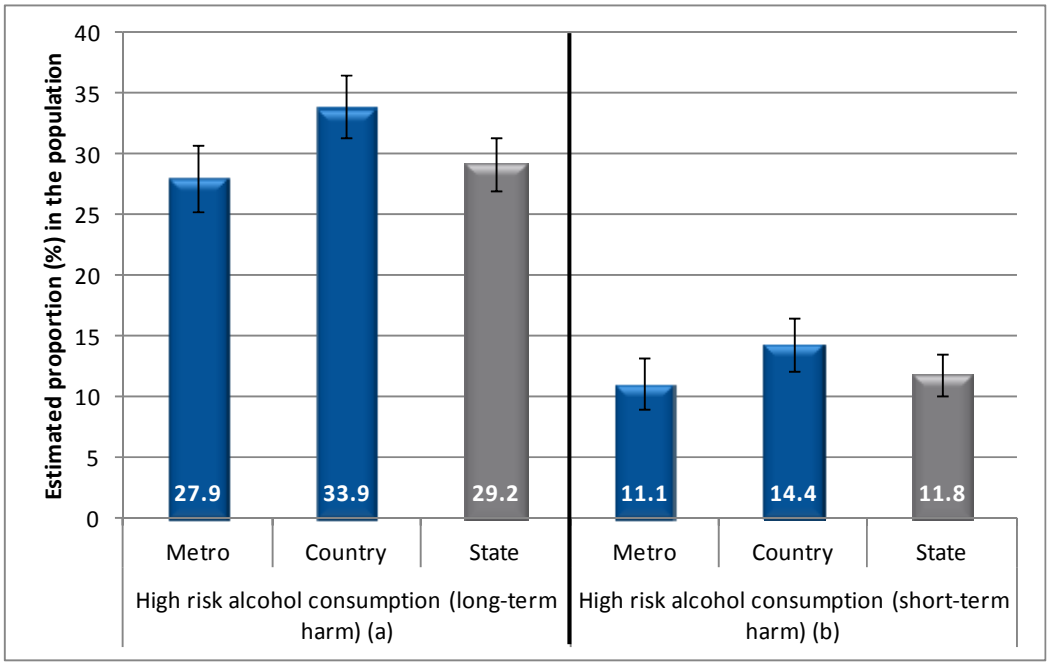
(a) Drinks four or less standard drinks on any one day.

(b) Drinks more than four standard drinks on any one day.

Just over one-third of respondents aged 16 to 44 reported drinking at levels considered to be high risk for long-term harm. Males in any age group were significantly more likely to report drinking at levels for an increased health risk compared with females. For both men and women, the proportion drinking at high risk levels significantly decreased in a linear fashion with increasing age.

Drinking at high risk levels for injury on a single occasion of drinking decreased significantly with age, with respondents aged 16 to 44 years twice as likely to report drinking more than four standard drinks compared with respondents aged 45 to 64 years (16.3% compared with 8.4%) and five times more likely that of persons aged over 65 years (16.3% compared with 3.1%).Figure 20 shows the proportion of people who consume alcohol at high risk levels for long-term and short-term harm by geographic area of residence. The proportion of residents drinking alcohol at levels for long-term and short-term harm were higher among country residents compared to metro residents, however this difference was only statistically significant for long-term harm.

Figure 20: High risk alcohol consumption for long-term (a) and short-term (b) harm



(a) Drinks more than two standard drinks on any one day.

(b) Drinks more than four standard drinks on any one day.

The standardised annual prevalence estimates of alcohol risk level for adults aged 16 years and over who reported drinking alcohol are shown in Table 35 and Figure 21. These estimates are based on the 2009 guidelines.

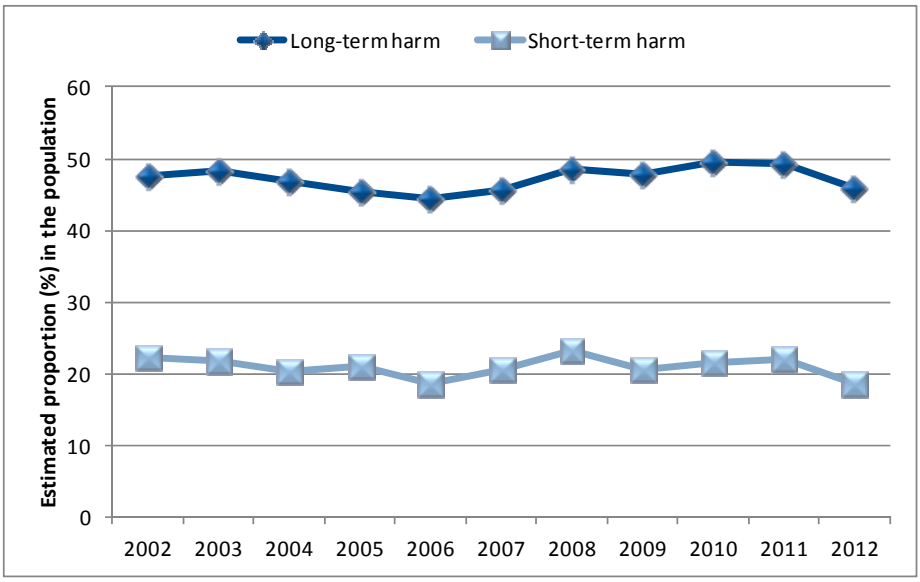
Table 35: Trend for alcohol consumption among drinkers by risk of long & short-term harm, 16 years & over, HWSS 2002 – 2012

	Risk of long-term harm (a)			Risk of short-term harm (b)		
	Males	Females	Persons	Males	Females	Persons
2002	60.0	32.7	47.6	30.6	12.3	22.3
2003	58.8	35.9	48.4	29.7	12.5	21.9
2004	57.1	34.0	46.8	28.8	9.8	20.3
2005	55.7	32.6	45.4	27.9	12.6	21.1
2006	54.1	32.7	44.4	25.3	10.7	18.7
2007	56.2	33.4	45.7	26.0	14.3	20.6
2008	59.1	36.5	48.6	30.3	15.0	23.2
2009	57.0	36.3	47.7	26.6	13.3	20.6
2010	59.6	37.4	49.5	29.5	12.2	21.6
2011	60.0	37.0	49.4	28.1	15.1	22.1
2012	55.2	33.8	45.9	24.5	10.8	18.5
Average	59.0	36.3	48.7	29.5	14.4	22.7

(a) As a proportion of respondents who reported drinking alcohol. Drinks more than two standard drinks on any one day.

(b) As a proportion of respondents who reported drinking alcohol. Drinks more than four standard drinks on any one day.

Figure 21: Trend for high risk consumption of alcohol for long & short-term harm, 16 years & over, HWSS 2002 – 2012



According to the new guidelines, on average almost half of the Western Australian population who reported drinking alcohol are drinking at levels likely to increase their risk of long-term alcohol related harm, and one in four who reported drinking alcohol drink at levels that increase their likelihood of short-term alcohol-related harm. Over time the proportion of adults drinking alcohol at levels that increase the risk of short term harm in 2012 (18.5%) was significantly lower compared to the proportion recorded in 2008 (23.2%).

8.3 Nutrition

Diet has an important effect on health and can influence the risk of various diseases, including coronary heart disease, Type 2 diabetes, stroke and digestive system cancers.[6] Eating fruit and vegetables is important to improve one's health and to protect against the risk of disease. It is recommended that adults eat at least two serves of fruit and five serves of vegetables each day.[18] Respondents were asked how many serves of fruit and vegetables they usually eat each day. The number of serves of fruit consumed daily is shown in Table 36. Table 37 shows the number of serves of vegetables consumed daily.

About half of all respondents reported consuming the recommended two or more servings of fruit per day. Females were significantly more likely to eat two or more serves of fruit daily compared with males (53.3% compared with 46.8%). Respondents aged 16 to 64 years were less likely eat two or more serves of fruit daily than people aged 65 years and over. The mean daily consumption of fruit was 1.7 serves; 1.7 serves for females and 1.6 serves for males.

Table 36: Number of serves of fruit consumed daily, HWSS 2012

	Doesn't eat fruit		Eats fruit less often than daily		Eats one serve of fruit daily		Eats two or more serves of fruit daily	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
16 to 44 yrs								
Males	6.9	(3.3 - 10.4)	10.7	(6.6 - 14.8)	38.0	(32.0 - 44.0)	44.4	(38.2 - 50.6)
Females	5.1	(2.9 - 7.2)	7.7	(4.9 - 10.4)	38.6	(33.6 - 43.6)	48.7	(43.6 - 53.8)
Persons	6.0	(3.9 - 8.1)	9.2	(6.7 - 11.7)	38.3	(34.4 - 42.2)	46.5	(42.5 - 50.5)
45 to 64 yrs								
Males	8.1	(5.7 - 10.5)	11.4	(8.6 - 14.2)	34.6	(32.0 - 44.0)	45.9	(41.6 - 50.1)
Females	5.5	(4.0 - 6.9)	7.3	(5.7 - 8.8)	31.8	(28.7 - 34.9)	55.5	(52.3 - 58.7)
Persons	6.8	(5.4 - 8.2)	9.3	(7.7 - 10.9)	33.2	(30.7 - 35.8)	50.7	(48.0 - 53.3)
65 yrs & over								
Males	3.6	(2.2 - 5.0)	6.8	(4.8 - 8.9)	32.2	(28.3 - 36.1)	57.4	(53.3 - 61.5)
Females	3.0	(1.8 - 4.2)	6.9	(5.3 - 8.6)	27.3	(24.4 - 30.3)	62.7	(59.5 - 65.9)
Persons	3.3	(2.4 - 4.2)	6.9	(5.6 - 8.2)	29.6	(27.2 - 32.0)	60.3	(57.7 - 62.8)
Total								
Males	6.8	(4.8 - 8.8)	10.4	(8.0 - 12.7)	36.1	(31.7 - 37.2)	46.8	(43.2 - 50.4)
Females	4.9	(3.7 - 6.0)	7.4	(5.9 - 8.9)	34.4	(31.7 - 37.2)	53.3	(50.5 - 56.2)
Persons	5.8	(4.6 - 7.0)	8.9	(7.5 - 10.3)	35.2	(33.0 - 37.4)	50.1	(47.8 - 52.3)

N.B. A serve of fruit is equal to one medium piece, two small pieces of fruit or one cup of diced fruit.

Table 37: Number of serves of vegetables consumed daily, HWSS 2012

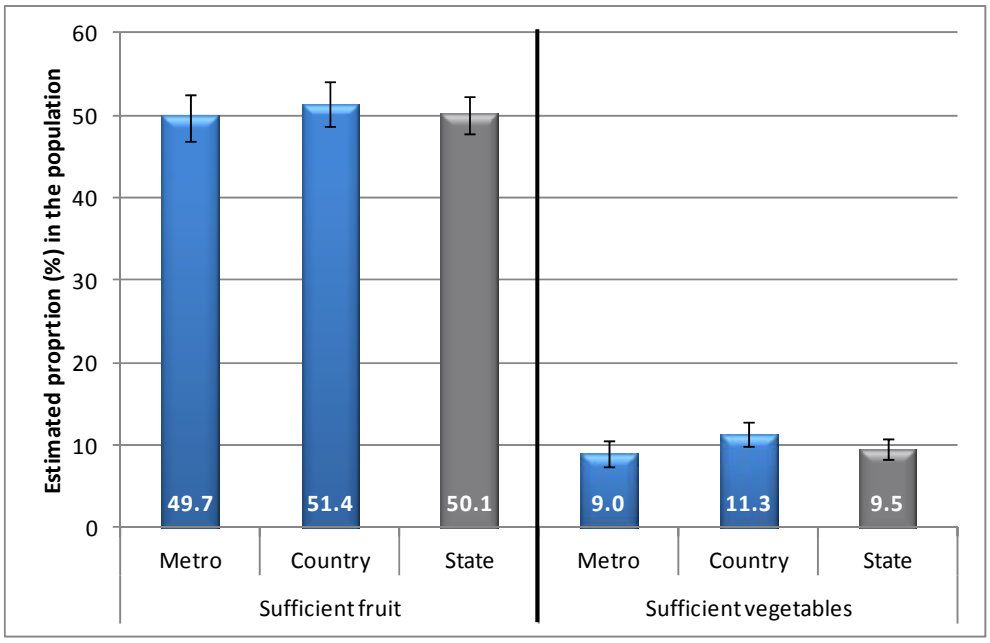
	Doesn't eat vegetables		Eats vegetables less often than daily		Eats one to two serves of vegetable daily		Eats three to four serves of vegetables daily		Eats five or more serves of vegetables daily	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
16 to 44 yrs										
Males	1.2	(0.2 - 2.3)	1.9	(0.2 - 3.6)	58.3	(35.6 - 64.3)	33.5	(27.8 - 39.2)	5.1	(2.4 - 7.8)
Females	0.3	(0.0 - 0.7)	1.1	(0.0 - 2.2)	46.3	(41.2 - 51.4)	40.6	(35.6 - 45.5)	11.7	(8.4 - 15.1)
Persons	0.8	(0.2 - 1.3)	1.5	(0.5 - 2.5)	52.4	(48.4 - 56.5)	36.9	(33.1 - 40.8)	8.3	(6.2 - 10.5)
45 to 64 yrs										
Males	0.8	(0.1 - 1.6)	4.1	(2.3 - 5.8)	51.8	(47.5 - 42.0)	37.9	(33.7 - 42.0)	5.4	(3.8 - 7.1)
Females	0.2	(0.0 - 0.5)	1.5	(0.8 - 2.1)	35.6	(32.5 - 38.7)	47.5	(44.3 - 50.7)	15.2	(12.9 - 17.4)
Persons	0.5	(0.1 - 0.9)	2.8	(1.8 - 3.7)	43.7	(41.0 - 46.4)	42.7	(40.1 - 45.3)	10.3	(8.9 - 11.7)
65 yrs & over										
Males	0.9	(0.2 - 1.6)	2.0	(1.0 - 3.0)	44.0	(39.9 - 48.1)	41.5	(37.4 - 45.6)	11.6	(9.0 - 14.3)
Females	0.6	(0.1 - 1.1)	2.1	(1.2 - 3.0)	37.2	(34.0 - 40.4)	48.8	(45.5 - 52.1)	11.2	(9.3 - 13.2)
Persons	0.7	(0.3 - 1.1)	2.1	(1.4 - 2.7)	40.3	(37.8 - 42.9)	45.4	(42.8 - 48.1)	11.4	(9.8 - 13.0)
Total										
Males	1.0	(0.4 - 1.6)	2.6	(1.6 - 3.7)	54.1	(50.5 - 57.6)	36.1	(32.7 - 39.5)	6.2	(4.6 - 7.7)
Females	0.3	(0.1 - 0.6)	1.4	(0.8 - 2.0)	41.2	(38.4 - 44.0)	44.3	(41.5 - 47.0)	12.8	(10.9 - 14.6)
Persons	0.7	(0.4 - 1.0)	2.0	(1.4 - 2.6)	47.6	(45.3 - 50.0)	40.2	(38.0 - 42.4)	9.5	(8.3 - 10.7)

N.B. A serve of vegetables is equal to half a cup of cooked vegetables or 1 cup of salad.

Just less than one in ten adults reported eating the recommended daily intake of five or more serves of vegetables daily. Females were twice as likely to meet the recommended guidelines compared with males (12.8% compared with 6.2%). A significantly greater proportion of males reported eating two or less serves of vegetables daily compared with females (57.7% compared with 42.9%). The mean daily consumption of vegetables was 2.6 serves; 2.9 serves for females and 2.4 serves for males.

