



Musculoskeletal Health

Briefing produced by PHE East of England Health & Wellbeing Team & PHE Musculoskeletal Health Team – Nov 2019 (V1.01)

This briefing paper has been produced by the PHE East of England Health and Wellbeing Team and the PHE Musculoskeletal Health Team. It is designed to provide easy access to key reference points and useful resources around the musculoskeletal health agenda and will be updated on a regular basis as new information becomes available. The information in each section is presented chronologically, with the most recent first.

What are Musculoskeletal (MSK) Conditions?

Musculoskeletal (MSK) conditions are a broad term that affect the bones, joints, muscles, tendons, ligaments and spine, and are a common cause of severe long-term pain and physical disability. They affect 18.8 million of the adult population and over 12,000 children in the UK. It is estimated that the cumulative healthcare cost of MSK conditions will reach £118.6 billion over the next decade.

There are three groups of MSK conditions:

1. **Inflammatory conditions**, for example, Rheumatoid Arthritis. Affects any age, often rapid onset that can affect any part of the body including the skin and internal organs.
2. **Conditions of MSK pain**, for example, Osteoarthritis, Back Pain, Carpal Tunnel Syndrome. More common with raising age, affecting the joints, spine and pain systems.
3. **Osteoporosis and fragility fractures**, for example, fracture after falling from standing height. Affects mainly older people, osteoporosis is a gradual weakening of bone and fragility fracture sudden events.

While life expectancy has risen, many people are living longer in poorer health – particularly those in more deprived parts of the country. The older a person is, the more likely that are to experience chronic diseases and disabilities such as poor musculoskeletal health. MSK conditions are the leading cause of years lived with disability, with low back pain being the top cause of years lived in disability. These conditions are associated with a large number of co-morbidities, including depression and obesity. Each year, more than 20% of people in the UK consult a doctor about an MSK condition.

The pain and disability caused by MSK conditions results in substantial loss in quality of life, with 78% of people with arthritis experiencing pain most days. Pain and functional limitations of MSK conditions can make it harder to cope with multi-morbidity, causing fatigue and depression. Depression is four times more common among people in persistent pain compared to those without pain and the most common comorbidity among people with rheumatoid arthritis, affecting one in six people.

There are multiple risk factors that can increase an individual's susceptibility to MSK conditions, including physical inactivity, being overweight or obese, diets deficient in vitamin D or calcium, smoking, older age and genetic predisposition to some MSK conditions. Risk factors such as physical inactivity, obesity and smoking are more common in lower socioeconomic groups and the burden of MSK is experienced disproportionately more by the most deprived communities. Many of the risk factors associated with MSK are behavioural risk factors such as physical inactivity, repetitive tasks at work and are modifiable, i.e. disease can be prevented, or its progress slowed.

National policy and reports

State of Musculoskeletal Health 2019

In **July 2019**, Versus Arthritis (formerly Arthritis Research UK) published their annual [State of MSK Health report](#) which is a resource for health professionals, policy makers, public health leads and anyone else interested in MSK health. It details the scale of the problem; key factors affecting MSK health; the impact and the economic benefits of MSK research.

Musculoskeletal Health: 5 Year Prevention Strategic Framework

PHE, jointly with NHSE, Versus Arthritis and partners, published the [strategic framework](#) (**June 2019**), which sets out a statement of commitments to promote MSK health and prevent MSK conditions. The framework is underpinned by key objectives, deliverables, outcomes and desired impact by 2023, providing a strategic programme overview of MSK prevention for England.

Developing Partnerships and a Whole-System Approach for the Prevention of MSK Conditions in England

This [case study and lessons learnt](#) was published in Public Health Panorama (**September 2018**) and includes PHE as an author. The case study reviews experience in England of developing and implementing a public health approach to the prevention of and early intervention in MSK conditions.

Policy Position Paper: Prevention of Musculoskeletal Conditions

This [position paper](#) (**October 2017**) developed by Arthritis and Musculoskeletal Alliance (ARMA), highlights that a transformation is needed so that the care and public health systems go beyond merely tackling MSK conditions when they arise, to promoting good, lifelong MSK health. At every age people should be supported to maintain and improve the health of their joints, bones and muscles.

Musculoskeletal Conditions and Multimorbidity Report

This [policy report](#) (**June 2017**) by Versus Arthritis explores the link between arthritis and many long-term conditions. It details key observations and sets out seven recommendations for change at a national and local level.

Providing Physical Activity Interventions for People with Musculoskeletal Conditions

This jointly produced [report](#) by Versus Arthritis, the Department of Health, PHE and NHS England (**March 2017**) reviews the benefits of physical activity for both those with MSK conditions and the wider society, and provides a framework that supports a tiered approach to intervention. It's intended for those commissioning and providing local services and other interested parties such as health and fitness professionals and leisure and sports facilities providers.

Data, guidance, infographics and toolkits

MSK Calculator

Versus Arthritis and Imperial College London have developed an [MSK calculator](#) which is a prevalence modelling tool for MSK conditions.

