



European approach to tackling work-related MSDs

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REGULĀCIJAS TĀVĀ NĀKOTNĒ



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Overview

- **Data on MSDs**
- **European Agency for Safety and Health at Work (EU-OSHA)
good practice information**
- **NAPO video**

Work-related musculoskeletal disorders

Complex nature of MSDs:

- multifactorial aetiology
- various risk factors (physical, ergonomic, psychosocial) and its combinations
- numerous intervention methods....

Factors that can contribute to MSDs

Physical factors:

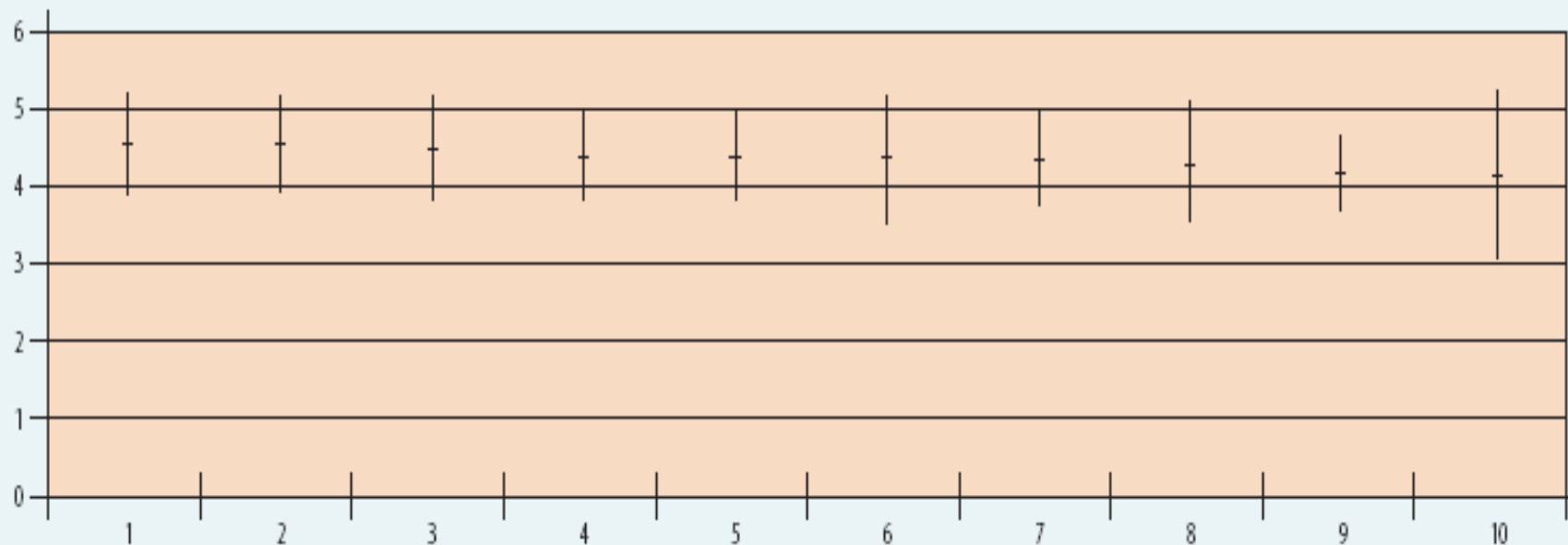
- **Force** application, e.g. lifting, carrying, pulling, pushing, use of tools
- **Repetition** of movements
- Awkward and static **postures**, e.g. with hands above shoulder level, or prolonged standing and sitting
- Local **compression** of tools and surfaces
- **Vibration**
- **Cold** or excessive **heat**
- Poor **lighting**, e.g. can cause an accident
- High **noise** levels, e.g. causing the body to tense

Organisational and psychosocial factors:

- Demanding work, lack of **control** over the tasks performed, and low levels of **autonomy**
- Low levels of **job satisfaction**
- Repetitive, monotonous work, at a high **pace**
- Lack of **support** from colleagues, supervisors and managers

Emerging physical OSH risks: Expert forecast

Top ten emerging OSH physical risks identified in the survey (Y-axis: mean values on the one-to-five-point Likert scale and standard deviations; X-axis: risks)



1. Lack of physical activity
2. Combined exposure to vibration and awkward postures
3. Poor awareness of thermal risks among low-status worker groups exposed to unfavourable thermal conditions
4. Multi-factorial risks
5. Combined exposure to musculoskeletal disorder and psychosocial risk factors
6. Thermal discomfort

