

Tackling the risk of Work-related Musculoskeletal Disorders (MSDs) within Construction

Build Health
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Take aways

- What are musculoskeletal disorders?
- Motivations for tackling MSD: Key priority area
- Partnership approach WHLGNI
- The extent of the problem: Statistics
- Research to improve legislative compliance
- Examples of improvements
- Make information, instruction & training more effective... Job specific
- What can we do?



What are musculoskeletal disorders?

Disorders in the **tissues** of the **body**

Disorders:

Effects of tissue change: stiffness, weakness, pain, swelling, restricted motion, tingling and sensations, etc.

Tissues:

Muscles
ligaments
tendons
nerves
blood vessels
bursae
bone

Back

**Upper limbs
(and neck)**

Lower limbs



MSD Key Priority

- Motivators includes sustainable workforce, Public Health etc.
- HSE GB Health Priority Plan – Occupational lung disease, **musculoskeletal disorders (MSD)** and work-related stress
- Mirrored within the HSENI occupational health priorities: Occupational lung diseases; occupational cancers; and **mental health at work & musculoskeletal disorders (Inter-related)**.
- WHLGNI : Mirrored HSENI priorities with 5 year strategy





Workplace Health
Leadership Group
Northern Ireland

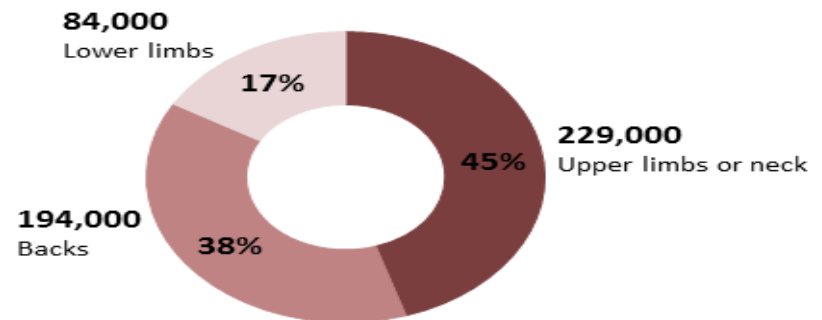
WHLGNI : Partnership Working

- Regional Multi-agency Group: Aim to give Workplace Health the same attention as Occupational Safety with 5 year Plan
- *“Encouraging all stakeholders to work collaboratively .. To identify and solve problems through existing provision and development of new tools/strategies”*

