

## Musculoskeletal Health in Harrow

### Purpose of report

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The report is designed to support health and wellbeing boards and their partners in understanding the local needs and service provisions for people with musculoskeletal (MSK) conditions. By examining the indicators below and combining them with local knowledge users can gain a wider perspective on MSK health in their area.

It presents a collation of existing indicators available on LG Inform relevant to MSK health. This includes modelled prevalence estimates for osteoarthritis, back pain, and rheumatoid arthritis from the [Versus Arthritis Musculoskeletal Calculator](#) and key risk factor indicators from [Public Health England](#), [Sport England](#), [Ministry of Housing, Communities & Local Government](#), and [NHS Digital](#).

This report provides an overview of the burden of MSK conditions in Harrow compared with its nearest neighbours identified by CIPFA ([Chartered Institute of Public Finance and Accountancy](#)).

Use the drop-down box above to select a local authority.

## Introduction

The Global Burden of Disease Study 2017 estimates 18.8 million people in the UK have a musculoskeletal (MSK) condition. MSK conditions are a leading cause of years lived with disability ([YLDs](#)), and disability adjusted life years ([DALYs](#)) [1].

The term 'musculoskeletal conditions' is often used to include a broad range of health conditions affecting the bones, joints, muscles and spine, as well as rarer autoimmune conditions such as lupus. Broadly speaking there are three groups of MSK conditions [2].

1. Inflammatory conditions (e.g. rheumatoid arthritis)
2. Conditions of musculoskeletal pain (e.g. osteoarthritis, back pain, etc.)
3. Osteoporosis & fragility fractures (e.g. fracture after fall from standing height)

An ageing population may mean that more people are living with MSK conditions. There has also been a slight rise in the prevalence of obesity in recent years and little change in physical inactivity, both of which are risk factors and exacerbate the impact of some MSK conditions [3]. In 2017/18, 17.0% of people in England reported a long term MSK problem (Table 1) [4]. The pain and disability caused by arthritis and other MSK conditions results in a substantial loss in quality of life and has been associated with depressive and anxiety disorders. It is estimated that 24.1% of people reporting a long term MSK problem in 2016/17 also reported feeling anxious and depressed (Table 1). The average quality of life score, defined using the EQ-5D, for people who reported a long term MSK problem was 0.577, significantly worse than those without a long-term condition who had a score of 0.92 for 2016/17 (Table 1) [4].

**Table 1. Data from the musculoskeletal diseases profile**

Indicator	Period	England	Change from previous time period
% reporting a long term MSK problem	2017/18	17.0%	Increasing (getting worse)
% reporting depression or anxiety	2016/17	1.7%	Increasing (getting worse)
% reporting a long term MSK aged 18+ who also report feeling depressed or anxious	2016/17	24.1%	Increasing (getting worse)
Average health related quality of life score for adults who reported having a long term MSK problem	2016/17	0.577	No significant change
Source: Analysis conducted by Public Health England on the GP Patient Survey 2016/17. Available on <a href="#">PHE Fingertips</a> .			

**Table 2. Harrow MSK health profile**

Indicator	Period	Harrow		England
		Number of people	Percentage of people (%)	Percentage of people (%)
Knee osteoarthritis in people over 45 years	2012	<a href="#">15,328</a>	<a href="#">16.6</a>	<a href="#">18.2</a>
Hip osteoarthritis in people over 45 years	2012	<a href="#">9,385</a>	<a href="#">10.2</a>	<a href="#">10.9</a>
Back pain in people all ages	2012	<a href="#">36,686</a>	<a href="#">15.1</a>	<a href="#">16.9</a>
Rheumatoid arthritis in people over 16 years	2015	*	*	0.84
Source: Arthritis Research UK, MSK Calculator *CCG level only on LG Inform Plus				

## Osteoarthritis

Osteoarthritis is a condition in which the joints of the body become damaged, stop moving freely and become painful. Osteoarthritis can develop in any joint in the body, it can affect mobility and cause disability. Nearly three quarters of people with osteoarthritis report some form of constant pain, with one in eight describing their pain as often unbearable [5]. Management usually involves prescription of specific therapeutic exercise by a trained clinician, physical activity, weight loss, and pain management.

