

High blood pressure

Web report | Last updated: 19 Jul 2019 | Topic: Risk factors

About

High blood pressure—also known as hypertension—is a risk factor for chronic conditions, including stroke, coronary heart disease, heart failure and chronic kidney disease. This report focuses on the prevalence of high blood pressure by age, sex, socioeconomic status, remoteness area and presents international comparisons.

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Findings from this report:

- 1 in 4 (25%) men had measured (or uncontrolled) high blood pressure compared with 1 in 5 (20%) women, in 2017-18
- The proportion of adults in 2017-18 with measured (or uncontrolled) high blood pressure increased with increasing age.
- The prevalence of measured (or uncontrolled) high blood pressure has remained stable since 2011-12.
- In 2017-18, people in the lowest socioeconomic areas had the highest rate of high blood pressure (24%).

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High blood pressure

High blood pressure - also known as hypertension - is a major risk factor for chronic conditions including stroke, coronary heart disease, heart failure and chronic kidney disease (see heart stroke and vascular disease and chronic kidney disease for more information). In 2015, 5.8% of the total burden of disease in Australia was due to high blood pressure (AIHW 2019). About 21% of high blood pressure burden in Australia in 2015 is due to a diet high in sodium - higher for men (23%) than women (17%) - based on unpublished estimates from the Australian Burden of Disease Study (ABDS) (see <u>Burden of disease</u>). The ABDS 2015 estimated how much impact a diet high in sodium had on blood pressure levels in Australia using a risk factor causing a risk factor approach. In addition to high salt intake, other risk factors for high blood pressure include poor diet, obesity, excessive alcohol consumption and insufficient physical activity. High blood pressure can be controlled with lifestyle measures and medication, reducing the risk of developing chronic conditions.

Box 1: How is high blood pressure measured?

Blood pressure is the force exerted by the blood on the walls of the arteries and is written as systolic/diastolic (e.g. 120/80 mmHg, stated as '120 over 80').

The World Health Organization defines high blood pressure as including any of the following:

- systolic blood pressure greater than or equal to 140 mmHg, or
- diastolic blood pressure greater than or equal to 90 mmHg, or
- receiving medication for high blood pressure (Whitworth 2003).

The Australian Bureau of Statistics (ABS) National Health Survey 2017-18 measured blood pressure at the time of the interview, and the definitions listed above were used in defining high blood pressure in the results presented here. 'Uncontrolled high blood pressure' is defined as measured systolic blood pressure of 140 mmHg or more, or diastolic blood pressure of 90 mmHg or more, whether or not they were taking blood pressure medication (ABS 2018). Controlled blood pressure refers to those people who are taking blood pressure medication and have a normal blood pressure reading.

Who has high blood pressure?

Based on measured data from the 2017-18 Australian Bureau of Statistics National Health Survey, about 1 in 3 people aged 18 and over (34%) have high blood pressure.

This comprises:

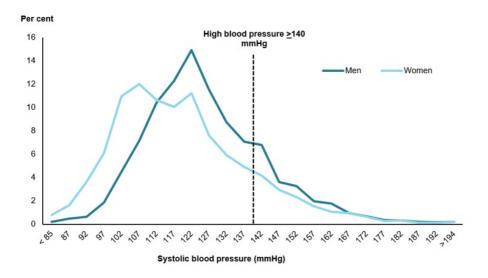
- 23% with uncontrolled high blood pressure; and
- 11% whose blood pressure was controlled using medication/s (Table S1).

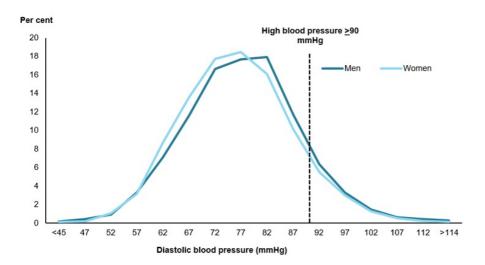
There has been no change in the prevalence of uncontrolled high blood pressure since 2011-12 (ABS 2018a).

