

JSNA Health and Wellbeing Profile 2023/24

Musculoskeletal Conditions

Musculoskeletal conditions are the leading cause of pain and disability in England and account for one of the highest causes of sickness absence and productivity loss. Musculoskeletal (MSK) conditions affect joints, ligaments, tendons, muscles and nerves and supporting structures of the limbs and back (e.g. spinal discs).

The impacts of MSK conditions are significant as sufferers can live with them for many years, resulting in a long-term burden of pain and impaired functioning, and possibly mental health issues. There is also a substantial economic burden due to work days lost and healthcare costs.

Summary points

- 14.4% of adults in Bristol live with a musculoskeletal problem
- Approximately 74,000 (15.7%) of Bristol residents suffer from back pain; 28,400 (17.8%) of adults aged over 45 suffer from knee osteoarthritis and 17,200 (10.8%) suffer from hip osteoarthritis.
- In Bristol the prevalence of osteoporosis in the population aged 50 years and over was 1.9%, significantly higher than England average of 0.8%.

Musculoskeletal Conditions

Musculoskeletal conditions have been ranked as a top reason for 'years lived with disability' in England and in Bristol¹. MSK conditions are known to impact quality of life by increased pain, limiting range of motion and impacting the ability to take part in daily life such as attending work.

In Bristol 14.4% of adults aged 16 and over reported a musculoskeletal problem² in 2022, significantly lower than England average of 17.6%. Those numbers increase with age, with 50% of people over 85 reporting a musculoskeletal problem nationally.

More women than men struggle with musculoskeletal conditions (20.1% vs 14.9%).

National data on health inequalities suggests that over 20% of people from White British, White Irish and White Gypsy or Irish Traveller reported a musculoskeletal problem in 2022, higher than all the other ethnicities with the exception of Black Caribbean (21%), and higher than the national average.

Back pain

Lower back pain has been ranked the single largest cause of years lived with disability (YLD) by the Global Burden of Disease Study 2019, both in Bristol and nationally. It affects people of all ages; their performance at work and general well-being.

There are several risk factors for developing back pain, including occupational posture, depressive moods, obesity, body height, physical activity levels and age.

¹ Global Burden of Disease Study 2019: <https://vizhub.healthdata.org/gbd-compare/>

² GP Patient Survey via Office for Health Improvement and Disparities (OHID) Musculoskeletal health: local profiles <https://fingertips.phe.org.uk/profile/msk> July 2023.

It is estimated that in Bristol 15.7% of people all ages (approximately 74,000 Bristol residents) are suffering from back pain³. That is lower than national average of 16.9%.

Osteoarthritis

Osteoarthritis is a degenerative joint disease that may cause cartilage loss and morphological damage to other joint tissues. Osteoarthritis was ranked as the 13th largest contributor to years lived with disability in Bristol in the 2019 Global Burden of Disease Study⁴.

The estimate prevalence of knee osteoarthritis among people aged 45 and over in Bristol is 17.8%, similar to the national average of 18.2%. That mean that over 28,400 Bristol residents are suffering from the disease.

The prevalence of hip osteoarthritis in people aged 45 and over has been estimated as 10.8% - over 17,200 Bristol residents. Also similar to the national average of 10.9%⁵.

Rheumatoid arthritis

Rheumatoid arthritis is an inflammatory disease of joints. It affects the small joints of the hands and the feet, usually both sides equally, although any synovial joint can be affected.

In Bristol the prevalence of rheumatoid arthritis in population aged 16+ is lower than nationally: 0.6% compared to 0.8% in England⁶. Over 2,700 Bristol residents are suffering from the disease. Prevalence of rheumatoid arthritis in Bristol has remained stable over the years (Figure 1).

