



Insufficient physical activity

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Citation

AIHW

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Participating in regular physical activity provides many benefits for physical and mental health at all ages, and can also help manage biomedical risk factors such as high body weight, high blood pressure and high cholesterol. Insufficient physical activity is a key risk factor contributing to disease burden in Australia. Given it plays a role in chronic conditions, it is important for Australians to achieve the levels of activity outlined in Australia's Physical Activity and Sedentary behaviour guidelines.

Cat. no: PHE 248

Findings from this report:

- [17% of 2-5 year olds met the physical activity and screen-based behaviour guidelines on 7 days in 2011-12](#)
- [12% of children and 2% of adolescents met the physical activity and screen-based behaviour guidelines in 2011-12](#)
- [1 in 2 adults \(55%\) did not meet the physical activity guidelines in 2017-18](#)
- [15% of adults met both the physical activity and muscle strengthening activity guidelines in 2017-18.](#)

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Physical inactivity

What is Physical activity?

'Physical activity' is any bodily movement produced by skeletal muscles that requires energy expenditure (WHO 2017a). Examples of 'physical activity' include:

Sporting and leisure activities

- swimming
- tennis
- bushwalking
- going to the gym

Incidental activities

- at work
- for transport
- household chores.

Muscle strengthening activities

- some types of yoga or pilates
- resistance-band training
- high-intensity activities (for example, cycling, dancing, gymnastics or gardening that requires digging or lifting)
- climbing stairs or hills
- squats, push-ups, sit-ups and weight training
- active playgrounds for children (for example, monkey bars, climbing frames, skipping or hopscotch).

Insufficient physical activity

Low levels of physical activity are a major risk factor for chronic conditions. People who do not do sufficient physical activity have a greater risk of cardiovascular disease, type 2 diabetes and osteoporosis. Being physically active improves mental and musculoskeletal health and reduces other risk factors such as overweight and obesity, high blood pressure and high blood cholesterol.

In 2015, 2.5% of the total disease burden was due to physical inactivity (AIHW 2019). Physical inactivity contributed 10-20% of the individual disease burden from diabetes, bowel cancer, uterine cancer, dementia, breast cancer, coronary heart disease and stroke (AIHW 2019) (see [Burden of disease](#))

For more information on physical activity see [Physical activity](#).

Box 1: Australia's Physical Activity and Sedentary Behaviour Guidelines

Australia's Physical Activity and Sedentary Behaviour Guidelines (the Guidelines) are a set of recommendations outlining the minimum levels of physical activity required for health benefits, as well as the maximum amount of time one should spend on sedentary behaviours to achieve optimal health outcomes (Department of Health 2017).

There are different recommendations for each age group, summarised in the table below. This approach acknowledges that different amounts of physical activity are required at various stages of life for maximum health benefits (Table 1).

Table 1: Summary of Australian Physical Activity and Sedentary Behaviour Guidelines

	Ages 2-5 ¹	Ages 5-17 ²	Ages 18-64	Ages 65 and over
Physical activity	At least 180 minutes per day with at least 60 minutes of energetic play	Several hours of light activities with at least 60 minutes of moderate to vigorous activity per day	Be active on most, preferably all days with at least 150 minutes of moderate to vigorous activity per week	Be active on most, preferably all days with at least 30 minutes of moderate activity per day

Sedentary or screen-based activity	Should not be restrained for more than 60 minutes at a time ³ No more than 60 minutes of sedentary screen time per day	No more than 120 minutes of screen use Break up long periods of sitting	Minimise and break up prolonged periods of sitting	Be as active as possible
Strength	N/A	Vigorous and muscle strengthening activities 3 times a week	Muscle strengthening activities 2 times a week	Incorporate muscle strengthening activities

Notes

1. This group includes those aged 5 who are not yet in full-time schooling (for example, pre-schoolers).
2. This group includes those aged 5 who are in full-time schooling.
3. Examples include being restrained in a stroller, car seat or high chair.

In 2017-18, the ABS National Health Survey collected information for the first time on physical activity at work. Therefore all results for adults include physical activity at work.

Based on the guidelines, in this report insufficient physical activity was defined as:

- Children aged 2-5 who did not complete at least 180 minutes of physical activity per day
- Children and adolescents aged 5-17 who did not complete at least 60 minutes of physical activity per day
- Adults aged 18-64 who did not complete 150 minutes of moderate to vigorous physical activity across 5 or more days in the last week
- Adults aged 65 and over who did not complete at least 30 minutes of physical activity per day on 5 or more days in the last week.

Children and adolescents

The Australian Physical Activity Guidelines recommend children and young people (aged 5-17) accumulate at least 60 minutes of moderate to vigorous physical activity every day (Department of Health 2019).

The most recent data available on physical activity in children and adolescents is the ABS 2011-12 National Nutrition and Physical Activity Survey. For the full results of the analysis see [Physical activity across the life stages](#).