Osteoarthritis of the knee

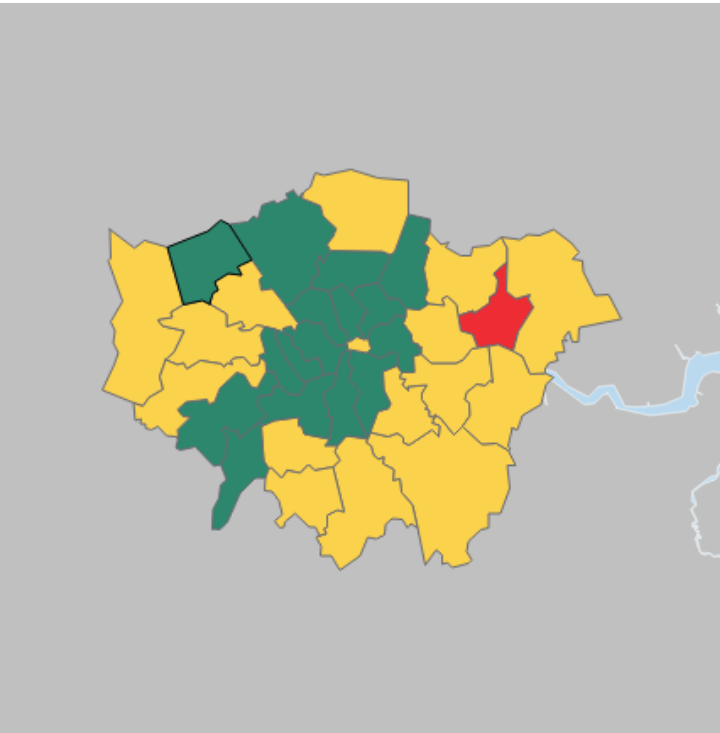
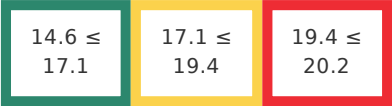
The prevalence of osteoarthritis of the knee ranges from **14.6% to 21.4%** across lower tier local authorities in England, which is almost a fifth of the whole population. A total of **15,328** people aged over 45 years in Harrow live with knee osteoarthritis. That equates to **16.6%** of people aged over 45 years, less than the England average of 18.2% (Table 2, Figure 1). Furthermore, it is estimated that of the **15,328** people with knee osteoarthritis in Harrow, **4,945** people have severe\* knee osteoarthritis which is **5.4%** of the population aged 45 years or over (Figure 2).

Osteoarthritis is the primary cause of 99% of knee replacements [6]. Between 2011/12 and 2015/16, there were **1,430** NHS hospital admissions for knee replacements in Harrow.

Figure 2 shows how the prevalence of knee osteoarthritis in Harrow compares with similar local authorities (as defined by CIPFA nearest neighbour methodology)

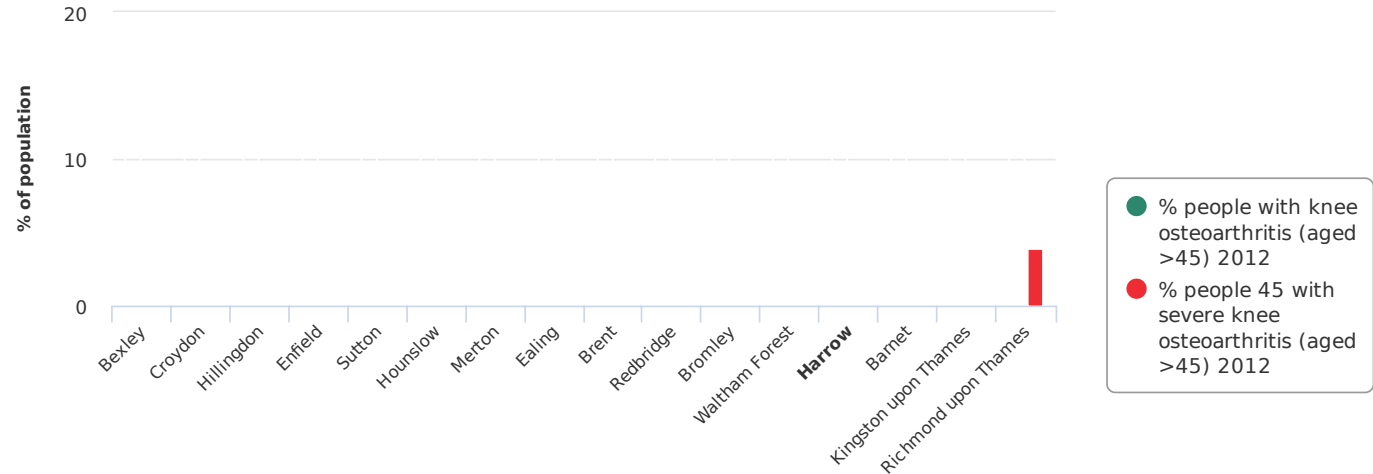
Figure 1. Prevalence (%) of osteoarthritis of the knee in people aged over 45 years at lower tier local authority level, London, 2012.

Custom bands within All local authorities in London



Source:  
Arthritis Research UK, Musculoskeletal Calculator, <http://id.esd.org.uk/metricType/6614>

Figure 2. Prevalence (%) of osteoarthritis of the knee in people aged over 45 years in Harrow compared with CIPFA nearest neighbours, 2012.