Figure 22 shows the proportion of adults eating the recommended serves of fruit (2 serves) and vegetables (5 serves) daily by geographic area of residence. Sufficient fruit and vegetable consumption was slightly higher among country residents compared with metro residents, however this was not statistically significant.

Figure 22: Sufficient daily fruit and vegetable consumption, 16 years & over, by geographic area, HWSS 2012



The standardised annual estimates of the proportion of adults aged 16 years and over eating the recommended daily two serves of fruit and five serves of vegetables are shown in Table 38. The mean serves of fruit and vegetables eaten daily are shown in Table 39.

Table 38: Trend for eating recommended fruit & vegetables, 16 years & over, HWSS 2002 – 2012

	Fruit			Vegetables		
	Males	Females	Persons	Males	Females	Persons
2002	43.7	57.1	50.4	9.8	14.3	12.0
2003	48.2	61.4	54.8	9.8	15.2	12.5
2004	48.1	59.5	53.8	12.6	17.2	14.9
2005	50.7	59.3	55.0	16.9	20.9	18.9
2006	44.0	53.2	48.6	14.1	16.8	15.5
2007	44.2	54.9	49.5	14.5	18.9	16.7
2008	46.3	57.6	51.9	11.6	16.1	13.8
2009	50.9	56.7	53.8	9.3	13.3	11.3
2010	51.7	58.7	55.2	10.5	16.3	13.4
2011	46.1	52.1	49.1	8.6	13.3	11.0
2012	46.7	53.2	50.0	6.2	12.8	9.5
Average	47.1	56.0	51.5	10.7	15.1	12.9

The proportion of the population consuming sufficient serves of fruit in 2012 was similar to the prevalence reported in 2002, showing relative stability over time, but a statistically significant decrease from the highest recorded prevalence in 2010. The proportion of people eating sufficient levels of vegetables in 2012 was the lowest ever recorded in the HWSS and was significantly lower compared with the prevalence recorded from 2002-2008.

Table 39: Trend for the mean serves of fruit and vegetables, 16 years & over, HWSS 2002 – 2012

	Fruit			Vegetables		
	Males	Females	Persons	Males	Females	Persons
2002	1.6	1.8	1.7	2.6	2.9	2.7
2003	1.7	1.9	1.8	2.6	3.0	2.8
2004	1.7	1.9	1.8	2.7	3.1	2.9
2005	1.7	1.8	1.8	3.0	3.2	3.1
2006	1.6	1.7	1.6	2.8	3.1	3.0
2007	1.6	1.7	1.6	2.8	3.2	3.0
2008	1.6	1.8	1.7	2.6	3.0	2.8
2009	1.7	1.8	1.7	2.5	2.9	2.7
2010	1.7	1.8	1.8	2.6	3.0	2.8
2011	1.5	1.7	1.6	2.5	2.9	2.7
2012	1.6	1.7	1.6	2.4	2.9	2.6
Average	1.6	1.8	1.7	2.6	3.0	2.8

The mean number of serves of vegetables for males, females and all persons, is the lowest or equal lowest recorded in the HWSS since collection began.

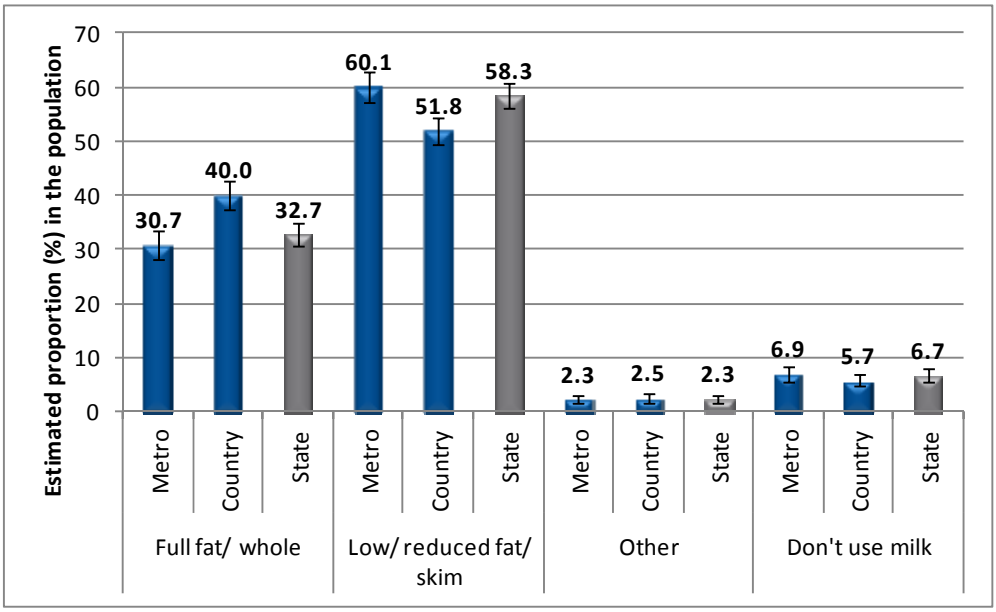
Diets high in saturated fat can cause an increase in cholesterol levels, which in turn increases the risk of coronary heart disease. As milk is one of the major sources of saturated fats, consumption of whole milk may be a useful indicator of saturated fat intake.[6] Respondents were asked what type of milk they usually consume, shown in Table 40. Females were significantly more likely to report consuming low fat or skim milk than males (63.3% compared with 53.4%).

Table 40: Type of milk consumed, HWSS 2012

	Full fat/whole		Low/reduced fat		Skim milk		Other		Don't use milk	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
16 to 44 yrs										
Males	41.1	(35.3 - 46.9)	42.0	(36.1 - 47.9)	9.7	(6.3 - 13.0)	1.5	(0.3 - 2.6)	5.8	(2.3 - 9.3)
Females	31.7	(27.2 - 36.2)	43.5	(38.8 - 48.3)	14.6	(11.0 - 18.2)	3.0	(1.2 - 4.8)	7.2	(4.6 - 9.8)
Persons	36.5	(32.8 - 40.2)	42.7	(38.9 - 46.6)	12.1	(9.6 - 14.5)	2.2	(1.1 - 3.3)	6.5	(4.3 - 8.6)
45 to 64 yrs										
Males	34.3	(30.3 - 38.3)	47.8	(43.5 - 52.1)	8.6	(6.2 - 11.0)	2.3	(1.0 - 3.7)	6.9	(4.8 - 9.1)
Females	19.6	(17.2 - 22.0)	55.6	(52.5 - 58.8)	15.4	(13.1 - 17.7)	2.7	(1.7 - 3.8)	6.7	(5.2 - 8.3)
Persons	26.9	(24.6 - 29.3)	51.7	(49.0 - 54.4)	12.0	(10.3 - 13.7)	2.5	(1.7 - 3.4)	6.8	(5.5 - 8.2)
65 yrs & over										
Males	37.9	(33.9 - 41.8)	40.7	(36.7 - 44.7)	12.3	(6.3 - 15.1)	1.8	(0.7 - 2.9)	7.3	(5.0 - 9.5)
Females	26.0	(23.2 - 28.8)	48.8	(45.5 - 52.1)	16.1	(13.7 - 18.6)	2.5	(1.5 - 3.5)	6.6	(5.0 - 8.3)
Persons	31.4	(29.1 - 33.8)	45.0	(42.5 - 47.6)	14.4	(12.6 - 16.2)	2.2	(1.5 - 2.9)	6.9	(5.6 - 8.3)
Total										
Males	38.5	(35.1 - 41.9)	43.7	(40.1 - 47.2)	9.7	(7.7 - 11.7)	1.8	(1.0 - 2.6)	6.4	(4.3 - 8.4)
Females	26.9	(24.4 - 29.4)	48.2	(45.5 - 51.0)	15.1	(13.1 - 17.1)	2.8	(1.8 - 3.8)	6.9	(5.5 - 8.4)
Persons	32.7	(30.6 - 34.8)	45.9	(43.7 - 48.2)	12.4	(10.9 - 13.8)	2.3	(1.7 - 2.9)	6.7	(5.4 - 7.9)

Figure 23 shows the consumption of different milk types by geographic area of residence. While the majority of adults living in both the metro and country consume low/reduced fat or skim milk, the proportion is significantly higher in the metro areas. In contrast a significantly higher proportion of country residents consume whole/ full fat milk compared with metro residents (40.0% compared with 30.7%).

Figure 23: Milk type consumed, 16 years & over, by geographic area, HWSS 2012



Respondents were asked whether there was any time in the last 12 months when they had run out of food and could not afford to buy more (Table 41). An estimated 66,852 people ran out of money and could not afford to buy food within the previous twelve months with the majority of these being in the 16 to 44 year age group.

Table 41: Ran out of food and could not afford to buy more, HWSS 2012

	Yes		No	
	%	95% CI	%	95% CI
16 to 44 yrs				
Males	4.9	(2.2 - 7.7)	95.1	(92.3 - 97.8)
Females	5.8	(3.1 - 8.5)	94.2	(91.5 - 96.9)
Persons	5.4	(3.5 - 7.3)	94.6	(92.7 - 96.5)
45 to 64 yrs				
Males	1.9	(0.9 - 2.9)	98.1	(97.1 - 99.1)
Females	2.1	(1.0 - 3.1)	97.9	(96.9 - 99.0)
Persons	2.0	(1.2 - 2.7)	98.0	(97.3 - 98.8)
65 yrs & over				
Males	0.2	(0.0 - 0.6)	99.8	(99.4 - 100.0)
Females	0.9	(0.3 - 1.5)	99.1	(98.5 - 99.7)
Persons	0.6	(0.2 - 0.9)	99.4	(99.1 - 99.8)
Total				
Males	3.3	(1.8 - 4.9)	96.7	(95.1 - 98.2)
Females	3.8	(2.4 - 5.3)	96.2	(94.7 - 97.6)
Persons	3.6	(2.5 - 4.6)	96.4	(95.4 - 97.5)

Respondents were asked how many times a week on average they would eat fast food meals, such as burgers, pizza, chicken or chips from fast food outlets, as shown in Table 42.

Table 42: Meals from fast food outlets per week, HWSS 2012

	Never		Less than once a week		Once or twice a week		Three or four times per week		Five or more times per week	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
16 to 44 yrs										
Males	25.0	(20.0 - 30.0)	18.3	(13.6 - 23.1)	49.1	(43.2 - 55.1)	6.0	(3.2 - 8.7)	1.5	(0.4 - 2.7)
Females	34.0	(29.5 - 38.5)	27.8	(23.3 - 32.2)	35.1	(30.5 - 39.8)	2.5	(1.0 - 4.0)	0.6	(0.0 - 1.3)
Persons	29.4	(26.0 - 32.8)	22.9	(19.7 - 26.2)	42.3	(38.4 - 46.1)	4.3	(2.7 - 5.9)	1.1	(0.4 - 1.8)
45 to 64 yrs										
Males	42.9	(38.7 - 47.1)	29.1	(25.1 - 33.0)	25.5	(21.7 - 29.4)	1.5	(0.5 - 2.6)	1.0	(0.1 - 1.8)
Females	58.0	(54.8 - 61.2)	24.8	(22.0 - 27.7)	16.7	(14.4 - 19.1)	0.4	(0.1 - 0.7)	0.0	(0.0 - 0.0)
Persons	50.5	(47.8 - 53.1)	27.0	(24.5 - 29.4)	21.1	(18.9 - 23.4)	1.0	(0.4 - 1.5)	0.5	(0.1 - 0.9)
65 yrs & over										
Males	66.1	(62.2 - 70.0)	25.3	(21.7 - 28.9)	7.8	(5.7 - 10.0)	0.4	(0.0 - 1.0)	0.4	(0.0 - 0.9)
Females	74.3	(71.4 - 77.2)	18.2	(15.7 - 20.7)	7.2	(5.4 - 8.9)	0.3	(0.0 - 0.7)	0.0	(0.0 - 0.0)
Persons	70.5	(68.1 - 72.9)	21.5	(19.3 - 23.6)	7.5	(6.1 - 8.8)	0.4	(0.0 - 0.7)	0.2	(0.0 - 0.4)
Total										
Males	36.5	(33.3 - 39.7)	22.7	(19.8 - 25.6)	35.8	(32.2 - 39.5)	3.8	(2.3 - 5.3)	1.2	(0.5 - 1.9)
Females	48.2	(45.5 - 51.0)	25.3	(22.7 - 27.8)	24.7	(22.1 - 27.3)	1.5	(0.7 - 2.3)	0.3	(0.0 - 0.7)
Persons	42.3	(40.2 - 44.5)	24.0	(22.1 - 25.9)	30.3	(28.0 - 32.6)	2.6	(1.8 - 3.5)	0.8	(0.4 - 1.1)

For respondents aged 16 to 44 years, just over half of males (56.6%) and over a third of females (38.2%) reported eating one or more fast food meals per week. Overall, males were significantly more likely to eat fast food meals each week than females (40.8% compared with 26.5%). The proportion of people never eating from fast food outlets increased significantly with age.

The mean fast food consumption per week was 0.6 meals, (0.5 for females and 0.8 for males).

Respondents aged 65 years and over were asked how many meals they eat each day, shown in Table 43, and whether their teeth or dentures affects the type of food they are able to eat, shown in Table 44.

Table 43: Number of meals eaten each day, 65 years and older, HWSS 2012

	One		Two		Three		Four or more	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
Males	2.4	(1.2 - 3.6)	14.1	(11.3 - 16.9)	80.5	(77.3 - 83.7)	3.0	(1.6 - 4.4)
Females	1.2	(0.5 - 1.9)	11.7	(9.6 - 13.8)	85.7	(83.4 - 88.0)	1.4	(0.7 - 2.2)
Persons	1.7	(1.1 - 2.4)	12.8	(11.1 - 14.5)	83.3	(81.4 - 85.2)	2.1	(1.4 - 2.9)

Table 44: Teeth or dentures affects food eaten, 65 years & older, HWSS 2102

	Yes		No	
	%	95% CI	%	95% CI
Males	11.3	(8.8 - 13.7)	88.7	(86.3 - 91.2)
Females	11.1	(9.1 - 13.2)	88.9	(86.8 - 90.9)
Persons	11.2	(9.6 - 12.8)	88.8	(87.2 - 90.4)

Approximately one in ten respondents aged 65 years and over reported that the type of food they ate was affected by the condition of their teeth or dentures.

8.4 Physical activity

Physical inactivity is a behavioural risk factor associated with several chronic health conditions, including coronary heart disease, stroke and diabetes. Being physically active reduces the risk of developing such conditions, while also improving general wellbeing.[19] Respondents were asked to rate their physical activity level, as shown in Table 45. Just over half of all respondents reported that they were either active or very active (52.1%).