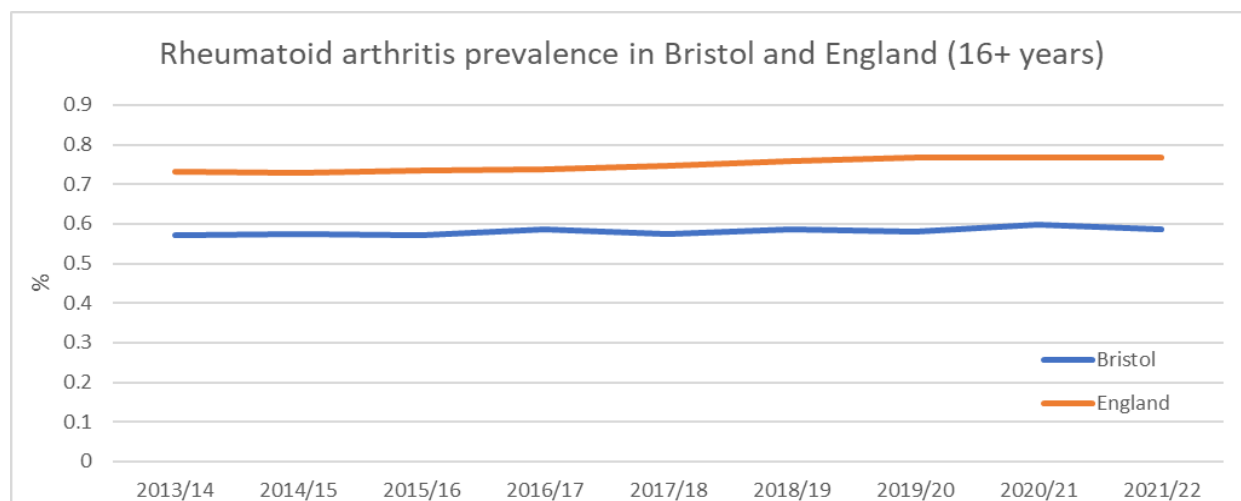


Figure 1: Rheumatoid arthritis prevalence, population aged 16+. Bristol vs England. Source: Office for Health Improvement and Disparities Musculoskeletal health: local profiles <https://fingertips.phe.org.uk/profile/msk>

³ Musculoskeletal (MSK) Calculator produced by Imperial College London for Versus Arthritis based on data from the Health Survey for England (HSE), 2012, [Data and statistics | Bulletins and reports \(versusarthritis.org\)](https://www.versusarthritis.org/data-and-statistics/bulletins-and-reports)

⁴ Global Burden of Disease Study 2019: <https://vizhub.healthdata.org/gbd-compare/>

⁵ Musculoskeletal (MSK) Calculator produced by Imperial College London for Versus Arthritis based on data from the Health Survey for England (HSE), 2012, [Data and statistics | Bulletins and reports \(versusarthritis.org\)](https://www.versusarthritis.org/data-and-statistics/bulletins-and-reports)

⁶ Rheumatoid Arthritis: QOF prevalence (16+), OHID Musculoskeletal health: local profiles <https://fingertips.phe.org.uk/profile/msk> July 2023.

Osteoporosis

Osteoporosis is a health condition that weakens bones, making them fragile and more likely to break. It develops slowly over several years and is often only diagnosed when a fall or sudden impact causes a bone to break (fracture)⁷.

Women are at greater risk of osteoporosis due to the decrease in oestrogen production at the menopause, which accelerates bone loss. The prevalence of osteoporosis increases markedly, from approximately 2% at 50 years of age to almost 50% at 80 years of age⁸.

In Bristol the prevalence of osteoporosis in the population aged 50 years and over was 1.9%, significantly higher than England average of 0.8%. Bristol osteoporosis prevalence has risen sharply between 2014/15 and 2018/19 (Figure 2).