Source:  
Arthritis Research UK, Musculoskeletal Calculator, <http://id.esd.org.uk/metricType/6614>  
Arthritis Research UK, Musculoskeletal Calculator, <http://id.esd.org.uk/metricType/6616>

### Osteoarthritis of the hip

The prevalence of osteoarthritis of the hip ranges from **9.6% to 12.5%** across all lower-tier local authorities in England. A total of **9,385** people aged 45 or over in **Harrow** live with hip osteoarthritis (Table 2, Figure 3). That equates to **10.2%** of people aged over 45 years, less than the England prevalence of **10.9%**. Furthermore, it is estimated of the **9,385** people with hip osteoarthritis in Harrow, **2,711** have severe\* hip osteoarthritis, which is **2.9%** of the population aged 45 years or over (Figure 4).

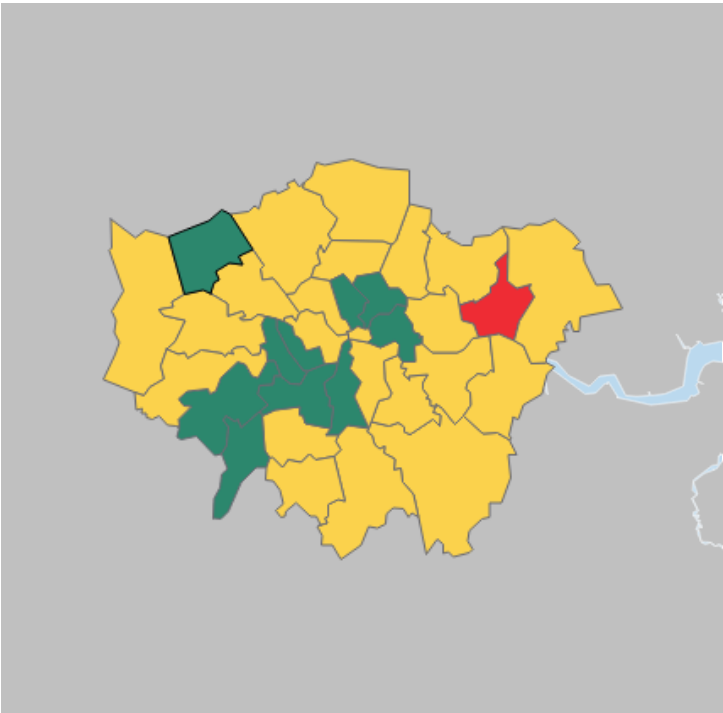
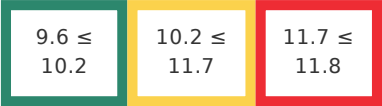
Osteoarthritis is the primary cause of 90% of hip replacements [6]. Between 2011/12 to 2015/16, there were **792** NHS hospital admissions for hip replacements in Harrow.

Figure 4 shows how the prevalence of hip osteoarthritis in Harrow compares with similar local authorities (as defined by CIPFA nearest neighbour methodology)

\*Respondents were deemed to have 'severe' osteoarthritis if their answers included any one of the following statements: They have severe pain most of the time (as opposed to 'mild' or 'moderate'); They're unable to walk ¼ mile unaided (as opposed to 'no', 'some' or 'much difficulty'); They've previously undergone hip or knee replacement due to arthritis.

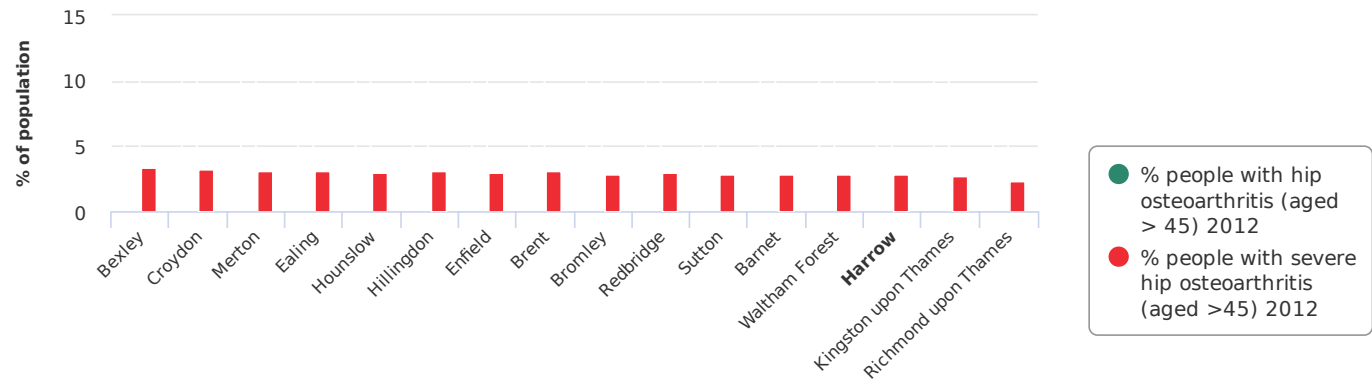
**Figure 3. Prevalence (%) of osteoarthritis of the knee in people aged over 45 years at lower tier local authority level, London, 2012.**