Children aged 2-5

In 2011-12, only 17% of children aged 2-5 met both the physical activity and sedentary screen-based behaviour guidelines on all 7 days.

About 6 in 10 (61%) children aged 2-5 met the physical activity guideline, and one-quarter (25%) met the sedentary screen-based behaviour guideline (AIHW 2018).

Children aged 5-11 and 12-17

The majority of children and adolescents are not meeting the physical activity and sedentary behaviour guidelines.

In 2011-12, around:

- 1 in 10 (12%) children aged 5-12 and only 2% of young people aged 13-17 met both the physical activity and sedentary screen-based behaviour guidelines
- 1 in 4 (26%) children aged 5-12 and around 1 in 10 (8%) children aged 13-17 met the physical activity guideline
- 1 in 3 (35%) children aged 5-12 and 1 in 5 (20%) children aged 13-17 met the sedentary screen-based behaviour guideline (AIHW 2018).

Muscle strengthening activities

The Guidelines recommend children and adolescents undertake muscle strengthening activities at least 3 times a week.

While this encompasses all of the muscle strengthening activities mentioned earlier, not all were captured or prompted as responses in the data source for this section, the ABS National Health Survey (ABS 2018). These data are only available for adolescents aged 15 to 17 years.

In 2017-18, 16% of 15 to 17 year olds did muscle strengthening activities on 3 or more days a week (22% of boys and 8% of girls).

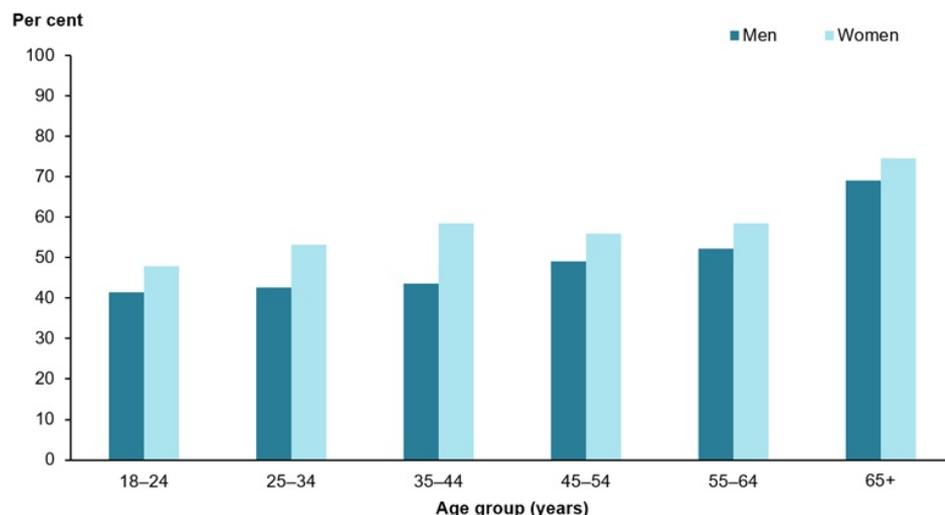
Only 2% of 15 to 17 year olds met both the physical activity and muscle strengthening guidelines (ABS 2018).

Adults

Just over 1 in 2 adults (55%) did not participate in sufficient physical activity in 2017-18. Women were more likely than men to be insufficiently active (59% compared to 50%).

The rate of insufficient physical activity generally increases with increasing age (Figure 1). Among 18-24 year olds, 41% of men and 48% of women were insufficiently active. For those aged 65 and over, 69% of men and 75% of women were insufficiently active.

Figure 1: Prevalence of insufficient physical activity among adults, by age and sex, 2017-18



Source: AIHW analysis of ABS 2019 (see [Table S1a](#) for footnotes).

Muscle strengthening activities

The physical activity guidelines also recommend Australian adults aged 18-64 undertake muscle strengthening activities at least 2 times a week, and adults aged 65 and over incorporate muscle strengthening activities.

While this encompasses all of these muscle strengthening activities mentioned earlier, not all were captured or prompted as responses in the data source for this section, the ABS National Health Survey (ABS 2018).

In 2017-18, 23% of adults aged 18 and over did muscle strengthening activities on 2 or more days a week (22% of women and 25% of men) (Table S1a).

Only 15% of adults met both the physical activity and muscle strengthening guidelines—17% of men and 14% of women (Table S1a).

