

# The State of Musculoskeletal Health 2025

Arthritis and other musculoskeletal conditions in numbers



# **Contents**

	Introduction and methods What is arthritis?	5
1	Population health How many people have arthritis? What are musculoskeletal conditions and how many people have them? Health inequalities	<b>6</b> 7 8 1
2	Person Impact of arthritis and musculoskeletal conditions Arthritis, musculoskeletal conditions and multiple long-term conditions Arthritis, musculoskeletal conditions and wider health	<b>16</b> 17 22 24
3	Provision Access to care	<b>30</b>
4	Societal impact Impact on healthcare and the economy	<b>37</b>
5	Conditions where arthritis is the main symptom Osteoarthritis Gout Rheumatoid arthritis Psoriatic arthritis Axial spondyloarthritis Juvenile idiopathic arthritis (JIA)	40 41 42 43 44 45
6	Conditions where arthritis is one symptom among many Lupus	<b>47</b>
7	Other musculoskeletal conditions Chronic pain Back pain Fibromyalgia Osteoporosis and fragility fracture	<b>49</b> 50 54 55 56
	Glossary	57
	References	58

Introduction and methods

## What is The State of Musculoskeletal Health?

The State of Musculoskeletal Health is a collection of the most up-to-date, UK-wide statistics on arthritis and other musculoskeletal (MSK) conditions. This includes how many people have these conditions, the number at risk of developing these conditions, the impact of these on a person, on the health system and society, and inequalities that can be found within all the topics above.

### Who is it for?

It is a resource for healthcare professionals, policy makers, public heath leads, researchers, people with these conditions, and anyone interested in MSK health. We believe that with the best information you can build awareness, make more informed decisions, feel more confident and ultimately help more people with MSK conditions, such as arthritis.

# Arthritis UK is the leading arthritis charity, changing lives through research, campaigning and support.

Over 10 million adults, young people and children in the UK live with arthritis. (1) (2) That's one in six people living with the pain, fatigue, disability, mental and financial strain it can cause. The impact can be huge, affecting the ability to work, care for family, and even live independently. Yet despite how many it affects, arthritis is poorly understood and far too little is done. At Arthritis UK, we fund life-changing research into better treatments, offer information and support, and campaign on the issues that matter most to people living with it.



# 10 million

people in the UK have arthritis.



### **Methods**

Data, information, and insights about MSK conditions such as arthritis are available from numerous sources. At Arthritis UK, we judge all evidence based on individual merit and 'good evidence' is evidence that accurately represents the needs, experiences, and perspectives of people with arthritis and musculoskeletal conditions. Different types of evidence can help answer different types of questions. The key is to select evidence based on the question and what is most relevant and useful for answering it.

Figure 1 depicts a hierarchy of evidence. (3) It is important to note that while such frameworks have their merits in specific contexts, they are not without their limitations, as ranking evidence in this way may indirectly favour certain sources of evidence over others. The evidence in this report mainly comes from quantitative studies and real-world evidence. However. it also includes evidence that has been generated from other methodological approaches, some of which may not rank highly in such hierarchies.

This kind of evidence, drawing on lived experience of MSK conditions such as arthritis, adds increased depth and context to some of the statistics we present in this report.

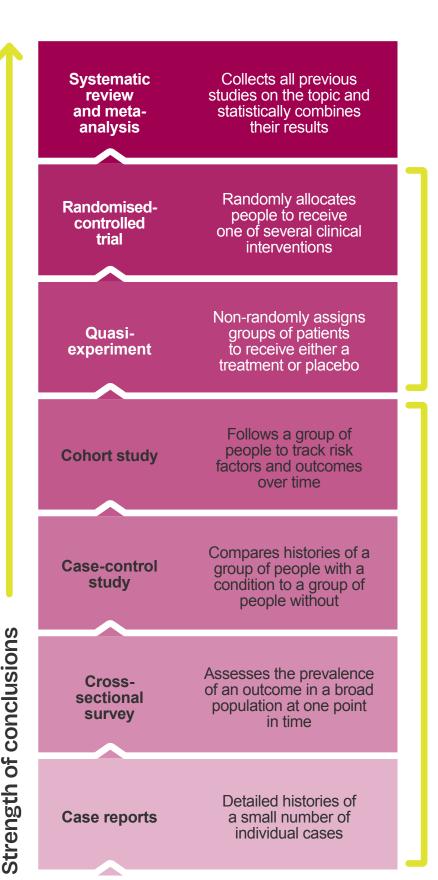


Figure 1. Hierarchy of evidence

# What is arthritis?

Arthritis refers to painful, stiff, or restricted joints. These symptoms are common in conditions that cause joint damage or inflammation. These include osteoarthritis (OA), autoimmune inflammatory arthritis conditions including axial spondyloarthritis, rheumatoid arthritis, crystal arthritis (such as gout), or as a symptom of inflammatory connective tissue diseases (such as lupus).

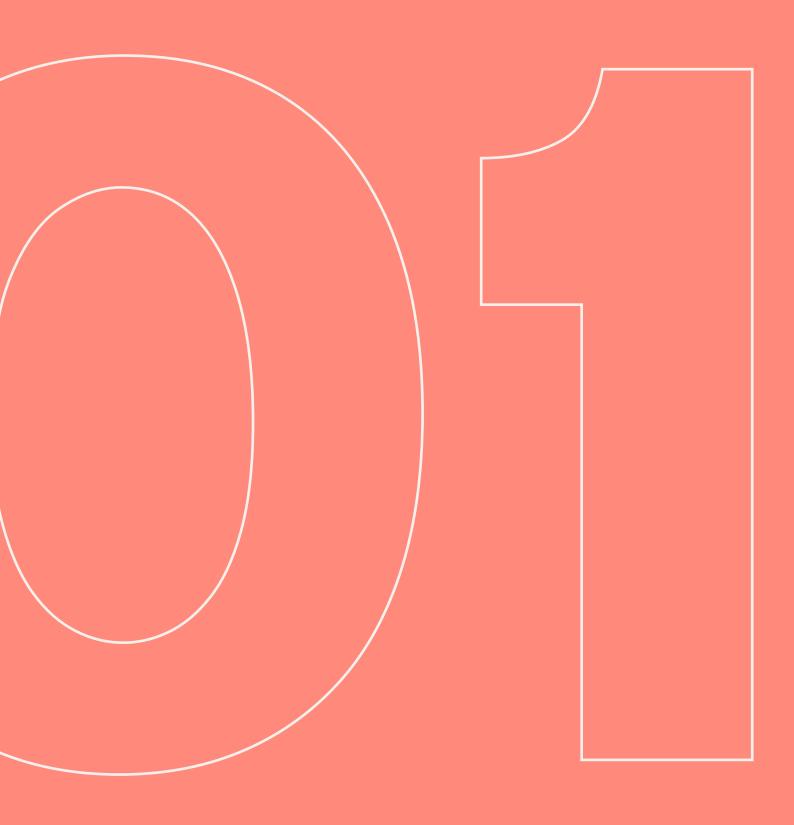
Arthritis is also used as an umbrella term for a range of conditions where arthritis is their main symptom.

Most types of arthritis are long-term conditions. The most common type is osteoarthritis, where the body is unable to maintain and repair the joints leading to thinned and damaged cartilage, due to rising age or injury to a joint. Osteoarthritis mainly affects older adults and is uncommon below age 45 years. People with arthritis often have multiple long-term conditions.

Less common types of arthritis are autoimmune conditions, such as rheumatoid arthritis (RA), psoriatic arthritis and axial spondyloarthritis. Here the immune system attacks and inflames the joints and surrounding tissues causing swelling, pain, stiffness, and joint damage. Peak onset is usually in middle age, but these can strike at any age including juvenile idiopathic arthritis (JIA) in childhood.

Arthritis is also a common symptom in other, mainly rare autoimmune conditions, including lupus, and Behcet's.

Conditions such as gout are types of crystal arthritis, where people have severe but self-limiting arthritis episodes caused by microscopic crystals being deposited in and around the joints. Because people often have more than one type of arthritis at the same time (such as osteoarthritis alongside a form of inflammatory arthritis), the size of the population with arthritis can't be estimated by simply adding up the numbers of the most common different types. The best current estimate is that between 10 and 11 million people in the UK have arthritis (1)(4) with approximately 450,000 adults diagnosed with one of the main arthritis conditions every year. (1) (4) (9) (13) (50)



# Population health

# How many people have arthritis?

The prevalence of musculoskeletal conditions can be measured at different points on someone's journey to diagnosis



The person experiences symptoms.

Such as stiff joints.



The person engages with the healthcare system about their symptoms.

e.g. via their GP surgery.



The healthcare professional begins the diagnostic process.

This might include a physical examination, or input from a specialist.



The person has a confirmed diagnosis.

This means they have a name and clear explanation for their symptoms.



We can measure the number of people who have experienced particular symptoms, or have identified that they have a particular condition through surveys.



At this point the healthcare professional may enter a code, for the symptoms or likely diagnosis, into the person's healthcare record. Examples of a clinical coding system are SNOMED or Read codes.



Once the diagnosis is confirmed, the relevant clinical code may be added to the person's notes.

The anonymised national databases of healthcare data used for research purposes generally only include codes entered by healthcare professionals, not free text data.

This means if no code is entered, or the incorrect code is used (even if the diagnosis is recorded in notes elsewhere in a patient's records) researchers will not capture this in their analysis. This is likely to underestimate the true prevalence of the condition.

# What measures are used in our prevalence data?

Estimates from those who self-report

Estimates from those with probable diagnosis

Estimates from those with a recorded diagnosis

9.5 million

people report low back pain in any given year in the UK. (5) (2) 10 million

adults have a probable diagnosis of osteoarthritis 1. (1) (2)

450,000

adults have a recorded diagnosis of rheumatoid arthritis <sup>1</sup>. <sup>(2) (4)</sup>

19.2-29

people report chronic pain in the UK. (2) (6) (7) (8)

1.6 million

adults have a probable diagnosis of gout. (2) (9)

10,000

children have a recorded diagnosis of juvenile idiopathic arthritis. (10) (11)

220,000

adults have a probable diagnosis of axial spondyloarthritis. (12)

60,000

adults have a recorded diagnosis of axial spondyloarthritis <sup>1</sup>. (4) (2)

200,000

adults have a probable diagnosis of psoriatic arthritis 1. (2) (4)



<sup>1</sup>Age standardised

# How many people have arthritis?

There is no definitive figure of how many people have arthritis in the UK. Instead, to create estimates of how many people have each type of arthritis, researchers rely on a range of data sources to estimate how many people have a particular condition. These data vary in both how they identify someone with arthritis, and their coverage across the UK population.