Custom bands within All local authorities in London



**Source:**  
Arthritis Research UK, Musculoskeletal Calculator, <http://id.esd.org.uk/metricType/6610>

**Figure 4. Prevalence (%) of osteoarthritis of the hip in people aged over 45 years in Harrow compared with CIPFA nearest neighbours, 2012.**



**Source:**  
Arthritis Research UK, Musculoskeletal Calculator, <http://id.esd.org.uk/metricType/6610>  
Arthritis Research UK, Musculoskeletal Calculator, <http://id.esd.org.uk/metricType/6612>

# Back pain

Back pain is a common problem often caused by a simple muscle, tendon or ligament strain, although there are several specific conditions such as arthritis that can cause back pain. It can be acute, where the pain starts quickly but then reduces after a few days or weeks, or chronic, where pain might last on and off for several weeks or even months and years. It is the second most common cause of short-term work absences after minor illnesses (such as colds, flu, and sickness) and the leading cause of Years Lived With Disability (YLD) in the UK [1,7].

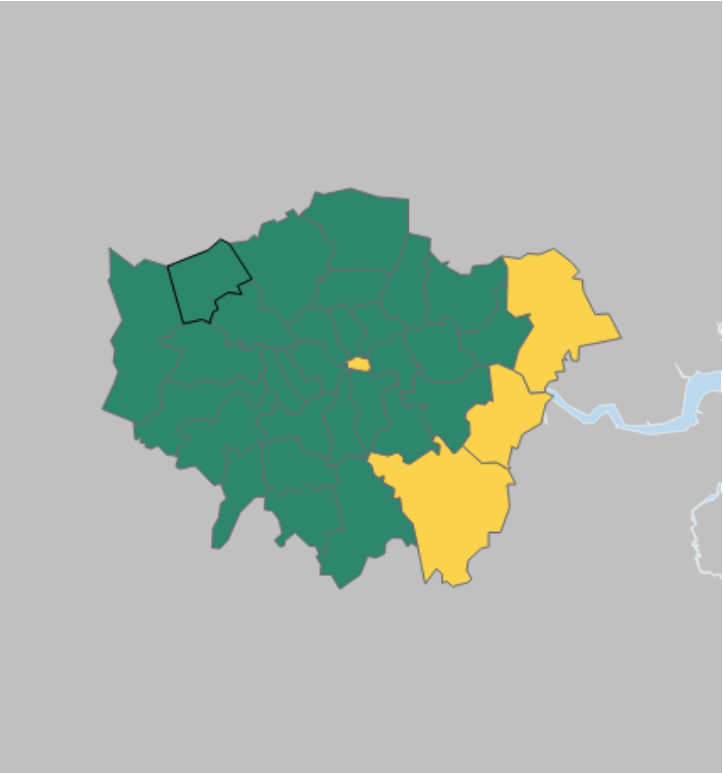
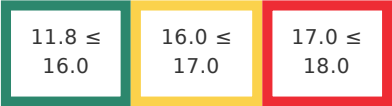
The prevalence of back pain varies across lower tier local authorities in England, ranging from **11.8% to 21.4%**. A total of **36,686** people in Harrow live with back pain. This means that of the total Harrow population, **15.1%** are estimated to have back pain (Table 2, Figure 5). This is lower than the overall England prevalence of **16.9%**. In addition, it is estimated that of the **36,686** people in Harrow with back pain **20,935** have severe\* back pain, which equates to **8.6%** of the population (Figure 6).

Figure 6 shows how the prevalence of back pain in Harrow compares with similar local authorities (as defined by CIPFA nearest neighbour methodology).

\*The severity of back pain was determined using the Chronic Pain Grade based on GCPS version 2.0. Respondents were deemed to have severe back pain if they scored a chronic pain grade of II, III, or IV.

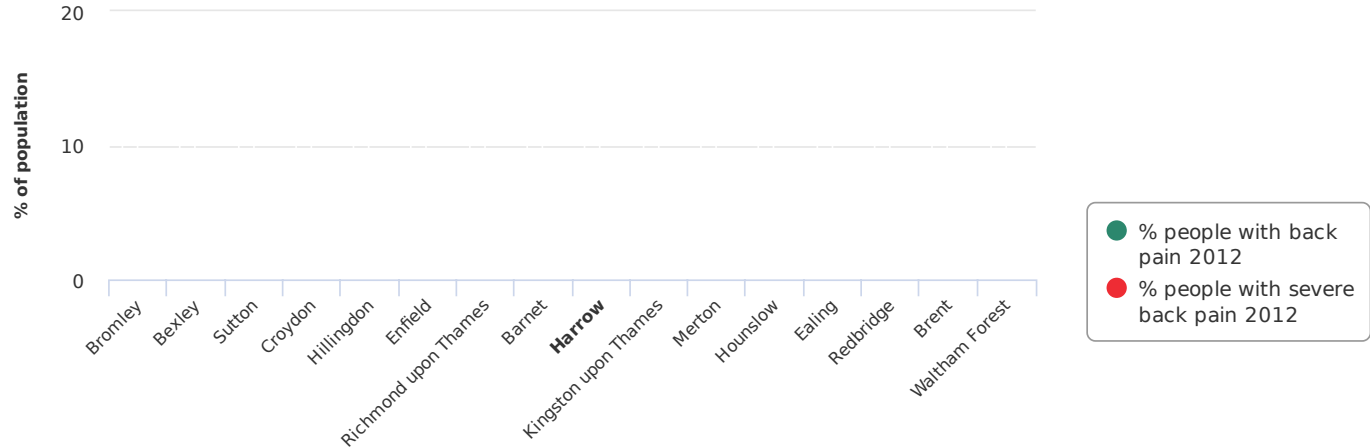
Figure 5. Prevalence (%) of back pain at lower tier local authority level, London, 2012.