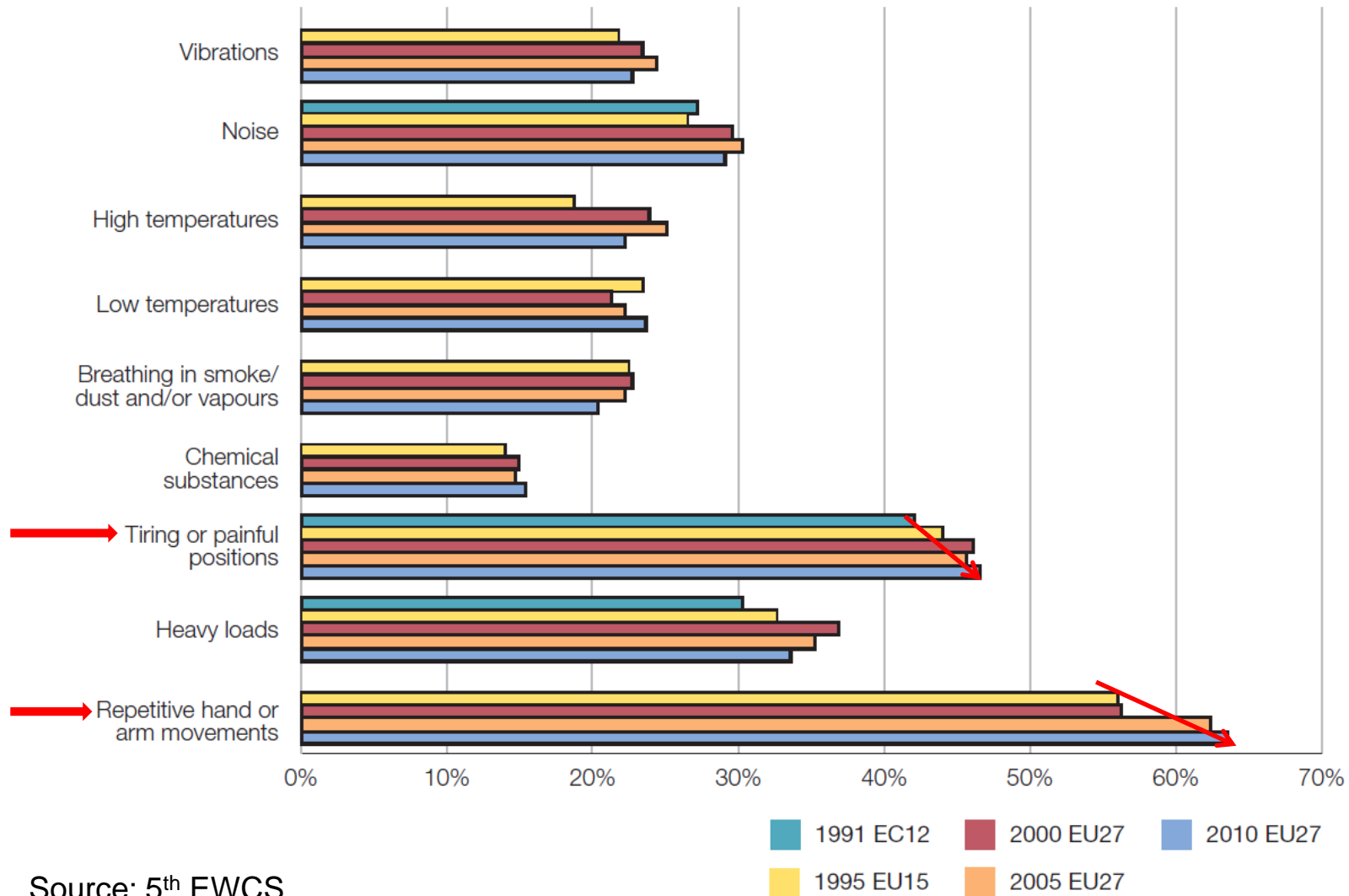
7. Combined exposure to vibration and muscular work
8. Complexity of new technologies, work processes and human-machine interfaces
9. Insufficient protection of high-risk groups against long-standing ergonomic risks
10. General increase of exposure to ultraviolet radiation during and outside working time

Scale:
1 = Strongly disagree
5 = Strongly agree

Source: Agency report « Expert forecast on emerging physical risks related to OSH », 2005