Researchers may update their estimates if data includes different ways of identifying if someone has arthritis, or if data that has improved coverage of the population becomes available. The underlying true prevalence can also change over time with changes in characteristics of the population, such as levels of obesity, poverty, and age distribution. The prevalence estimates we have are based on data from a sample of people, which is used to give an estimate of the true prevalence in the whole population of the UK. As these samples improve in their coverage of the population, the estimates will become more accurate.

# How do we know someone has arthritis?

The first step to estimating prevalence of a condition is to define who will be included as 'having the condition'. There are several definitions that can be used, depending on where someone is on their journey to diagnosis. The typical journey to diagnosis differs between conditions; for example, diagnosis of osteoarthritis may be possible by reviewing symptoms and performing a physical examination, while diagnosing JIA is likely to require referral to a specialist and further investigations.

Number of people with hip OA and knee OA in the UK. (5)



### Northern Ireland

Knee: **152,312** 

Hip: **91,220** 

### Wales

Knee: **274,317** 

Hip: **179,880** 

### Scotland

Knee: **431,662** 

Hip: **262,638** 

### England

Knee: **4,615,697** 

Hip: **2,764,346** 

### What are MSK conditions?

Musculoskeletal (MSK) conditions are problems with the muscles, bones, joints and adjacent connective tissues, leading to temporary or lifelong limitations in functioning, and the ability to participate in everyday activities.

They are typically characterised by pain and limitations in mobility and dexterity, including conditions such as arthritis conditions, back and neck pain, and fibromyalgia. Some musculoskeletal conditions like osteoporosis may be painless.

# 20.8 million

people in the UK live with an MSK condition. (14)



**20.2 million adults** (over 20 years old) live with an MSK condition in the UK, that's more than 1 in 3 people. (14)



**600,000 children** and young people (under 20 years old) live with an MSK condition in the UK. (14)



Adults living with an MSK condition (those over 20 years old) and children and young people living with an MSK condition (those aged 0 to 19 years) (14)

### **Scotland**

Adults 1,700,000 39% Children 48,000 5%

### **England**

Adults 17,000,000 39% Children 490,000 5%

### **Northern Ireland**

Adults **530,000|37%** Children **19,000|5%** 

### **Wales**

Adults 960,000 | 40% Children 31,000 | 5%

# **Health inequalities**

Health inequalities are 'unfair and avoidable differences in health across the population, and between different groups within society'. (15)

Here we present data on these 5 topics:

- 1. Deprivation
- 2. Weight
- 3. Ethnicity
- 4. Age
- 5. Differences between men and women

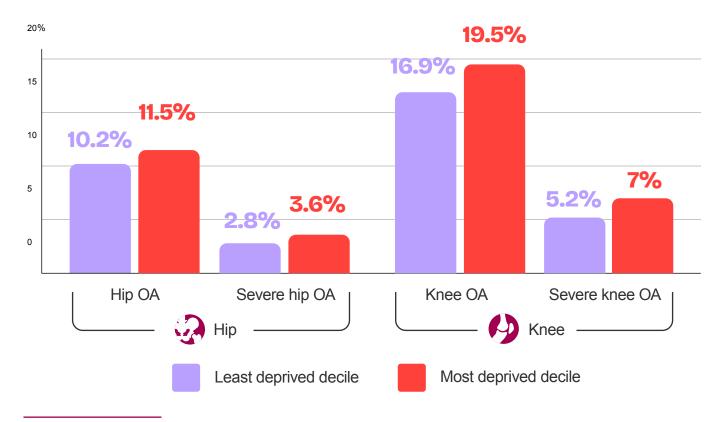
### 1. Deprivation

Arthritis and MSK conditions are more common among those living in more deprived areas.

#### **Arthritis**

In England, the prevalence of hip osteoarthritis and the prevalence of knee osteoarthritis is higher in people living in the most deprived 10% of areas than those living in the least deprived 10% as demonstrated in the infographic <sup>2</sup>. (16) (17)

Increased prevalence of hip and knee osteoarthritis in people aged over 45 living in the most deprived 10% of England <sup>2</sup>. (16) (17)

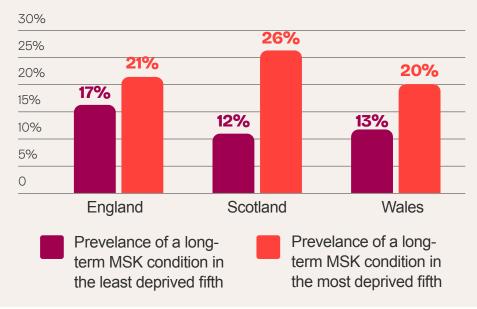


<sup>&</sup>lt;sup>2</sup> Currently, in the UK, this data is only publicly available in England

### MSK conditions

People who live in the most deprived 20% are more likely to report arthritis or a long-term MSK condition compared to those living in the least deprived 20% <sup>4</sup>. (7) (23) (25)

### Increased prevalence of long-term MSK conditions in those living in the most deprived 20% <sup>3</sup>.



### 2. Weight

People who experience higher levels of deprivation are more likely to be living with overweight or obesity than those experiencing lower levels of deprivation. (21)

Deprived areas have increased prevalence of osteoarthritis. The increased prevalence of people living with obesity in these areas accounts for 50% of the extra risk for knee osteoarthritis. (22)

The risk of developing osteoarthritis increases by 1% for every

1kg/m<sup>2</sup> increase in BMI (20)

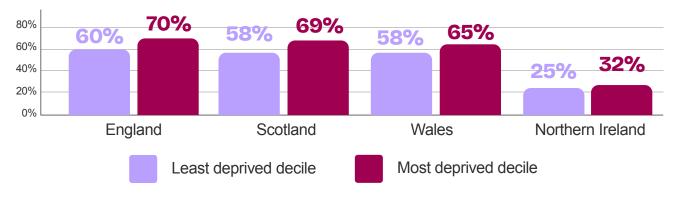


The risk of developing osteoarthritis increases by

**3%** for every 5cm increase in waist circumference (20)

- 5cm = 1 x AA battery +

The prevalence of people living with obesity increases with deprivation (7) (21) (23) (24)



<sup>&</sup>lt;sup>3</sup> Northern Ireland has not been included in this graph as data for the prevalence of MSK conditions with varying deprivation is not available for Northern Ireland.

<sup>&</sup>lt;sup>4</sup>Long-term MSK condition defined as a condition or illness that has lasted or is expected to last a year or more

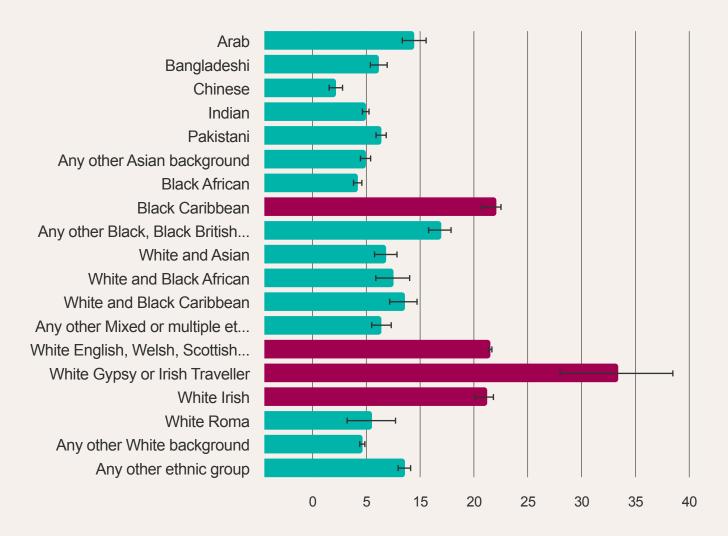
### 3. Ethnicity

MSK conditions disproportionately affect some minoritised ethnic groups, however data often varies in which groups are identified as having the highest rates of these conditions.

Findings from the GP patient survey, conducted in England, have shown that White Gypsy

or Irish Traveller (33.4%), Black Caribbean (21.7%), White English, Welsh, Scottish, Northern Irish or British (21.3%) and White Irish (21.1%) ethnic groups are the most likely to report a long-term musculoskeletal problem. (25)

### Increased prevalence of long-term musculoskeletal conditions in some minoritised ethnic groups in England (aged 16+) (25)



In some cases, the disproportionate prevalence of MSK conditions in some minoritised ethnic groups is only made apparent when you look at the data for men and women separately. (26)

For example, Health Survey for England data demonstrate a significantly higher than average prevalence of MSK conditions among Pakistani women (29.1%). (26)

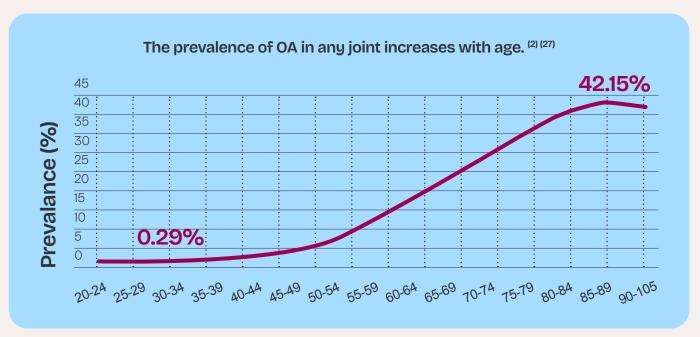
29.1% of Pakistani women have

an MSK condition.

### 4. Age

#### **Arthritis**

Osteoarthritis prevalence increases with age.