Custom bands within All local authorities in London



Source:  
Arthritis Research UK, Musculoskeletal Calculator,  
<http://id.esd.org.uk/metricType/6618>

Figure 6. Prevalence (%) of back pain in Harrow compared with CIPFA nearest neighbours, 2012.



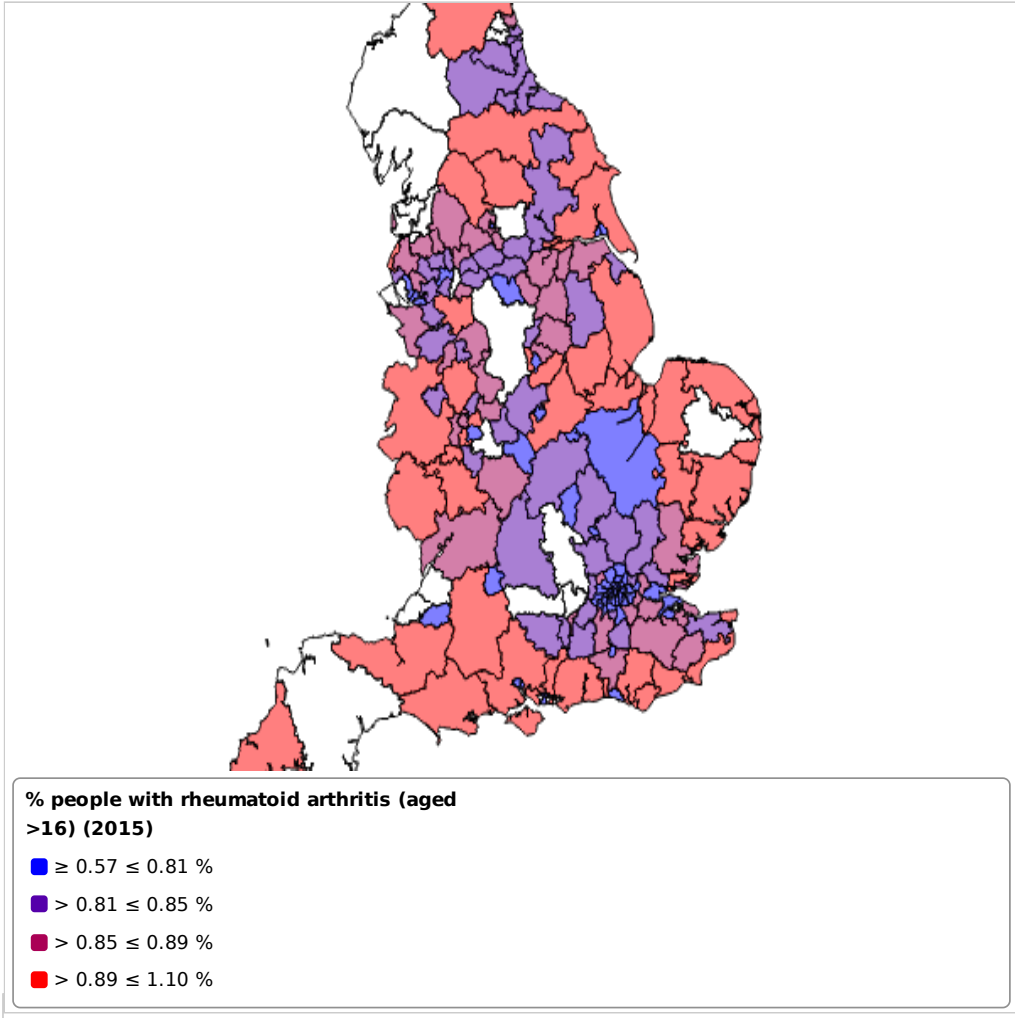
Source:  
Arthritis Research UK, Musculoskeletal Calculator, <http://id.esd.org.uk/metricType/6618>  
Arthritis Research UK, Musculoskeletal Calculator, <http://id.esd.org.uk/metricType/6620>

# Rheumatoid arthritis

Rheumatoid arthritis is an autoimmune disease that causes inflammation in the joints. As a result, the joint becomes painful, stiff and swollen. This inflammatory activity can ultimately cause irreversible damage. This condition requires specialist care from rheumatologists using drug treatments to suppress the immune system. The sooner one starts treatment for rheumatoid arthritis, the more effective it is likely to be, so early diagnosis and intensive treatment is important.