Table 45: Self-reported level of physical activity, HWSS 2012

	Very active		Active		Moderately active		Not very active		Not at all active	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
16 to 44 yrs										
Males	29.8	(24.1 - 35.4)	34.2	(28.5 - 39.9)	26.5	(21.4 - 31.5)	8.1	(5.2 - 11.0)	1.4	(0.4 - 2.5)
Females	17.0	(13.5 - 20.6)	29.7	(25.3 - 34.2)	35.1	(30.5 - 39.8)	15.6	(12.1 - 19.1)	2.6	(0.9 - 4.2)
Persons	23.5	(20.1 - 27.0)	32.0	(28.4 - 35.7)	30.7	(27.2 - 34.1)	11.8	(9.5 - 14.1)	2.0	(1.0 - 3.0)
45 to 64 yrs										
Males	19.1	(15.9 - 22.4)	31.9	(27.9 - 35.9)	34.8	(30.7 - 38.9)	11.5	(8.7 - 14.3)	2.6	(1.1 - 4.2)
Females	18.2	(15.6 - 20.7)	29.0	(26.1 - 31.9)	36.0	(33.0 - 39.0)	14.1	(11.8 - 16.3)	2.8	(1.6 - 3.9)
Persons	18.6	(16.6 - 20.7)	30.4	(28.0 - 32.9)	35.4	(32.9 - 38.0)	12.8	(11.0 - 14.6)	2.7	(1.7 - 3.6)
65 yrs & over										
Males	17.3	(14.2 - 20.4)	31.6	(27.7 - 35.4)	35.2	(31.3 - 39.1)	11.9	(9.3 - 14.5)	4.1	(2.5 - 5.6)
Females	16.0	(13.6 - 18.4)	28.7	(25.8 - 31.7)	37.0	(33.9 - 40.2)	14.4	(12.1 - 16.6)	3.8	(2.6 - 5.1)
Persons	16.6	(14.7 - 18.5)	30.0	(27.6 - 32.4)	36.2	(33.7 - 38.7)	13.2	(11.5 - 15.0)	3.9	(2.9 - 4.9)
Total										
Males	24.7	(21.3 - 28.0)	33.1	(29.7 - 36.5)	30.3	(27.2 - 33.4)	9.7	(7.9 - 11.6)	2.2	(1.4 - 3.0)
Females	17.2	(15.2 - 19.3)	29.3	(26.8 - 31.9)	35.7	(33.1 - 38.4)	14.9	(12.9 - 16.9)	2.8	(1.9 - 3.8)
Persons	20.9	(19.0 - 22.9)	31.2	(29.1 - 33.4)	33.0	(31.0 - 35.1)	12.3	(10.9 - 13.7)	2.5	(1.9 - 3.1)

Respondents were asked how they usually spend most of the day, as shown in Table 46.

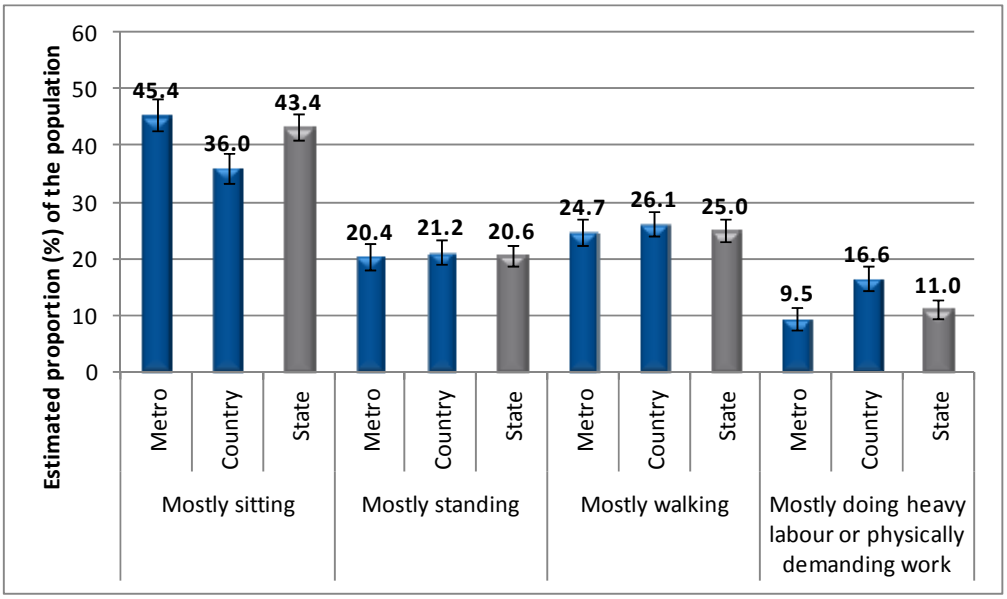
Table 46: How usually spend day, HWSS 2012

	Sitting		Standing		Walking		Heavy labour/ physically demanding work	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
16 to 44 yrs								
Males	49.0	(43.0 - 55.0)	13.4	(9.5 - 17.4)	17.1	(12.9 - 21.3)	20.4	(15.5 - 25.4)
Females	40.2	(35.4 - 45.0)	26.7	(22.3 - 31.1)	28.8	(22.3 - 33.2)	4.2	(2.5 - 5.9)
Persons	44.7	(40.8 - 48.6)	19.9	(16.9 - 22.9)	22.8	(19.7 - 25.9)	12.5	(9.8 - 15.3)
45 to 64 yrs								
Males	46.4	(42.1 - 50.8)	14.3	(11.4 - 17.2)	21.5	(18.1 - 24.9)	17.8	(14.3 - 24.9)
Females	37.1	(34.0 - 40.3)	25.6	(22.7 - 28.5)	31.3	(28.3 - 34.3)	6.0	(4.5 - 7.5)
Persons	41.8	(39.4 - 44.6)	19.9	(17.8 - 22.0)	26.4	(24.1 - 28.7)	11.9	(10.0 - 13.9)
65 yrs & over								
Males	44.8	(40.7 - 49.0)	21.4	(17.9 - 24.9)	29.3	(25.5 - 33.2)	4.4	(2.9 - 5.9)
Females	39.5	(36.3 - 42.8)	27.0	(24.0 - 30.0)	30.7	(27.5 - 33.9)	2.8	(1.7 - 3.8)
Persons	42.0	(39.4 - 44.6)	24.4	(22.1 - 26.7)	30.1	(27.6 - 32.6)	3.5	(2.6 - 4.4)
Total								
Males	47.6	(44.0 - 51.3)	14.8	(12.4 - 17.2)	20.1	(17.5 - 22.8)	17.4	(14.5 - 20.4)
Females	39.1	(36.4 - 41.9)	26.4	(23.9 - 28.9)	29.9	(27.4 - 32.5)	4.5	(3.5 - 5.6)
Persons	43.4	(41.1 - 45.7)	20.6	(18.8 - 22.4)	25.0	(23.2 - 26.9)	11.0	(9.4 - 12.6)

Compared to females, males were significantly more likely to spend most of their day in heavy labour/physically demanding work (17.4% compared with 4.5%) or sitting (47.6% compared with 39.1%). In contrast, females were more likely to spend most of their day standing (26.4% compared with 14.8%) or walking (29.9% compared with 20.1%).

Figure 24 shows how people usually spend their day by geographic area of residence. While the majority of adults living in both the metro and country spend most of the day sitting, the proportion is significantly higher for metro residents. A significantly higher proportion of adults in country areas spend most of their day in heavy labour/ physically demanding work compared with their metro counterparts.

Figure 24: How usually spend day, 16 years & over, by geographic area, HWSS 2012



The questions used to estimate the amount of physical activity undertaken in a week were taken from the Active Australia Survey. These questions enable physical activity to be categorised to the National Physical Activity Guidelines for Australians. There are a number of definitions of sufficient physical activity, in this report sufficient physical activity necessary for a health benefit and this is defined as accruing at least 150 minutes of moderate physical activity over five or more sessions in a week, as shown in Table 47.

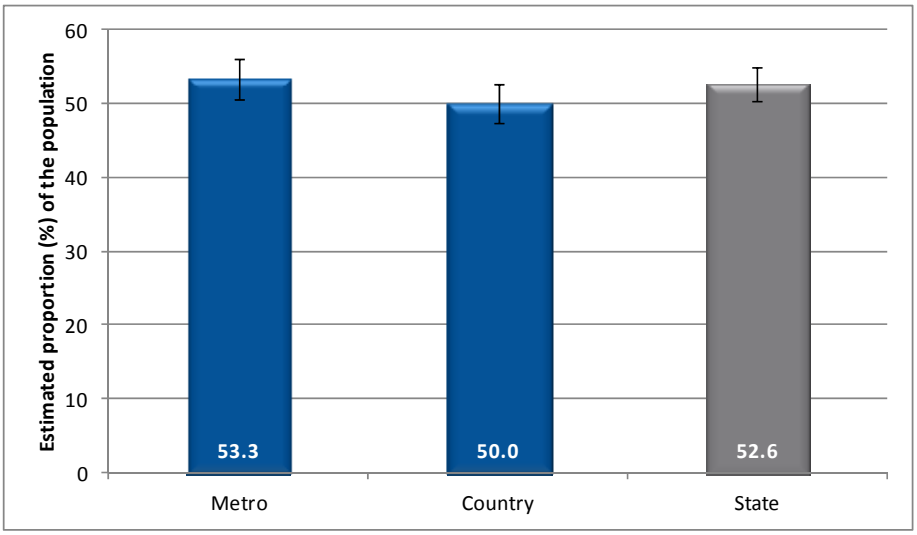
Only 52.6% of respondents were considered sufficiently active for good health and over one tenth of respondents (13.5%) did no leisure time physical activity. Males were significantly more likely than females to meet the recommended guidelines (57.2% compared with 48.0%).

Table 47: Proportion of people by level of physical activity as estimated using Active Australia guidelines, HWSS 2012

	Does no leisure time physical activity		Does less than 150 mod mins physical activity		Does 150 or more mod mins but not over 5 sessions		Does 150 or more mod mins over 5 or more sessions	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
16 to 44 yrs								
Males	8.6	(5.6 - 11.7)	15.7	(11.3 - 20.1)	10.3	(7.0 - 13.6)	65.3	(59.8 - 70.9)
Females	8.2	(5.6 - 10.8)	26.9	(22.5 - 31.3)	12.0	(8.9 - 15.1)	52.9	(48.1 - 57.8)
Persons	8.4	(6.4 - 10.4)	21.2	(18.0 - 24.3)	11.1	(8.8 - 13.4)	59.3	(55.5 - 63.0)
45 to 64 yrs								
Males	19.5	(15.8 - 23.1)	17.2	(14.2 - 20.3)	15.1	(11.9 - 18.3)	48.2	(43.9 - 52.5)
Females	14.6	(12.4 - 16.7)	29.3	(26.3 - 32.4)	9.2	(7.4 - 10.9)	46.9	(43.7 - 50.1)
Persons	17.0	(14.9 - 19.2)	23.3	(21.0 - 25.5)	12.2	(10.3 - 14.0)	47.5	(44.8 - 50.2)
65 yrs & over								
Males	20.1	(16.9 - 23.4)	23.5	(20.1 - 26.9)	10.7	(8.1 - 13.3)	45.7	(41.6 - 49.8)
Females	28.0	(25.0 - 30.9)	26.6	(23.8 - 29.5)	10.8	(8.8 - 12.9)	34.6	(31.4 - 37.8)
Persons	24.3	(22.2 - 26.5)	25.2	(23.0 - 27.4)	10.7	(9.1 - 12.4)	39.7	(37.1 - 42.3)
Total								
Males	13.7	(11.5 - 15.8)	17.3	(14.7 - 19.9)	11.9	(9.8 - 14.0)	57.2	(53.7 - 60.6)
Females	13.4	(11.8 - 15.0)	27.6	(25.1 - 30.2)	10.9	(9.2 - 12.7)	48.0	(45.2 - 50.8)
Persons	13.5	(12.2 - 14.9)	22.4	(20.6 - 24.3)	11.4	(10.0 - 12.8)	52.6	(50.4 - 54.9)

Figure 25 shows the proportion of adults meeting the recommended levels of physical activity by geographic area of residence. The proportion of adults meeting the recommended level of physical activity is slightly higher among metro residents compared with country residents; however this difference is not statistically significant.

Figure 25: Meeting recommended levels of physical activity, 16 years & over, by geographic area, HWSS 2012



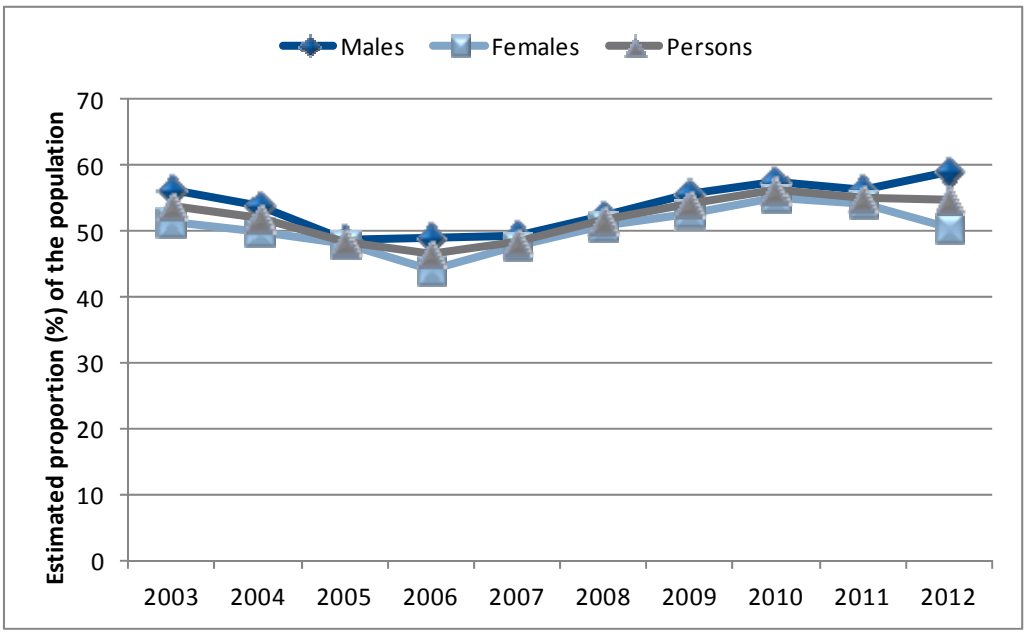
The standardised annual estimates of the proportion of adults doing the recommended 150 minutes or more of physical activity over five or more sessions are shown in Table 48 and Figure 26. The proportion of males, females and all persons meeting the recommended levels were all significantly higher in 2012 compared to 2006.

Table 48: Trend for meeting recommended physical activity level, adults 16-64 years, HWSS, 2003 – 2012

	Males	Females	Persons
2002	na	na	na
2003	56.3	51.6	54.0
2004	53.8	50.1	52.0
2005	48.7	48.1	48.4
2006	49.1	44.2	46.7
2007	49.4	47.8	48.6
2008	52.3	51.0	51.7
2009	55.8	52.8	54.3
2010	57.4	55.1	56.3
2011	56.2	54.2	55.2
2012	58.9	50.7	54.9
Average	54.3	51.0	52.7

na This information is not available for 2002

Figure 26: Trend for meeting recommended physical activity level, adults 16-64 years, HWSS, 2003 – 2012



The mean minutes spent in physical activity per week, for respondents who indicated some level of physical activity, are shown in Table 49.

Table 49: Trend for mean time (a) spent in physical activity per week, HWSS 2003 – 2012

	Males	Females	Persons
2002	na	na	na
2003	456.7	314.3	386.7
2004	414.9	289.7	353.3
2005	378.7	273.5	327.0
2006	360.7	256.4	309.4
2007	388.7	280.2	335.4
2008	384.2	301.4	343.6
2009	410.5	319.0	365.5
2010	436.7	334.8	386.7
2011	412.0	325.5	369.6
2012	426.6	328.6	378.5
Average	410.7	308.9	360.4

na This information is not available for 2002

(a) Refers to the mean time spent in moderate physical activity per week, where vigorous activity has been doubled.

Table 50 shows how many hours per week people spend watching TV or videos, or using the computer for the Internet or to play games, excluding work time.

The time spent watching TV or videos or using the computer increased significantly with age, from a mean of 13.8 hours for 16 to 44 year olds to 16.4 hours for 45 to 64 year olds and 20.3 hours for 65 year olds and over. There was no significant difference between males and females in the time spent watching TV or videos or using the computer.