Men are more likely to have uncontrolled high blood pressure than women. In particular, 1 in 4 men (25%) had uncontrolled high blood pressure compared with 1 in 5 (20%) women.

The average systolic blood pressure is higher for men (126 mmHg) than for women (119 mmHg). The average diastolic blood pressures are similar for men and women (77 and 76 mmHg) (Figure 1).

Figure 1: Prevalence distribution of systolic and diastolic blood pressure measurements, 2017-18



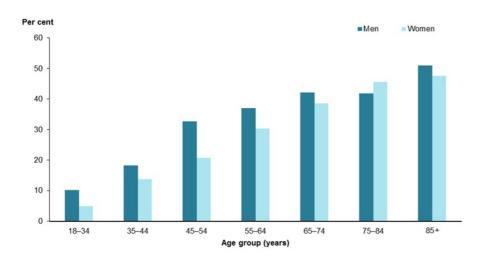


Note: Measured high blood pressure excludes self-reported hypertension prevalence rates. In 2017-18, 31.6% of respondents aged 18 years and over did not have their blood pressure measured. For these respondents, imputation was used to obtain blood pressure. For more information see Appendix 2: Physical measurements in the National Health Survey.

Source: AIHW analysis of ABS 2019. (see Table S3 for footnotes).

The proportion of adults with uncontrolled high blood pressure increased with age—from 10% or less among 18-34 year-olds (10% for men and 4.9% for women) to a peak of 47% at age 85 and over (51% for men and 48% for women).

Figure 2: Prevalence of uncontrolled high blood pressure among adults, by age and sex, 2017-18



Source: ABS 2018a: AIHW analysis of ABS 2019 (see Table S2 for footnotes).

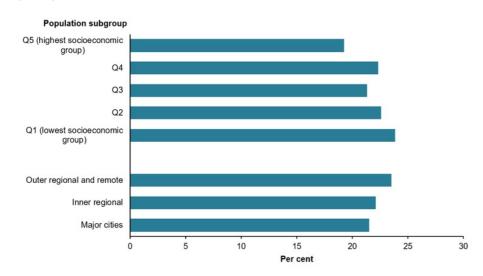
Inequalities

The prevalence of uncontrolled high blood pressure is similar between remoteness areas (Figure 3).

- 24% for Outer regional and remote areas
- 22% for Inner regional areas
- 22% for Major cities

Uncontrolled high blood pressure is significantly more common in the lowest socioeconomic areas where 1 in 4 people (24%) have uncontrolled high blood pressure, compared with 1 in 5 (19%) people in the highest socioeconomic areas (Figure 3).

Figure 3: Prevalence of uncontrolled high blood pressure among adults, by socioeconomic areas and remoteness, 2017-18



Source: AIHW analysis of ABS 2019 (see Table S4 for footnotes).

International comparisons

Age-standardised data from the World Health Organization reported that an estimated 18% of men and 12% of women aged 18 and over in Australia had uncontrolled high blood pressure in 2015 (based on systolic blood pressure and diastolic blood pressure only). These estimates differ to the data presented above as they have been standardised to the global population in order to make comparisons between countries (WHO 2015). This was a lower proportion than most other OECD countries (Organisation for Economic Cooperation and Development), and lower than the average across the 36 OECD countries (25% for men and 16% for women).

The Republic of Korea had the lowest proportion (14% for men and 8% for women) followed by the United States of America (15% for men and 11% for women) and then Canada (16% for men and 11% for women). While Lithuania, Latvia, Hungary and Slovenia had the highest rates of raised blood pressure (36% for men and between 23-25% for women).

Source data

High blood pressure supplementary data tables

References

ABS 2018a. National Health Survey: First Results, 2017-18. ABS cat. no. 4364.0.55.001. Canberra: Australian Bureau of Statistics.

