



Arthritis

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Citation

AIHW

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Arthritis is an umbrella term for a range of inflammatory conditions affecting the bones, muscles and joints. These conditions often result in pain, stiffness, swelling and redness in affected joints. They include osteoarthritis, rheumatoid arthritis, juvenile arthritis and gout. Arthritis is a common condition particularly among older Australians, and is a large contributor to illness, pain and disability.

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Findings from this report:

- 3 in 4 Australians over 45 with arthritis have self-reported at least one other chronic condition
- 1 in 2 Australians with arthritis experienced moderate to severe pain
- 1 in 5 Australians with arthritis experienced high or very high levels of psychological distress
- 1 in 7 Australians have some form of arthritis

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Arthritis

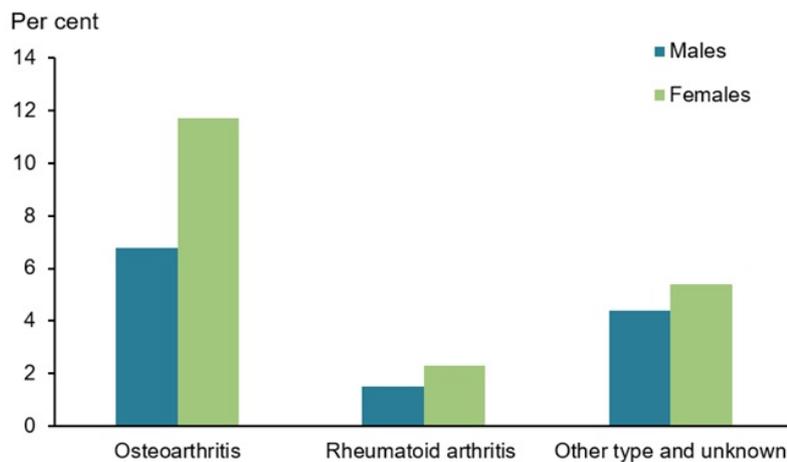
Arthritis is an umbrella term for a wide range of inflammatory conditions affecting the bones, muscles and joints. This often results in pain, stiffness, swelling and redness in affected joints. Age, overweight and obesity, injury and genetic factors increase the risk of developing arthritis. Osteoarthritis, rheumatoid arthritis and gout are common types of arthritis.

How common is arthritis?

Almost 1 in 3 (29%) of Australians had a musculoskeletal condition in 2017-18, an estimated 7.0 million people. Arthritis – including osteoarthritis, rheumatoid arthritis and ‘other type and unknown’ – affects an estimated 3.6 million (15%) Australians, based on self-reported data from the ABS National Health Survey 2017-18 (ABS 2018). Osteoarthritis and rheumatoid arthritis are the most common forms of arthritis (Figure 1):

- osteoarthritis is a chronic condition characterised by the deterioration of the cartilage that overlies the ends of bones in joints. Approximately 2.2 million Australians (9.3%) have osteoarthritis, affecting 12% of females and 6.8% of males (ABS 2018) in 2017-18.
- rheumatoid arthritis is a systemic autoimmune disease where the body’s immune system attacks its own tissues. Approximately 456,000 Australians (1.9%) have rheumatoid arthritis, affecting 2.3% of females and 1.5% of males (ABS 2018) in 2017-18.

Figure 1: Prevalence of self-reported arthritis in Australia, by arthritis type and sex, 2017-18



Note: refers to people who self-reported that they were diagnosed by a doctor or nurse as having arthritis (current and long term) and also people who self-reported having arthritis.

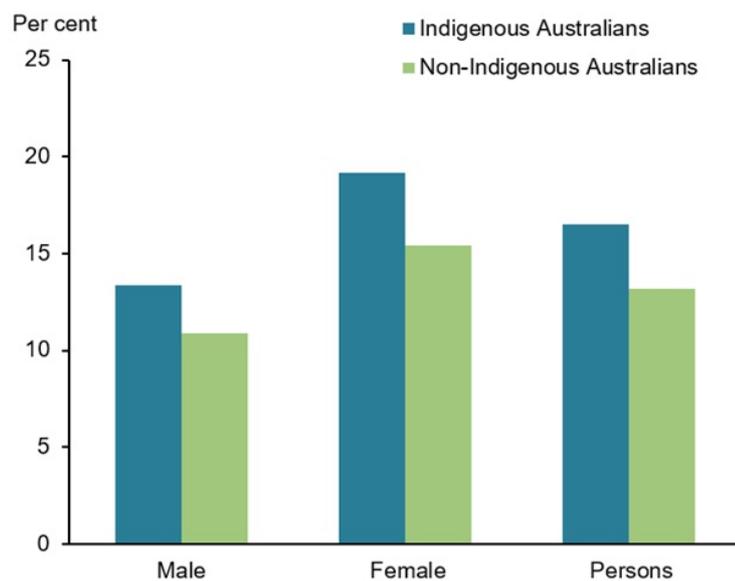
Source: ABS 2018 ([Data table](#)).

