

Musculoskeletal disorder and manual handling

An Aviva Risk Management Solutions guide

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Musculoskeletal disorders in the workplace overview

We deal with a range of liability claims at Aviva, but work-related manual handling and repetitive strain injuries form a significant part of this. The HSE Foresight Report 2018 backs this up, highlighting musculoskeletal disorder (MSD) as one of the most prevalent work-related health problems in the UK.

Musculoskeletal disorder risks can be found across all kinds of workplaces – from the heavy lifting on building sites to the repetitive strain of factory work or the poor posture of an office job. Fortunately, there is a wealth of scientific evidence showing that the kinds of small changes we'll cover in this guide can yield great benefits when it comes to preventing harm.



“At Aviva, our proactive prevention philosophy to risk management allows us to help our clients effectively manage the risks that may cause musculoskeletal injuries. The prevention of manual handling injuries is a complex problem, requiring multi-disciplinary, multi-faceted approaches to mitigate the risk. By sharing information and advice on how to approach this, we hope that this guide will help you continue to protect your people and your business from this perennial problem.”

Chris Andrews

Director of Aviva Risk Management Solutions

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The fundamentals of MSD risk management

Risk assessment

Undertaking detailed risk assessments on manual handling and ergonomic hazards is essential to understanding your exposures. It enables a cohesive action plan to be developed and implemented to eliminate or control certain risk factors.

Risk control

Taking 'reasonably practicable' steps to control and mitigate risks is the key to success. Too often MSD issues are dismissed as trivial or 'just part of the job' – difficult to resolve and an acceptable residual risk. Our claims experience suggests otherwise and we believe many companies should ensure they have the right focus and resources in place.

Risk profiling

Look to improve incident investigations and trend analysis to identify 'hot spots' which can be effectively targeted with risk reduction measures.





Conducting an effective risk assessment

In cases where your general risk assessment has identified an MSD risk as medium or high, it's important to always undertake a separate detailed manual handling risk assessment as part of your MSD management strategy.

Often an employee will undertake several different manual handling or repetitive tasks as part of their job role. A common approach to carrying out the assessment is to break down by employee tasks completed over a typical working week. This enables you to estimate the employee's overall exposure in the same way that other occupational health exposures may be assessed, i.e. a person-based risk assessment.

It's also worth taking into account other lifestyle factors that may contribute to daily 'wear and tear' such as hobbies, health factors and psychological factors. And finally, be sure to review the effectiveness of current control measures. Are they working? If not, why not?

For further information see:

**[HSE musculoskeletal disorders toolkit \(hse.gov.uk\)](https://www.hse.gov.uk),
template and checklists**

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MSD incident investigation

Investigations undertaken following an accident report often look only as far as the alleged activity the injured person was doing at the time of the incident. But all risk factors need to be assessed to determine if the injury was due to a single excessive force or has built up over time.

As such, the key to establishing the root cause of a musculoskeletal injury is to extend the reach of your questioning to gain a full picture of what the injured person does on a regular basis, both in and out of work.

Consider:

- tasks performed in the days leading up to the reported accident occurring
- what activities are they doing outside of work that may have contributed to the injury?
- what training have they had and when was it last undertaken?
- are they receiving rehabilitation and support following the incident?

For further information see:

[Prevention of Musculoskeletal Disorders Loss Prevention Standards >](#)





Workplace design and layout

The ergonomic design aspects of a workplace and of individual workstations can have a significant impact on manual handling risks. Contributory factors to be aware of include working in confined spaces where static body postures are required for long periods or environmental factors such as low temperatures or low-level lighting. These hazards should be taken into account alongside human factors of the employees in question, such as physical capability, height, age and overall physical health.

The management of manual handling hazards is the most desirable position and should always be what you're aiming for. Achieving this requires ergonomic design criteria to be built into all capital and investment projects and procurement specifications.

For further information see:

[**Manual Handling Loss Prevention Standards >**](#)

Human machine interface (HMI)

Human machine interface (HMI) means any situation where humans interact with a machine. This could be anything from smartphones and computers to smart wearable devices or touchscreen displays.

The increased automation of operator tasks often has the benefit of removing people from hazardous tasks and environments while also increasing the productivity of the machine operator by enabling the employee to do more, faster.

The potential downside is that such interfaces can lead to static postures and a reduction of physical activity, causing MSD-related problems in the workforce.