Table 50: Time spent watching TV/Videos/ or using the computer per week, HWSS 2012

	None		Less than 7 hrs		7 to less than 14 hrs		14 to less than 21 hrs		21+ hrs	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
16 to 44 yrs										
Males	1.0	(0.0 - 2.2)	16.6	(12.3 - 20.8)	29.6	(24.0 - 35.2)	31.5	(25.8 - 37.1)	21.4	(16.9 - 25.9)
Females	2.1	(0.9 - 3.4)	20.7	(16.9 - 24.5)	26.9	(22.7 - 31.2)	29.2	(24.7 - 33.7)	21.1	(17.0 - 25.1)
Persons	1.5	(0.7 - 2.4)	18.6	(15.7 - 21.4)	28.3	(24.8 - 31.9)	30.3	(26.7 - 34.0)	21.2	(18.2 - 24.3)
45 to 64 yrs										
Males	1.6	(0.3 - 2.8)	9.9	(7.4 - 12.3)	23.5	(19.7 - 27.2)	33.7	(29.7 - 37.8)	31.4	(27.4 - 35.3)
Females	2.0	(0.9 - 3.1)	12.8	(10.5 - 15.0)	18.8	(16.3 - 21.2)	31.5	(28.5 - 34.5)	35.0	(32.0 - 38.1)
Persons	1.8	(0.9 - 2.6)	11.3	(9.7 - 13.0)	21.1	(18.9 - 23.4)	32.6	(30.1 - 35.1)	33.2	(30.7 - 35.7)
65 yrs & over										
Males	1.7	(0.7 - 2.8)	6.7	(4.6 - 8.7)	14.5	(11.7 - 17.3)	26.4	(22.8 - 30.0)	50.7	(46.6 - 54.8)
Females	1.9	(1.1 - 2.8)	6.8	(5.0 - 8.6)	11.0	(9.0 - 13.1)	27.8	(24.9 - 30.8)	52.4	(49.1 - 55.7)
Persons	1.8	(1.2 - 2.5)	6.7	(5.4 - 8.1)	12.6	(11.0 - 14.3)	27.2	(24.9 - 29.5)	51.6	(49.0 - 54.2)
Total										
Males	1.3	(0.5 - 2.0)	13.1	(10.6 - 15.5)	25.6	(22.2 - 28.9)	31.5	(28.1 - 34.9)	28.6	(25.7 - 31.6)
Females	2.1	(1.3 - 2.8)	15.9	(13.8 - 18.0)	21.8	(19.4 - 24.1)	29.7	(27.1 - 32.3)	30.6	(28.2 - 33.0)
Persons	1.7	(1.1 - 2.2)	14.5	(12.9 - 16.1)	23.7	(21.6 - 25.7)	30.6	(28.5 - 32.7)	29.6	(27.7 - 31.5)

8.5 Sleep

There is growing recognition of the importance of sleep to good health, with insufficient sleep linked to cardiovascular disease, increased risk of mortality, depression, and increased risk of injury and/or accidents.[20] It is recommended that adults receive 7 to 8 hours sleep per night.

Respondents were asked how many hours sleep they get on a usual night, shown in Table 51. Just under two thirds of respondents (61.1%) reported sleeping the recommended 7 to 8 hours per night. Respondents aged 45 years and over were almost two and half times more likely than younger respondents to sleep less than or equal to five hours per night. Overall, respondents reported sleeping an average of 7.2 hours per night.

Table 51: Time spent sleeping on a usual night, HWSS 2012

	Less than or equal to 5 hours sleep		Between 5 and 7 hours sleep		Between 7 and 8 hours sleep		More than 8 hours sleep	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
16 to 44 yrs								
Males	3.5	(1.7 - 5.3)	18.6	(14.2 - 23.0)	65.0	(59.4 - 70.6)	12.9	(8.8 - 17.1)
Females	5.8	(3.4 - 8.1)	14.2	(11.0 - 17.3)	66.3	(61.7 - 70.9)	13.8	(10.2 - 17.3)
Persons	4.6	(3.1 - 6.0)	16.5	(13.7 - 19.2)	65.6	(62.0 - 69.3)	13.3	(10.6 - 16.1)
45 to 64 yrs								
Males	9.4	(6.9 - 12.0)	22.0	(18.5 - 25.4)	62.2	(58.0 - 66.3)	6.4	(4.6 - 8.3)
Females	13.4	(11.2 - 15.6)	21.0	(18.4 - 23.7)	56.9	(53.7 - 60.0)	8.7	(7.0 - 10.4)
Persons	11.4	(9.7 - 13.1)	21.5	(19.3 - 23.7)	59.5	(56.9 - 62.1)	7.6	(6.3 - 8.8)
65 yrs & over								
Males	11.3	(8.7 - 13.9)	20.5	(17.2 - 23.8)	53.6	(49.5 - 57.7)	14.5	(11.7 - 17.4)
Females	17.2	(14.7 - 19.7)	26.2	(23.2 - 29.2)	44.5	(41.3 - 47.8)	12.1	(10.0 - 14.2)
Persons	14.5	(12.7 - 16.3)	23.6	(21.3 - 25.8)	48.8	(46.1 - 51.4)	13.2	(11.5 - 14.9)
Total								
Males	6.5	(5.1 - 7.8)	19.9	(17.3 - 22.6)	62.5	(59.1 - 65.9)	11.1	(8.7 - 13.5)
Females	10.0	(8.6 - 11.5)	18.3	(16.4 - 20.2)	59.8	(57.1 - 62.5)	11.9	(9.9 - 13.8)
Persons	8.2	(7.2 - 9.2)	19.1	(17.5 - 20.8)	61.1	(59.0 - 63.3)	11.5	(9.9 - 13.0)

9. PHYSIOLOGICAL RISK FACTORS

Lifestyle choices are associated with some physiological risk factors including high blood pressure, high blood cholesterol and being overweight or obese. These physiological risk factors are expressed as body measurements and are highly interrelated.[7] High blood pressure, high cholesterol and excess body weight are risk factors in their own right and contribute to chronic disease, such as heart disease.

9.1 Cholesterol level

Respondents were asked when they last had their cholesterol measured, shown in Table 53, and whether or not they have had high cholesterol. Table 52 shows the proportion of respondents who have been told by a doctor that they have high cholesterol levels.

Table 52: Prevalence of diagnosed high cholesterol levels, HWSS 2012

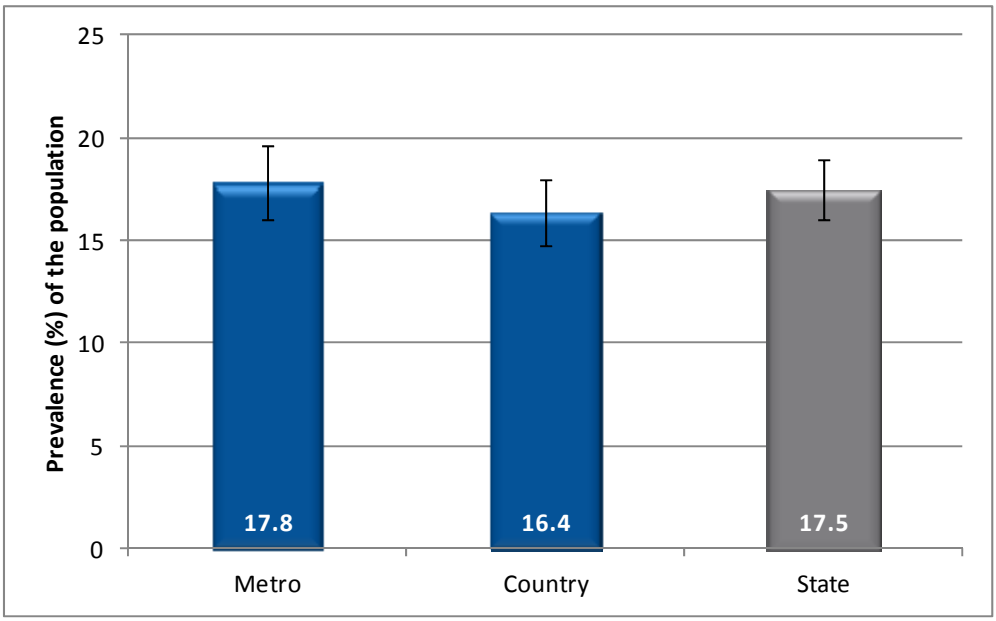
	Lifetime (ever)		Point (current)	
	%	95% CI	%	95% CI
16 to 44 yrs				
Males	15.4	(10.4 - 20.3)	6.6	(2.9 - 10.2)
Females	11.6	(8.0 - 15.2)	3.9	(1.9 - 5.8)
Persons	13.6	(10.5 - 16.7)	5.3	(3.1 - 7.4)
45 to 64 yrs				
Males	37.5	(33.2 - 41.9)	25.4	(21.5 - 29.3)
Females	28.4	(25.5 - 31.3)	17.5	(15.0 - 20.0)
Persons	33.0	(30.3 - 35.6)	21.4	(19.1 - 23.8)
65 yrs & over				
Males	40.4	(36.4 - 44.5)	32.7	(28.8 - 36.5)
Females	40.3	(37.1 - 43.6)	33.9	(30.7 - 37.0)
Persons	40.4	(37.8 - 43.0)	33.3	(30.8 - 35.8)
Total				
Males	29.1	(26.1 - 32.1)	19.1	(16.7 - 21.6)
Females	24.6	(22.5 - 26.7)	15.9	(14.3 - 17.4)
Persons	26.9	(25.0 - 28.7)	17.5	(16.0 - 18.9)

Table 53: Cholesterol level last tested, HWSS 2012

	Never		Within 6 mths		6 mths to 1 yr		1 to 2 yrs		2 or more yrs ago		Unsure	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
16 to 44 yrs												
Males	44.8	(38.8 - 50.8)	17.0	(13.0 - 21.0)	16.0	(11.5 - 20.4)	6.4	(3.7 - 9.0)	5.7	(3.4 - 8.0)	10.2	(6.4 - 14.0)
Females	46.7	(41.8 - 51.6)	20.0	(16.3 - 23.7)	14.3	(11.2 - 17.4)	6.2	(3.5 - 8.8)	6.7	(4.5 - 8.8)	6.2	(4.0 - 8.5)
Persons	45.7	(41.8 - 49.6)	18.4	(15.7 - 21.2)	15.1	(12.4 - 17.9)	6.3	(4.4 - 8.1)	6.2	(4.6 - 7.8)	8.3	(6.0 - 10.5)
45 to 64 yrs												
Males	5.5	(3.6 - 7.3)	53.0	(48.7 - 57.3)	23.0	(19.4 - 26.5)	8.9	(6.3 - 26.5)	5.5	(3.7 - 7.3)	4.2	(2.6 - 5.7)
Females	5.5	(4.0 - 7.0)	46.0	(42.9 - 49.2)	27.5	(24.6 - 30.4)	9.9	(8.0 - 11.7)	6.4	(4.8 - 7.9)	4.7	(3.4 - 6.0)
Persons	5.5	(1.6 - 6.7)	49.5	(46.8 - 52.2)	25.2	(22.9 - 27.5)	9.4	(7.8 - 11.0)	5.9	(4.7 - 7.1)	4.4	(3.4 - 5.5)
65 yrs & over												
Males	1.8	(0.6 - 2.9)	65.0	(61.1 - 68.9)	18.3	(15.1 - 21.4)	5.4	(3.5 - 7.2)	4.2	(2.5 - 5.9)	5.4	(3.7 - 7.1)
Females	2.9	(1.8 - 3.9)	60.4	(57.2 - 63.6)	19.3	(16.7 - 21.9)	5.9	(4.3 - 7.5)	3.1	(2.0 - 4.2)	8.4	(6.6 - 10.2)
Persons	2.4	(1.6 - 3.1)	62.5	(60.0 - 65.0)	18.8	(16.8 - 20.8)	5.7	(4.5 - 6.9)	3.6	(2.6 - 4.6)	7.0	(5.8 - 8.3)
Total												
Males	26.3	(22.7 - 30.0)	35.1	(32.0 - 38.1)	18.5	(15.8 - 21.2)	7.0	(5.4 - 8.7)	5.4	(4.0 - 6.8)	7.6	(5.4 - 9.8)
Females	26.5	(23.5 - 29.4)	34.9	(32.5 - 37.3)	19.3	(17.3 - 21.2)	7.3	(5.8 - 8.8)	6.0	(4.7 - 7.2)	6.1	(4.8 - 7.4)
Persons	26.4	(24.0 - 28.8)	35.0	(33.0 - 36.9)	18.9	(17.2 - 20.6)	7.2	(6.0 - 8.3)	5.7	(4.8 - 6.6)	6.9	(5.6 - 8.1)

Figure 27 shows the proportion of adults with current high cholesterol by geographic area of residence. There were not statistically significant differences.

Figure 27: Prevalence of current high cholesterol, 16 years & over, by geographic area, HWSS 2012



The standardised annual prevalence estimates of high blood pressure for adults aged 25 years and over are shown in Table 54 Descriptively, the prevalence of lifetime high cholesterol in 2012 has decreased for males for the first time since 2008, while for females and all persons 2012 was the lowest prevalence ever recorded to date. For the prevalence of current high cholesterol the prevalence in 2012 was the lowest recorded for females to date, though not at a statistically significant level.

Table 54: Trend for high cholesterol, 25 years & over, HWSS 2003 – 2012

	Lifetime (ever)			Period (current) (a)		
	Males	Females	Persons	Males	Females	Persons
2002	na	na	na	na	na	na
2003	32.4	30.3	31.4	19.8	18.9	19.4
2004	34.0	31.5	32.8	22.1	18.5	20.4
2005	30.9	30.2	30.6	21.3	18.7	20.0
2006	30.0	30.1	30.0	19.9	17.8	18.9
2007	32.1	28.9	30.5	20.3	19.5	19.9
2008	29.7	27.1	28.4	18.3	17.0	17.6
2009	31.4	27.4	29.5	20.9	18.2	19.6
2010	32.8	31.0	31.9	21.5	20.4	21.0
2011	33.8	28.9	31.4	22.9	18.3	20.6
2012	30.5	25.9	28.2	20.4	16.7	18.6
Average	31.9	29.1	30.5	20.9	18.5	19.7

na This information is not available for 2002.

(a) Current high cholesterol is defined as having high cholesterol or taking medication.

9.2 Blood pressure

Respondents were asked when they last had their blood pressure measured (Table 56) and if they have ever had it measured. For respondents who reported having had their blood pressure measured, an estimate of the prevalence of people who have had high blood pressure as well as people who currently have high blood pressure or who are being treated for high blood pressure is shown in Table 55. The prevalence for ever being diagnosed with high blood pressure and a current diagnosis increases significantly with age.