Aboriginal and Torres Strait Islander people

According to self-reported data from the ABS 2018-19 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS), the prevalence of arthritis among Aboriginal and Torres Strait Islander people was 11%, affecting about 85,600 people –including about 8,800 who live in remote areas (5.9% of the remote Indigenous population).

After adjusting for age, more females (19%) were affected by the condition than males (13%), and the proportion of Indigenous Australians with arthritis (17%) was slightly higher than that for non-Indigenous Australians (13%) (Figure 2).

Figure 2: Prevalence of arthritis by Indigenous status, 2018-19



Note: Age-standardised to the Australian population as at 30 June 2001.

Source: ABS 2019 ([Data table](#)).

References

ABS (Australian Bureau of Statistics) 2018. [National Health Survey: First Results, 2017-18](#). ABS cat. no. 4364.0.55.001. Canberra: ABS.

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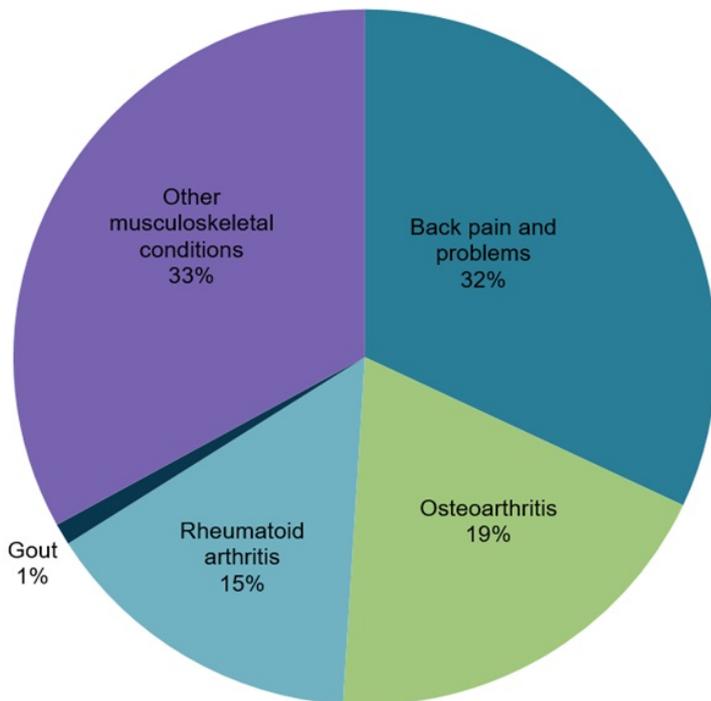
Impact of arthritis

Arthritis can have a profound impact on a person's quality of life and wellbeing due to acute and chronic pain, physical limitations, management of the condition and mental health issues. This can often result in withdrawal from social, community and occupational activities (Briggs et al. 2016).

Disease burden

Common forms of arthritis (osteoarthritis, rheumatoid arthritis and gout) are large contributors to illness, pain and disability in Australia. Based on data from the Australian Burden of Disease Study 2015, musculoskeletal conditions were responsible for 13% (approximately 611,300 disability-adjusted life years (DALY)) of the total burden of disease. Of this proportion, osteoarthritis contributed 19% of disease burden, rheumatoid arthritis contributed 15%, and gout contributed 0.9%. The remaining burden was attributed to 'other musculoskeletal conditions' (33%) and 'back pain and problems' (32%) (Figure 1).