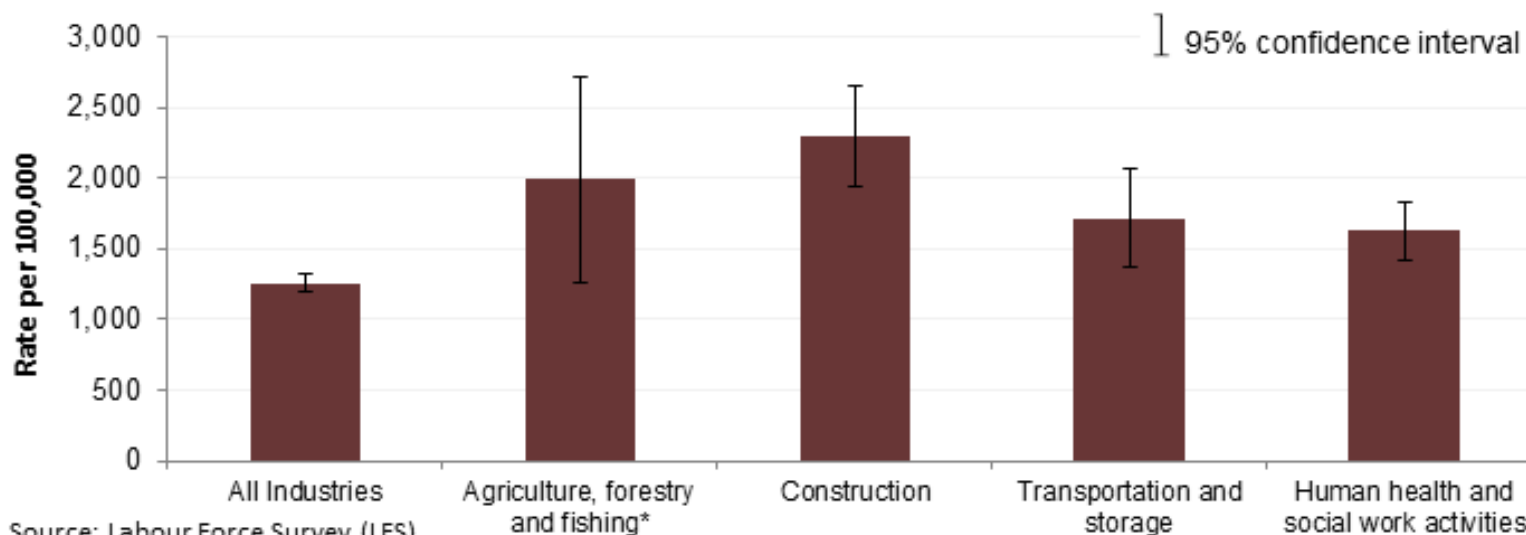


The Burden of MSDs

- 507,000 workers suffering from MSDs (new or long-standing) in 2016/17
- 8.9 million working days lost due to MSDs in 2016/17
- Overall GB cost estimated £2 billion
- Total case breakdown



Estimated prevalence rates of self-reported MSDs in Great Britain, for people working in the last 12 months, by selected industries, averaged 2014/15-2016/17