Table 55: Prevalence of high blood pressure, HWSS 2012

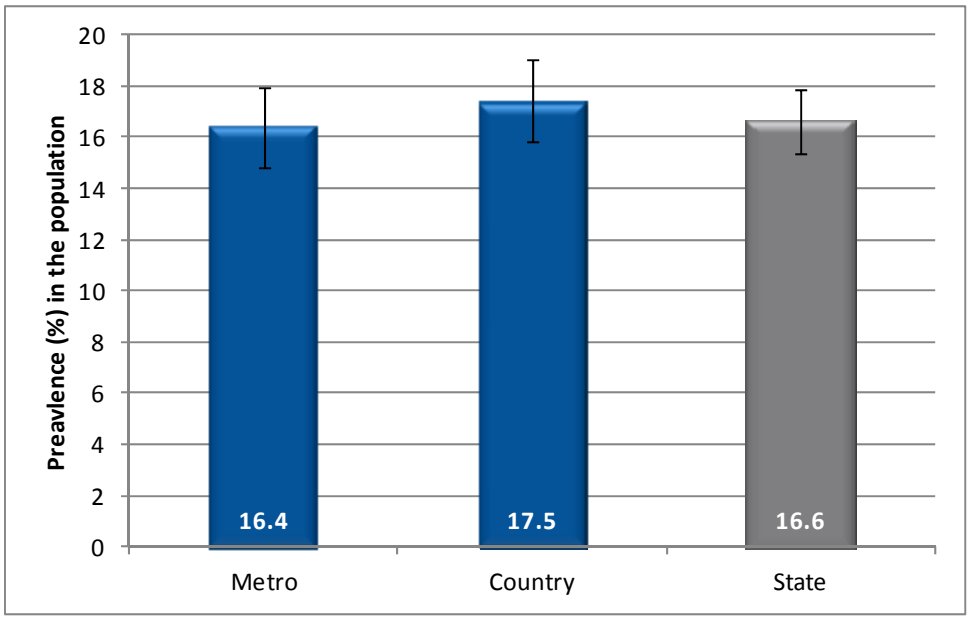
	Lifetime (ever)		Point (current)	
	%	95% CI	%	95% CI
16 to 44 yrs				
Males	9.5	(5.7 - 13.2)	4.5	(2.2 - 6.9)
Females	11.7	(8.7 - 14.7)	4.1	(2.3 - 5.9)
Persons	10.6	(8.2 - 13.0)	4.3	(2.8 - 5.8)
45 to 64 yrs				
Males	30.2	(26.3 - 34.1)	23.0	(19.5 - 26.5)
Females	30.0	(27.1 - 32.9)	22.1	(19.5 - 24.8)
Persons	30.1	(27.7 - 32.5)	22.6	(20.4 - 24.7)
65 yrs & over				
Males	50.5	(46.4 - 54.6)	45.6	(41.6 - 49.7)
Females	49.3	(46.0 - 52.6)	44.9	(41.6 - 48.2)
Persons	49.9	(47.3 - 52.4)	45.3	(42.7 - 47.8)
Total				
Males	22.2	(19.6 - 24.8)	16.5	(14.5 - 18.5)
Females	23.9	(21.9 - 25.9)	16.7	(15.2 - 18.3)
Persons	23.1	(21.4 - 24.7)	16.6	(15.4 - 17.9)

Table 56: Blood pressure last tested, HWSS 2012

	Never		Within 6 mths		6 mths to 1 yr		1 to 2 yrs		2 or more yrs ago		Unsure	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
16 to 44 yrs												
Males	6.2	(3.5 - 9.0)	56.6	(50.8 - 62.5)	21.7	(16.7 - 26.6)	6.4	(3.7 - 9.1)	3.6	(1.8 - 5.4)	5.4	(2.6 - 8.3)
Females	3.7	(1.9 - 5.5)	58.2	(53.3 - 63.0)	21.0	(17.1 - 24.9)	7.7	(4.5 - 10.8)	4.4	(2.3 - 6.5)	5.0	(2.5 - 7.4)
Persons	5.0	(3.3 - 6.7)	57.4	(53.6 - 61.2)	21.4	(18.2 - 24.5)	7.0	(4.9 - 9.1)	4.0	(2.6 - 5.4)	5.2	(3.3 - 7.1)
45 to 64 yrs												
Males	0.6	(0.0 - 1.2)	78.0	(74.4 - 81.5)	12.9	(10.0 - 15.7)	4.4	(2.7 - 6.0)	2.0	(0.9 - 3.0)	2.2	(0.7 - 3.7)
Females	0.2	(0.0 - 0.3)	75.1	(72.3 - 78.0)	17.4	(14.9 - 20.0)	4.2	(2.9 - 5.5)	1.9	(1.2 - 2.7)	1.2	(0.4 - 1.9)
Persons	0.4	(0.0 - 0.7)	76.6	(74.3 - 78.8)	15.1	(13.2 - 17.1)	4.3	(3.2 - 5.3)	1.9	(1.3 - 2.6)	1.7	(0.9 - 2.5)
65 yrs & over												
Males	0.1	(0.0 - 0.4)	89.9	(87.6 - 92.3)	7.5	(5.4 - 9.7)	0.8	(0.2 - 1.5)	0.8	(0.1 - 1.5)	0.8	(0.2 - 1.4)
Females	0.7	(0.1 - 1.3)	90.0	(88.0 - 92.0)	5.9	(4.4 - 7.5)	1.0	(0.4 - 1.6)	0.7	(0.1 - 1.3)	1.7	(0.8 - 2.6)
Persons	0.4	(0.1 - 0.8)	90.0	(88.5 - 91.5)	6.7	(5.4 - 8.0)	0.9	(0.5 - 1.3)	0.7	(0.3 - 1.2)	1.3	(0.7 - 1.8)
Total												
Males	3.6	(2.1 - 5.1)	68.1	(64.6 - 71.5)	16.9	(14.0 - 19.8)	5.0	(3.4 - 6.5)	2.7	(1.7 - 3.7)	3.8	(2.2 - 5.4)
Females	2.1	(1.2 - 3.0)	68.8	(66.0 - 71.6)	17.4	(15.2 - 19.6)	5.5	(3.8 - 7.2)	3.0	(1.9 - 4.1)	3.2	(1.9 - 4.5)
Persons	2.9	(1.9 - 3.8)	68.4	(66.2 - 70.6)	17.2	(15.4 - 19.0)	5.2	(4.1 - 6.4)	2.9	(2.1 - 3.6)	3.5	(2.5 - 4.6)

Figure 28 shows the proportion of adults with current high blood pressure by geographic area of residence.

Figure 28: Prevalence of current high blood pressure, 16 years & over, by geographic area, HWSS 2012



The standardised annual prevalence estimates of high blood pressure for adults aged 25 years and over are shown in Table 57.

Table 57: Prevalence of high blood pressure, 25 years & over, HWSS 2003 – 2012

	Lifetime (ever)			Period (current) (a)		
	Males	Females	Persons	Males	Females	Persons
2002	na	na	na	na	na	na
2003	25.1	29.3	27.2	16.7	18.5	17.6
2004	26.5	30.7	28.6	17.3	20.1	18.7
2005	26.2	29.0	27.6	17.6	17.6	17.6
2006	27.0	30.5	28.7	18.6	18.9	18.8
2007	28.4	30.1	29.2	18.5	19.2	18.9
2008	26.1	29.2	27.7	18.1	19.2	18.7
2009	27.0	28.7	27.8	20.0	19.2	19.6
2010	29.6	29.0	29.3	21.0	18.8	19.9
2011	26.7	27.4	27.0	18.4	19.0	18.7
2012	25.0	26.7	25.9	18.7	18.9	18.8
Average	27.2	29.0	28.1	18.9	19.1	19.0

na This information is not available for 2002.
(a) Refers to having been diagnosed by a doctor with high blood pressure and either still having high blood pressure or still taking medication for high blood pressure.

The prevalence of current high blood pressure has remained relatively stable since 2003, while the prevalence of lifetime high blood pressure in 2012 was the lowest recorded to date.

9.3 Body Weight

Respondents were asked how tall they were and how much they weighed. A Body Mass Index (BMI) was derived from these figures by dividing weight in kilograms by height in metres squared after adjustment for errors in the self-reported height and weight.[21] The BMIs were then classified as not overweight (BMI<25), overweight (25≤BMI<30) or obese (BMI≥30),[22] as shown in Table 58.

Two thirds of respondents (66.2%) reported height and weight measurements that classified them as overweight or obese. Just over one-quarter of those interviewed reported height and weight that classified them as obese. Females were more likely to be classified as not overweight or obese than males (38.4% compared to 29.4%). The proportion of respondents classified as overweight or obese was significantly higher for persons aged 45 years and over compared to those aged 16 to 44 years.

Table 58: Prevalence by BMI categories, 16 years & over, HWSS 2012

	Not overweight or obese		Overweight		Obese	
	%	95% CI	%	95% CI	%	95% CI
16 to 44 yrs						
Males	38.3	(32.2 - 44.3)	39.0	(33.2 - 44.8)	22.7	(17.9 - 27.6)
Females	47.7	(42.7 - 52.7)	28.2	(23.7 - 32.6)	24.2	(19.9 - 28.4)
Persons	42.7	(38.8 - 46.7)	33.9	(30.1 - 37.6)	23.4	(20.2 - 26.7)
45 to 64 yrs						
Males	17.2	(14.0 - 20.4)	48.0	(43.6 - 52.4)	34.8	(30.6 - 38.9)
Females	27.3	(24.3 - 30.3)	36.4	(33.2 - 39.6)	36.3	(33.2 - 39.5)
Persons	22.2	(20.0 - 24.4)	42.3	(39.5 - 45.1)	35.5	(32.9 - 38.2)
65 yrs & over						
Males	22.1	(18.6 - 25.5)	50.7	(46.5 - 54.9)	27.2	(23.5 - 30.9)
Females	30.5	(27.3 - 33.7)	36.7	(33.3 - 40.1)	32.8	(29.6 - 36.1)
Persons	26.5	(24.2 - 28.9)	43.3	(40.6 - 46.0)	30.2	(27.7 - 32.6)
Total						
Males	29.4	(25.8 - 33.0)	43.5	(39.9 - 47.0)	27.1	(24.1 - 30.2)
Females	38.4	(35.5 - 41.3)	32.2	(29.5 - 34.8)	29.4	(26.9 - 32.0)
Persons	33.8	(31.5 - 36.1)	37.9	(35.7 - 40.2)	28.3	(26.3 - 30.2)

Figure 29 shows the adults by BMI categories by geographic area of residence. The proportion of adults classified as obese using BMI was significantly lower among metro residents compared with country residents.

Figure 29: Prevalence by BMI categories, 16 years & over, by geographic area, HWSS 2012

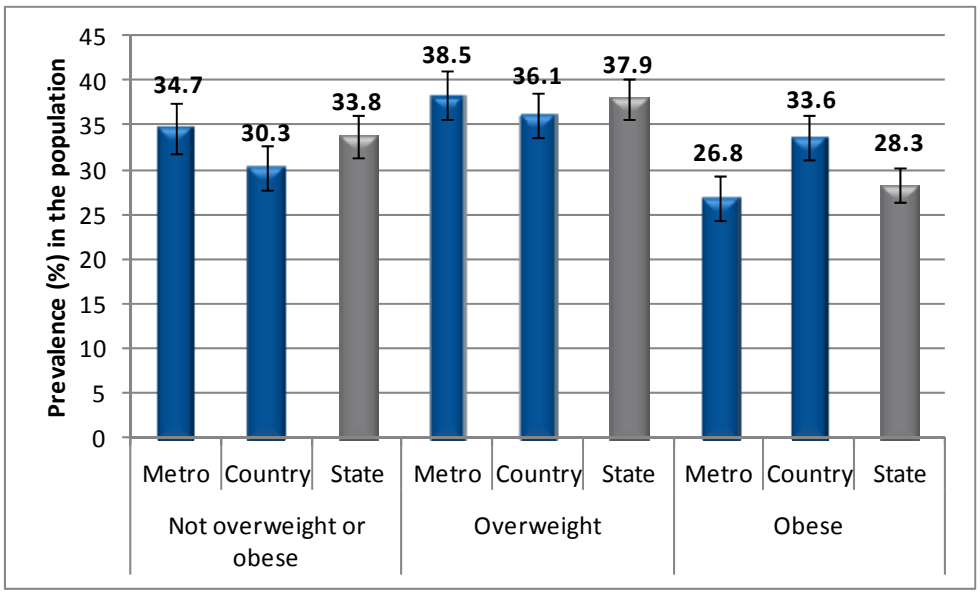


Table 59 shows the trends over time for three BMI categories, not overweight or obese, overweight and obese. The prevalence of obesity has increased significantly from 2002 to 2012 for males, females and all persons.

Table 59: Trend for BMI categories, 16 years & over, HWSS 2002 – 2012

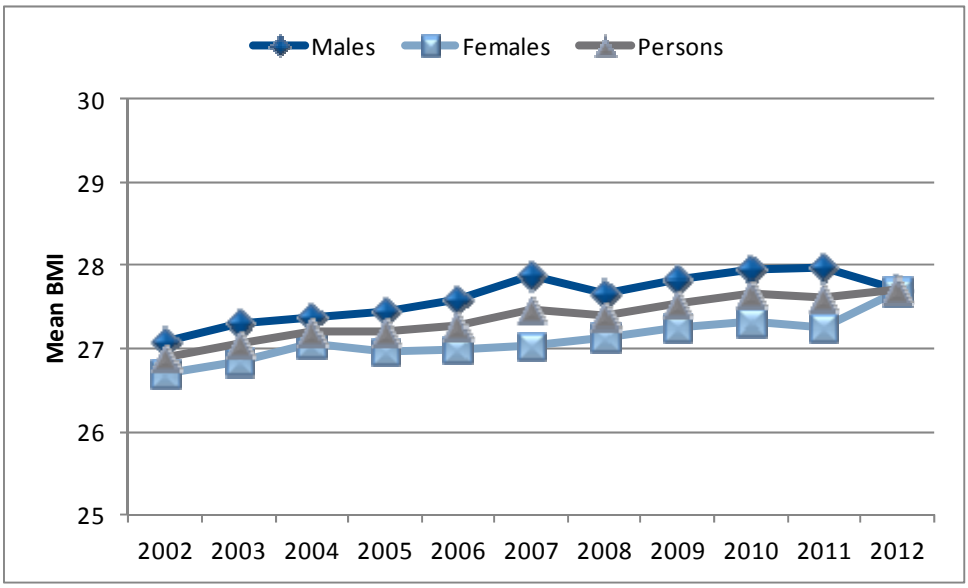
	Not overweight or obese			Overweight			Obese		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
2002	31.8	45.5	38.6	48.0	32.7	40.4	20.3	21.8	21.0
2003	31.5	44.7	38.0	46.8	33.4	40.2	21.7	21.9	21.8
2004	28.8	42.2	35.4	49.1	33.8	41.6	22.0	24.0	23.0
2005	28.4	44.5	39.4	48.8	29.6	39.4	22.9	25.9	24.4
2006	28.8	42.4	35.5	47.1	33.3	40.3	24.1	24.3	24.2
2007	27.6	42.9	35.2	45.3	31.9	38.7	27.1	25.2	26.2
2008	30.0	43.1	36.4	44.2	31.7	38.1	25.8	25.2	25.5
2009	26.1	40.9	33.4	46.8	32.6	39.9	27.1	26.5	26.8
2010	26.2	41.6	33.7	47.1	32.2	39.8	26.7	26.2	26.5
2011	26.5	41.4	33.7	46.9	32.8	40.0	26.6	25.9	26.3
2012	29.5	38.5	33.8	43.3	32.1	37.8	27.3	29.4	28.3
Average	28.6	42.4	35.4	46.4	32.2	39.5	25.0	25.4	25.2

The standardised annual prevalence estimates of BMI for adults aged 16 years and over are shown in Table 60 and Figure 30

Table 60: Standardised prevalence of mean BMI, 16 years and over, HWSS 2002 – 2012

	Males	Females	Persons
2002	27.1	26.7	26.9
2003	27.3	26.8	27.1
2004	27.4	27.1	27.2
2005	27.4	27.0	27.2
2006	27.6	27.0	27.3
2007	27.9	27.0	27.5
2008	27.7	27.1	27.4
2009	27.8	27.3	27.6
2010	28.0	27.3	27.7
2011	28.0	27.2	27.6
2012	27.7	27.7	27.7
Average	27.7	27.1	27.4

Figure 30: Trend for mean BMI, 16 years & over, HWSS 2002 – 2012



The standardised mean BMI has been increasing slightly over time. For males, females and all persons, the mean BMI has increased significantly from 2002 to 2012.

