



Healthy
Workplaces
LIGHTEN THE LOAD



Supporting musculoskeletal health in the workplace

Key Points

Why it is so important to prevent work-related MSDs and to promote good musculoskeletal health among EU workers.

- Key for EU workers' quality of life and for sustainable work, productivity and social security systems.
- Work-related MSDs remain the most common work-related health problem in the EU and one of the most common causes of disability and sick leave.
- Work-related MSDs result in huge costs that fall on the workers, employers, health services and the wider society and economy.
- MSDs are preventable and manageable. So high costs related to MSDs can be reduced. The return on investment for workers' quality of life at work, businesses and social security systems is worth the effort.
- Taking into account the need for an ageing EU workforce to remain healthy and productive, it is urgent for organisations to implement MSD policies to prevent and reduce work-related MSDs.
- As well as the prevention of new disorders, rehabilitating workers with MSDs and integrating them back into work should also form an integral part of any workplace MSD policy.

All info sheets and other campaign materials are available to download from EU-OSHA's Healthy Workplaces Campaign website (<https://healthy-workplaces.eu>).

Healthy Workplaces Lighten the Load

The European Agency for Safety and Health at Work (EU-OSHA) is running a Europe-wide campaign from 2020 to 2022 to raise awareness of work-related musculoskeletal disorders (MSDs) and the importance of preventing them. The objective is to encourage employers, workers and other stakeholders to work together to prevent MSDs and to promote good musculoskeletal health among EU workers.

What are work-related MSDs?

Work-related MSDs are impairments of bodily structures, such as muscles, joints, tendons, ligaments, nerves, bones and the localised blood circulation system, that are caused or aggravated primarily by work and by the effects of the immediate environment in which work is carried out.¹

Most work-related MSDs are cumulative disorders, resulting, for instance, from repeated exposure to high-intensity loads over a long period of time. However, work-related MSDs can also be acute traumas, such as fractures, that occur during an accident.

The types of work-related MSDs that workers experience may include the following:



Back pain and neck pain are some of the most common conditions.



Muscle injuries can be caused by strenuous or repetitive activities.



Joint conditions can be caused by wear and tear or disease, or they may result from accidents at work.



Bone conditions typically result from an accident at work, as in the case of a broken bone.

Prevalence

Millions of workers throughout Europe suffer from MSDs. Work-related MSDs remain the most common work-related health problem in Europe. About three in every five workers in the EU report MSD complaints, based on data from the sixth European Working Conditions Survey². The most common types of MSD reported by workers are backache and muscular pains in the upper limbs.

Despite the efforts to prevent workers from suffering from MSDs and the risk factors often associated with these disorders, MSDs remain highly prevalent among the EU workforce. This can be explained by many different reasons including:

- repetitive work, lifting or moving people or heavy loads, which are quite widespread and increasing (see the chart);
- new and emerging MSD-related risk factors such as prolonged sitting (see the chart) and psychosocial factors or health problems such as work-related stress, which are also increasing;
- changes in the world of work — new technologies, new working processes, new ways of organising work;
- demographic factors such as an ageing EU population;
- public health issues such as prolonged sitting, obesity, lack of physical exercise.

MSD-related risk factors

Different groups of factors can contribute to work-related MSDs, including physical and biomechanical factors, organisational and psychosocial factors, and individual factors. These may act independently or in combination. So exposure to a combination of risk factors should be considered when assessing work-related MSDs.

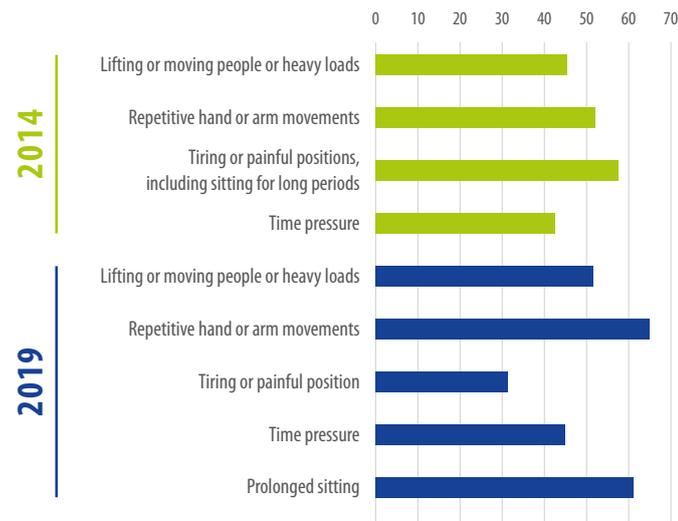
Factors potentially contributing to the development of work-related MSDs

Type of factor	Examples
Physical	<ul style="list-style-type: none"> • Lifting, carrying, pushing or pulling loads or using tools • Repetitive or forceful movements • Prolonged physical effort • Awkward and static postures (e.g. kneeling, holding hands above shoulder level, prolonged standing and sitting) • Hand-arm or whole-body vibration • Cold or excessive heat • High noise levels, causing tension in the body • Poor workstation layout and poor workplace design
Organisational and psychosocial	<ul style="list-style-type: none"> • Demanding work, heavy workload • Long working hours • Lack of breaks or opportunities to change working postures • Lack of control over tasks and workload • Unclear/conflicting roles • Repetitive, monotonous work at a fast pace • Lack of support from colleagues and/or supervisor
Individual	<ul style="list-style-type: none"> • Prior medical history • Physical capacity • Age • Obesity/overweight