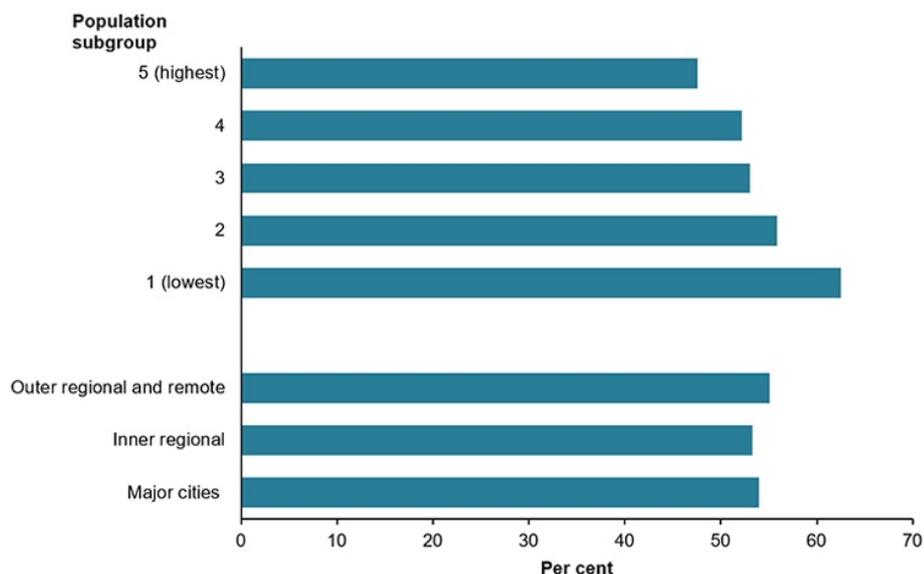
Population groups

There were similar levels of insufficient physical activity among adults living in all remoteness areas:

- 55% for *Outer regional and remote* areas
- 53% for *Inner regional* areas
- 54% for *Major cities* (Figure 2).

In 2017-18, 63% of people from the lowest socioeconomic areas were insufficiently active, compared with 48% in the highest socioeconomic areas (Figure 2).

Figure 2: Prevalence of insufficient physical activity among adults, by selected population characteristics, 2017-18



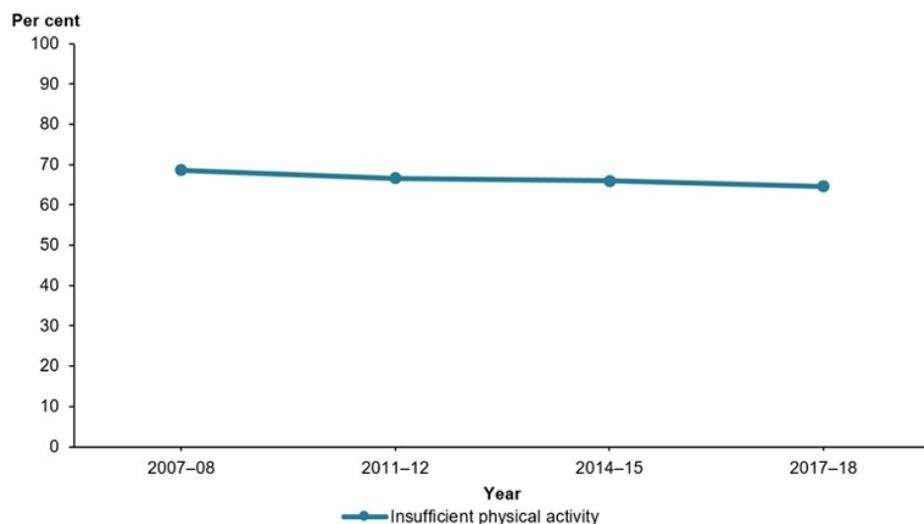
Note: Rates are age-standardised to the 2001 Australian population.

Source: AIHW analysis ABS 2019, (see [Table S2a](#) for footnotes).

Trends

After adjusting for age, there was a slight decrease in the proportion of adults who were insufficiently active between 2007-08 and 2017-18—decreasing from 69% to 65%. However rates have not changed significantly since 2011-12 (Figure 3). These results do not include activity undertaken at work.

Figure 3: Prevalence of insufficient physical activity among adults from 2007-08 to 2017-18



Note: Rates are age-standardised to the 2001 Australian population.

Source: AIHW analysis of ABS 2019; ABS 2016; ABS 2014 and ABS 2010 see [Table S3](#) for footnotes).

References

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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 met the physical activity guidelines

This is measured using the following definition:

- Percentage of adults aged 18-64 who undertook 150-300 minutes of moderate physical activity or 75-150 minutes of vigorous physical activity, or an equivalent combination of both, and were active on 5 or more days; and
- Percentage of adults aged 65 and over who were active for 30 minutes or more per day on 5 or more days.

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](#)



Notes

Amendments

30 Sep 2019 - The source data hyperlink for Figure 3 has been replaced to direct to the correct data tables.

19 Jul 2019 - New data by PHN has been added to the  [supplementary tables](#).

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Data

[Data tables: Physical inactivity supplementary tables](#)

[Download Data tables: Physical inactivity supplementary tables. Format: XLSX 156Kb](#) XLSX 156Kb

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