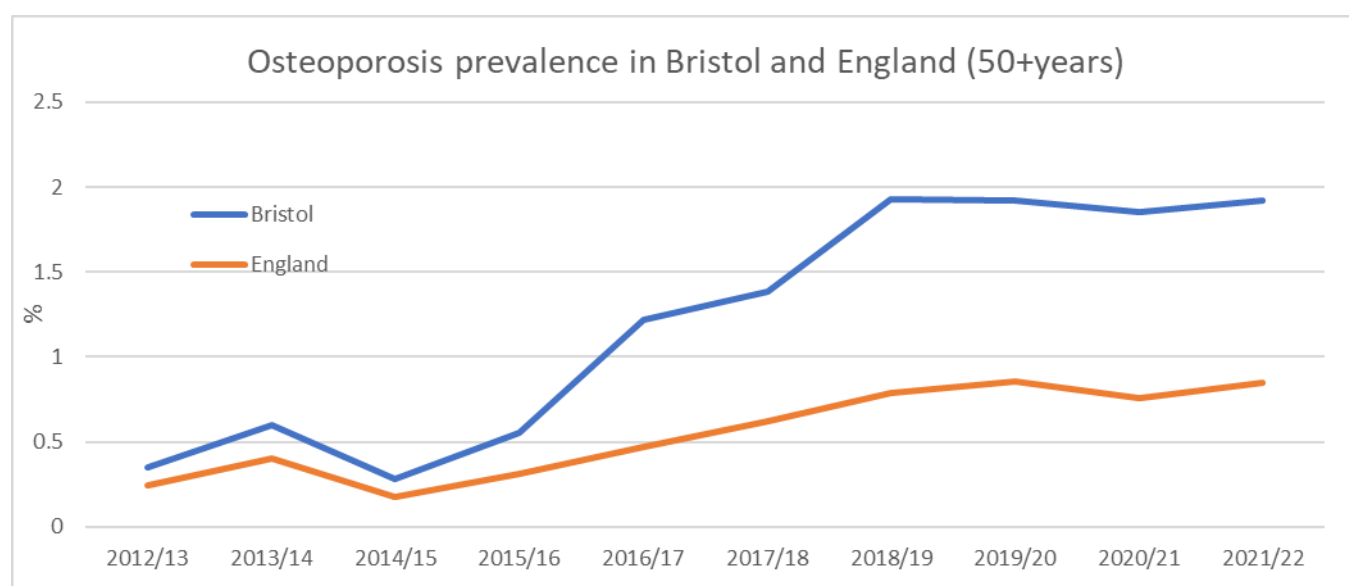


Figure 2: Osteoporosis prevalence, population aged 50+. Bristol vs England. Source: OHID Musculoskeletal health: local profiles: <https://fingertips.phe.org.uk/profile/msk>

One of the consequences of osteoporosis is a hip fracture (fracture of the neck of femur). The average age of a person with a hip fracture is 83 years for women and 84 for men with majority of fractures occurring among women (76%)⁹.

In Bristol there were 335 emergency hospital admissions due to a hip fracture in the population aged 65 and over in 2021/22. That is 533 admissions per 100,000 population, similar to the national average of 551. It is not currently possible to compare with previous years data as following Census 2021, the Office for National Statistics (ONS) is carrying out reconciliation and rebasing of the mid-year population estimates (MYE) it produces. Once revised populations for mid-2012 to mid-2020 are published, the updated back series for this indicator will be published.

⁷ <https://www.nhs.uk/conditions/osteoporosis/>

⁸ National Institute for Health and Care Excellence: <https://cks.nice.org.uk/topics/osteoporosis-prevention-of-fragility-fractures/background-information/prevalence/>

⁹ NICE: The management of hip fracture in adults, <https://www.nice.org.uk/guidance/cg124/evidence/full-guideline-183081997>

Risk factors

Musculoskeletal conditions are one of the biggest threats to the health of people who are obese. Obesity directly damages weight-bearing joints such as knees and hips because of the abnormally high loads they have to carry¹⁰. In Bristol 55.2% of adults aged 18 and over are overweight or obese, lower than national average of 63.8%¹¹.

Physical inactivity is also a risk factor in developing musculoskeletal conditions. In Bristol 17% of adults aged 19 and over have been classified as physically inactive, lower than nationally (22.3%)¹²

Further data / links / consultations:

- Office for Health Improvement and Disparities (OHID) Musculoskeletal health: local profiles: <https://fingertips.phe.org.uk/profile/msk>
- Versus Arthritis: <https://www.versusarthritis.org/>
- [Musculoskeletal health: applying All Our Health - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/collections/musculoskeletal-health-applying-all-our-health)

Covid-19 Impact:

While the full impact of Covid-19 upon musculoskeletal conditions remains to be seen, it is likely that reduced opportunities to exercise, ability to eat a balanced diet and achieve or maintain a healthy weight, and the increased burden of poor mental health will be seen to have an impact upon some musculoskeletal conditions.

Date updated: July 2023

Next update due: July 2024

¹⁰ Versus Arthritis: State of Musculoskeletal Health 2019, <https://www.versusarthritis.org/about-arthritis/data-and-statistics/state-of-musculoskeletal-health-2019/>

¹¹ Public Health England (based on Active Lives survey, Sport England) <https://fingertips.phe.org.uk/profile/msk>

¹² Public Health England (based on the Active Lives Adult Survey, Sport England): The percentage of respondents aged 19 and over, with valid responses to questions on physical activity, doing less than 30 moderate intensity equivalent (MIE) minutes physical activity per week in bouts of 10 minutes or more in the previous 28 days. <https://fingertips.phe.org.uk/profile/msk>