Figure 1: Musculoskeletal conditions burden (DALY), by disease, 2015



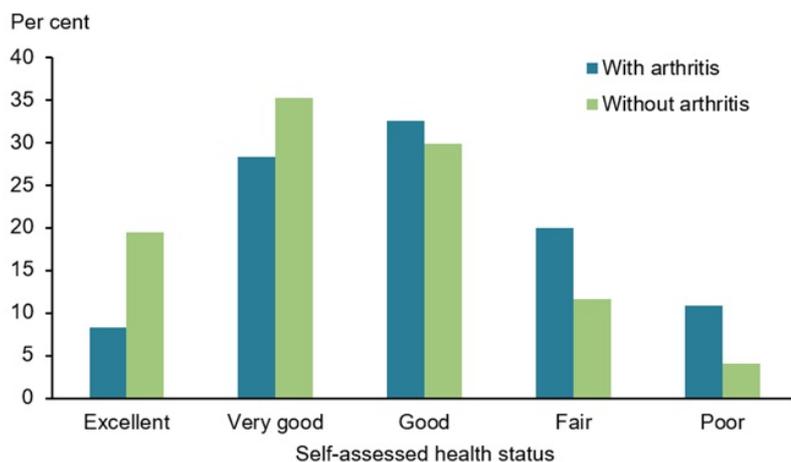
Source: AIHW 2019a.

Perceived health status

Although arthritis affects people of all ages, its prevalence increases sharply from the age of 45 years.

According to the ABS 2017-18 National Health Survey (NHS), people aged 45 and over with arthritis are less likely to perceive their health as excellent or very good than people without the condition. Conversely, people with arthritis were twice as likely to describe their health as poor (11%) compared with those without arthritis (4.0%) (Figure 2).

Figure 2: Self-assessed health of people aged 45 and over with and without arthritis, 2017-18



Note: Age-standardised to the 2001 Australian population.

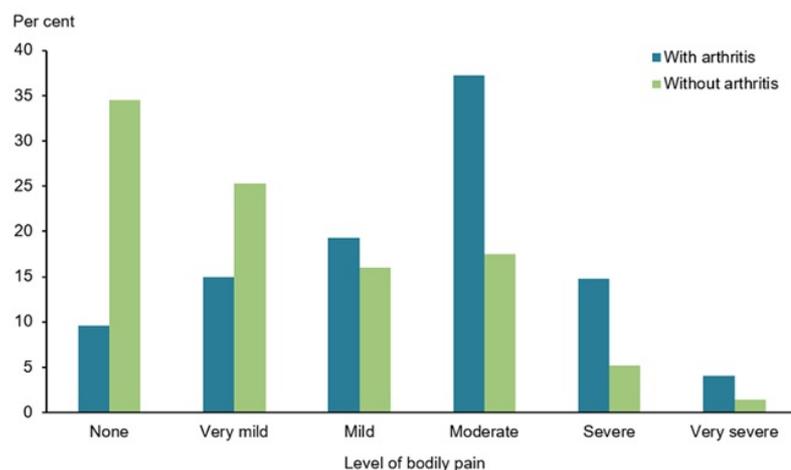
Source: AIHW analysis of ABS 2019 (Data table).

Pain

Arthritis can have a significant impact on a person's physical health, due to the pain and physical limitations associated with the disease.

In 2017-18, half of people aged 45 and over with arthritis (56%) experienced 'moderate' to 'very severe' pain in the last 4 weeks; this was about 2.3 times as likely as people without arthritis (24%) (Figure 3). In addition, over 2 in 5 (45%) people aged 45 and over with arthritis described their pain as having a 'moderate' to 'extreme' interference with their normal work during the last 4 weeks (Table 2.3) (ABS 2019).

Figure 3: Pain^(a) experienced by people aged 45 and over with and without arthritis, 2017-18



(a) Bodily pain experienced in the 4 weeks prior to interview.

Note: Age-standardised to the 2001 Australian population.

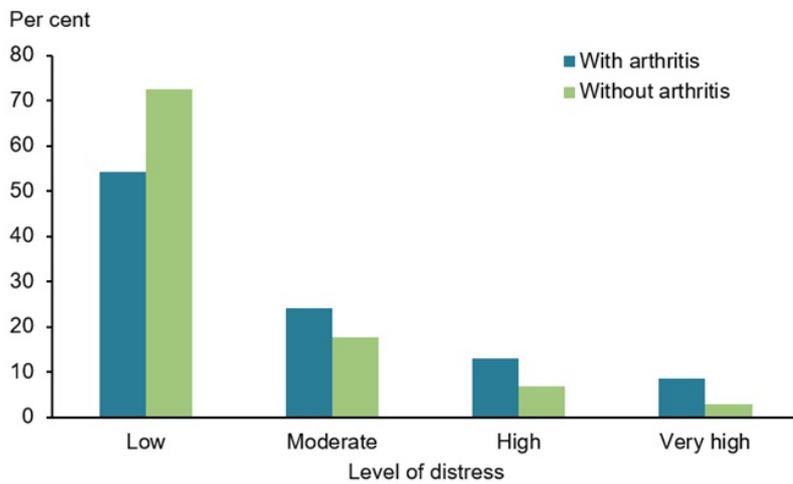
Source: AIHW analysis of ABS 2019 (Data table).