Exposure to physical risks

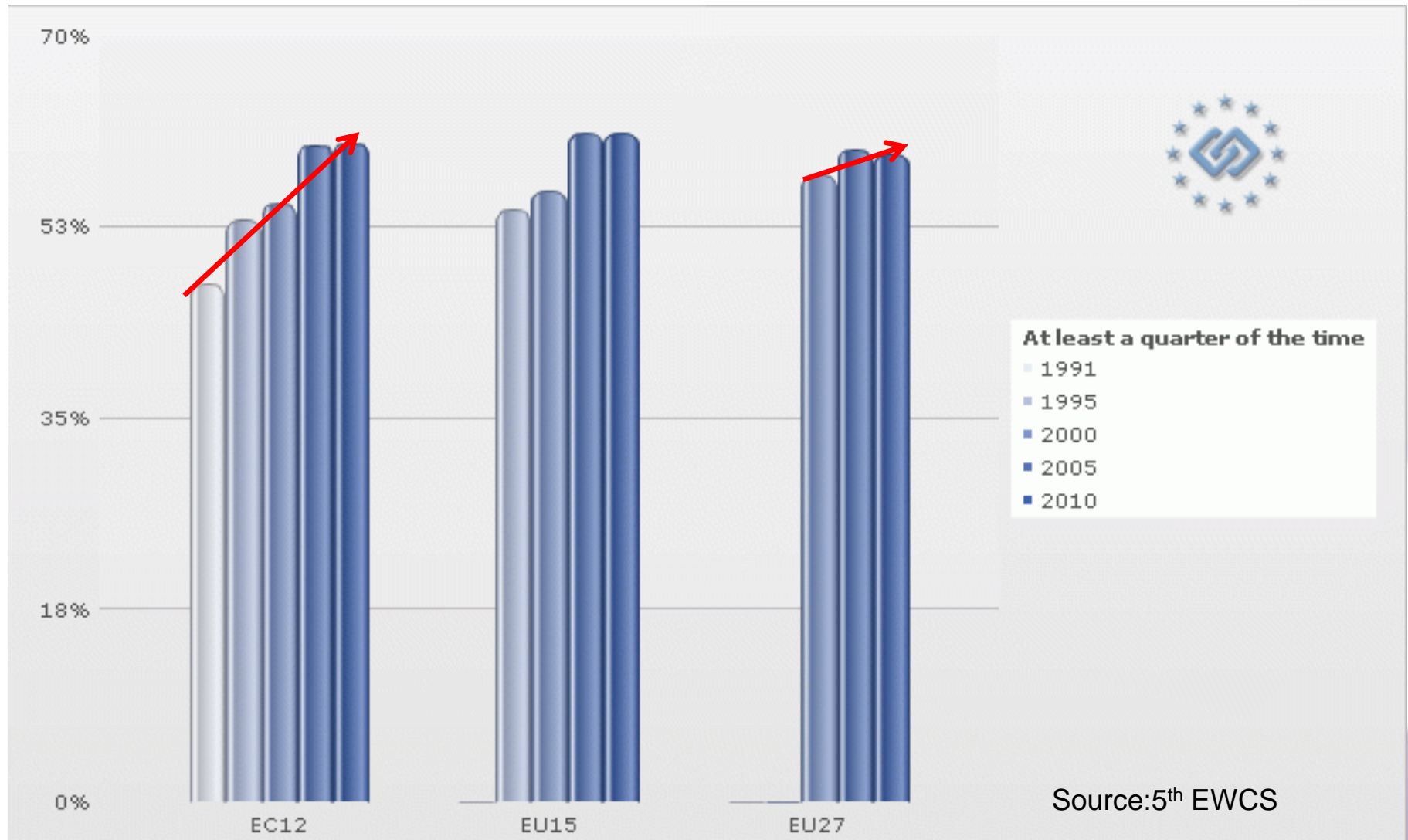
Figure 17: Exposure to physical risks over time (% exposed quarter of time or more)