Respondents were also asked to estimate their waist circumference as this may predict future health risks more accurately than BMI alone. Respondents with a waist circumference of 80-87cm for females and 94-101cm for males were categorised as abdominally overweight and having an increased risk of developing chronic conditions, while respondents with a waist circumference of ≥88cm for females and ≥102cm for males were categorised as abdominally obese and having a highly increased risk of developing chronic conditions.[23] The results are displayed in Table 61. Just over one-quarter of respondents (27.4%) reported waist measurements that classified them as overweight or obese. Males were significantly more likely than females to be underweight or normal, in particular males under the age of 65. The proportion of respondents classified as overweight or obese was significantly higher for persons aged 45 years and over compared to those aged 16 to 44 years.

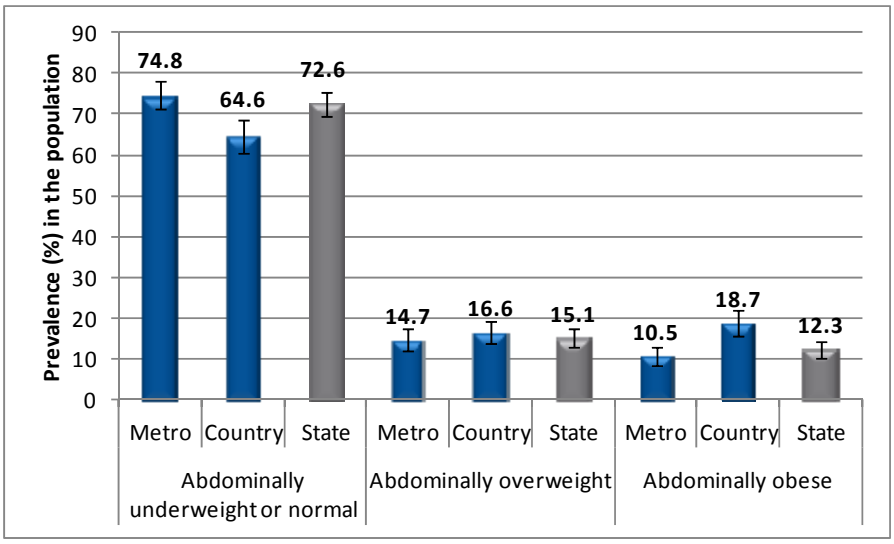
Table 61: Classification of waist circumference, 16 years & over, HWSS 2012

	Abdominally underweight or normal		Abdominally overweight		Abdominally obese	
	%	95% CI	%	95% CI	%	95% CI
16 to 44 yrs						
Males	87.3	(83.1 - 91.4)	7.5	(4.1 - 11.0)	5.2	(2.8 - 7.6)
Females	64.7	(52.1 - 77.4)	17.2	(7.8 - 26.6)	18.1	(8.5 - 27.8)
Persons	83.8	(79.7 - 87.9)	9.0	(15.5 - 22.8)	7.2	(4.6 - 9.8)
45 to 64 yrs						
Males	67.7	(62.8 - 72.7)	17.2	(13.2 - 21.3)	15.0	(11.2 - 18.8)
Females	50.3	(41.5 - 59.2)	28.9	(20.7 - 37.1)	20.8	(14.0 - 27.5)
Persons	64.9	(60.5 - 69.3)	19.1	(22.9 - 22.8)	16.0	(12.6 - 19.3)
65 yrs & over						
Males	53.4	(48.2 - 58.6)	26.9	(22.2 - 31.6)	19.7	(15.6 - 23.8)
Females	41.4	(31.8 - 51.1)	27.6	(18.8 - 36.5)	30.9	(21.9 - 40.0)
Persons	51.2	(46.5 - 55.8)	27.0	(22.9 - 31.2)	21.8	(18.0 - 25.6)
Total						
Males	75.8	(72.7 - 79.0)	13.6	(11.1 - 16.0)	10.6	(8.6 - 12.6)
Females	55.9	(48.4 - 63.4)	22.9	(17.2 - 28.7)	21.2	(15.6 - 26.7)
Persons	72.6	(69.6 - 75.6)	15.1	(12.8 - 17.4)	12.3	(10.4 - 14.2)

Figure 31 shows the adults by waist circumference classification for high body weight by geographic area of residence. The proportion of adults classified as obese based on waist circumference was significantly lower among metro residents compared

with country residents. Abdominal obesity was also lower for the State as a whole compared with country residents.

Figure 31: Classification of waist circumference, 16 years & over, by geographic area, HWSS 2012



Respondents were also asked for their perceptions of their own weight (Table 62). Males were significantly more likely than females to consider themselves underweight (7.3% compared to 3.2%), but significantly less likely to consider themselves very overweight (1.7% compared with 5.0%).

Table 62 Self-perception of body weight, 16 years & over, HWSS 2012

	Underweight		Normal weight		Overweight		Very overweight	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
16 to 44 yrs								
Males	9.7	(5.6 - 13.7)	61.0	(55.2 - 66.8)	28.5	(23.3 - 33.6)	0.9	(0.1 - 1.6)
Females	3.6	(1.8 - 5.3)	57.6	(52.8 - 62.4)	34.5	(29.9 - 39.0)	4.4	(2.1 - 6.6)
Persons	6.7	(4.4 - 9.0)	59.3	(55.6 - 63.1)	31.4	(27.9 - 34.9)	2.6	(1.4 - 3.7)
45 to 64 yrs								
Males	4.3	(2.8 - 5.9)	45.1	(40.8 - 49.4)	47.6	(43.4 - 51.9)	2.9	(1.5 - 4.3)
Females	1.8	(1.0 - 2.6)	38.0	(34.9 - 41.2)	52.7	(49.5 - 55.9)	7.4	(5.6 - 9.2)
Persons	3.1	(2.2 - 4.0)	41.6	(38.9 - 44.3)	50.2	(47.5 - 52.9)	5.2	(4.0 - 6.3)
65 yrs & over								
Males	4.7	(3.1 - 6.4)	46.5	(42.5 - 50.6)	46.8	(42.7 - 50.9)	1.9	(0.8 - 3.0)
Females	4.6	(3.3 - 5.8)	45.5	(42.2 - 48.8)	47.5	(44.2 - 50.8)	2.4	(1.5 - 3.3)
Persons	4.7	(3.6 - 5.7)	46.0	(43.4 - 48.6)	47.2	(44.6 - 49.8)	2.2	(1.5 - 2.9)
Total								
Males	7.3	(5.0 - 9.6)	53.9	(50.4 - 57.5)	37.1	(33.8 - 40.4)	1.7	(1.0 - 2.3)
Females	3.2	(2.2 - 4.1)	49.4	(46.6 - 52.2)	42.4	(39.7 - 45.1)	5.0	(3.7 - 6.3)
Persons	5.2	(4.0 - 6.5)	51.7	(49.4 - 53.9)	39.7	(37.6 - 41.9)	3.3	(2.6 - 4.1)

Respondents were then asked what they were trying to do about their weight (Table 63). Females were significantly more likely to state that they were trying to lose weight than males, particularly in the 45 to 64 year age group.

Table 63: Intentions regarding weight, 16 years & over, HWSS 2012

	Lose weight		Gain weight		Stay the same weight		I am not trying to do anything about my weight	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
16 to 44 yrs								
Males	36.7	(31.0 - 42.4)	16.4	(11.5 - 21.4)	22.0	(17.2 - 26.8)	24.9	(20.0 - 29.7)
Females	46.1	(41.3 - 51.0)	1.9	(0.5 - 3.2)	27.4	(23.1 - 31.8)	24.6	(20.4 - 28.7)
Persons	41.3	(37.5 - 45.1)	9.3	(6.6 - 12.1)	24.7	(21.4 - 27.9)	24.7	(21.5 - 27.9)
45 to 64 yrs								
Males	45.4	(41.1 - 49.7)	2.7	(1.3 - 4.0)	25.7	(22.0 - 29.5)	26.2	(22.3 - 30.1)
Females	55.8	(52.6 - 58.9)	0.9	(0.4 - 1.3)	23.1	(20.5 - 25.8)	20.2	(17.6 - 22.9)
Persons	50.6	(47.9 - 53.2)	1.8	(1.1 - 2.5)	24.4	(22.2 - 26.7)	23.2	(20.9 - 25.6)
65 yrs & over								
Males	34.3	(30.4 - 38.2)	1.1	(0.3 - 1.8)	35.3	(31.3 - 39.2)	29.4	(25.7 - 33.1)
Females	37.1	(33.9 - 40.3)	2.9	(1.9 - 3.9)	27.9	(24.9 - 30.9)	32.1	(29.1 - 35.2)
Persons	35.8	(33.3 - 38.3)	2.1	(1.4 - 2.7)	31.3	(28.9 - 33.7)	30.9	(28.5 - 33.2)
Total								
Males	39.1	(35.7 - 42.6)	9.9	(7.1 - 12.7)	25.1	(22.1 - 28.0)	25.9	(22.9 - 28.9)
Females	47.7	(44.9 - 50.4)	1.7	(1.0 - 2.4)	26.2	(23.7 - 28.6)	24.5	(22.1 - 26.8)
Persons	43.4	(41.2 - 45.6)	5.8	(4.3 - 7.3)	25.6	(23.7 - 27.5)	25.2	(23.3 - 27.1)

10. HEALTH SERVICE UTILISATION

Health services are the way in which health care is provided to patients and the general population and consist of many different forms, including GP, hospital, dental, mental and alternative services.[7] Respondents were asked whether they had used a number of common health services within the past 12 months, shown in Table 64 and how often they visited them, shown in Table 65.

While almost nine in ten respondents (88.6%) reported having used primary health services (e.g. visiting a GP) within the past 12 months, only 6.3% reported having used mental health services during this period. A significantly higher proportion of females reported using primary, allied, and alternative health services compared with males.

The most used service was primary health services, with a mean of 4.2 visits, followed by allied services, with 2.8 visits. Females had a significantly higher mean number of visits for primary, allied and alternative health services compared with males.

Table 64: Health service utilisation, HWSS 2012

	Primary (a)		Hospital based (b)		Allied (c)		Dental		Mental (d)		Alternative (e)	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
16 to 44 yrs												
Males	78.6	(73.4 - 83.8)	22.2	(17.0 - 27.5)	37.8	(32.1 - 43.4)	52.6	(46.6 - 58.5)	6.6	(3.8 - 9.4)	5.5	(2.8 - 8.2)
Females	92.3	(89.9 - 94.7)	27.4	(23.1 - 31.7)	43.7	(38.9 - 48.5)	54.9	(50.1 - 59.8)	8.9	(6.2 - 11.7)	10.9	(7.9 - 13.9)
Persons	85.3	(82.3 - 88.3)	24.8	(21.4 - 28.2)	40.6	(36.9 - 44.4)	53.7	(49.9 - 57.6)	7.7	(5.8 - 9.7)	8.1	(6.1 - 10.1)
45 to 64 yrs												
Males	89.1	(86.3 - 91.9)	27.0	(23.1 - 30.9)	53.7	(49.4 - 58.0)	56.0	(51.8 - 60.3)	5.1	(3.3 - 7.0)	4.9	(3.2 - 6.5)
Females	92.2	(90.6 - 93.9)	25.8	(23.0 - 28.6)	59.0	(55.8 - 62.1)	64.8	(61.8 - 67.8)	6.2	(4.6 - 7.7)	13.0	(10.9 - 15.2)
Persons	90.7	(89.0 - 92.3)	26.4	(24.0 - 28.8)	56.3	(53.6 - 59.0)	60.4	(57.8 - 63.0)	5.7	(4.5 - 6.9)	8.9	(7.5 - 10.3)
65 yrs & over												
Males	95.7	(94.2 - 97.2)	34.1	(30.2 - 38.0)	54.4	(50.4 - 58.5)	56.3	(52.2 - 60.3)	3.3	(1.8 - 4.8)	3.4	(2.0 - 4.8)
Females	95.8	(94.4 - 97.1)	30.3	(27.4 - 33.3)	63.2	(60.0 - 66.4)	52.6	(49.4 - 55.9)	2.0	(1.1 - 2.8)	6.1	(4.5 - 7.6)
Persons	95.8	(94.7 - 96.8)	32.1	(29.7 - 34.5)	59.1	(56.6 - 61.7)	54.3	(51.8 - 56.9)	2.6	(1.7 - 3.4)	4.8	(3.8 - 5.9)
Total												
Males	84.3	(81.3 - 87.3)	25.4	(22.3 - 28.5)	45.1	(41.7 - 48.6)	54.2	(50.6 - 57.8)	5.7	(4.0 - 7.3)	5.0	(3.4 - 6.6)
Females	92.9	(91.5 - 94.2)	27.4	(24.9 - 29.9)	51.7	(48.9 - 54.5)	57.7	(54.9 - 60.4)	6.9	(5.4 - 8.4)	10.8	(9.1 - 12.5)
Persons	88.6	(86.9 - 90.3)	26.4	(24.4 - 28.4)	48.4	(46.2 - 50.7)	55.9	(53.7 - 58.2)	6.3	(5.2 - 7.4)	7.9	(6.7 - 9.1)

(a) e.g. medical specialist, general practitioner, community health centre, community or district nurses.
(b) e.g. overnight stay, accident and emergency Department or outpatients.
(c) e.g. optician, physiotherapist, chiropractor, podiatrist, dietician, nutritionist, occupational therapist, diabetes/other health educator.
(d) e.g. psychiatrist, psychologist or counsellor.
(e) e.g. acupuncturist, naturopath, homeopath or any other alternative health service.