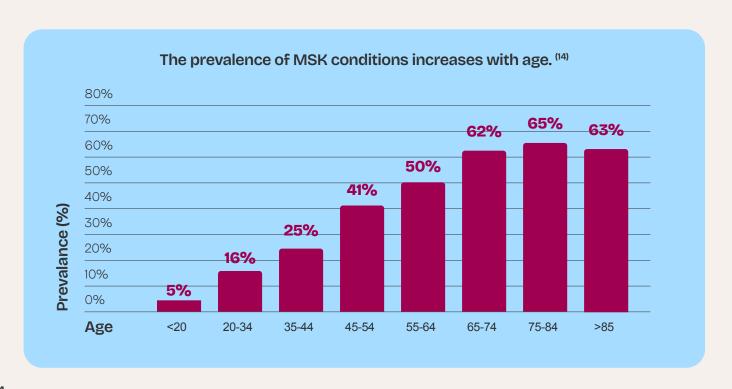


Most people are aged between 45 to 70 years old when diagnosed with rheumatoid arthritis. (28) (29)

#### **MSK conditions**

MSK conditions affect people of all ages but become more common with advancing age.

- **2.7 million people** aged under 35 years (9%) live with an MSK condition. (2) (14)
- **10.1 million people** aged 35-64 years (38%) live with an MSK condition. (2) (14)
- 7.9 million people aged 65 and over (61%) live with an MSK condition. (2) (14)



### Differences between men and women

Arthritis and MSK conditions have different prevalence between men and women.

#### **Arthritis**

Rheumatoid arthritis is 2-3 times as common among women than among men. (28)

Radiographic axial spondyloarthritis is more frequently diagnosed in men (3:1) compared with women. (29)

Non-radiographic axial spondyloarthritis (where damage is not visible on a standard x-ray) has an equal distribution between men and women. (29)

6 million

women have osteoarthritis in the UK. (1)

4 million

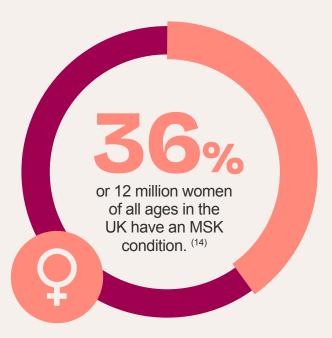
men have osteoarthritis in the UK. (1)

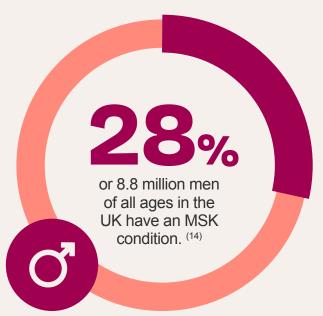
#### MSK conditions in the UK

Health inequalities are also seen in those with chronic pain (also known as persistent pain).

To find out more about these go to our Chronic Pain page.









# Person

# Impact of arthritis and MSK conditions

### Impact on life

Having arthritis or another MSK condition is one of the biggest contributors to years lived with disability (YLDs).

YLDs is a measure which combines the prevalence of a disease with a rating of how disabling that disease is.

One YLD represents a year of healthy life being lost due to disability or illness. (32)

Quality of life can be measured using a self-reported Quality of Life score, where a score of 1=perfect health. For example, the presence of any long-term condition is associated with an average self-reported Quality of Life score of 0.79, but if arthritis or back pain is present the average self-reported Quality of Life score is 0.71. (33)



### Musculoskeletal conditions and Years Lived with Disability (14)

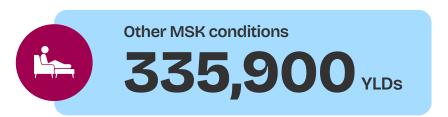


Neck pain accounts for 293,822
YLDs

Osteoarthritis accounts for 322,643
YLDs

Rheumatoid arthritis accounts for 60,632 YLDs

Gout accounts for 22,931
YLDs

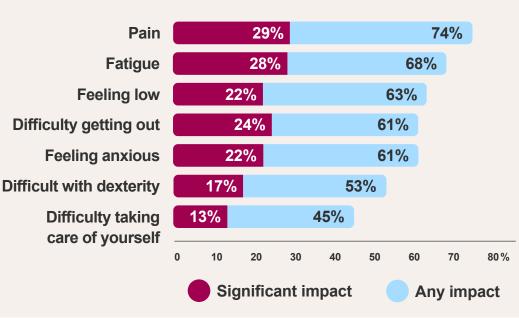


### Impact on daily activities

Arthritis UK surveyed people with MSK conditions to understand the factors that impact their lives.

Half of the respondents reported they cannot do anything themselves to lessen the impact of their condition on their lives. (34)

### Factors impacting the lives of people with MSK conditions (32)



# Work

Arthritis and MSK conditions can impact a person's ability to work.

People with arthritis are 20% less likely to be in work than someone without arthritis. (35) (36)

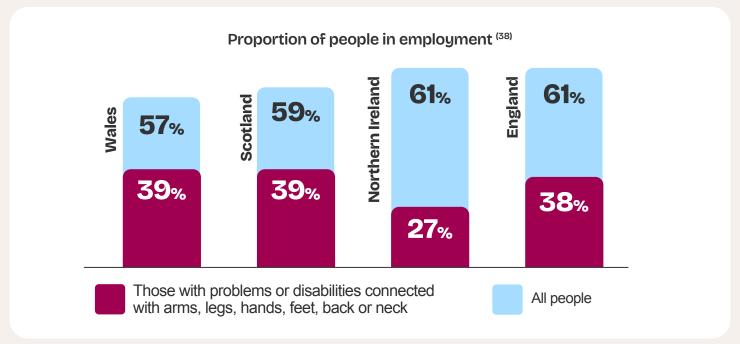
### People in work

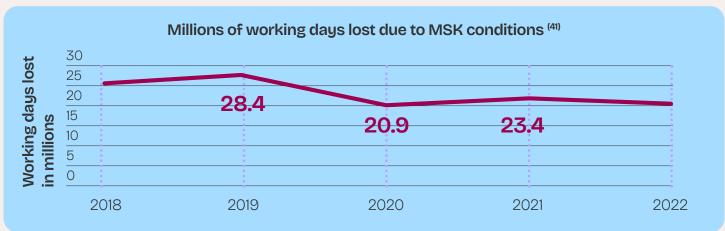
1 in 10 current UK employees have an MSK condition. (37)

1 in 3 employees with a long-term condition have not discussed it with their employer. (40)

23.4 million working days were lost in the UK in 2022 due to MSK conditions. (41)

MSK conditions are the 3rd most common reason for working days lost, only behind 'Other' (including COVID-19) and 'Minor Illnesses'. (41)





The percentage of UK employees reported having a long-term health condition rose from:

March 2016

29%

March 2023

36%(39)

MSK conditions are the second most common diagnosis (after mental health conditions) on fit notes written by GPs in England, from July 2023 to June 2024. (42)

17%



of fit notes issued to patients by GPs in England were for MSK conditions from July 2023 to June 2024. (42)

52%



of fit notes issued for MSK conditions cited episodes lasting 5 or more weeks in 2023 to 2024. (42)

53%



of people with an MSK condition say their symptoms have a negative impact on work. (34)

9%



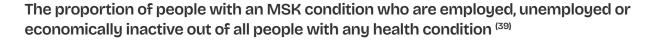
of people (6,120) receiving support from the UK's Access to Work scheme in 2023/24 had an MSK condition. (44)

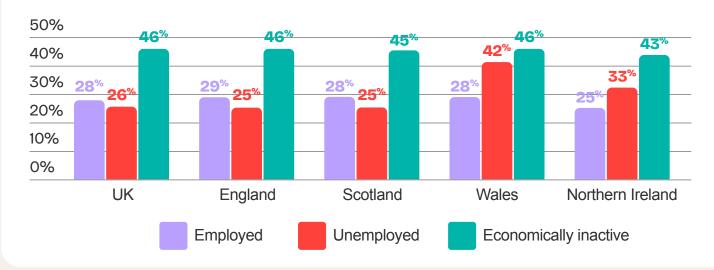


13%

of sickness absence within the NHS England over August 2023 to July 2024 was due to back problems and other MSK conditions. This is equivalent to 3,460,166 working days lost in 12 months. (43)







As of March 2023, the number of people reporting problems with their legs or feet has risen by **243,000 (29%)** since 2019. (39)

As of March 2023, the number of people reporting problems with their back or neck has risen by **217,000 (28%)** since 2019. (39)

**16% (508,500)** of female ESA claimants in Great Britain in 2023 have a disease of the MSK system or connective tissue as their primary condition. (45)

**9% (289,461)** of male ESA claimants in Great Britain in 2023 have a disease of the MSK system or connective tissue as their primary condition. (45)

1.35 million

people who were economically inactive (not seeking employment) in Jan-March 2023 due to long-term sickness reported their main health condition was a musculoskeletal health condition. (39)

13% (797,954) of employment and support allowance (ESA) claimants in Great Britain in 2023 have a disease of the MSK system or connective tissue as their primary condition. (45)

# Arthritis, MSK conditions and multiple long-term conditions



adults in the UK live with two or more long-term conditions. (46) (47)



1 in 5 people with osteoarthritis experience symptoms of depression and anxiety. (51)

People with OA have a

24%



higher risk of cardiovascular disease than people without OA. (52)

People with OA have a

61%



higher risk of having diabetes mellitus than those without arthritis. (53)

Multiple long-term conditions, or multimorbidity, refers to when a single individual is living with two or more long-term conditions.

**1 in 2 people** in England (over 32 million) live with two or more long-term conditions (52.8%). (48) (2)

In England, the median age of onset for living with two or more long-term conditions was 56 years in 2004 but in 2019 the median age was 46 years. Showing people are experiencing multimorbidity earlier in life. (48)

The prevalence of people with 4 or more chronic conditions in the UK is expected to nearly double from: 9.8% in 2015 to 17% in 2035. (47)

#### **Arthritis**

Multiple long-term conditions are common in people with arthritis.