Source: 5th EWCS

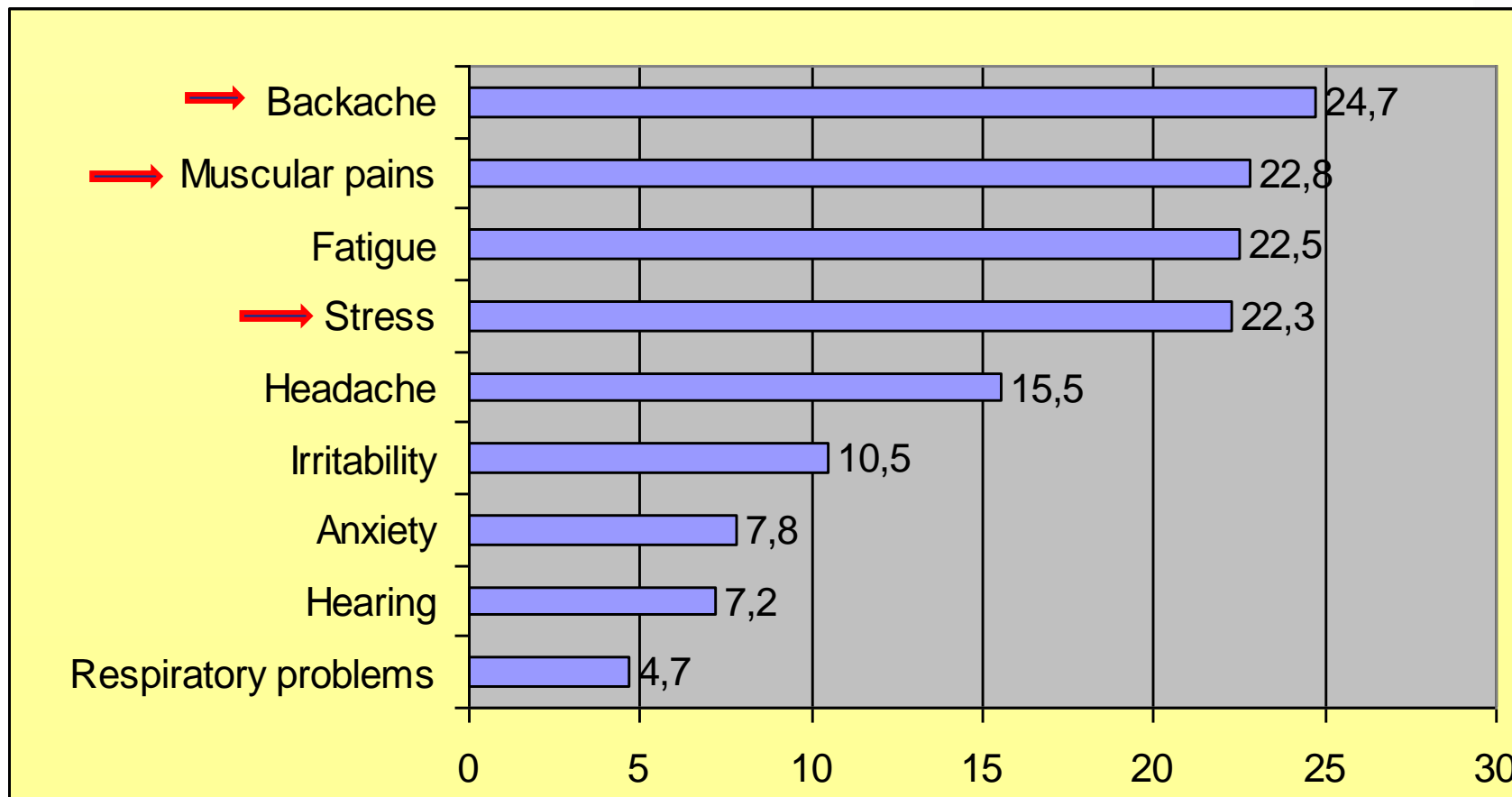
Work intensity

Q: Does your job involve working at very high speed?