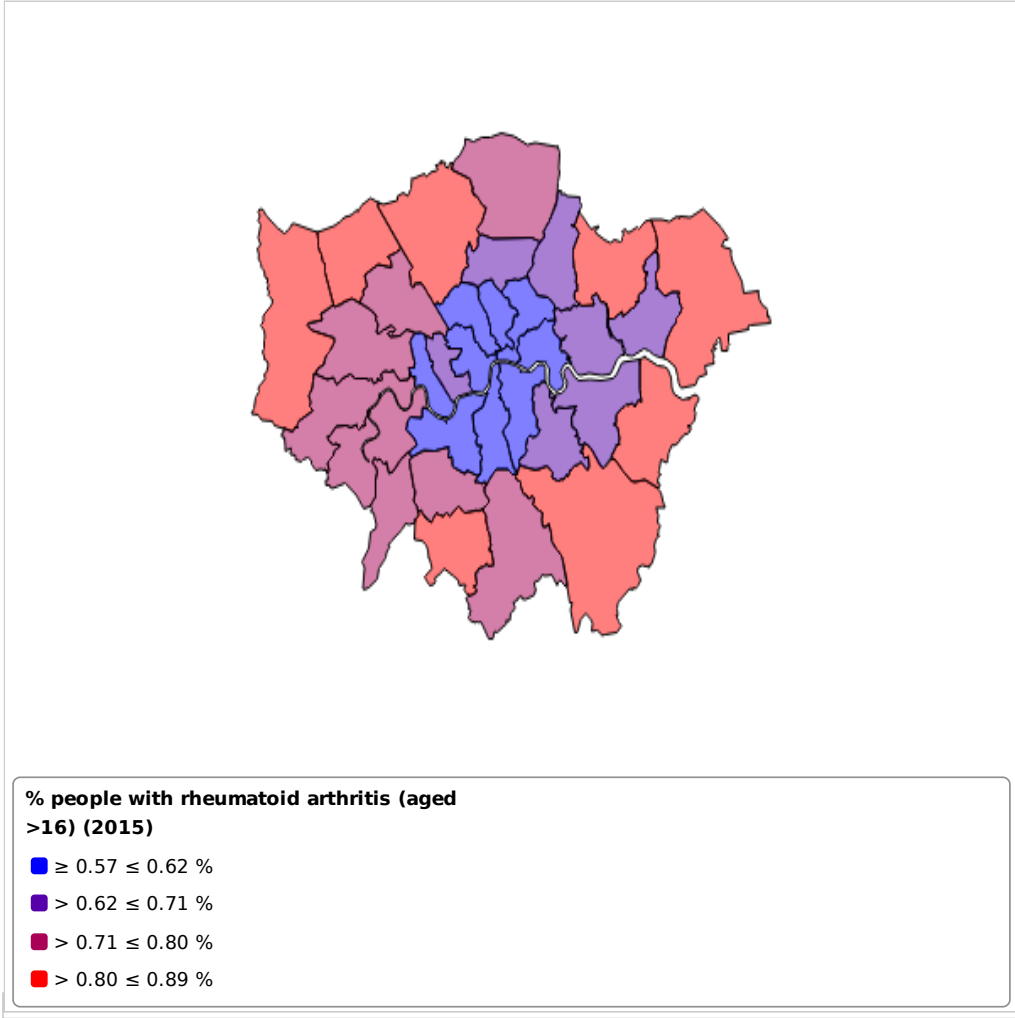
In England **0.84%** of adults aged over 16 years have rheumatoid arthritis which is approximately **380,000** people [2]. Data on the number of people aged over 16 with rheumatoid arthritis in England is available at CCG level on LG Inform Plus.

**Figure 7. Prevalence (%) of rheumatoid arthritis in people aged over 16 years at CCG level, England, 2015.**



Source: Arthritis Research UK, Musculoskeletal Calculator.

Figure 8. Prevalence (%) of rheumatoid arthritis in people aged over 16 years at CCG level, London, 2015.