People with OA are **1.2x more** likely to have an additional long-term condition than people without. (50)

People with OA are **2.5x more** likely to have three or more additional conditions than people without. (50)

The prevalence of depression in people with rheumatoid arthritis is **2 to 3 times higher** than in those without the condition. <sup>(54)</sup>

MSK conditions are very common in people with multiple long-term conditions.



Almost **4 in 10** people (36%) with multiple long-term conditions are living with a physical and a mental health condition. (46) (47)



**1 in 5** adults (21%) in midlife (46 to 48) in Britain with multiple long-term conditions have recurrent back issues. (55)



**1 in 8** people (13.4%) in England report living with at least two long-term conditions, one of which is MSK-related.<sup>(56)</sup>

The prevalence of multiple long-term conditions increases with advancing age.



**1 in 3** adults (34%) who are 46 to 68 years old live with multiple long-term conditions in Britain. (55)



**6 in 10** people aged 65 to 84 years have multiple long-term conditions. (46) (47)



**8 in 10** people aged 85 years or over have multiple long-term conditions. (46) (47)

Multimorbidity is associated with social deprivation.





Adults from more disadvantaged backgrounds are up to

43%

more likely to have multiple long-term conditions in midlife (46 to 48) compared to those from less disadvantaged backgrounds. (55)

People who experience higher levels of deprivation are significantly more likely to report two or more conditions and can expect to develop them 10 to 15 years earlier than those experiencing lower levels of deprivation. (46) (47)

# Arthritis, MSK conditions and wider health

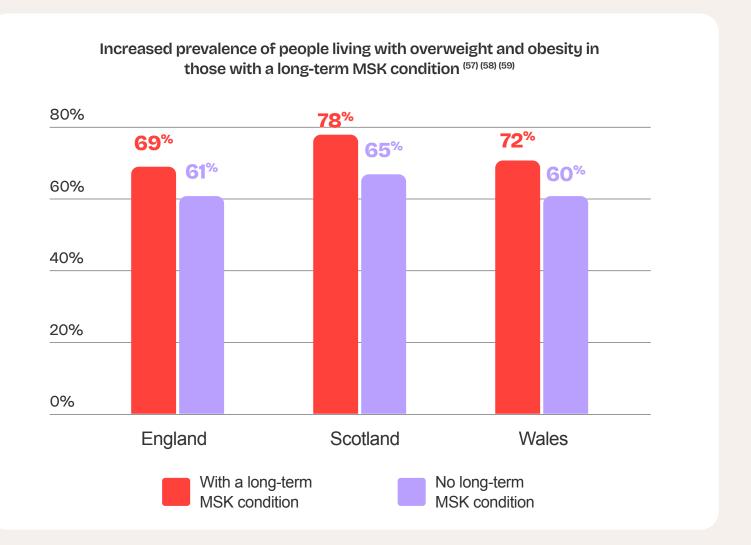
People with arthritis, an MSK condition, or chronic pain (also referred to as persistent pain) are more likely to have wider health problems such as poor mental health, overweight and physical inactivity. The relationships here are complex. Some are because of shared risk factors such as deprivation.

Some risk factors are causative, such as increased body weight contributing directly to knee osteoarthritis, or people struggling to be physically active because of painful arthritis or musculoskeletal conditions.

These relationships can also be reciprocal, including where chronic pain worsens mental health, and poor mental health worsens chronic pain.

### Overweight and obesity

Living with overweight or obesity can increase people's risk of developing arthritis conditions such as osteoarthritis and gout.





adults in the UK are classified as living with overweight or obesity. (57) (58) (59)



(70%) adults over 16 with a long-term MSK condition are classified as living with overweight or obesity. (57) (58) (59)



The risk of developing OA increases by 3% for every 5cm increase in waist circumference. (20)



The risk of developing OA increases by 1% for each 1kg/m2 increase in BMI. (20)



people with psoriatic arthritis are classified as living with obesity. (60)



**54**%

of adults in England living with obesity report chronic pain. (6)



### Average BMI of hip and knee replacement patients (61) (62) (63)



Obesity directly damages weight-bearing joints, such as knees and hips, because of the abnormally high loads they have to carry. (64) In nearly a quarter (24.6%) of people with new onset knee pain, the symptoms can be attributed to living with overweight or obesity. (65)



People who are living with obesity are 2x more likely than someone classified with healthy weight to develop gout and are more likely to develop it at a younger age. (66)

People classified as living with overweight have a 10% higher risk of low back pain than those classified with healthy weight. (67)

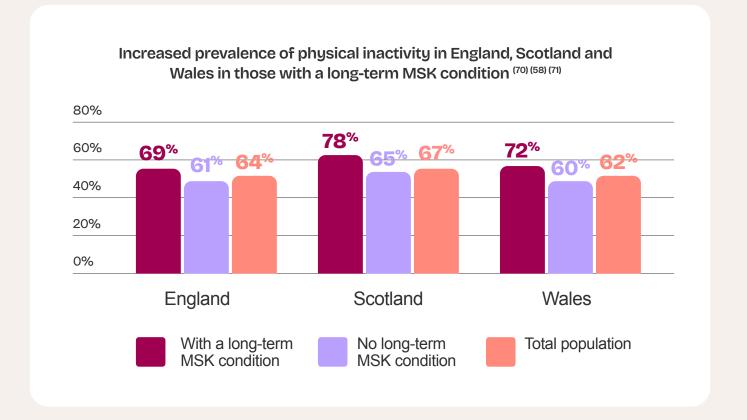
People classified as living with obesity have a 31% higher risk of rheumatoid arthritis than those classified with healthy weight. (68)

People classified as living with overweight have an a 15% higher risk of rheumatoid arthritis than those classified with healthy weight. (68)

### **Physical inactivity**

Being physically inactive, defined as doing less than 30 minutes of moderate intensity physical activity a week, can increase people's risk of developing particular MSK conditions. <sup>(69)</sup>





60%

of people with rheumatoid arthritis are physically inactive. (73)

**45**%

of people who are physically inactive in England have chronic pain. <sup>(6)</sup>

20%

of respondents in Northern Ireland reported 0 as the number of days where they have completed at least 30 minutes of physical activity (inactive). (72) People with a longterm MSK condition are around

**2**x

as likely to report being physically inactive than those without. (58) (70) (71)

### Regular physical activity reduces people's risk of:

Those struggling with their MSK conditions are less likely to be active but have the most to gain, if offered the right support.

### 8 in 10

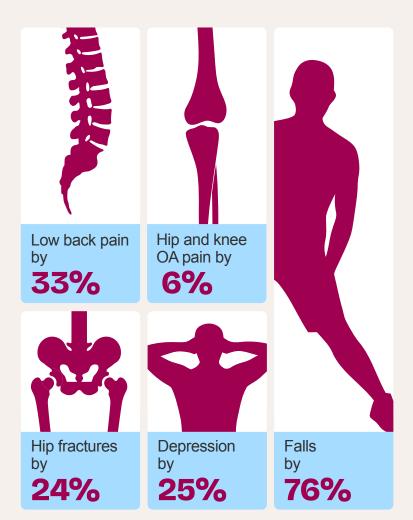
(77%) surveyed with MSK conditions said they want practical support to help them be more physically active. (79)

### 6 in 10

(60%) surveyed with MSK conditions reported using physical activity as a way to manage their symptoms. (34)

### 7 in 10

(70%) people surveyed with MSK conditions said they would like to be more active. (79)





4 in 10

(36%) surveyed with MSK conditions who were active at least once a week said they exercised because it helped them with their pain. (34)

### Mental health

People with arthritis, MSK conditions or chronic pain are more likely to have mental health conditions.



men (23.7%) with rheumatoid arthritis develop depression within 5 years of diagnosis. (77)



people (20%) with OA experience symptoms of depression and anxiety. (51)



women (36.5%) with rheumatoid arthritis develop depression within 5 years of diagnosis. (80)



people (20%) with psoriatic arthritis have depression. (81)

### **1.5**x

The odds of having a self-reported mental health condition are 1.5 times as high in people with an MSK condition compared with people with no MSK condition. (82)

### **4**x

Depression is 4 times more common among people in persistent pain compared to those without pain. (83)



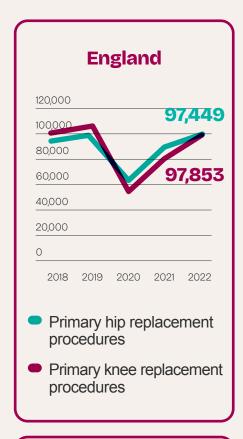
# Provision

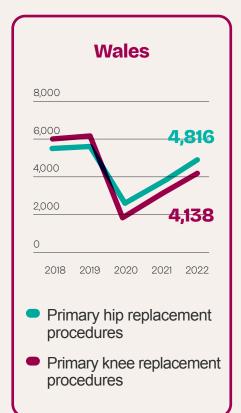
# **Access to care**

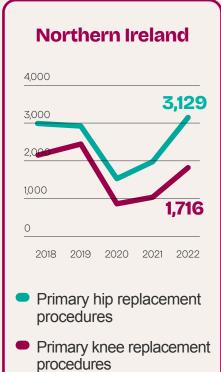
# Joint replacements and trauma and orthopaedic waiting times

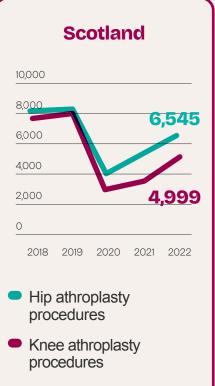
An important treatment for osteoarthritis, when other less invasive interventions have not worked, is joint replacement surgery. Typically, this will be a replacement of the hip or knee.