1 EU-OSHA, 'Factsheet 71 — Introduction to work-related musculoskeletal disorders', 2007. Available at: <https://osha.europa.eu/en/tools-and-publications/publications/factsheets/71/view>

2 EU-OSHA, *Work-related musculoskeletal disorders: prevalence, costs and demographics in the EU*, 2019, p. 46. Available at <https://osha.europa.eu/en/publications/msds-facts-and-figures-overview-prevalence-costs-and-demographics-msds-europe/view>

Some MSDs-related risk factors present in the establishment (% establishments, EU27, 2019 and 2014)



Base: all establishments in the EU27, ESENER 2014 and ESENER 2019.
Note: 'Prolonged sitting' and 'Tiring or painful positions' are new items in ESENER 2019. Previously they were covered by a single item 'Tiring or painful positions, including sitting for long periods'

Need to tackle work-related MSDs

Work-related MSDs result in huge costs that fall on the workers, employers, health services and the wider society and economy.

Direct costs of work-related MSDs include resources used for healthcare (diagnosis and treatment of diseases, rehabilitation expenditures), medicines, workers' compensation costs, etc.

Indirect costs include costs due to absenteeism, disruptions in working teams, decreases in productivity, production delays and replacement of sick workers (including training for the new employees). These indirect costs are considered to be several times higher than the direct costs for businesses.

So, apart from legal responsibilities, there are also good business reasons for an organisation to address MSDs in its workplace. MSDs are manageable and can be preventable, so the costs related to MSDs can be reduced. The return on investment for workplaces, social security systems and for workers' quality of life at work is worth the effort.

The prevention and management of MSDs in the workplace

Work-related MSDs are preventable and manageable.

This can be achieved by adopting an integrated management approach to tackling MSDs based on the principles of the occupational safety and health Framework Directive³, among which we would like to underline here:

- workplace risk assessment;
- hierarchy of prevention;
- workers' participation.

In order to prevent MSDs, a **workplace risk assessment** has to be carried out with the purpose of identifying the risks and trying to remove them. Although it is unlikely to be able to completely eliminate every risk, effective action to reduce and manage MSD risk factors will need to be taken.

Organisations using a participative approach are more likely to implement successful interventions than those without such an approach. One active way of involving groups of workers in hazard spotting, risk assessment and the decisions about solutions is through the interactive methods of **body mapping** and **hazard mapping**.

As well as the prevention of new disorders, rehabilitating workers with MSDs and integrating them back into work should also form an integral part of any workplace MSD policy. Effective management of MSDs means **early intervention**. That means committing to managing MSDs as soon as the employer becomes aware of a problem (when a worker informs them about a musculoskeletal problem). This will allow the employer to take control of the situation and ensure that the problem does not worsen; left unmanaged, it could affect the health of the worker and the productivity of the business. If a worker has already taken sick leave because of MSDs, the employer's role in managing **return to work** is very important. Often, simple workplace changes, adjustments and support mechanisms can help workers who have chronic and painful musculoskeletal conditions to continue in work and ensure that work does not make those conditions worse.

When discussing and agreeing on actions to address MSD risks, it is important to follow the general principles of prevention. According to the **hierarchy of prevention** (see box below), highest priority must be given to actions that eliminate or at least reduce the severity of a hazard.



Although MSDs are preventable, they remain the most common work-related health problem in Europe

³ Directive 89/391/EEC (the OSH Framework Directive) of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at work.

The general principles of prevention and examples of measures⁴ to prevent work-related MSDs

Avoid the risks:

- automate lifting and transport operations.

Combat risks at their source:

- reduce the height that loads need to be lifted to.

Adapt the work to the individual:

- design the workplace to provide enough room for workers to adopt the correct postures;
- choose adjustable chairs and desks (e.g. standing desks that allow workers to alternate between sitting and standing);
- allow variation in how work tasks are performed;
- allow breaks.

Adapt to technological progress:

- keep up to date with new assistive devices and more ergonomic devices, tools and equipment.

Replace the risky with the safe or less risky:

- replace manual handling of (heavy) loads with mechanical handling.

Develop a coherent prevention policy that covers technology, work organisation, working conditions, social relationships and the work environment.

Implement collective measures first:

- prioritise good-grip handles over anti-slip gloves, smaller loads per lift over back belts (lumbar support).

Provide good training and instruction for workers:

- provide practical training on the correct use of work equipment (lifting devices, chairs, furniture) and safe working postures (sitting, standing).

⁴ These measures (like all those mentioned in this infosheet) are presented as examples. Most of them could be considered 'good practice' examples and are therefore not necessarily mandatory or relevant to all workplaces. Their relevance will depend on the specificities of each workplace (and the outcomes of risk assessments).

Resources

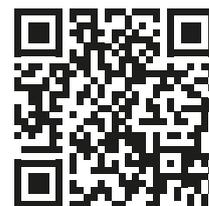
EU-OSHA, Healthy workers, thriving companies – a practical guide to wellbeing at work: Tackling psychosocial risks and musculoskeletal disorders in small businesses.

Available at: <https://osha.europa.eu/en/publications/healthy-workers-thriving-companies-practical-guide-wellbeing-work/view>

Visit the Tools & Resources section on the campaign website:

<https://healthy-workplaces.eu/en/tools-and-publications> to see what is available.

Further information on MSD prevention and management is available through the Agency's website at: <https://osha.europa.eu/en/themes/musculoskeletal-disorders>



www.healthy-workplaces.eu