MSK Conditions Fingertips Profile

PHE has produced the [musculoskeletal condition profile](#) (updated regularly) to provide meaningful data, on a single platform, to enable commissioners to understand the health needs of their local populations and commission high value services.

STartBack

Research carried out by Arthritis Research UK and Keele University has helped to improve the [management of lower back pain](#). A successful stratified approach to treat back pain, it involves both the use of a tool in the form of a simple questionnaire that GPs and physiotherapists can use to understand the nature of an individual's back pain, and match treatments for each group of patients.

All Our Health

The PHE [All Our Health framework](#) (first published 2015, but evolving with latest updates in May 2019) is a framework of evidence to help healthcare professionals in England understand and maximise the impact on improving health outcomes and reducing health inequalities. Since the publication of this framework, PHE has published a resource [about the framework](#) and another piece of guidance around applying 'All Our Health' in relation to [MSK health](#) (January 2019). This guidance explains the need for promoting MSK health; interventions that can prevent the onset of MSK; actions that can be taken; measuring impact and other useful resources.

Musculoskeletal Core Capabilities Framework

This [framework](#) (July 2018) for first point of contact practitioners has been published in partnership by PHE, NHSE, Health Education England, Skills for Health and the Arthritis and Musculoskeletal Alliance. It aims to ensure that people with MSK problems get rapid access to diagnosis and early management advice. It sets out a standard for consistent, safe, effective practice across a range of settings.

Workplace Health Needs Assessment

PHE and Healthy Working Futures published this [needs assessment tool](#) (September 2017) providing information and practical advice for employers around workplace health and how to carry out a health needs assessment, no matter the type or size of the employer. This resource has a discrete section around physical activity in the workforce.

Productive Healthy Ageing and MSK Health

This PHE [guidance](#) (December 2017) is aimed at health professionals and local authorities and makes the case for action to support healthy productive ageing. The guidance includes background data and impact of poor MSK health as well as interventions to prevent the onset of MSK problems and a call to action for healthcare professionals, local authorities, commissioners and the voluntary and private sectors.

Return on Investment of Interventions for the Prevention and Treatment of MSK Conditions

This PHE [tool](#) (December 2017) is to help local commissioners provide cost-effective interventions for the prevention and treatment of MSK conditions. The tool allows results to be

tailored to local situation based on the knowledge of the user. Accompanying the tool itself is a report and a literature review.

Transforming MSK and Orthopaedic Elective Care Services

This NHSE [handbook](#) (December 2017) has been produced to support local health and care systems to work together to better manage rising demand for elective care services; improve patient experience and access to care and provide more integrated, person-centred care.

MSK Health in the Workplace: A Toolkit for Employers

Business in the Community in partnership with PHE have produced a suite of toolkits to health organisations support the mental and physical health and wellbeing of its employees. These are free to access for all employers, irrespective of size or sector. In particular there is a [MSK health in the workplace toolkit](#) (March 2017).

NHS RightCare Focus Packs

These NHS RightCare produced [data packs](#) (May 2016) allow local health systems to consider information from across patient pathways to identify the greatest potential improvements in spend and outcomes. These packs are CCG focused with one specifically for [MSK](#).

Local Health and Care Planning: Menu of Preventative Interventions

This PHE [document](#) (November 2016) was published to help those involved in the planning and commissioning of health services, including STPs. This document details evidence-based public health interventions.

NICE Guidelines and Quality Standards

NICE pathways allow users to navigate the breadth and depth of NICE recommendations on a given subject through topic-based flowcharts. For each topic area, there are NICE guidelines, – clinical and/or public health – and their related quality standards. Each of the guidelines and quality standards will link to the tools and resources that NICE has produced to support the implementation of the guidance and improvement of practice.

This [musculoskeletal conditions](#) interactive pathway includes arthritis, bone and joint conditions, congenital conditions, maxillofacial conditions, soft tissue conditions and spinal and back conditions. It also links to the interactive flowcharts on low back pain and sciatica, osteoarthritis, osteoporosis and rheumatoid arthritis.

Initiatives and Campaigns

ESCAPE-pain

This is a [rehabilitation programme](#) for people with chronic joint pain, that integrates education self-management and coping strategies with an exercise regime individualised for each participant. ESCAPE-pain is NICE and QIPP approved, endorsed by Arthritis Research UK and recommended by NHS RightCare. [Robust evaluation](#) shows that ESCAPE-pain reduces pain, improves physical function, improves the psychosocial consequences of pain and reduces healthcare and utilisation costs. Research trials followed patients for up to 30 months after the end of the programme and demonstrated continued improvements.

Moving Medicine

This **initiative** set up by the Faculty of Sport and Exercise Medicine in partnership with PHE and Sport England aims to provide clinicians and Allied Health Professionals with accessible, evidence-based, condition-specific information to help give advice on physical activity at all stages of a patient's treatment pathway. The project has been developed in collaboration with experts, professional bodies and charities representing patients and healthcare professionals in each disease area, for example prescribing movement for MSK pain.