The impact of the COVID-19 pandemic on the number of hip and knee replacements conducted each year (84) (85) (86)





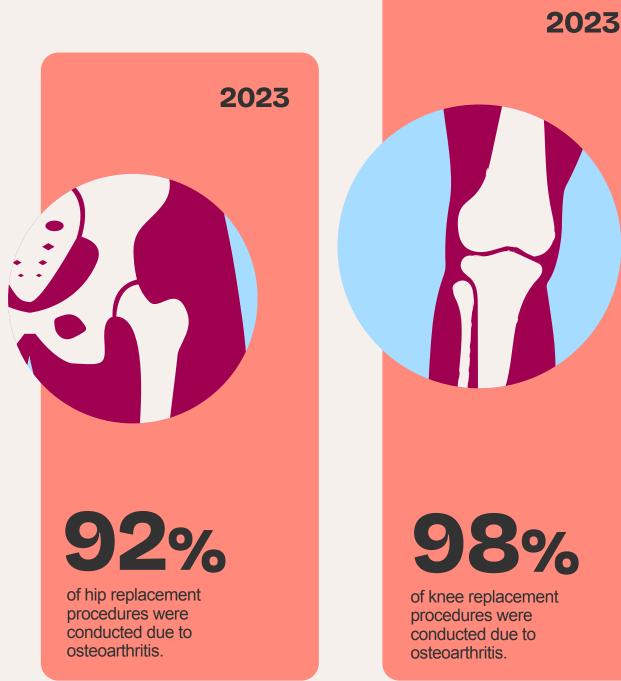




The number of joint replacement surgeries conducted dropped in 2020 and have steadily increased over the years since.

In 2023, **108,558 primary hip replacement procedures** were conducted in England, Northern Ireland and Wales, 92% of these were conducted due to osteoarthritis. <sup>(63)</sup>

In 2023,116,845 primary knee replacement procedures were conducted in England, Northern Ireland and Wales, 98% of these were conducted due to osteoarthritis. (62)

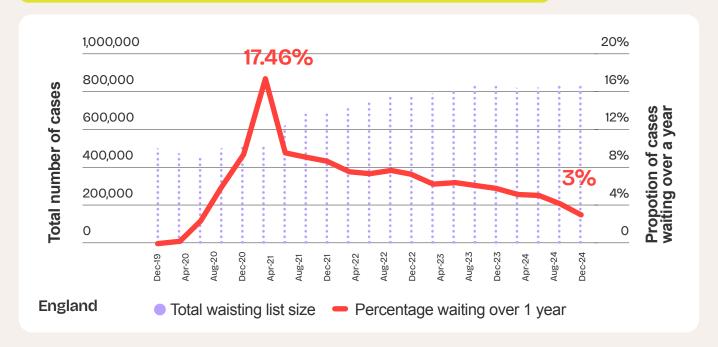


# Joint replacement and health inequalities

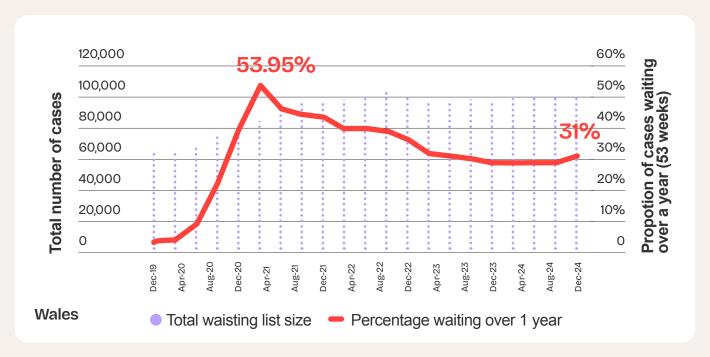
People who experience the most deprivation across England and Wales are more likely to need a hip replacement than those experiencing

less deprivation. (87) Yet a patient living in the least deprived area in England was 4.8 times more likely to receive an NHS-funded elective hip replacement in 2016 than a patient of the same age, sex and hip function who lived in the most deprived area. (87)

### The number of people waiting for trauma and orthopaedic treatment



In England the waiting list for Trauma and Orthopaedic treatment contains 852,975 cases, 3% have waited over a year for treatment (December 2024 data). (88)



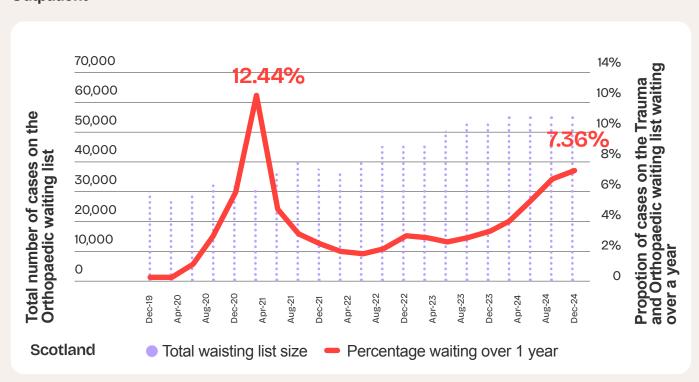
In Wales 102,293 cases are waiting for Trauma and Orthopaedic treatment with 31% waiting over a year and 5% waiting over two years (December 2024 data). (89)

### Inpatient



In Scotland 45,285 cases are waiting for Orthopaedic inpatient and day case treatment with 26% waiting for over a year (December 2024 data). (87)

### **Outpatient**



In Scotland 64,163 cases are waiting for Orthopaedic outpatient treatment with 7% waiting for over a year (December 2024 data). (90)

### Northern Ireland

Northern Ireland trusts are currently migrating to a new electronic patient record system and as such we have not been able to generate national figures for the past year. (91) (92)

Southern and Western Health and Social Care Trusts

10,653

cases are waiting for Trauma and Orthopaedic inpatient and day case treatment with 62% waiting for over a year. (91) (92)

13,063

cases were waiting for Trauma and Orthopaedic surgery outpatient treatment with 46% waiting for over a year (December 2024 data). (91) (92)

South Eastern and Belfast Health and Social Care Trusts <sup>6</sup>

13,046

cases are waiting for Orthopaedic inpatient and day case treatment with 64% waiting for over a year. (91) (92)

15,794

cases were waiting for Orthopaedic outpatient treatment with 36% waiting for over a year (December 2024 data). (91) (92)

## Quality of care in inflammatory arthritis services

These data come from the National Early Inflammatory Arthritis Audit (NEIAA) which collects data from England and Wales. (93)

51% of people with suspected inflammatory arthritis are referred within the target of 3 working days, a decrease of 5% from the previous year. (93)

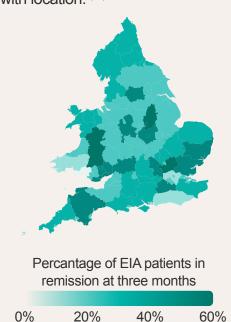
44% of people with suspected inflammatory arthritis receive a rheumatology appointment within 3 weeks of a rheumatology clinic receiving a referral. (93)

60% of people with confirmed autoimmune inflammatory arthritis receive disease-modifying antirheumatic drugs (DMARDs) within 6 weeks, an increase of 8% from the previous year. (93)

The number of people with early inflammatory arthritis that are in remission has remained stable at 35%. (93)

### **Geographical variation**

The percentage of patients with suspected inflammatory arthritis assessed within 3 weeks varies with location. (93)



<sup>&</sup>lt;sup>6</sup> Referral to treatment data for Northern Ireland is split into two different groups due to an ongoing change process in how this data is collected. As such data collected from South Eastern and Belfast HSC trusts are not comparable to data collected from the other three HSC trusts.

### Juvenile idiopathic arthritis (JIA)

The pathway for a child or young person to receive a diagnosis of JIA is varied and depends on various factors such as the symptoms presented and where they live. As such, delays in diagnosis occur which lead to increased pain and potentially more joint damage. (94)



In a recent quality of care review, it was found that

43%

of patients experience a delay between the first presentation of symptoms and referral to rheumatology. (94) In the same quality of care review, delays in starting medication were identified.

These delays were common with medication delays seen in

32%

of patients. (94)

9%

of patients were given inappropriate medications. For example, oral medication was given whilst patients and carers waited to receive training on how to administer injections. (94)





# Societal impact

# Impact on healthcare, social services and the economy

# Health and care services

Those with arthritis and MSK conditions are more likely to contact and use primary healthcare, secondary healthcare, and community healthcare services such as physiotherapy.

MSK conditions accounted for

**1.2**m

hospital admissions, 7% of the total number of hospital admissions in England in 2023-24. (95)

MSK conditions account for 1 in 7 GP consultations. (1)

Every year **1 in 5 adults** will consult their GP for an MSK condition. <sup>(96)</sup>

In a survey, **2 in 5 people** see their GP as the main person they are supported by. (34)

People with arthritis and MSK conditions often take medicines to help manage their symptoms.

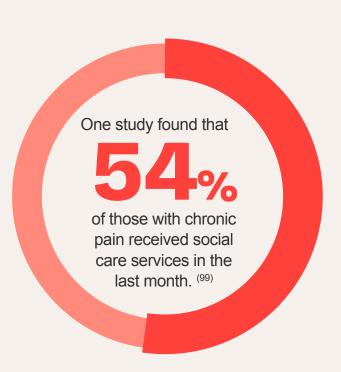
**47% people** with long-term MSK conditions in England take five or more medicines on a regular basis. (97)

Over **31 million** prescription items were dispensed for MSK conditions and joint diseases in England in 2023 to 2024. (98)

Prescriptions for MSK conditions dispensed in the community cost approximately £138m in England in 2023 to 2024. (98)

# **Social services**

Adults with chronic MSK pain have high levels of social care use in the UK. (99)



# **Economy**

Musculoskeletal ill health results in significant costs for individuals, employers, the health service, and the wider economy.

