



3.10 Arthritis and other musculoskeletal conditions

Arthritis and other musculoskeletal conditions are a group of conditions affecting the bones, muscles and joints. These conditions include osteoarthritis, rheumatoid arthritis, juvenile arthritis, back pain and problems, gout, and osteoporosis or osteopenia (low bone density) (see Glossary).

How common are arthritis and other musculoskeletal conditions?

Arthritis and other musculoskeletal conditions are very common, affecting around 1 in 3 (30%) Australians. Self-reported data from the Australian Bureau of Statistics 2014–15 National Health Survey indicates that, of the nearly 6.9 million people (30% of the total population) with arthritis and other musculoskeletal conditions, 3.7 million (16%) had back pain and problems (the most common musculoskeletal condition), 3.5 million (15%) had arthritis and 801,000 (3.5%) had osteoporosis (ABS 2015). Females and older people were more likely to have arthritis and other musculoskeletal conditions:

- More than half (55%) of all people with musculoskeletal conditions were female.
- Compared with males, in each age group, females had a similar prevalence of back pain and problems and were 20–50% more likely to have arthritis.
- Overall, females were around 4 times as likely as males to have osteoporosis, but there was substantial variation by age.
- More than half (53%) of all people with musculoskeletal conditions were aged 55 and over.
- One in 4 (26%) Australians aged 55 and over had back pain and problems, 44% had arthritis and 11% had osteoporosis.

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

In 2014–15, for people with:

arthritis, 79% had at least one other chronic condition

Arthritis + other chronic condition(s)	Arthritis only
79%	21%

back pain and problems, 65% had at least one other chronic condition.

Back pain and problems + other chronic condition(s)	Back pain and problems only
65%	35%

The proportion of people with comorbidities increased with age: from 74% (aged 45–64) to 86% (aged 65 and over) for people with arthritis and from 49% (aged 0–44) to 89% (aged 65 and over) for people with back pain and problems.



Impact

Arthritis and other musculoskeletal conditions are large contributors to illness, pain and disability. Individuals with these conditions have higher rates of poor health, psychological distress and reduced participation in work and education. In 2015, of the people with disability in Australia, 14% had back problems and 13% had arthritis as the main long-term health condition causing the disability (ABS 2016).

According to the Australian Burden of Disease Study 2011, musculoskeletal conditions contributed to:

- 12% of the total disease burden (fatal and non-fatal) in Australia. This disease group was the fourth leading contributor to total burden after cancer, cardiovascular disease, and mental and substance use disorders
- almost one-quarter (23%) of non-fatal burden (that is, the impact of living with illness and injury)
- a higher burden among females than males—females experienced more than half (55%) of the burden due to all musculoskeletal conditions combined, and two-thirds (66%) of the burden due to osteoarthritis. Males experienced most of the burden due to gout (83%).

Some of the total burden due to musculoskeletal conditions can be attributed to preventable risk factors. In 2011:



Overweight and obesity

contributed to:

10% of total burden of all musculoskeletal conditions

45% of the burden of osteoarthritis

39% of the burden of gout



Occupational exposures and hazards

contributed to:

5.4% of total burden of all musculoskeletal conditions

17% of the burden of back pain and problems

See Chapter 4.4 'Contribution of selected risk factors to burden of disease' for more information on definitions and the burden of disease associated with these conditions.





Treatment and management

In primary health care settings

Musculoskeletal conditions are primarily managed in primary health care settings by a range of health professionals. Treatment combines physical therapy, medicines (for pain and inflammation), self-management (such as diet and exercise), education on self-management and living with the condition, and referral to specialist care where necessary. Based on survey data, musculoskeletal conditions were managed at an estimated 18% of general practice visits in 2015–16 (Britt et al. 2016).

In hospitals

Musculoskeletal conditions can also be managed in hospitals for more severe disease or when specialised treatment or surgery is needed. In 2015–16, there were more than 763,000 hospitalisations involving treatment and management of musculoskeletal conditions; this represented 7.2% of all hospitalisations in that year. Osteoarthritis was the most common musculoskeletal reason for hospitalisation (accounting for 33% of all musculoskeletal hospitalisations), followed by back pain and problems (22%). Other less common musculoskeletal reasons for hospitalisation were rheumatoid arthritis (1.7%), osteoporosis (1.1%), gout (1.0%) and juvenile arthritis (0.3%).

Pharmacotherapy

As mentioned earlier, pharmacotherapy (medicines) is used extensively to manage musculoskeletal conditions. Many are non-prescription and bought over-the-counter, some are prescribed in primary care, and others—such as the specialised biologic disease-modifying anti-rheumatic drugs (bDMARDs)—can only be prescribed by a rheumatologist and administered in hospital. In 2015–16, 47% of hospitalisations for juvenile arthritis and 70% for rheumatoid arthritis involved at least one procedure for the administration of pharmacotherapy.

Surgery

Joint replacement surgery is a common treatment for people with osteoarthritis who do not respond to medicines. Between 2005–06 and 2015–16, the rate of joint replacement surgery where osteoarthritis was the principal diagnosis increased by 36% for total knee replacements and 38% for total hip replacements (AOA 2017).





What is missing from the picture?

The prevention, management and treatment of musculoskeletal conditions beyond hospital settings cannot currently be examined in detail due to limitations in available data on:

- primary and allied health care at the national level
- use of over-the-counter medicines to manage pain and inflammation
- diagnosis information for prescription pharmaceuticals (which would allow a direct link between musculoskeletal conditions and use of subsidised medicines)
- patient outcomes, pathways through the health system and quality of care.

Where do I go for more information?

More information on arthritis and other musculoskeletal conditions is available at www.aihw.gov.au/reports-statistics/health-conditions-disability-deaths/arthritis-musculoskeletal-conditions/overview.

References

ABS (Australian Bureau of Statistics) 2015. National Health Survey: first results, 2014–15.

ABS cat. no. 4364.0.55.001. Canberra: ABS.

ABS 2016. Disability, ageing and carers, Australia: summary of findings, 2015. ABS cat. no. 4430.0. Canberra: ABS.

AOA (Australian Orthopaedic Association) 2017. Australian Orthopaedic Association National Joint Replacement Registry. Annual report. 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.