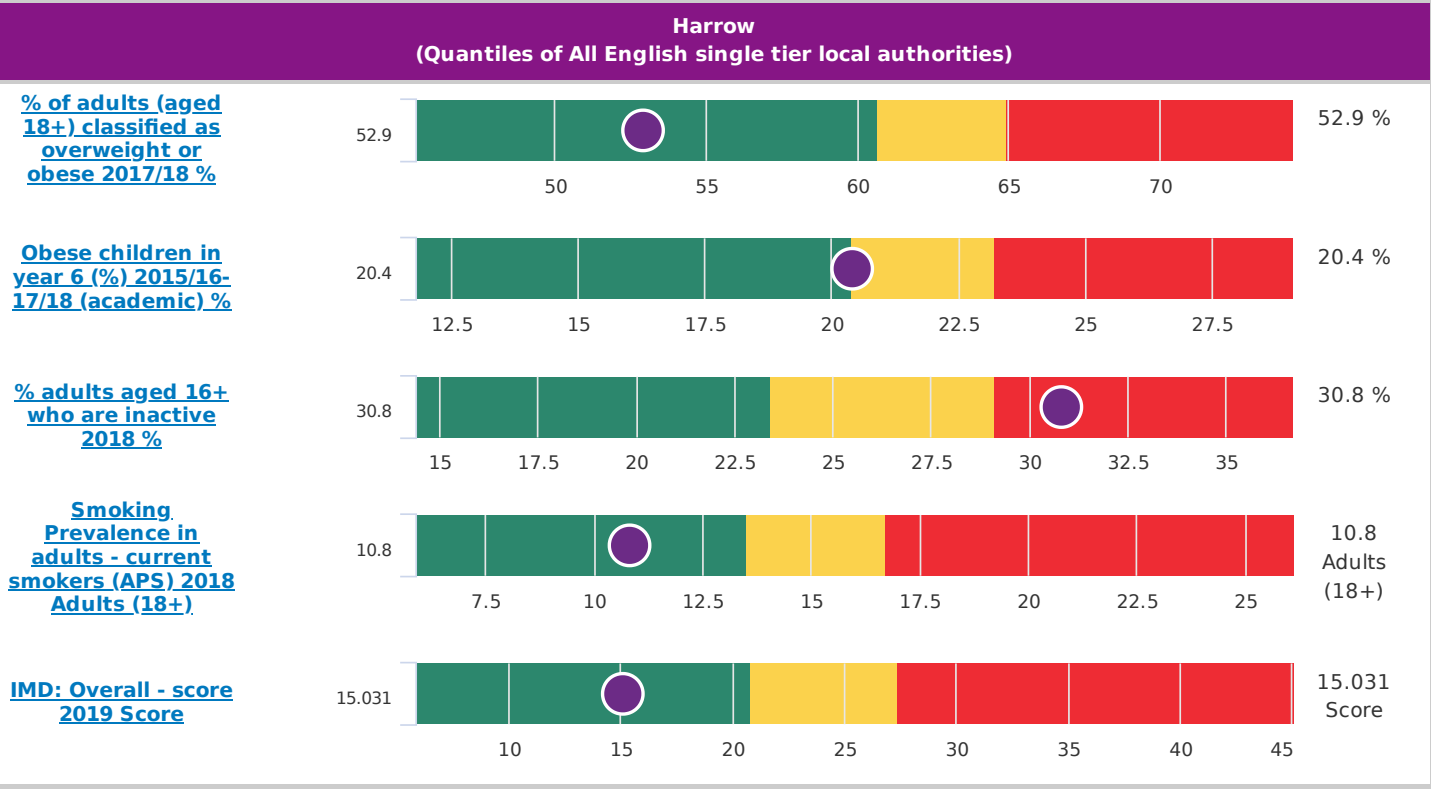
Source: Arthritis Research UK, Musculoskeletal Calculator

# Risk factors for musculoskeletal health

There are several risk factors associated with the development of various musculoskeletal conditions. These include, but are not limited to, obesity, physical inactivity, smoking, and deprivation. The prevalence of these risk factors varies greatly by local authority.

Harrow is the 207th most deprived local authority district in England out of 326 lower tier local authorities. It has a lower proportion of adults who are overweight or obese compared with the England average of 62.0%. The proportion of adults in Harrow who are physically inactive is higher than the England average of 25.1%, and it has a lower smoking prevalence than the England average of 14.4%.

**Figure 9. Indicators showing how Harrow compares to all local authorities for risk factors relevant to musculoskeletal health**



**Indicator definitions:**

1. % of adults (aged 18+) classified as overweight or obese 2016/17 shows the percentage of all adults (aged 18 and over) classified as overweight or obese in 2016/17.
2. % of measured children in year 6 classified as obese - This is the number of children in year 6 classified as obese as a percentage of all children measured. This is based on 3 years of measurement, based on the child's area of residence.
3. % of adults aged 16+ who are inactive 2017 shows the percentage of adults who are inactive (i.e. do less than 30 minutes of physical activity per week). This includes the activities of walking, cycling, dance, fitness and sporting activities, but excludes gardening which is outside of Sport England's remit.
4. Smoking prevalence in adults (18+)-current smokers (APS) 2017 shows the percentage of self-reported smokers aged over 18 years.
5. IMD: Overall (2015) stands for The Indices of Deprivation (IMD, 2015) which combines a range of economic, social and housing indicators to provide a measure of relative deprivation. It measures the position of areas against each other within different domains. A higher overall IMD score indicates a higher level of overall deprivation.