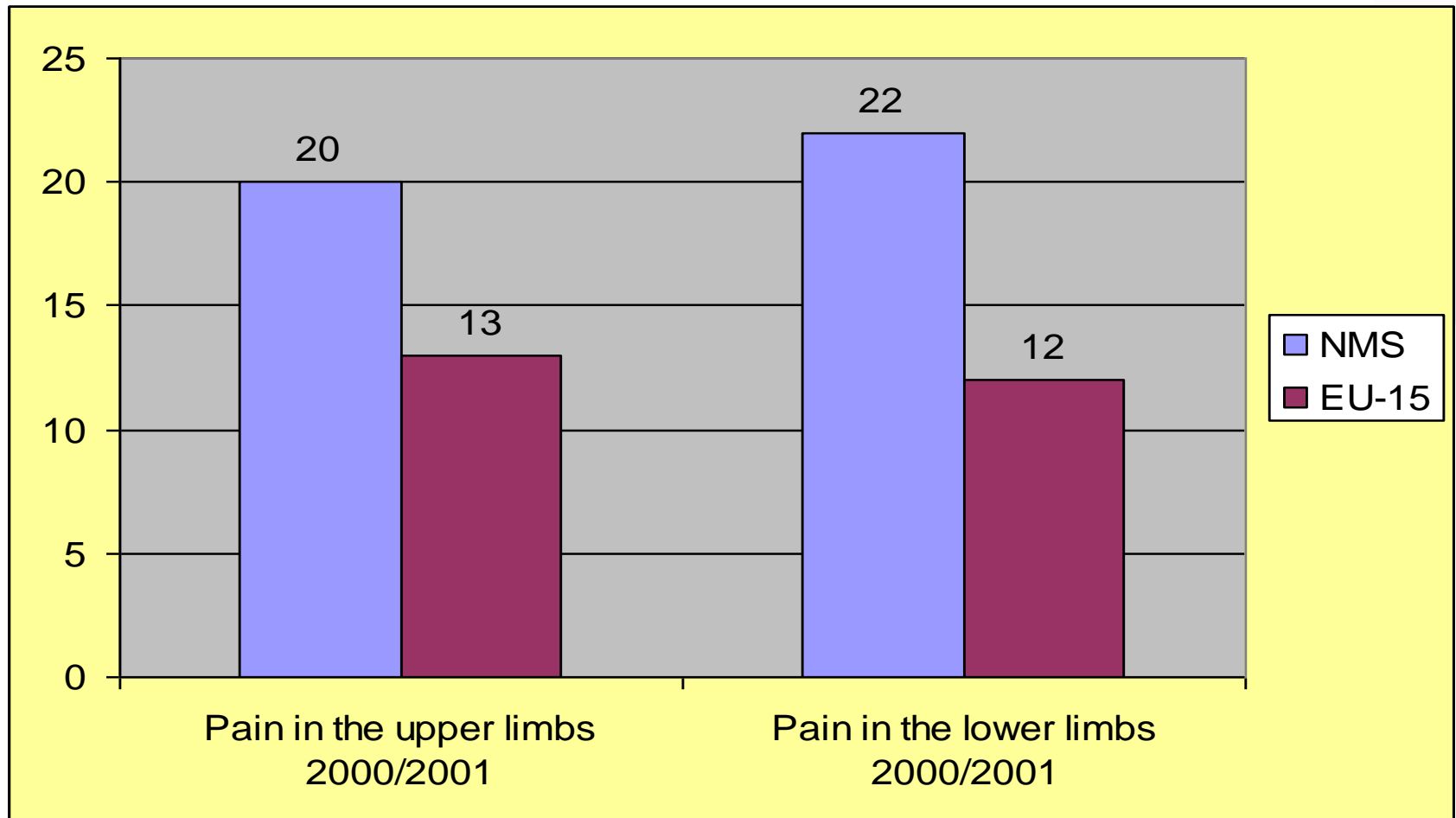


% of workers reporting work-related health problems, EU-27

35% of workers report that work affects their health, of those



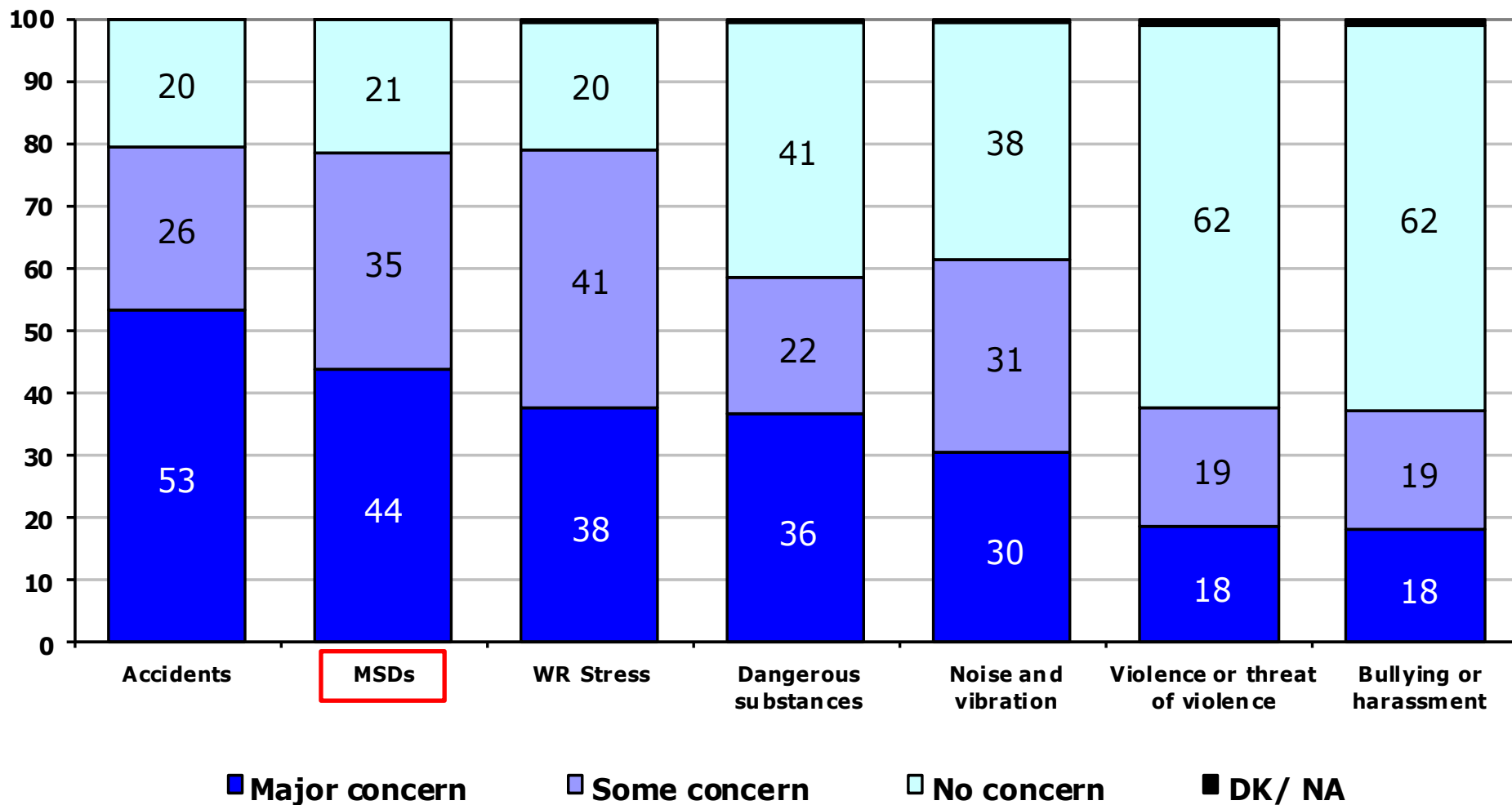
% of workers reporting work-related health problems