This emerging risk needs to be considered carefully with good ergonomic design which takes into consideration both the employee's physical and mental capabilities. You can find more information in the HSE Foresight Report 2018.

HSE Foresight Report 2018

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Workforce profile

It's estimated that by 2050, 19 million people in the UK will be 65 years old or over.* Our workforce profile is changing, and one consequence of this is that workers are increasingly likely to have several chronic health conditions, of which musculoskeletal disorders may be one.

Interventions targeted towards your workforce age profile may help to prevent MSD-related conditions from developing. You should also see a reduction in sickness absence rates as a result of such initiatives.

Examples include:

- encouraging employees to increase their physical exercise and include resistance training within their regular physical activities
- introducing stretching exercises such as chair yoga for office workers to support regular movement throughout the working day
- encouraging a positive safety culture with clear, consistent messaging around looking after yourself when undertaking manual handling tasks.

For further information see:

[**Aviva Physical Health and Wellbeing Loss Prevention Standard >**](#)

*UK Parliament: The Ageing Population

Addressing lifestyle factors

It's estimated that an office worker can spend 80,000 hours of their working life sitting.* The increase in sedentary work, alongside the aging workforce profile, can have a significant influence on the risk of developing musculoskeletal disorders.

The Equality Act 2010 protects employees against discrimination on the grounds of age, disability and other factors. It places the duty on employers to support workers with chronic or progressive illnesses.

Gartner, a leading research and advisory company, proposes that wearable smart fitness devices may be part of the solution for workplaces. 470,000 workers suffered from work-related musculoskeletal disorders in 2020/21,** so having technology that allows you to modify behaviours, raise awareness and reduce injuries can be very beneficial.

BACK-TRACK are a specialist partner of Aviva. They provide wearable technology to support a client's manual handling risk management strategy.

For further information on manual handling wearable sensor technology, see:

[BACK-TRACK >](#)

*European Agency for Safety and Health at Work – Prolonged static sitting at work, Health Effects and good practice advice 2021.

**HSE Healthy & Safety Figures for Great Britain 2020/21 <https://www.hse.gov.uk/statistics/>

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Education and training

Too often seen as the default action when looking at how to control the risk of injury, MSD prevention training and competence should be your final check – only considered once all other routes of risk reduction have been explored and actioned. Training’s purpose should be used to mop up any remaining residual risk to employees once other control measures are in place.

An effective training and education strategy should include:

- training for all – bespoke packages for managers, supervisors, engineers and employees
- emphasis that prevention of injury is everyone’s responsibility
- built-in practical demonstrations and practice opportunities
- reinforcement via ‘micro-training’ sessions – EdApp is a useful e-learning tool for this
- early intervention coaching to encourage better reporting of early signs such as fatigue and muscle discomfort
- refresher training at predetermined intervals or more frequently following an accident.

Aviva Risk Management Solutions

Aviva Risk Management Solutions offers an integrated approach to manual handling risk management with in-house solutions such as our review and training capability and our relationship with external specialist partners.

Using accident and near-miss data, 'hot spots' and risk mapping, high-risk areas can be identified and targeted as part of a holistic approach to manual handling risk management.



Our specialist partner in the field of wearable tech:

BACK-TRACK Europe Ltd

The BACK-TRACK wearable device (worn on a belt) and the supporting awareness programmes slow the wear and tear process on the back, and can reduce absence and injuries for those whose tasks involve repetitive lifting and handling*.

[BACK-TRACK >](#)



* Preferential rates are available for Aviva customers

Staying protected against risk

Risk is a factor in every organisation. The form it takes varies from sector to sector and business to business, but it's a constant that demands serious consideration.

Our team can work alongside you to understand, analyse and help to minimise the threats and exposures that arise in your business, and put into action sensible measures to control them.

Take a look at the sectors and wide range of risks Aviva Risk Management Solutions can address to protect businesses from uncertainty.

Support includes:

- Loss Prevention Standard Library
- Virtual Risk Management
- Webinars
- Back to Business podcasts

Aviva Risk Management Specialist Partners

Aviva Risk Management Solutions



If you would like more information on or assistance with manual handling, or any other areas of risk, visit Aviva Risk Management Solutions or contact us at riskadvice@aviva.com

This document contains general information and guidance. It is not intended to be specific advice and should not be relied on as such. It may not cover every risk, exposure or hazard that may arise and we recommend that you obtain specific advice relevant to your circumstances. We accept no responsibility or liability in respect of any person who may rely upon this document.

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