Psychological distress

Arthritis can affect both physical health and mental wellbeing. The chronic and progressive symptoms and the management of the condition can cause distress, which may lead to mental health issues such as anxiety or depression (Sharma et al. 2016).

According to the NHS 2017-18, 1 in 5 Australians (22%) with arthritis experienced high to very high levels of psychological distress. This was twice as likely as people without arthritis (10%) (Figure 4).

Figure 4: Psychological distress^(a) experienced by people aged 45 and over with and without arthritis, 2017-18



(a) Psychological distress is measured using the Kessler Psychological Distress Scale (K10), which involves 10 questions about negative emotional states experienced in the previous 4 weeks. The scores are grouped into Low: K10 score 10-15, Moderate: 16-21, High: 22-29, Very high: 30-50.

Note: Age-standardised to the 2001 Australian population.

Source: AIHW analysis of ABS 2019 ([Data table](#)).

Economic impact

Arthritis significantly impacts the Australian economy. Increased health care costs and higher use of health care services (for example, general practitioners, specialists, allied health and pharmaceuticals) required to treat and manage arthritis represent direct financial costs to the health care system. There are also indirect costs associated with arthritis and/or musculoskeletal conditions and comorbidities, such as productivity losses, disability support pensions and other welfare payments, early retirement and carer costs (AIHW 2014; Arthritis Australia 2014).

Expenditure on health services for arthritis is substantial. In 2015-16, health expenditure for arthritis was estimated to cost:

- \$3.5 billion for osteoarthritis
- \$1.2 billion for rheumatoid arthritis (AIHW 2019b).

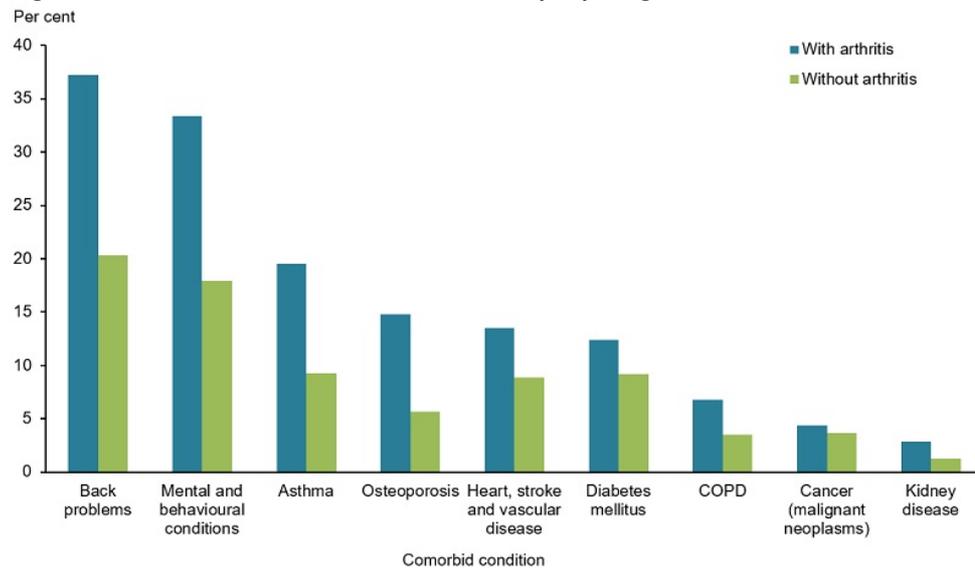
Musculoskeletal health is important for a productive and prolonged working life; as a result, the risk of arthritis will become increasingly important with an ageing population participating in the workforce for longer. People with arthritis are more likely to have reduced productivity and retire early, resulting in an economic loss that far outweighs direct health care costs (Arthritis and Osteoporosis Victoria 2013).

Comorbidities of arthritis

People with arthritis often have other chronic diseases and long-term conditions. This is referred to as 'comorbidity', where two or more health problems occur at the same time.

In 2017-18, 3 out of 4 (75%) people aged 45 and over with arthritis had at least one other chronic condition (ABS 2019). Back problems was the most common comorbidity (36%), followed by mental and behavioural conditions (30%) and asthma (18%) (ABS 2019). These are also among the most common chronic conditions experienced by people without arthritis but those with arthritis experience them at higher rates.