Analysis by York Health Economics Consortium in 2017 found that the cost of working days lost due to osteoarthritis and rheumatoid arthritis was estimated at £3 billion in 2024 rising to £4 billion in 2040. (100)



Combined costs from all worklessness and sickness absence in the UK amount to around £100 billion annually. (40)

The total work-related costs of axial spondyloarthritis due to early retirement, absenteeism and presenteeism is estimated to be £11,943 per person with axial spondyloarthritis per year. (101)

### The cost of arthritis to the NHS

York Health Economics Consortium found in 2017 that:

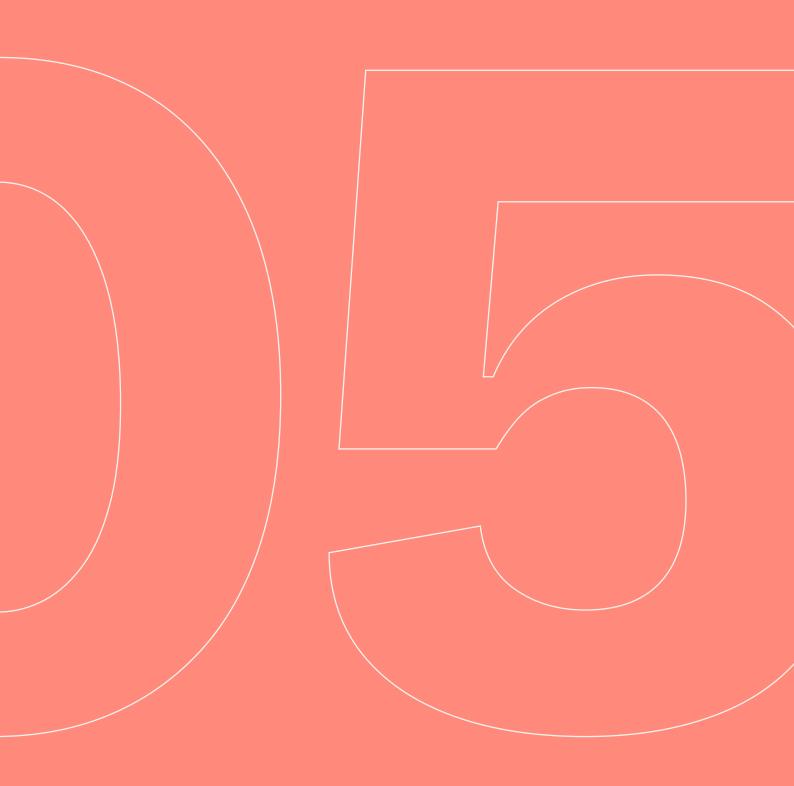
- Treating the two most common forms of arthritis (OA and RA) was projected to cost the NHS £118.6 billion over the next decade, from 2017. (100)
- Based on this analysis, in 2025, treating the two most common forms of arthritis is projected to cost the NHS £13.2 billion. (100)

# £118.6 billion projected costs



MSK conditions accounted for the third largest area of NHS programme spending at £4.7 billion in 2013 to 14. This was 3.5% of total spending in 2013 to 2014. If the proportion has stayed the same – MSK conditions will have accounted for £5.5 billion spending in 2019 to 2020 and an estimated £6.2 billion in 2023 to 2024 <sup>7</sup>. (102) (103)

<sup>&</sup>lt;sup>7</sup> Data for 2019-2020 are shown here to demonstrate the increase prior to the COVID-19 pandemic.



# Conditions where arthritis is the main symptom

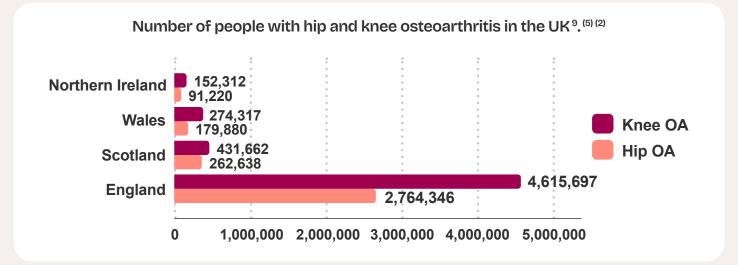
# **Osteoarthritis**

Osteoarthritis (OA) happens when the body can no longer maintain and repair one or more joints – commonly affecting hands, hips, and knees. The cartilage becomes thin and uneven, preventing the joint from moving easily. The body's attempts to repair these changes can lead to pain, stiffness and swelling.

# OA and other long-term conditions

People with OA have a significantly increased risk of cardiovascular disease, **24% higher** than people without OA, probably because of shared underlying risk factors for these conditions. (52)

**1 in 5 people** with OA experience symptoms of depression and anxiety. <sup>(51)</sup>



# Prevalence and incidence

In the UK, **10 million adults** have a probable diagnosis of osteoarthritis <sup>8</sup>. (1) (2)

In the UK, **3.2 million people** have hip osteoarthritis. <sup>(5)</sup>

In the UK, **5.4 million people** have knee osteoarthritis. <sup>(5)</sup>

In the UK, around **350,000 people** are diagnosed with osteoarthritis each year. (27)

Studies suggest that the median age of symptom onset of OA is approximately 55 years old, although severity of symptoms will vary. (104) (105)

# Prevalence of OA in men and women

In the UK, **nearly half of people** aged 75 or over have OA. (49% of women and 42% of men). (1) (2)

## **Risk factors**



Age – OA is uncommon in people under 45 years old. (14)



Men and women – For most joints, OA is more common and more severe in women <sup>10</sup>. (106) (107)



Heredity – Inherited genetic and genomic factors. (108) (109)



Abnormal loading onto joints – Due to abnormalities in joint shape or living with overweight or obesity. (110)



Inflammatory arthritis – Leading to loss of cartilage. (111)

<sup>&</sup>lt;sup>8</sup>Age standardised

Due to data unavailability, we have applied the prevalence of England to produce the totals for Northern Ireland. Please use this statistic with caution.

<sup>&</sup>lt;sup>10</sup> The terms 'men' and 'women' have been used to ensure consistency when presenting data from multiple sources which report sex-related risk factors in varying ways.

# Gout

Gout is a type of inflammatory arthritis where the immune system, which is the body's natural self-defence system, attacks joints and surrounding tissues where urate crystals have formed, causing episodes of severe inflammation, stiffness, pain, and damage. Urate crystals form in joints when the body's urate (uric acid) level is consistently too high.

## Prevalence and incidence

In the UK

1.6 million

adults (1 in 50) have a probable diagnosis of gout. (9) (2)

In the UK

66,000

people are newly diagnosed with gout each year. (2) (9)

# Gout and other long-term conditions

Women and men with gout are 71% and 22% more likely to develop type 2 diabetes. (112)

People with gout are at 29% higher risk of chronic kidney disease than people without gout. (113)

Recent evidence has also shown that flareup episodes of gout are associated with an increase in cardiovascular events in the 4 months following the flare. (114)

### **Risk factors**



Age – The risk increases with age. (115)



Men and women – Gout is more common in men <sup>10</sup>. (115)



Weight – Living with overweight or obesity increases the risk of gout. (116)



Heredity – Inherited genetic and genomic factors. (117) (118)



Food and drink intake – Some foods and drinks raise urate levels. (119)



Medicines – Some lead to increased urate levels. (120)



Long-term conditions – Chronic kidney disease. (121)

<sup>&</sup>lt;sup>10</sup>The terms 'men' and 'women' have been used to ensure consistency when presenting data from multiple sources which report sex-related risk factors in varying ways.

# Rheumatoid arthritis

Rheumatoid arthritis (RA) is a type of inflammatory arthritis where the immune system attacks the body's joints, causing inflammation, swelling, pain, stiffness and damage to the joints.

# Prevalence and incidence

In the UK, 450,000 adults have a recorded diagnosis of rheumatoid arthritis<sup>11</sup>. <sup>(4) (2)</sup> In the UK, 27,000 adults are newly diagnosed with RA each year <sup>12</sup>. <sup>(4) (2)</sup>

# RA and other long-term conditions

Around **30% of people** with RA develop osteoporosis-weak bones. (4)

Evidence suggests **1 in 10 people** with rheumatoid arthritis will be diagnosed with interstitial lung disease over the course of their disease, putting them at increased risk of early death. (122)

**1 in 3 women** (36.5%) with rheumatoid arthritis develop depression within 5 years of diagnosis. (80)

**1 in 4 men** (23.7%) with rheumatoid arthritis develop depression within 5 years of diagnosis. (80)

People with RA have **twice the risk** of developing congestive heart failure than people without RA. (123)

In England, patients with RA have a 33% higher cardiovascular disease risk than those without RA. (124) (125)

In England, **53% of people** with RA have hypertension. (126)

In England, **51% of people** with RA have osteoarthritis. (126)

### Wider health

**60% of people** with RA are physically inactive. (73)

## Work

Around **1/3 of people** with RA quit work within 5 years of diagnosis. (127)

### **Risk factors**



Age – Most people are aged between 46 and 70 when diagnosed with rheumatoid arthritis. (29) (28)



Men and women – RA is 2 to 3 times more common in women than men <sup>13</sup>. <sup>(128)</sup>



Weight – Living with overweight or obesity increases risk. (129)



Heredity – Inherited genetic, genomic, and epigenetic factors. (130) (131)



Microbiomes – Changes in the microbiome. (132)



Smoking tobacco – Increases risk, worsens disease, and weakens treatment response. (133)

<sup>12</sup> Age standardised

<sup>13</sup> The terms 'men' and 'women' have been used to ensure consistency when presenting data from multiple sources which report sex-related risk factors in varying ways.

# **Psoriatic arthritis**

Psoriatic arthritis (PsA) is a type of inflammatory arthritis linked to psoriasis where the immune system attacks the body's joints, causing inflammation, swelling, stiffness, pain and damage to the joints. Psoriasis is an autoimmune condition affecting the skin and around 1 in 4 people who have psoriasis have psoriatic arthritis. (134) Some people may develop psoriatic arthritis without noticeable skin psoriasis.

1 in 4
who have psoriasis have psoriatic arthritis. (134)

Prevalence and incidence

In the UK

200,000

adults have a probable diagnosis of psoriatic arthritis <sup>14</sup>. (13) (2)

In the UK, around

9,000

adults have a probable diagnosis of psoriatic arthritis <sup>15</sup>. (13) (2)

Psoriatic arthritis and other long-term conditions

1in 5

people (19%) with psoriatic arthritis have a cardiovascular disease. (60)

**222** 1 in 3

people (31%) in England with psoriatic arthritis have depression. (126)

**2222** 1 in 4

psoriatic arthritis patients (25%) are living with obesity. (60)

# **Risk factors**



Age – Peak onset is between 40 and 50 years old. (135)



Heredity – Inherited genetic, genomic, and epigenetic factors. (136)

<sup>14</sup> Age standardised

<sup>15</sup> Age standardised

# **Axial spondyloarthritis**

Axial spondyloarthritis is a type of inflammatory arthritis where the immune system attacks the spine and sometimes joints causing inflammation, stiffness, pain, and damage. Axial spondyloarthritis can be either 'radiographic (r-axSpA)' or 'non-radiographic (nr-axSpA)'. In radiographic axial spondyloarthritis there are visible changes on X-rays. Radiographic axial spondyloarthritis was previously called ankylosing spondylitis (AS). In non-radiographic axial spondyloarthritis there are no changes visible on X-rays, but it may be picked up on an MRI scan.

