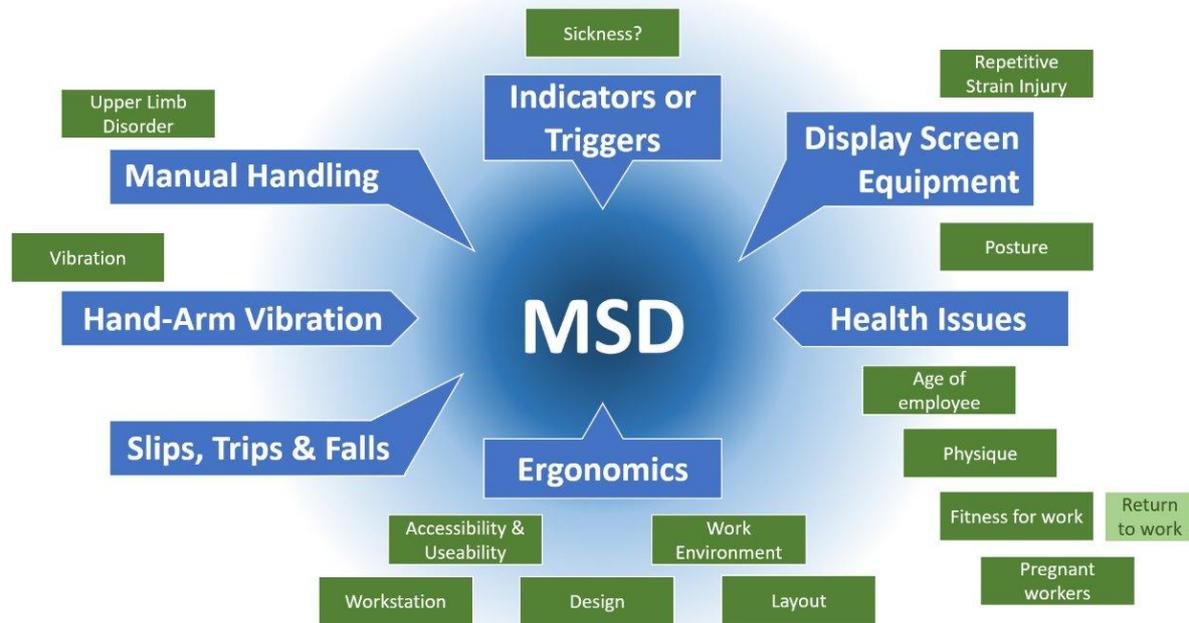# CDOIF: Musculoskeletal Disorders (MSD's): A guide to recognising and managing Ergonomics & Human Factors, associated with MSD's within the workplace.

What is it?

Ergonomics is the 'fit' between people and their work. It puts people first, taking account of their capabilities and limitations.

Why should an employer be concerned about it

The physical and psychological abilities in your workforce need to be considered in designing the plant and equipment they use, and the tasks they perform. Assessing people's abilities and limitations, their jobs and tasks, equipment and working environment and their interactions will help you design safe, effective and productive work systems.

Factors that can have a negative effect on people and the work they do, include workloads that are excessively high or low, unclear tasks, time pressures, inadequate training, and poor support from managers.   A good ergonomics and human factors approach can improve worker health and save the business money by avoiding costly accidents, reducing injuries, reducing sickness absence, and improving quality and productivity.

How do I know if I may have a problem?

Checking for human factors problems, which includes ergonomics, should be part of your normal risk assessment process. This can be done by talking to employees and seeking their views – particularly when planning new work activities or equipment, walking around your workplace to see if you can spot any hazards, and reviewing any accidents or reports of ill health you have had in the past.

What should I be doing?

Many factors can contribute to ergonomic issues which may impact the health of employees and lead to reduced production over time.

- Walk around your workplace, look for signs of poor or inadequate equipment design such as:
  - improvised tools
  - handwritten reminders, or handwritten labels on machinery controls
  - plasters on workers' fingers or 'home-made' protective pads made of tissue or foam.
- Review information you may already have about accidents and ill health which may result from the behaviour and actions of people
- Look at the circumstances that lead to frequent errors or incidents. Identify the root causes of people's mistakes.

When designing a new task, process or workstation, not only look at past accident reports to identify details of incidents and their possible causes but also consider the following.

- The job/task being done
- Organisation and the work social environment
- Workplace and task design, e.g. posture, body movements
- Conflicting demands, e.g. high productivity and quality.
- Manual handling and repetitive tasks
- Workstation layout

How can I do it?

Talk to employees and get them to suggest ideas and discuss possible solutions. Involve employees from the start of the process – this will help them to accept and adopt changes.

Employees can provide insight into the work by identifying the problems they have, and how they impact health, safety, and performance. While talking to them, you can ask them specific questions about their work such as:

- are their working postures comfortable?
- do they experience discomfort, aches, pain, fatigue, or feel unable to keep up with the flow of work?
- is the equipment appropriate, easy to use and well maintained?
- is the person satisfied with their working arrangements?
- do they make the same errors and mistakes repeatedly?
- are they following procedures, and if not, why not?

Always make sure any alterations are properly evaluated by the people doing the job. Be careful that a change introduced to solve one problem doesn't create difficulties somewhere else.

Further Information

(1) INDG90 Ergonomics and human factors at work - https://www.hse.gov.uk/pubns/indg90.htm

(2) IOSH (Institute of Occupational Safety and Health) – Stress - https://www.iosh.co.uk/Books-and-resources/Our-OH-toolkit/Stress.aspx

(3) Health and Safety for Disabled people - Health and safety for disabled people at work - HSE