Figure 5: Prevalence of chronic conditions in people aged 45 and over with and without arthritis, 2017-18



Notes:

1. Age-standardised to the 2001 Australian population.
2. Proportions do not total 100% as one person may have more than one additional diagnosis.

Source: AIHW analysis of ABS 2019 ([Data table](#)).

Data notes

The National Health Survey (NHS) uses three factors to determine whether or not a person is counted as having a particular condition: whether the condition is current, whether it is long term and whether it was medically diagnosed. The combination of these factors required for a person to count as having the condition varies according to the nature of the condition. For example, some conditions, such as diabetes and HSVD, once diagnosed, are seen to be lifelong. Even if a person no longer reports symptoms, they still count as having the condition. While other conditions, such as depression, asthma, cancer or back problems, can be lifelong, episodic or in complete remission.

Most conditions do not need the respondent to have been diagnosed by a doctor or nurse. The respondent is counted if they said they have the condition. However, in cases where the respondent said they had diabetes or HSVD and that the condition was not current, they need to have received a diagnosis to be counted.

Table 1: Definitions used for chronic conditions

Condition	Current	Long term	Has the condition been diagnosed by a doctor or nurse?
Arthritis	current	long term	no diagnosis required
Asthma	current	long term	no diagnosis required
Back problems	current	long term	no diagnosis required
Cancer	current	long term	no diagnosis required
COPD	current	long term	no diagnosis required
Diabetes	current	long term	no diagnosis required
(2 combinations)	ever had	not long term	diagnosis required
Heart, stroke and vascular disease (HSVD)	current	long term	no diagnosis required
(2 combinations)	ever had	not long term	diagnosis required
Kidney disease	current	long term	no diagnosis required
Mental and behavioural conditions	current	long term	no diagnosis required
Osteoporosis	current	long term	no diagnosis required

Note: Please see the [2017-18 NHS User Guide](#) for more information on the definitions of the conditions.

References

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

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Arthritis Australia 2014. Time to move: rheumatoid arthritis, a national strategy to reduce a costly burden. Sydney: Arthritis Australia.

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Treatment & management of arthritis

Primary health care

At present there is no cure for arthritis, with treatment aiming to manage symptoms and maximise quality of life. Arthritis-related conditions are predominantly managed in primary health care settings by a range of health professionals. Treatment involves a combination of self-management (such as diet and exercise), education on living with the condition, physiotherapy, medication (for pain and inflammation), and referral to specialist care where necessary (WHO 2019). Based on survey data, arthritis was managed at an estimated 3.5% of general practice visits in 2015-16 (Britt et al. 2016).

Medications

Medication is primarily used to manage symptoms of pain, inflammation and improve functioning and quality of life among people with arthritis. Medications can range from general over-the-counter analgesics (painkillers) to highly specialised medications and vary depending on the type and severity of the condition.

See the [osteoarthritis](#), [rheumatoid arthritis](#), [juvenile arthritis](#) and [gout](#) pages for further information on the medications used for these conditions.

Hospitalisation

Arthritis-related conditions are often managed in hospitals when specialised treatment or surgery is required.

Osteoarthritis was the most common musculoskeletal reason for hospitalisation in 2017-18 (accounting for 34% of all musculoskeletal hospitalisations), followed by back pain and problems (23%). Other less common musculoskeletal reasons for hospitalisation were rheumatoid arthritis (1.5%), osteoporosis (1.0%) and gout (1.0%).

See the [osteoarthritis](#), [rheumatoid arthritis](#), [juvenile arthritis](#) and [gout](#) pages for further information on hospitalisations for these conditions.

Surgery

Joint replacement surgery may be required for those with severe arthritic conditions who are unresponsive to medication and exercise (RACGP 2018). These procedures restore joint function, help relieve pain and improve quality of life of the affected person. Osteoarthritis is the most common condition leading to hip and knee replacement surgery in Australia (AOANJRR 2019).

See the [osteoarthritis](#), [rheumatoid arthritis](#), [juvenile arthritis](#) pages for further information on surgery for these conditions.

References

AOANJRR (Australian Orthopaedic Association National Joint Replacement Registry) 2019. Annual report 2019: Hip, knee and shoulder arthroplasty. Adelaide: AOA.

Britt H, Miller GC, Henderson J, Bayram C, Harrison C, Valenti L et al. 2016. General practice activity in Australia 2015-16. General practice series no. 40. Sydney: Sydney University Press.

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Data

Data tables: [Arthritis 2020](#)

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