# Axial spondyloarthritis and other long-term conditions

In England, 21% of people with axial spondyloarthritis have a painful eye condition called uveitis which can cause blindness if untreated. (126)

In England, nearly 3 in 10 (27%) people with axial spondyloarthritis have depression. (126)

In England, 38% of people with axial spondyloarthritis have hypertension. (126)

## Prevalence and incidence

Assessment of healthcare records suggest 60,000 people have a confirmed diagnosis of axial spondyloarthritis in the UK. (4) (2) However, coding in both primary and secondary care remains an obstacle to having an accurate number of diagnoses and indeed one study in the UK suggests that the number of people with the condition could be approximately 220,000. (12)

In the UK, around 2,200 adults are diagnosed with axial spondyloarthritis each year <sup>16</sup>. (4) (2)

# Work

In a study on men with radiographic axial spondyloarthritis (previously known as ankylosing spondylitis) 24% reported retiring early and 45% changed to a less physically demanding job due to their condition. (137) (138)

## **Risk factors**



Age – Axial spondyloarthritis often presents in people's late teens or twenties. (139)



Chronic conditions – Axial spondyloarthritis is more common in those with psoriasis or inflammatory bowel disease. (140)



Men and women – Axial spondyloarthritis with changes on X-ray/MRI is more frequently diagnosed in men than women (3:1), but axial spondyloarthritis with a normal X-ray/MRI has an equal sex distribution <sup>17</sup>. <sup>(31)</sup>



Heredity – Inherited genetic factors. (136)

<sup>&</sup>lt;sup>16</sup>Age standardised

<sup>&</sup>lt;sup>17</sup> The terms 'men' and 'women' have been used to ensure consistency when presenting data from multiple sources which report sex-related risk factors in varying ways.

# Juvenile idiopathic arthritis

JIA refers to a group of arthritis conditions that present before children are 16 years old. Although JIA is a diagnosis given in children under 16 years old, this remains your diagnosis into adulthood. JIA are autoimmune diseases where the immune system attacks the body. There are different types of JIA, and the severity of the condition varies depending on the type. (141)

Prevalence and incidence

It is estimated that

10,000

children under 16 years old have been diagnosed with JIA. (10) (11)

Around

50%

of the children diagnosed with JIA will be discharged from care (perhaps due to drug-free remission) and around half of children will continue to need care. (142)



JIA and other long-term conditions

13 to 19%

of children with JIA have uveitis, an eye condition that can cause eye pain and if untreated can lead to blindness. (143)

15%

of children with JIA in the UK develop macrophage activation syndrome (MAS) – a rare inflammatory condition. (143)

## **Risk factors**



Age – Typical onset age is between 2 and 10 years. (11) (144)



Men and women – JIA is more common in girls – data from JIA registries found 68 to 70% of patients were female <sup>18</sup>. (143)

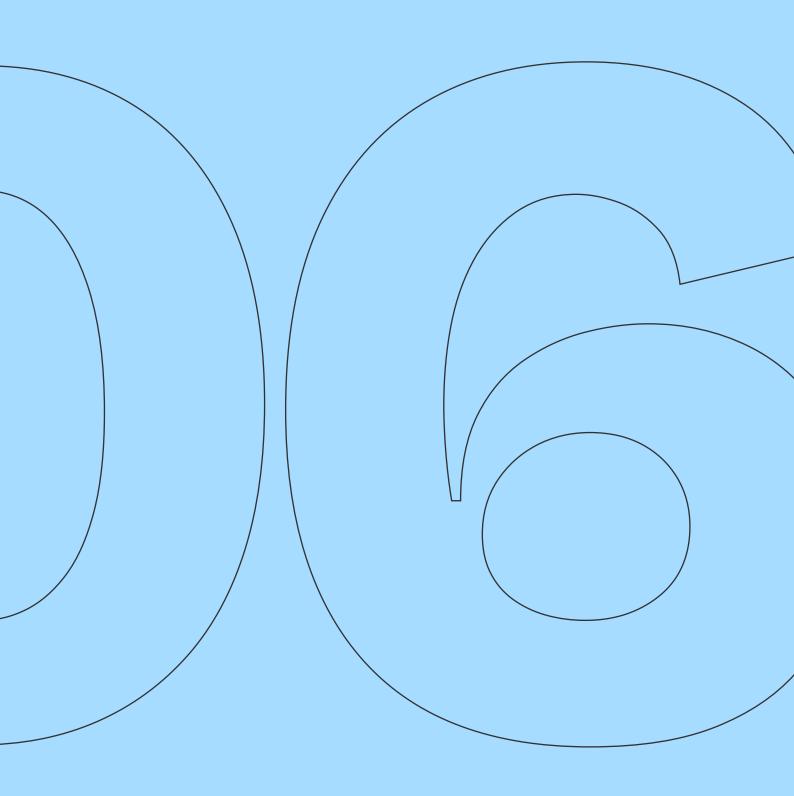


Heredity – Inherited genetic, genomic and epigenetic factors. (144)



Microbiomes – Changes in the microbiome. (145)

<sup>19</sup> The terms 'men' and 'women' have been used to ensure consistency when presenting data from multiple sources which report sex-related risk factors in varying ways.



# Conditions where arthritis is one symptom among many

# Lupus

Lupus (systemic lupus erythematosus, SLE) is a condition where the immune system, which is the body's natural self-defence system, attacks the body. Lupus commonly affects the joints. causing arthritis with inflammation, swelling, stiffness, pain, and damage. It can also attack other organs including the skin, kidneys, lungs, and nervous system.

In patients with mild lupus, of more than 10 years duration, there is a

# 3 to 4 times

increased risk of cardiovascular events and death compared with people who do not have lupus. (148)

Prevalence and incidence

In the UK, an estimated

people have lupus 19. (146)

In the UK

people are newly diagnosed with lupus each year 20. (146)

**Risk factors** 



Age – Onset in women is typically between 15 and 40 years old. (149)



Men and women 21 - Lupus is more common in women. (150)



Ethnic background – Lupus is especially common in certain ethnicities, particularly Black Caribbean. (146)



Heredity – Inherited genetic, genomic and epigenetic factors. (151)



Microbiome – Changes in the microbiome. (152)

# Lupus and other long-term conditions

People with lupus have a mortality rate nearly

than those without lupus. (147)

<sup>9</sup> Age standardised

<sup>20</sup> Age standardised

<sup>&</sup>lt;sup>21</sup> The terms 'men' and 'women' have been used to ensure consistency when presenting data from multiple sources which report sex-related risk factors in varying ways.



# Other musculoskeletal conditions

# **Chronic pain**

Pain is one of the leading symptoms of MSK conditions. Chronic pain (also referred to as persistent pain) is defined as pain which has lasted for more than three months.

# **Chronic pain in England**

15,500,000 people (34%) have chronic pain in England. (6)

5,500,000 people (12%) have high-impact chronic pain, which is severe and where people are unable to carry out their daily activities. <sup>(6)</sup>

About 8 in every 10 people (84%) with chronic pain in England report that at least some of their chronic pain is in the neck or shoulder, back, limbs or extremities – all sites where pain is most likely to be musculoskeletal. (6)

Among young adults aged 16 to 34 with chronic pain in England, the proportion reporting high-impact chronic pain rose from 21% to 32% between 2011 and 2017. (6)

# **Health inequalities**

# **Deprivation**

Chronic pain is linked to deprivation. 4 in 10 people (41%) who live in the most deprived 20% in England report chronic pain compared to 3 in 10 (30%) in the least deprived 20%. (6)

The prevalence of chronic pain is projected to increase at a faster rate in the most deprived areas than in the least deprived areas. (153)

Projections show that in England between 2019 and 2040 there will be over 270,000 more people living with chronic pain in the most deprived areas. Correspondingly in the least deprived areas there will be 140,000 more people living with chronic pain between 2019 and 2040. (153)

In England between 2019 and 2040 there will be

Chronic pain affects between

19.2 to 29

million
people in the UK. (2) (6)

# **Ethnicity**

The prevalence of chronic pain differs between some ethnic groups. (6)

One England-based study found 44% of Black people have chronic pain, compared with 34% of white people, 35% of Asian people, 34% of people of mixed ethnicity and 26% of people from other ethnicities. (6)

Another study in England found that people from Pakistani and Bangladeshi ethnic backgrounds have the highest rates of chronic pain of all ethnic groups. (154)

# Differences between men and women

More women are affected by chronic pain than men.

38%

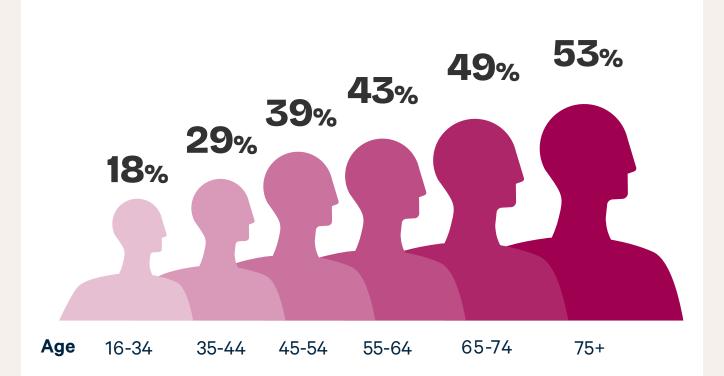
of women have chronic pain and 30% of men have chronic pain in England. (6)

14%

of women have high-impact chronic pain and 9% of men have high-impact chronic pain. (6)

# Age

Chronic pain increases with increasing age, but people of all ages can have it. (6)



To find out more on health inequalities and chronic pain you can read our report, Chronic Pain in England: Unseen, Unequal, Unfair.