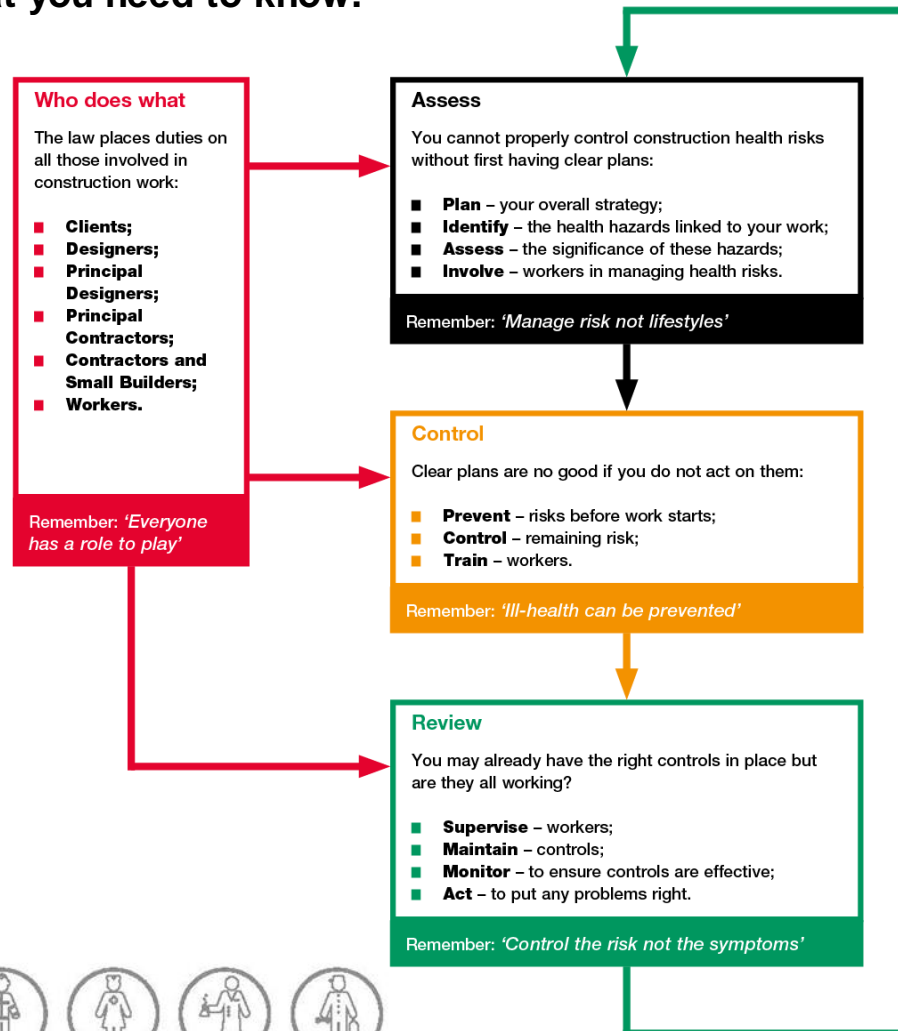


Estimated numbers of NI employees affected per annum



Managing Construction Health Risks

Managing health risks is no different to managing safety risks. This diagram outlines the basic principles that you need to know.



Manual Handling Risk Assessment

- Can manual handling involving risk be **avoided**?
- Can risks be **mechanised or handling /lifting aids be used**?
- Can tasks be **altered**-reduce the risk from twisting, stretching or bending?
- Can the loads be **changed** – to reduce weight or improve grip?
- Can the work area be **improved** to make room for handling?
- Have workers been **trained** in the use of equipment?
- MAC Tool online currently being updated



Focus on Managing MSD (Evidence based) .. Do you need help includes:

- With MSD risk assessment
- “Designing out”, reorganising, cost benefit
- Identifying suitable equipment,
- Occupational health cases
- Research shows that general training in lifting ineffective way to control risk.. Changing attitudes, behaviours, tailoring training to suit (Job Specific)



What are the MSD risk factors?

- Load Weight
- Frequency of lifting heavy loads
- Excessive Carry distances
- Pushing and Pulling
- Poor Posture
- Lifting at/above head height or at foot level or below
- Poor environment – hot/cold/wet (slippery), poor floor surface etc.
- Poor grip on load



Other factors

- Age/aging workforce
- Smoking
- Existing health problems
- Piece work: Making a living verses recovery time (Spinal – realignment)
- Cumulative effect



Designing Out

- Lighter, dense blocks
- Prefabricated Walling Systems
- Light weight beam and block floor
- Useful links
 - <http://forterra-jetfloor.co.uk/>
 - <http://www.jablite.co.uk/application/jabfloor/>
 - <http://www.tetrisfloors.co.uk/beam-and-block>



Avoiding



Continued

- Mobile lifting hoists



Lifting Aids

- Cam grips and suctions



Identifying equipment

- Adjustable Spot Board



Continued: Rebar Tying Machines



The way forward suggestions

- Use of your expertise, networks, lobby for change, drive down costs etc.
- Link with Competent Specialists i.e. Ergonomists and Human Factors, Chartered Physiotherapists (Evidence Based) etc.
- Review information, instruction training : Tool box talks
- Share good practice/case study
- Any ideas



Useful Links

- <http://www.hse.gov.uk/statistics/causdis/musculoskeletal/msd.pdf>
<http://www.hse.gov.uk/pubns/cis57.pdf>
- <https://www.hseni.gov.uk/publications/workplace-health-leadership-group-strategic-plan-2017-2022>
- <http://www.hse.gov.uk/construction/healthrisks/physical-ill-health-risks/manual-handling.htm>
- <http://www.hse.gov.uk/construction/healthrisks/index.htm>
- <http://www.hse.gov.uk/msd/external-help.htm>
- <http://www.eco-buildingproducts.co.uk/ecospot-adjustable-mortar-board.html>
- <http://forterra-jetfloor.co.uk/>
- <http://www.jablite.co.uk/application/jabfloor/>
- <http://www.tetrisfloors.co.uk/beam-and-block>