Table 65: Mean visits to health services used in the past 12 months, HWSS 2012

	Primary (a)		Hospital based (b)		Allied (c)		Dental		Mental (d)		Alternative (e)	
	$\bar{x}$	95% CI	$\bar{x}$	95% CI	$\bar{x}$	95% CI	$\bar{x}$	95% CI	$\bar{x}$	95% CI	$\bar{x}$	95% CI
16 to 44 yrs												
Males	2.7	(2.3 - 3.0)	0.4	(0.2 - 0.7)	2.1	(1.6 - 2.6)	0.9	(0.7 - 1.2)	0.3	(0.1 - 0.5)	0.2	(0.1 - 0.3)
Females	4.8	(4.1 - 5.5)	0.5	(0.4 - 0.6)	3.1	(2.4 - 3.9)	1.1	(0.8 - 1.3)	0.6	(0.4 - 0.9)	0.6	(0.4 - 0.8)
Persons	3.7	(3.3 - 4.1)	0.5	(0.3 - 0.6)	2.6	(2.2 - 3.1)	1.0	(0.9 - 1.2)	0.5	(0.3 - 0.6)	0.4	(0.3 - 0.5)
45 to 64 yrs												
Males	4.1	(3.6 - 4.7)	0.5	(0.4 - 0.7)	2.8	(2.1 - 3.4)	1.0	(0.9 - 1.2)	0.2	(0.1 - 0.3)	0.4	(0.2 - 0.6)
Females	4.3	(3.9 - 4.6)	0.4	(0.4 - 0.5)	3.3	(2.9 - 3.7)	1.3	(1.2 - 1.4)	0.5	(0.3 - 0.6)	0.7	(0.5 - 1.0)
Persons	4.2	(3.9 - 4.5)	0.5	(0.4 - 0.6)	3.0	(2.6 - 3.4)	1.2	(1.1 - 1.2)	0.3	(0.2 - 0.4)	0.6	(0.4 - 0.7)
65 yrs & over												
Males	5.6	(5.2 - 6.1)	0.7	(0.6 - 0.8)	2.8	(1.8 - 3.7)	1.2	(1.0 - 1.3)	0.1	(0.0 - 0.2)	0.1	(0.0 - 0.2)
Females	6.1	(5.6 - 6.5)	0.7	(0.5 - 0.8)	3.5	(3.0 - 4.0)	1.1	(1.0 - 1.2)	0.1	(0.0 - 0.1)	0.3	(0.2 - 0.5)
Persons	5.9	(5.6 - 6.2)	0.7	(0.6 - 0.8)	3.2	(2.7 - 3.7)	1.1	(1.0 - 1.2)	0.1	(0.1 - 0.1)	0.2	(0.1 - 0.3)
Total												
Males	3.6	(3.3 - 3.8)	0.5	(0.4 - 0.6)	2.4	(2.1 - 2.8)	1.1	(1.0 - 1.3)	0.3	(0.2 - 0.4)	0.2	(0.1 - 0.3)
Females	4.9	(4.5 - 5.2)	0.5	(0.4 - 0.5)	3.2	(2.8 - 3.7)	1.0	(0.9 - 1.1)	0.5	(0.3 - 0.6)	0.6	(0.5 - 0.7)
Persons	4.2	(4.0 - 4.4)	0.5	(0.4 - 0.6)	2.8	(2.5 - 3.1)	1.1	(1.0 - 1.2)	0.4	(0.3 - 0.5)	0.4	(0.3 - 0.5)

(a) e.g. medical specialist, general practitioner, community health centre, community or district nurses.
(b) e.g. overnight stay, accident and emergency Department or outpatients.
(c) e.g. optician, physiotherapist, chiropractor, podiatrist, dietician, nutritionist, occupational therapist, diabetes/other health educator.
(d) e.g. psychiatrist, psychologist or counsellor.
(e) e.g. acupuncturist, naturopath, homeopath or any other alternative health service.

Annual flu vaccinations and five-yearly pneumonia vaccinations are recommended for adults aged 65 years and over and are available free of charge.[24] Respondents 65 years and older were asked about flu and pneumonia vaccinations, as shown in Table 66.

Table 66: Vaccinations received, 65 years and older, HWSS 2012

	Pneumonia vaccine within 5 years		Flu vaccine since 1st March 2011	
	%	95% CI	%	95% CI
Males	42.2	(38.1 - 46.4)	56.1	(51.7 - 60.5)
Females	52.7	(49.4 - 56.1)	57.2	(53.6 - 60.8)
Persons	47.9	(45.3 - 50.5)	56.7	(53.9 - 59.5)

11. PSYCHOSOCIAL

Mental health involves the capacity to interact with people and the environment and refers to the ability to negotiate the social interactions and challenges of life without experiencing undue emotional or behavioural incapacity.[25] Mental health is also referred to as psychosocial health as it involves aspects of both social and psychological behaviour.

11.1 Psychological distress

Psychological distress may be determined in ways other than having been diagnosed or treated for a mental health condition.[7] The Kessler 10 (K10) is a standardised instrument consisting of ten questions that measure psychological distress by asking about levels of anxiety and depressive symptoms experienced in the past four weeks. Each item on the K10 is scored and then summed, resulting in a range of possible scores from 10 to 50, which have then been categorised into low, moderate, high and very high levels of psychological distress[26,27](Table 67). Low psychological distress is regarded as not requiring any intervention, while moderate and high levels require self-help and very high levels require professional help.[27]

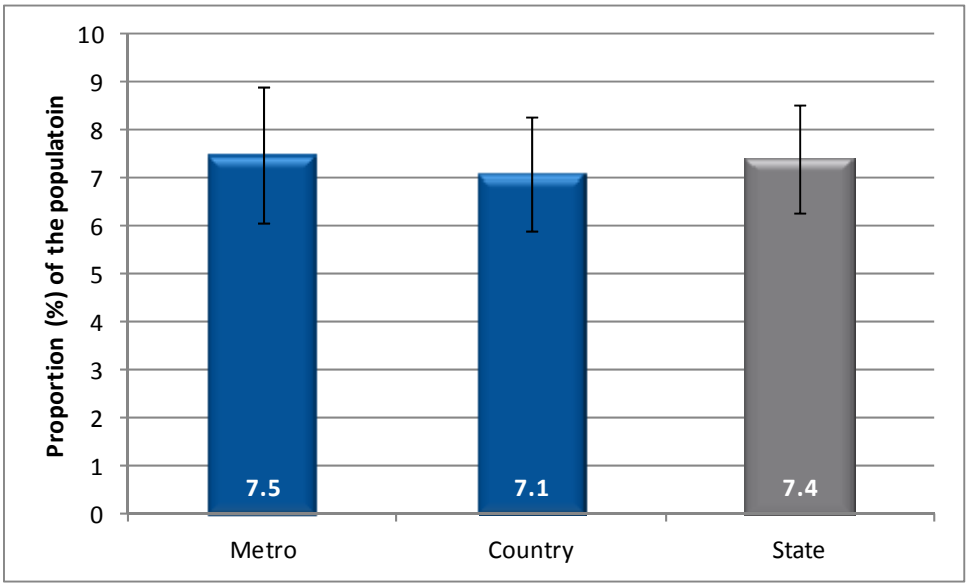
Table 67: Psychological distress, as measured by Kessler 10, HWSS 2012

	Low		Moderate		High		Very high	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
16 to 44 yrs								
Males	78.7	(73.3 - 84.0)	16.6	(11.5 - 21.8)	3.5	(1.5 - 5.5)	1.2	(0.3 - 2.2)
Females	74.3	(70.0 - 78.6)	15.8	(12.3 - 19.3)	6.4	(3.8 - 9.0)	3.5	(1.6 - 5.3)
Persons	76.5	(73.1 - 80.0)	16.2	(13.1 - 19.4)	4.9	(3.3 - 6.6)	2.3	(1.3 - 3.4)
45 to 64 yrs								
Males	80.1	(76.9 - 83.4)	12.5	(9.8 - 15.1)	4.4	(2.8 - 6.0)	3.0	(1.5 - 4.5)
Females	73.5	(70.7 - 76.4)	17.4	(15.0 - 19.9)	6.2	(4.6 - 7.8)	2.9	(1.8 - 3.9)
Persons	76.8	(74.7 - 79.0)	14.9	(13.1 - 16.8)	5.3	(4.2 - 6.4)	2.9	(2.0 - 3.8)
65 yrs & over								
Males	81.8	(78.7 - 84.9)	11.9	(9.4 - 14.5)	4.6	(2.9 - 6.3)	1.7	(0.6 - 2.8)
Females	78.5	(75.8 - 81.2)	15.3	(12.9 - 17.6)	5.4	(3.9 - 6.8)	0.9	(0.3 - 1.5)
Persons	80.0	(78.0 - 82.1)	13.7	(12.0 - 15.5)	5.0	(3.9 - 6.1)	1.3	(0.6 - 1.9)
Total								
Males	79.6	(76.4 - 82.7)	14.6	(11.7 - 17.6)	3.9	(2.7 - 5.1)	1.9	(1.1 - 2.6)
Females	74.7	(72.3 - 77.2)	16.2	(14.2 - 18.2)	6.2	(4.7 - 7.6)	2.9	(1.8 - 3.9)
Persons	77.2	(75.2 - 79.1)	15.4	(13.6 - 17.2)	5.0	(4.1 - 6.0)	2.4	(1.7 - 3.0)

High/very high levels of psychological distress were reported for 7.4% of the population, which is equivalent to approximately 138,572 people.

Figure 32 shows the proportion of adults with high/ very high levels of psychological distress by geographic area of residence. There was no difference in the proportion of adults with high/ very high levels of psychological distress.

Figure 32: Levels of high/ very high psychological distress, measured by the Kessler 10, persons 16 years & over, by geographic area, HWSS 2012



The standardised annual prevalence estimates of high or very high levels of psychological distress for adults aged 16 years & over are shown in Table 68

.

Table 68: Standardised prevalence estimates for high and very high psychological distress, as measured by the Kessler 10, HWSS 2002 – 2012

	Males	Females	Persons
2002	7.6	9.9	8.7
2003	8.4	10.7	9.5
2004	8.1	10.6	9.3
2005	6.6	9.3	8.0
2006	7.5	11.5	9.5
2007	6.3	7.7	7.0
2008	7.0	11.8	9.4
2009	6.8	9.4	8.1
2010	7.5	9.8	8.7
2011	7.0	9.7	8.3
2012	5.8	9.0	7.4
Average	7.6	10.2	8.9

The prevalence of psychological distress has remained relatively stable over time for females and all persons, while the prevalence for males in 2012 was the lowest recorded to date (5.8%). The difference for males over time was however, not statistically significant

11.2 Major life events

Major life events can influence a person's wellbeing.[28] Respondents were asked whether they had personally been affected by major life events in the past 12 months, shown in Table 69.

The most frequently reported major life events were the death of someone close (24.1%) followed by moving house (both 10.6%) and financial hardship (9.6%).

Table 69: Experienced major life events, HWSS 2012

	Moved house		Robbed or burgled		Death of someone close		Relationship breakdown		Serious injury		Financial hardship		Loss of driver's licence		Seriously ill		Other major event	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
16 to 44 yrs																		
Males	12.3	(8.4 - 16.3)	5.2	(2.7 - 7.6)	23.8	(18.4 - 29.2)	9.3	(6.0 - 12.6)	11.8	(7.3 - 16.4)	9.4	(5.3 - 13.6)	3.1	(1.0 - 5.2)	5.0	(2.5 - 7.5)	6.0	(3.4 - 8.6)
Females	18.4	(14.5 - 22.2)	4.0	(2.3 - 5.8)	21.6	(17.8 - 25.5)	7.6	(5.3 - 10.0)	5.2	(3.0 - 7.3)	13.4	(10.1 - 16.8)	1.4	(0.5 - 2.3)	7.2	(4.8 - 9.5)	13.4	(9.9 - 16.9)
Persons	15.3	(12.5 - 18.0)	4.6	(3.1 - 6.2)	22.7	(19.4 - 26.1)	8.5	(6.4 - 10.5)	8.6	(6.0 - 11.2)	11.4	(8.7 - 14.1)	2.3	(1.1 - 3.4)	6.0	(4.3 - 7.8)	9.6	(7.4 - 11.8)
45 to 64 yrs																		
Males	7.0	(4.5 - 9.5)	3.9	(2.2 - 5.6)	23.0	(19.5 - 26.4)	5.7	(3.6 - 7.7)	6.5	(4.3 - 8.6)	10.2	(7.7 - 12.8)	0.9	(0.1 - 1.7)	8.6	(6.1 - 11.1)	8.5	(6.2 - 10.8)
Females	5.8	(4.3 - 7.4)	4.4	(3.1 - 5.7)	28.5	(25.6 - 31.4)	5.7	(4.2 - 7.3)	4.7	(3.4 - 6.1)	7.4	(5.9 - 9.0)	0.7	(0.1 - 1.2)	11.5	(9.5 - 13.6)	10.0	(8.0 - 12.0)
Persons	6.4	(5.0 - 7.9)	4.2	(3.1 - 5.3)	25.7	(23.5 - 28.0)	5.7	(4.4 - 7.0)	5.6	(4.3 - 6.9)	8.8	(7.4 - 10.3)	0.8	(0.3 - 1.3)	10.1	(8.5 - 11.7)	9.2	(7.7 - 10.8)
65 yrs & over																		
Males	2.7	(1.5 - 4.0)	3.5	(2.1 - 4.8)	24.6	(21.1 - 28.1)	2.9	(1.6 - 4.2)	4.0	(2.4 - 5.5)	4.8	(3.1 - 6.4)	0.9	(0.1 - 1.6)	9.6	(7.2 - 11.9)	4.8	(3.0 - 6.6)
Females	2.7	(1.7 - 3.7)	3.6	(2.4 - 4.8)	26.4	(23.6 - 29.2)	4.3	(2.9 - 5.6)	5.3	(3.9 - 6.8)	4.6	(3.4 - 5.9)	1.7	(0.8 - 2.5)	11.4	(9.3 - 13.4)	7.8	(6.0 - 9.7)
Persons	2.7	(1.9 - 3.5)	3.5	(2.6 - 4.4)	25.6	(23.4 - 27.8)	3.6	(2.7 - 4.6)	4.7	(3.6 - 5.7)	4.7	(3.7 - 5.7)	1.3	(0.7 - 1.9)	10.5	(9.0 - 12.1)	6.4	(5.1 - 7.7)
Total																		
Males	9.3	(7.0 - 11.6)	4.5	(3.1 - 6.0)	23.6	(20.5 - 26.8)	7.3	(5.3 - 9.2)	9.0	(6.4 - 11.6)	9.0	(6.6 - 11.4)	2.1	(0.9 - 3.3)	6.8	(5.1 - 8.4)	6.6	(5.0 - 8.2)
Females	11.8	(9.7 - 13.9)	4.1	(3.1 - 5.1)	24.6	(22.3 - 26.8)	6.5	(5.1 - 7.8)	5.0	(3.8 - 6.2)	10.1	(8.3 - 11.9)	1.2	(0.7 - 1.7)	9.2	(7.8 - 10.7)	11.4	(9.5 - 13.4)
Persons	10.6	(9.0 - 12.1)	4.3	(3.4 - 5.2)	24.1	(22.2 - 26.1)	6.9	(5.7 - 8.0)	7.0	(5.6 - 8.5)	9.6	(8.1 - 11.1)	1.6	(1.0 - 2.3)	8.0	(6.9 - 9.1)	9.0	(7.7 - 10.3)

11.3 Feeling lack of control

Perceptions of control relate to an individual's belief as to whether outcomes are determined by external events outside their control or by their own actions.[29] Feelings of lack of control have been found to have adverse effects on health and to increase the risk of mortality.[30, 31]

Respondents were asked to rate how often during the past four weeks they felt a lack of control over their life in general, their personal life and their health. Table 70 shows self-reported lack of control over life in general.