For each of the following issues, please tell me whether it is of major **concern**, some concern or no concern at all **in your establishment**

% establishments, EU27

Source: ESENER, 2010



Tackling work-related MSDs

Promoting an integrated management approach to tackle MSDs:*

- **Prevention** of MSDs by addressing the whole load on the body, including ergonomic and organisational aspects of work
- Managing the retention, rehabilitation and **return to work** of those who suffer, or have suffered, MSDs



Work-related musculoskeletal disorders: Prevention report

Organisational and administrative interventions

- A reduction in daily working **hours** may reduce MSDs
- The introduction of additional **breaks** into repetitive work may be achievable without loss of productivity

Technical interventions

- Technical **ergonomic** measures can reduce the workload on the back and upper limbs (e.g. in the case of ergonomic hand tools), and thus the occurrence of MSDs, without the loss of productivity

Protective equipment

- There is no conclusive evidence to support **back belt** use to prevent work-related low back pain

Behavioural modification

- **Training** on working methods in manual handling is not effective if it is used as the only measure to prevent low back pain
- **Physical training** can reduce the recurrence of back pain and neck-shoulder pain. But to be effective, the training should include vigorous exercise and be repeated at least three times a week

Implementation strategies

- A combination of several kinds of interventions (**multidisciplinary approach**) – including organisational, technical and personal measures – is needed to prevent MSDs. Interventions based on single measures are unlikely to prevent MSDs
- A **participative approach** that includes the workers in the process of change may have a positive effect on the success of an intervention

European Agency for Safety and Health at Work

EUROPEAN WEEK FOR SAFETY AND HEALTH AT WORK

EN 3



Work-related musculoskeletal disorders: Back to work report

MSDs back-to-work report:

a policy overview

- Focus on integrating people with disabilities into the workforce who are **not** currently **employed**, rather than on workers who have developed MSDs at work
- **Early recognition** of problems and avoidance of long-term incapacity for work, including returning people with MSDs to work as quickly as possible
- Provision of **comprehensive care** including medical, occupational and social rehabilitation

More EU-OSHA good practice



You are here: [Home](#) → [Topics](#) → Musculoskeletal Disorders

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Musculoskeletal disorders



Musculoskeletal disorders (MSDs) can affect the body's muscles, joints, tendons, ligaments, bones and nerves.

Most work-related MSDs develop over time and are caused either by the work itself or by the employees' working environment. They can also result from accidents, e.g. fractures and dislocations. Typically, MSDs affect the back, neck, shoulders and upper limbs; less often they affect the lower limbs.

Health problems range from discomfort, minor aches and pains, to more serious medical conditions requiring time off work and even medical treatment. In more chronic cases, treatment and recovery are often unsatisfactory - **the result could be permanent disability and loss of employment.**

Many problems can be prevented or greatly reduced by complying with existing [safety and health law](#) and following guidance on good practice. This includes **assessing the work tasks, putting in place preventive measures,** and checking that these measures stay effective.

MSDs are a major problem.

For the employee, they cause personal suffering and loss of income; for the employer, they reduce business efficiency; and for government, they increase social security costs.