# Actions for commissioners and providers to consider

Arthritis and related conditions, such as back pain and osteoporosis can affect adults across the life course. This group of MSK conditions are the biggest cause of pain and disability in the UK, resulting in MSK being the main reason for working days lost. Local commissioners and providers of interventions have a significant role to play in preventing, identifying, supporting and treating MSK conditions.

- 1. **Include prevention of MSK conditions as part of local health and wellbeing commissioning frameworks.** For example, consider the provision of assistance for individuals who may be at risk of or have developed early signs of a MSK condition to access appropriate help and support in a timely manner.
- 2. **Take into consideration the needs of people living with or at risk of an MSK condition when planning health and wellbeing care services.** For example in Joint Strategic Needs Assessments and Joint Health and Wellbeing Strategies. Consider measures to enable people with MSK conditions to take part in a care and support planning processes by using standardised tools to explore and record pain and functional limitation, and how these affect their daily life.
- 3. **Tailor health promotion messages,** such as emphasising the benefits of physical activity, to people with MSK conditions. For example, include raising awareness about the positive actions, such as strength and balance type activity, that individuals can take to look after their bones, muscles and joints across the life course, or promoting a healthy balanced diet for good bone health to prevent osteoporosis in later life.

## Additional resources:

<b>Versus Arthritis policy reports:</b> <ul style="list-style-type: none"><li>• <a href="#">A Fair Assessment</a>—our report into local authorities' assessments</li><li>• <a href="#">Adapted homes, empowered lives</a>: A report on home aids and adaptations</li><li>• <a href="#">Providing physical activity interventions for people with musculoskeletal conditions</a></li><li>• <a href="#">Musculoskeletal health: a public health approach</a></li><li>• <a href="#">Musculoskeletal conditions and multimorbidity</a></li><li>• <a href="#">Working with arthritis</a></li></ul>	<b>National Institute for Health and Care Excellence (NICE)</b> <ul style="list-style-type: none"><li>• NICE make a number of recommendations about the treatment and care of people with arthritis and related conditions. These can be found at <a href="https://www.nice.org.uk/guidance">https://www.nice.org.uk/guidance</a></li></ul> <b>The Cochrane Library</b> <ul style="list-style-type: none"><li>• The Cochrane Collaboration publish high quality systematic reviews to inform healthcare decision making covering a range of topics. These can be found at <a href="http://www.thecochranelibrary.com">www.thecochranelibrary.com</a></li></ul>
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## References

[1] Global Burden of Disease Collaborative Network, "Global Burden of Disease Study 2017 (GBD 2017) Results," Institute for Health Metrics and Evaluation (IHME), Seattle, 2018.

[2] Arthritis Research UK (2018). State of Musculoskeletal Health 2018.

[3] Public Health England. Health Profile for England 2018. Link <https://www.gov.uk/government/publications/health-profile-for-england-2018/chapter-3-trends-in-morbidity-and-risk-factors>)

[4] Public Health England. Musculoskeletal disease profile: short commentary, June 2018. Link: <http://www.gov.uk/government/publications/musculoskeletal-diseases-profile-june-2018-update/musculoskeletal-diseases-profile-short-commentary-june-2018#fnref:1>

[5] Arthritis Care (2012). OA Nation 2012 Survey.

[6] National joint Registry (2017). 14th Annual Report. Part two including data on clinical activity.

[7] Office for National Statistics (2017). Sickness absence in the UK Labour Market. Link: <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/datasets/sicknessabsenceinthelabourma>



Public Health  
England

Protecting and improving the nation's health

## About Public Health England

Public Health England exists to protect and improve the nation's health and wellbeing, and reduce health inequalities. We do this through world-leading science, knowledge and intelligence, advocacy, partnerships and the delivery of specialist public health services. We are an executive agency of the Department of Health and Social Care, and a distinct delivery organisation with operational autonomy. We provide government, local government, the NHS, Parliament, industry and the public with evidence-based professional, scientific and delivery expertise and support.

Public Health England has worked with Versus Arthritis to develop this bulletin.

## About Versus Arthritis

We are Versus Arthritis. We're the 10 million people living with arthritis. We're carers, researchers, health care professionals, friends, runners and fundraisers all united in our ambition to make a difference. Together, we are here to demand and deliver better for people with arthritis across the country, those whose lives are compromised every day by the limits of the condition.

Building on the best of Arthritis Research UK and Arthritis Care, we've joined forces to strengthen our challenge against the injustice of arthritis. Together, we've achieved life-changing breakthroughs in our push against arthritis, demanding better treatments and support. But there's more to be done, and we'll continue developing these breakthroughs, challenging how people see arthritis and ensuring that everyone has access to the best information and support they need, whenever they need it.

# VERSUS ARTHRITIS