Parkrun Practices

The Royal College of GPs and parkrun UK have launched a **new initiative** where patients could be 'prescribed' outdoor physical activity, in order to improve health and wellbeing. GP practices will be able to become certified 'parkrun practices', establishing closer links with their local parkrun, enabling healthcare professionals to signpost their patients and carers to parkrun, especially those who have long-term conditions and/or are inactive.

PHE One You - Social Marketing Programme

Launched in March 2016, 'One You' encourages adults to take part in an online health quiz, called 'How Are You?', which helps them reassess their lifestyle choices. After completing the quiz, individuals can receive email reminders and resources to motivate them to make changes to lead a healthier lifestyle. 'One You' has its own **website** with a range of resources and free **apps**. In the first year of its launch, there were 1.34 million completions of the quiz. Promotional materials can be downloaded and ordered for free from the PHE **resource hub**.

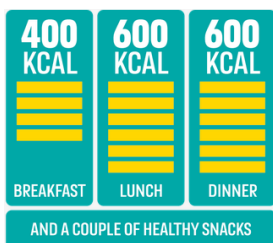
Under the banner of 'One You', PHE has launched several campaigns covering different lifestyle choices and changes that can be made:



Drink free days – PHE in association with Drinkaware, launched this campaign in September 2018 to help people, particularly 45-64-year olds, cut down on the amount of alcohol they are regularly drinking and to highlight that having more drink free days can reduce risks of serious conditions like CVD and improve their health.



Active 10 – Initially launched in March 2017 and re-launched in June 2018, this PHE campaign aims to combat physical inactivity and lower the risks of serious illnesses such as heart disease, by encouraging adults to incorporate more physical activity into their daily lives, by going for a brisk ten-minute walk (or more) each day.



400-600-600 – Adults are consuming on average an extra 200-300 calories per day. This 'calorie creep' contributes to two thirds of adults being overweight or obese, which can in turn lead to serious CVD conditions. This PHE campaign was launched in March 2018, to help adults manage the 'calorie creep' by providing simple tips to help them make healthier choices whilst on the go. The aim is around 400 calories for breakfast, 600 for lunch and 600 for dinner, plus a couple of healthier snacks and drinks in-between.



Stoptober – Originally launched in October 2012, this PHE 28-day stop smoking challenge, encourages and supports smokers across England towards quitting for good. There are lots of ways to quit and Stoptober can help people choose what works for them and provides free support along the way.



Heart Age Test – This tool is a collaboration between NHS, PHE, the British Heart Foundation and UCL. It was relaunched in September 2018 and is an ‘always-on’ campaign. This simple online test helps individuals compare their heart age to their real age and explains the importance of knowing their blood pressure and cholesterol numbers. The test can still be completed if these numbers are not known. As part of the results, it also provides individuals with advice on how to lower their heart age and reduce their risk of heart attack and stroke.

We Are Undefeatable

This **national campaign** launched in August 2019 aims to support and empower the 15 million people who live with one or more long-term health condition, in England, to be more active. The campaign is led by a collaboration of 15 health and social care charities (Richmond Group of Charities) and Sport England. To help support the campaign locally, you can download and order a range of materials from the **PHE campaign resource hub**.

Training opportunities and sharing knowledge

MSK Champions

Versus Arthritis together with Ashridge Executive Education launched the **MSK Champions** programme in 2018, with the aim to improve the quality of life for the 18.8 million people living with the pain and disability of MSK conditions in the UK. The vision of the programme is to cultivate a community of multi-disciplinary leaders and influencers. Applications for 2020 MSK Champions open in March 2020.

Musculoskeletal Primary Care Programme

This **e-learning programme** consists of 8 sessions and has been developed by Health Education England to support the musculoskeletal core capabilities framework in primary care. It is therefore aimed at supporting clinicians who are working in primary care and first contact practitioners.

PHE Musculoskeletal Health Knowledge Hub Group

This **Khub group** is an open group for those interested in MSK health and wellbeing. You can join the group to share knowledge and keep up-to-date with the latest news, events and information.

Work and Health Programme

The **e-learning course** concerns the relationship between work and health including musculoskeletal health. It is intended to improve healthcare practitioners’ confidence in supporting patients with long-term or chronic health conditions via brief conversations in routine consultations.

Other briefings in the series

There are several briefing documents in this series which relate to MSK health and will be updated on a regular basis. These include:

- [Dementia and Healthy Ageing](#)
- [Making Every Contact Count](#)
- [Obesity Prevention](#)
- [Physical Activity](#)

You can click on the links above to download each document or visit the [PHE East of England Group](#) on the KHub to view all the documents in the series and other useful resources.

For any further questions, please contact Fennie Gibbs, Health and Wellbeing Support Officer, PHE East of England on fennie.gibbs@phe.gov.uk or msk.enquiries@phe.gov.uk