MSDs are a priority for the EU in its Community strategy on occupational health and safety. They are also a recognised priority by the EU Member States and European Social partners.

Read the [Key facts](#)

[Agency publications on Musculoskeletal Disorders](#)

Search


[A-Z Index](#)

More about...

- [European Week 2007: Lighten the Load](#)
- [Manual Handling - risk assessment and training tools](#)
- [European Legislation on MSDs](#)
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 -  [Results of SME funded projects on MSDs prevention](#)
 -  [Research](#)
- **Consultation of Social Partners (on MSDs):**
 -  [EU Commission second-stage consultation](#)

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- Upcoming Events
- 3. Gesundheitsgipfel mit dem Thema: Führung und die vielfältigen Potenziale der Beschäftigten
DE Grainau, 08.08.2010
 - T2010, the tri-annual

Practical Solutions

The European Agency for Safety and Health at Work monitors, collects and analyses scientific findings, statistical information and **prevention measures**. It also supports the exchange and sharing of information. If you are involved in workplace health and safety, you can use this section to find **practical information, guidelines** and **case studies** to help solve a variety of problems.

Good practice that has been implemented successfully in one workplace can be adapted and used elsewhere. However, before good practice information is applied, an assessment of the hazards and risks present in the workplace should be carried out, making reference to relevant national legislation.

While EU-OSHA is not responsible for the content of external internet sites to which it links, we aim to ensure that we only link to good practice information that is reliable and meets identified criteria for prevention. These include following: the 'prevention hierarchy' set out in EU legislation, which includes starting with prevention at source and prioritising collective measures over individual ones and; ensuring the participation of workers.

More detailed information on good practice collection, evaluation and dissemination can be found in our [Good Practice Information](#) provided by EU-OSHA.



USEFUL LINKS



RISK ASSESSMENT



CASE STUDIES



PROVIDERS



FAQ

Latest additions

Improving quality and productivity at work - Community strategy 2007-2012 on health and safety at work
09.07.2010 - Modified: 09.07.2010
The European Commission proposes in its Communication a strategy for promoting health and safety at work in the European Union from 2007 to 2012. The overall objective of the strategy is to reduce ...
<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52007DC0062:EN:NOT>

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03.08.2010
 - Round Table - Integrated management systems
27.07.2010
 - Mainstreaming OSH into business management
26.07.2010
 - Updated section on legislation now available
25.07.2010
 - EU - Appointment of New Director for Eurofound
23.07.2010
- More news...

Provider of this information:
[European Commission: Directorate General Employment and Social Affairs \(DG Employment\)](#)

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OSH in figures

Our Events

Events

[2nd EU Infodays in
DGUV Congress](#)
DE Dresden, Dec 03,
2012

[le salon de la
prévention et de la
gestion des risques](#)
FR Paris, Dec 04,
2012

[International
Conference on
Occupational Health
and Safety: From
Policies to Practice](#)
LV Riga, Dec 06, 2012

[International
Conference
"Comparative
Approach of
Psychosocial Risk in
the Workplace.
French Approach and
Foreign Systems"](#)
FR Bordeaux, Jan 16,
2013

[3rd International
Strategy Conference](#)

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Search results — 77 items match your criteria

Summaries translated in all EU languages

Google™ Pielāgotā meklēšana



Jūs atrodaties šeit: [Sākums](#) → [Data](#) → [Case Studies](#) → SKELETA UN MUSKUĻU SISTĒMAS PROBLĒMU RISINĀJUMI AKLO CILVĒKU PAVADOŅSUŅU TRENERIEM UN KUSTĪBAS TRAUCĒJUMU NOVĒRŠANAS INSTRUKTORIEM

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Case study: SKELETA UN MUSKUĻU SISTĒMAS PROBLĒMU RISINĀJUMI AKLO CILVĒKU PAVADOŅSUŅU TRENERIEM UN KUSTĪBAS TRAUCĒJUMU NOVĒRŠANAS INSTRUKTORIEM

Name of the organisation(s)

The Guide Dog for the Blind Association - Health and Safety Team

Valsts :

United Kingdom

The issue

Suņu apmācība aklu un vājredzīgu personu vajadzībām ir ar kreiso roku veicams darbs, kas suņu treneriem / kustības traucējumu novēršanas instruktoriem rada vienpusīgu slodzi:

- uz kreisās plaukstas locītavu, apakšdelmu un elkoni – satvēriena noturēšana, spēka pielietojums, apakšdelma rotācija;

Jaunumi

[Starptautiskā diena vardarbības izskaušanai pret sievietēm – 25. novembris](#)
23.11.2012