Table 70: Lack of control over life in general during past four weeks, HWSS 2012

	Never		Rarely		Sometimes		Often		Always	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
16 to 44 yrs										
Males	70.2	(65.0 - 75.5)	18.0	(13.7 - 22.3)	8.9	(5.5 - 12.4)	2.0	(0.8 - 3.2)	0.8	(0.0 - 1.6)
Females	60.1	(55.3 - 75.5)	17.3	(13.8 - 20.7)	16.5	(12.7 - 20.2)	4.8	(2.8 - 6.9)	1.4	(0.1 - 2.7)
Persons	65.3	(61.7 - 68.9)	17.7	(14.9 - 20.4)	12.6	(10.0 - 15.1)	3.4	(2.2 - 4.6)	1.1	(0.4 - 1.8)
45 to 64 yrs										
Males	71.3	(67.5 - 75.1)	12.0	(9.4 - 14.5)	12.7	(10.0 - 15.5)	2.9	(1.5 - 4.3)	1.1	(0.0 - 2.3)
Females	63.1	(60.0 - 66.3)	15.8	(13.4 - 18.2)	15.7	(13.3 - 18.1)	4.0	(2.8 - 5.2)	1.4	(0.7 - 2.0)
Persons	67.2	(64.8 - 69.7)	13.9	(12.1 - 15.6)	14.2	(12.4 - 16.1)	3.5	(2.5 - 4.4)	1.2	(0.5 - 1.9)
65 yrs & over										
Males	76.9	(73.5 - 80.3)	11.3	(8.9 - 13.8)	9.2	(6.8 - 11.5)	1.5	(0.6 - 2.4)	1.1	(0.1 - 2.0)
Females	71.7	(68.8 - 74.7)	13.7	(11.5 - 15.9)	11.5	(9.3 - 13.6)	2.9	(1.7 - 4.1)	0.2	(0.0 - 0.4)
Persons	74.1	(71.9 - 76.4)	12.6	(10.9 - 14.3)	10.4	(8.8 - 12.0)	2.2	(1.5 - 3.0)	0.6	(0.2 - 1.1)
Total										
Males	71.5	(68.4 - 74.6)	15.2	(12.7 - 17.7)	10.2	(8.1 - 12.2)	2.2	(1.4 - 3.0)	0.9	(0.4 - 1.5)
Females	63.0	(60.3 - 65.6)	16.2	(14.3 - 18.2)	15.4	(13.3 - 17.5)	4.3	(3.1 - 5.4)	1.2	(0.5 - 1.9)
Persons	67.3	(65.2 - 69.3)	15.7	(14.1 - 17.3)	12.8	(11.3 - 14.3)	3.2	(2.5 - 3.9)	1.1	(0.6 - 1.5)

How often people reported feeling a lack of control over their personal life in the past four weeks is shown in Table 71 and how often people reported feeling a lack of control over their health in the past four weeks is shown in Table 72.

Table 71: Lack of control over personal life during past four weeks, HWSS 2012

	Never		Rarely		Sometimes		Often		Always	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
16 to 44 yrs										
Males	73.0	(67.9 - 78.1)	15.6	(11.3 - 19.9)	9.6	(6.4 - 12.8)	1.0	(0.2 - 1.7)	0.8	(0.0 - 1.7)
Females	64.0	(59.3 - 68.7)	16.3	(12.9 - 19.7)	14.1	(10.5 - 17.6)	4.7	(2.5 - 6.8)	1.1	(0.0 - 2.1)
Persons	68.6	(65.1 - 72.1)	15.9	(13.2 - 18.7)	11.7	(9.3 - 14.2)	2.8	(1.6 - 3.9)	0.9	(0.3 - 1.6)
45 to 64 yrs										
Males	73.0	(69.2 - 76.7)	13.4	(10.5 - 16.3)	10.6	(7.9 - 13.2)	2.6	(1.3 - 3.9)	0.5	(0.0 - 0.9)
Females	68.6	(65.6 - 71.6)	12.8	(10.7 - 15.0)	13.4	(11.2 - 15.6)	3.6	(2.5 - 4.7)	1.6	(0.6 - 2.5)
Persons	70.8	(68.4 - 73.2)	13.1	(11.3 - 14.9)	12.0	(10.3 - 13.7)	3.1	(2.2 - 4.0)	1.0	(0.5 - 1.6)
65 yrs & over										
Males	79.5	(76.2 - 82.8)	11.3	(8.7 - 13.8)	7.6	(5.4 - 9.8)	1.1	(0.2 - 2.0)	0.5	(0.0 - 1.2)
Females	77.4	(74.6 - 80.2)	12.0	(9.8 - 14.2)	7.7	(6.0 - 9.5)	1.9	(0.9 - 2.9)	0.9	(0.2 - 1.6)
Persons	78.4	(76.2 - 80.5)	11.7	(10.0 - 13.3)	7.7	(6.3 - 9.1)	1.6	(0.9 - 9.1)	0.7	(0.2 - 1.2)
Total										
Males	73.9	(70.9 - 77.0)	14.3	(11.8 - 16.8)	9.6	(7.6 - 11.6)	1.5	(0.9 - 2.1)	0.7	(0.2 - 1.2)
Females	67.6	(65.0 - 70.3)	14.5	(12.6 - 16.4)	12.8	(10.8 - 14.8)	3.9	(2.7 - 5.1)	1.2	(0.6 - 1.8)
Persons	70.8	(68.7 - 72.8)	14.4	(12.8 - 16.0)	11.2	(9.8 - 12.6)	2.7	(2.0 - 3.4)	0.9	(0.5 - 1.3)

Table 72: Lack of control over health during past four weeks, HWSS 2012

	Never		Rarely		Sometimes		Often		Always	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
16 to 44 yrs										
Males	75.2	(70.5 - 79.9)	13.5	(9.7 - 17.3)	9.3	(6.5 - 12.1)	1.5	(0.2 - 2.9)	0.4	(0.0 - 0.9)
Females	60.2	(55.4 - 65.0)	17.2	(13.5 - 20.9)	14.8	(11.2 - 18.4)	5.5	(3.3 - 7.6)	2.3	(0.7 - 3.9)
Persons	67.9	(64.5 - 71.4)	15.3	(12.6 - 17.9)	12.0	(9.7 - 14.3)	3.4	(2.2 - 4.7)	1.3	(0.5 - 2.1)
45 to 64 yrs										
Males	68.6	(64.6 - 72.5)	12.1	(9.4 - 14.7)	14.4	(11.4 - 17.5)	2.6	(1.3 - 3.9)	2.3	(1.1 - 3.6)
Females	62.9	(59.7 - 66.0)	12.5	(10.4 - 14.5)	16.6	(14.1 - 19.1)	4.9	(3.6 - 6.2)	3.2	(2.0 - 4.3)
Persons	65.7	(63.2 - 68.3)	12.3	(10.6 - 14.0)	15.5	(13.5 - 17.5)	3.7	(2.8 - 4.7)	2.7	(1.9 - 3.6)
65 yrs & over										
Males	70.8	(67.1 - 74.5)	11.7	(9.1 - 14.3)	12.8	(10.0 - 15.5)	2.4	(1.2 - 3.6)	2.3	(1.1 - 3.5)
Females	67.7	(64.7 - 70.8)	12.5	(10.3 - 14.6)	14.4	(12.0 - 16.7)	3.3	(2.2 - 4.5)	2.1	(1.1 - 3.0)
Persons	69.2	(66.8 - 71.5)	12.1	(10.5 - 13.8)	13.6	(11.8 - 15.4)	2.9	(2.1 - 3.7)	2.2	(1.4 - 2.9)
Total										
Males	72.5	(69.6 - 75.4)	12.8	(10.5 - 15.1)	11.4	(9.6 - 13.3)	2.0	(1.1 - 2.8)	1.3	(0.8 - 1.8)
Females	62.3	(59.6 - 65.0)	14.9	(12.8 - 17.0)	15.3	(13.3 - 17.4)	4.9	(3.7 - 6.2)	2.5	(1.6 - 3.4)
Persons	67.4	(65.4 - 69.5)	13.9	(12.3 - 15.4)	13.4	(12.0 - 14.8)	3.5	(2.7 - 4.2)	1.9	(1.4 - 2.4)

Table 73 shows the proportion of respondents who reported often or always feeling lack of control.

Table 73: Proportion who often or always perceive a lack of control, HWSS 2012

	General		Personal		Health	
	%	95% CI	%	95% CI	%	95% CI
16 to 44 yrs						
Males	2.8	(1.3 - 4.3)	1.8	(0.7 - 3.0)	2.0	(0.6 - 3.4)
Females	6.2	(3.8 - 8.7)	5.7	(3.3 - 8.1)	7.8	(5.1 - 10.4)
Persons	4.5	(3.1 - 5.9)	3.7	(2.4 - 5.0)	4.8	(3.3 - 6.3)
45 to 64 yrs						
Males	4.0	(2.2 - 5.8)	3.0	(1.7 - 4.4)	4.9	(3.1 - 6.7)
Females	5.4	(4.0 - 6.7)	5.2	(3.7 - 6.6)	8.1	(6.3 - 9.8)
Persons	4.7	(3.5 - 5.8)	4.1	(3.1 - 5.1)	6.5	(5.2 - 7.7)
65 yrs & over						
Males	2.5	(1.2 - 3.8)	1.6	(0.5 - 2.7)	4.7	(3.0 - 6.4)
Females	3.1	(1.9 - 4.3)	2.8	(1.6 - 4.0)	5.4	(3.9 - 6.8)
Persons	2.9	(2.0 - 3.7)	2.3	(1.5 - 3.1)	5.1	(4.0 - 6.2)
Total						
Males	3.1	(2.1 - 4.1)	2.2	(1.4 - 3.0)	3.3	(2.3 - 4.3)
Females	5.4	(4.1 - 6.8)	5.1	(3.7 - 6.4)	7.5	(6.0 - 9.0)
Persons	4.3	(3.5 - 5.1)	3.6	(2.8 - 4.4)	5.4	(4.5 - 6.3)

11.4 Suicide ideation

Mental health problems are associated with higher rates of death from many causes, including suicide.[7] Respondents were asked whether or not they had suicidal thoughts or had made an attempt (Table 74) or if friends or family had done so (Table 75).

Table 74: Suicide thoughts and attempts over past 12 months, HWSS 2012

	Seriously thought about ending own life		Attempts by those seriously thinking about suicide (a)		Attempted suicide, all respondents	
	%	95% CI	%	95% CI	%	95% CI
16 to 44 yrs						
Males	3.6	(1.4 - 5.8)	7.8	(0.0 - 22.7)	0.3	(0.0 - 0.8)
Females	6.4	(4.0 - 8.8)	21.5	(4.9 - 38.1)	1.4	(0.2 - 2.6)
Persons	5.0	(3.4 - 6.6)	16.3	(4.2 - 28.5)	0.8	(0.2 - 1.5)
45 to 64 yrs						
Males	4.9	(3.0 - 6.9)	14.0	(0.0 - 29.1)	0.7	(0.0 - 1.5)
Females	4.2	(3.0 - 5.4)	7.6	(1.2 - 14.0)	0.3	(0.0 - 0.6)
Persons	4.6	(3.4 - 5.7)	11.1	(2.3 - 19.9)	0.5	(0.1 - 0.9)
65 yrs & over						
Males	2.6	(1.4 - 3.8)	1.5	(0.0 - 4.4)	0.0	(0.0 - 0.1)
Females	1.8	(1.0 - 2.6)	10.2	(0.0 - 27.1)	0.2	(0.0 - 0.5)
Persons	2.2	(1.5 - 2.9)	5.4	(0.0 - 13.5)	0.1	(0.0 - 0.3)
Total						
Males	3.9	(2.6 - 5.3)	9.7	(0.0 - 19.5)	0.4	(0.0 - 0.8)
Females	4.9	(3.6 - 6.2)	17.1	(5.6 - 28.6)	0.8	(0.2 - 1.5)
Persons	4.4	(3.5 - 5.4)	13.8	(6.0 - 21.6)	0.6	(0.2 - 1.0)

(a) Note: These figures are based on small numbers, particularly the 65 years & over age group.

Respondents aged 16 to 44 years were twice as likely to report having thought about ending their own life in the last 12 months compared with respondents aged 65 years and over (5.0% compared to 2.2%).

Table 75: Friends/ family suicide attempts over past 12 months, HWSS 2012

	Friend(s) attempted		Family attempted	
	%	95% CI	%	95% CI
16 to 44 yrs				
Males	12.1	(7.4 - 16.7)	2.6	(0.9 - 4.3)
Females	11.9	(8.5 - 15.2)	5.7	(3.3 - 8.1)
Persons	12.0	(9.1 - 14.8)	4.1	(2.6 - 5.6)
45 to 64 yrs				
Males	4.7	(2.7 - 6.7)	3.1	(1.6 - 4.6)
Females	5.8	(4.3 - 7.3)	5.6	(4.1 - 7.1)
Persons	5.2	(4.0 - 6.5)	4.3	(3.3 - 5.4)
65 yrs & over				
Males	3.2	(1.9 - 4.5)	2.2	(0.9 - 3.4)
Females	1.7	(0.9 - 2.6)	3.1	(1.8 - 4.5)
Persons	2.4	(1.6 - 3.1)	2.7	(1.7 - 3.6)
Total				
Males	8.5	(5.8 - 11.2)	2.7	(1.6 - 3.8)
Females	8.3	(6.5 - 10.1)	5.2	(3.9 - 6.6)
Persons	8.4	(6.8 - 10.0)	4.0	(3.1 - 4.8)

The proportion of respondents who reported that friend(s) had tried to end their own life in the past 12 months decreased significantly with age, with respondents aged 16 to 44 years five times more likely to report this compared with those aged 65 years and over (12.0% compared with 2.4%).

11.5 Social support

Social support relates to the resources available within communities and is believed to have a positive influence on health status.[32] As a surrogate measure of social support, respondents were asked how many groups/associations they belong to, including church, social groups, political and professional groups, shown in Table 76.

Table 76: Number if groups/ associations belonging to, HWSS 2012

	None		One		Two		Three		Four or more	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
16 to 44 yrs										
Males	30.0	(24.7 - 35.3)	29.1	(23.7 - 34.5)	19.4	(14.6 - 24.3)	13.3	(8.9 - 17.7)	8.2	(5.3 - 11.1)
Females	38.9	(34.0 - 43.7)	28.2	(23.8 - 32.6)	15.5	(12.1 - 18.8)	9.9	(7.1 - 12.7)	7.6	(5.5 - 9.7)
Persons	34.3	(30.7 - 38.0)	28.6	(25.1 - 32.1)	17.5	(14.5 - 20.5)	11.6	(9.0 - 14.3)	7.9	(6.1 - 9.7)
45 to 64 yrs										
Males	41.4	(37.1 - 45.6)	26.2	(22.4 - 29.9)	18.3	(15.0 - 21.5)	6.8	(4.8 - 8.8)	7.4	(5.3 - 9.5)
Females	45.3	(42.1 - 48.5)	24.3	(21.5 - 27.0)	15.0	(12.7 - 17.3)	8.8	(7.1 - 10.5)	6.6	(5.1 - 8.0)
Persons	43.3	(40.7 - 46.0)	25.2	(22.9 - 27.5)	16.7	(14.7 - 18.6)	7.8	(6.5 - 9.1)	7.0	(5.7 - 8.2)
65 yrs & over										
Males	32.2	(28.5 - 36.0)	26.0	(22.4 - 29.7)	20.1	(16.8 - 23.5)	10.5	(8.0 - 13.0)	11.1	(8.5 - 13.7)
Females	34.1	(30.9 - 37.3)	26.8	(23.9 - 29.7)	17.2	(14.8 - 19.7)	11.0	(9.0 - 13.0)	10.8	(8.8 - 12.8)
Persons	33.2	(30.8 - 35.7)	26.5	(24.2 - 28.7)	18.6	(16.5 - 20.6)	10.8	(9.2 - 12.4)	11.0	(9.4 - 12.6)
Total										
Males	33.9	(30.7 - 37.2)	27.7	(24.5 - 30.9)	19.2	(16.3 - 22.0)	10.8	(8.3 - 13.4)	8.4	(6.6 - 10.1)
Females	40.1	(37.4 - 42.9)	26.7	(24.2 - 29.2)	15.6	(13.7 - 17.5)	9.7	(8.2 - 11.3)	7.8	(6.6 - 9.0)
Persons	37.0	(34.9 - 39.2)	27.2	(25.2 - 29.3)	17.4	(15.7 - 19.1)	10.3	(8.8 - 11.8)	8.1	(7.0 - 9.2)

With over one third of the respondents in all age groups reporting that they belonged to no groups or associations of any kind, the potential for social support would seem limited to the family group if they have one or a friendship group. This is an area that may need further investigation for any adverse effects on health, both in terms of the people with no other support than family or friends and those people providing support.

12. REFERENCES

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