ABS 2018b. Census of Population and Housing: Socio-Economic Indexes for Areas (SEIFA). ABS cat. no. 2033.0.55.001. Canberra: Australian Bureau of Statistics.

ABS 2018c. Australian Statistical Geography Standard (ASGS): Volume 5 - Remoteness Structure, July 2016. ABS cat. no. 1270.0.55.005. Canberra: Australian Bureau of Statistics.

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Technical notes

About the ABS National Health Survey

This web report contains results from the Australian Bureau of Statistics (ABS) National Health Survey (NHS) 2017-18, collected between July 2017 to June 2018.

The 2017-18 NHS is the most recent in a series of Australia-wide health surveys conducted by the ABS. It was designed to collect a range of information about the health of Australians, including:

- prevalence of long-term health conditions
- health risk factors such as smoking, overweight and obesity, alcohol consumption and exercise
- use of health services such as consultations with health practitioners and actions people have recently taken for their health
- demographic and socioeconomic characteristics.

The 2017-18 NHS collected data on children and adults living in private dwellings but excluded persons living in non-private dwellings, very remote areas and discrete Aboriginal and Torres Strait Islander communities.

For further information, refer to the ABS National Health Survey: First Results, 2017-18.

Primary Health Network data

This release includes the following indicator by Primary Health Network (PHN):

• Percentage of adults who have high blood pressure (and uncontrolled high blood pressure)

Proportions have been age standardised to the 2001 Australian population to account for differences in the age structure of the population for different areas.

Results are presented as both crude and age-standardised rates.

Total high blood pressure includes all persons with a high, very high or severe (from 140/90 mmHg) measured or imputed blood pressure (regardless of whether taking hypertension medication) as well as persons with normal/low (<140/90 mmHg) measured or imputed blood pressure who reported they were taking hypertension medication. Hypertension medication includes Antihypertensives (C02), Diuretics (C03), Beta blocking agents (C07), Calcium channel blockers (C08) and Agents acting on the renin-angiotensin system (C09).

Uncontrolled high blood pressure includes all persons with measured high blood pressure (systolic ≥140 and/or diastolic ≥90) regardless of whether they were taking high blood pressure medication Measured high blood pressure excludes self-reported hypertension prevalence rates

In 2017-18, 31.6% of respondents aged 18 years and over did not have their blood pressure measured. For these respondents, imputation was used to obtain blood pressure. For more information see Appendix 2: Physical measurements in the 2017-18 National Health Survey (ABS 2018a).

About the data

Primary Health Networks (PHNs) are local organisations that connect health services across a specific geographic area, with the boundaries defined by the Australian Government Department of Health.

The quality of estimates from the NHS can vary across PHN areas, as the survey was not specifically designed to produce estimates at this level of geography.

As an indication of the accuracy of proportions, 95% confidence intervals were produced. These were calculated by the ABS using relative standard error (RSE) estimates of the proportion.

To ensure robust reporting of these data by PHN areas, suppression or interpret with caution rules were developed and applied by the Australian Institute of Health and Welfare.

Estimates of a percentage or its complement that had a relative standard error greater than 50% were suppressed. These estimates were considered unreliable for most practical purposes.

Data for PHN areas were suppressed if there was the likelihood of a non-representative sample, that is, where the survey sample count in the PHN area was less than 20% of the expected number of adults.

The 'interpret with caution' flag was applied to the data if the relative standard error associated with the percentage or its complement was greater than 25%. This indicates the proportion derived is subject to high sampling error and should be used with caution.

Data for Northern Territory should be interpreted with caution as the NHS excluded discrete Aboriginal and Torres Strait Islander communities and very remote areas, which comprise around 28% of the estimated resident population of the Northern Territory.

Data quality statement

For more information about the ABS 2017-18 National Health Survey see:

4324.0.55.001 - Microdata: National Health Survey, 2017-18

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Data

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