# **Chronic pain in Scotland**

In 2022, over a third (38%) of adults in Scotland were experiencing chronic pain (also referred to as persistent pain). (7) Although people of all ages can be impacted by chronic pain, prevalence increases with age. (7) As was also seen in England, more women than men are affected by chronic pain in Scotland, 43% of women have chronic pain and 33% of men have chronic pain. (7)

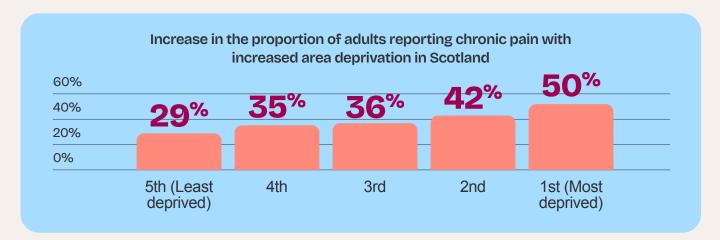
The proportion of adults experiencing chronic pain is highest in the most deprived fifth of Scotland, where the proportion of adults reporting chronic pain is 21% higher than the proportion reporting chronic pain in the least deprived fifth. (7)

### Work

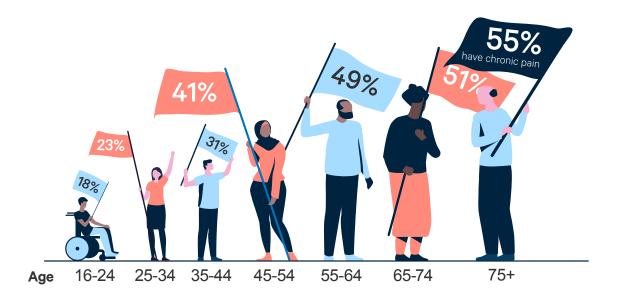
In 2022, 78% of adults experiencing chronic pain reported that it limited their life and work considerably. (7)

# Children

In 2022, 6% of children reported experiencing chronic pain. (7) The most common type of chronic pain was in arms, hand, hips, leg or feet. (7)



# Proportion of adults experiencing chronic pain in Scotland



# **Chronic pain in Wales**

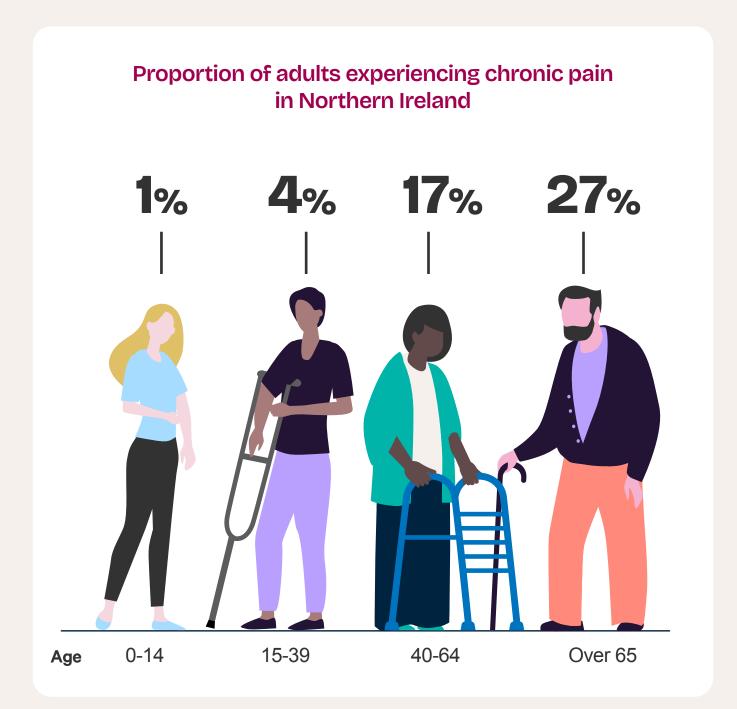
National survey for Wales does not include any data on chronic pain so there is currently no data available in Wales regarding chronic pain.

# **Chronic pain in Northern Ireland**

The prevalence of long-term pain in Northern Ireland increases with increasing age. (155)

220,300

people (11.6%) in Northern Ireland had long-term pain or discomfort. (155)



# **Back pain**

Back pain is a common MSK condition. Non-specific low back pain which has not been caused by damage or inflammation in the spine is the most common type. Low back pain is the top cause of years lived with disability in the UK (2019). (14)

# Prevalence and incidence

# 9.5 million

people in the UK experience low back pain in any given year and of these 9.5 million, 5.8 million experience severe back pain. (2) (5)

# 2.6 million

new cases of low back pain occur each year in the UK. (14)

# Wider health

The odds of back pain in people with symptoms of depression have been shown to be 50% higher than in those without symptoms of depression. (156)

### Work

In March 2023, 995,000 people in the UK were economically inactive due to problems or disabilities connected to the back or neck. (39)
Around 1 in 5 workers with back pain take time off work over a period of 6 months or longer. (157)

### **Risk factors**



Age – While back pain can occur at any age it is not more common with age and seems to decline in the oldest people. (158)



Men and women – Back pain is more common in women <sup>23</sup>. (159)



Injury



Weight – Those who are living with overweight or obesity are more likely to have lower back pain than those classified as having a normal weight. (67)

# The number of people with low back pain across the UK <sup>22 (5) (2)</sup> 10 8 6 4 2 0 England Scotland Wales Northern Ireland Number of people with low back pain Number of people with severe back pain

<sup>&</sup>lt;sup>22</sup> Due to data unavailability, we have applied the prevalence of England to produce the totals for Northern Ireland. Please use this statistic with caution.

<sup>&</sup>lt;sup>23</sup> The terms 'men' and 'women' have been used to ensure consistency when presenting data from multiple sources which report sex-related risk factors in varying ways.

# Fibromyalgia

Fibromyalgia is a chronic condition, which is a form of chronic primary pain. Fibromyalgia does not itself cause any lasting damage on the body's tissues but is associated with widespread pain, fatigue, physical symptoms, and cognitive symptoms.

### **Prevalence**

Around

1.7 to 2.8 m

people have fibromyalgia. (160)

270,000

adolescents aged 11 to 18 years have fibromyalgia. (161,162)

### **Risk factors**



**Age** – Fibromyalgia most commonly presents between 25 and 55 years. (166) (167)



**Men and women** – Fibromyalgia is more common in women <sup>15</sup>. (166)



**Heredity** – Inherited genetic, genomic, and epigenetic factors. (168)



**Microbiome** – Changes in the microbiome. (169)

## Wider health

Fibromyalgia is associated with a 1.54-fold increased risk for irritable bowel syndrome. (165)

Lifetime prevalence of depression in people with fibromyalgia goes up to:

70% (163) (164)

Lifetime prevalence of anxiety in people with fibromyalgia goes up to:

60% (163) (164)



<sup>&</sup>lt;sup>15</sup> The terms 'men' and 'women' have been used to ensure consistency when presenting data from multiple sources which report sex-related risk factors in varying ways.

# Osteoporosis and fragility fractures

Osteoporosis is a silent condition where bones are weak and can break easily. A fragility fracture is a broken bone which results from a force that would not usually result in a fracture, such as a fall from standing height or less.

### **Prevalence**

More than 3,000,000 people in the UK are estimated to have osteoporosis. (170)

# Osteoporosis and other long-term conditions

Adults over 50 years old with osteoporosis are more than 2 times more likely to develop arthritis, chronic low back pain, chronic heart failure and depression than someone without osteoporosis. (171)

Every year in England, Wales and Northern Ireland, over

70,000

people will sustain a hip fracture. (172)

## **Fractures**

- Hip fractures are associated with a cost of £2 billion to health and social services. (172)
- Around 3% of all broken hip bones (femoral fractures) in England and Wales in 2023 occurred in inpatient settings. (173)
- 88% of people who broke their hip (femoral fracture) received surgery within 24 hours of presenting with a hip fracture. (172)
- 58% of patients were assessed by a senior geriatrician within 72 hours of presentation. (172)
- The economic burden of osteoporosis-related fractures is approximately £4 billion per year in the UK. (174)

# Glossary

**Age standardised:** a statistical measure to increase precision when comparing data from two or more populations by removing the effects of age. (175)

**Cartilage:** a type of connective tissue found throughout the human body including within the joints. (176)

**Comorbidity:** the occurrence of more than one illness or condition at the same time. (177)

**Economically inactive:** people who are not in employment and not looking for work. (178)

**Epigenetic:** refers to a factor that affects the expression of a gene without altering the DNA sequence. (179)

**Fatigue:** severe mental and physical exhaustion which is not attributable to exertion. (180)

**Genomics:** the study of all of a person's genes (the genome) including the interactions of those genes with each other and the environment. (181)

**Geriatrician:** is a doctor that provides medical care to older people. (182)

**Health inequalities:** unfair and avoidable differences in health across the population, and between different groups within society. (15)

**Hypertension:** also known as high blood pressure, is when the pressure in your blood vessels is too high. (183)

**Immune system:** the network of cells and tissues in your body that work to provide defence from viruses, bacteria, and other infections. (184)

**Incidence:** the number of individuals who develop a specific disease during a particular time period. (185) In this report the time period used is a year.

**Microbiome:** refers to all of the microbes including bacteria, fungi and viruses that naturally live on and within our bodies. (186)

**Prevalence:** the total number of individuals in a population who have a disease or health condition at a specific time. (185)

**Quantitative:** refers to numerical measurement. Quantitative research uses systematic methods involving numerical or statistical data to study phenomena, assuming they can be measured. (187)

**Quintile:** one of five equal parts a population can be divided into. (188)

Years Lived with Disability (YLDs): a measure which summarises levels of disability in a given population; it combines the prevalence of a disease with a rating of how disabling that disease is. (189)

The terms 'men' and 'women' have been used to ensure consistency when presenting data from multiple sources which report sex-related risk factors in varying ways.

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# **Arthritis UK**

Third Floor 120 Aldersgate Street London EC1A 4JQ

- 0300 790 0400
- e enquiries@arthritis-uk.org

arthritis-uk.org