[European League against Rheumatism: WIN with EULAR](#)
23.11.2012

[Eiropas nedēļa 2012 — risku apzināšana Eiropas darbavietās](#)
20.11.2012

[„Zelta ķiveri” iegūst „Statoil Fuel & Retail Latvia”](#)
20.11.2012

[„Zelta ķiveri” iegūst](#)

Checklists

Lower limb disorders



Checklist for the prevention of lower limb disorders

Part A: Introduction

Work-related lower limb disorders (LLDs) are impairments of bodily structures such as a tendon, muscle, nerve, joint and bursa caused or aggravated primarily by the performance of work and by the effects of the immediate environment where the work is carried out. They can affect the lower extremities, mainly hip, knee and feet. The main risk factors of work-related lower limb disorders include squatting, kneeling, pushing on pedals, and prolonged standing or walking. This checklist concerns hazards for injury or development of disorders to the lower limb and is targeted at people engaged in workplace hazard identification. Though limits have been indicated, these are based on the associations that have been reported in the current literature and so may change with future research that provides better scientific evidence. In addition, this checklist offers examples of preventive measures that can help to reduce LLDs risks.

How to use a checklist

- A checklist can help identify hazards and potential prevention measures and, used in the right way, forms part of a risk assessment.
- This checklist is not intended to cover all the risks of every workplace but to help you put the method into practice.
- A checklist is only a first step in carrying out a risk assessment. Further information may be needed to assess more complex risks and in some circumstances you may need an expert's help.
- For a checklist to be effective, you should adapt it to your particular sector or workplace. Some extra items may need to be covered, or some points omitted as irrelevant.
- For practical and analytical reasons, a checklist presents problems/hazards separately, but in workplaces they may be intertwined. Therefore, you have to take into account the interactions between the different problems or risk factors identified. At the same time, a preventive measure put in place to tackle a specific risk can also help to prevent another one; for example, air conditioning put in place to combat high temperatures can also prevent stress, given that high temperatures are a potential stress factor.
- It is equally important to check that any measure aimed at reducing exposure to one risk factor does not increase the risk of exposure to other factors; for example, reducing the amount of time a worker spends reaching above shoulder level may also increase the time spent working in a stooped posture, which may lead to back disorders.

European Agency for Safety and Health at Work - <http://osha.europa.eu>

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Manual handling



Checklist for the prevention of manual handling risks

Part A: Introduction

Manual handling of loads (MHL) includes lifting, holding, putting down, pushing, pulling, carrying and moving a load. It is one of the major causes of musculoskeletal disorders (MSDs). These are impairments of the bodily structures such as muscles, joints, tendons, ligaments and nerves, or localised blood circulation systems that are caused or aggravated primarily by the performance of work and by the effects of the immediate environment where the work is carried out. MHL should be avoided as much as possible, but sometimes it is impossible to avoid entirely in the workplace. It is then the responsibility of management to minimise the risks. More information on MHL is available in the European Agency for Safety and Health at Work's factsheet (<http://osha.europa.eu/en/publications/factsheets/73/view>) and the E-fact (<http://osha.europa.eu/en/publications/e-facts/efact14/view>).

There are several risk factors that make manual handling tasks hazardous and therefore increase the risk of injury. The risk factors for MSDs are: length of the MHL, posture of the body, exerted force during the manual handling and frequency of movements.

The risk factors are related to the different aspects of manual handling:

- weight and specific characteristics of the loads
- task and organisation of work
- workplace layout and equipment
- work environment
- individual capacity, skills and training level.

This checklist includes questions related to all aspects of manual handling and offers examples of preventive measures that can help to improve handling and therefore reduce risks. The preventive measures follow the general principles of prevention in the Council Directive concerning health and safety at work (89/391/EEC).

How to use a checklist

- A checklist can help identify hazards and potential prevention measures and, used in the right way, forms part of a risk assessment.
- This checklist is not intended to cover all the risks of every workplace but to help you put the method into practice.
- A checklist is only a first step in carrying out a risk assessment. Further information may be needed to assess more complex risks and in some circumstances you may need an expert's help.
- For a checklist to be effective, you should adapt it to your particular sector or workplace. Some extra items may need to be covered, or some points omitted as irrelevant.

European Agency for Safety and Health at Work - <http://osha.europa.eu>

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Checklist for the prevention of WRULDs

Part A: Introduction

Work-related neck and upper limb disorders (WRULDs) are impairments of bodily structures such as a tendon, nerve, muscle, joint, bursa or the localised blood circulation system. Principally, they are caused by the performance of work and by the effects of the immediate environment where that work is carried out. Symptoms include pain and/or reduced ability to function normally. As the term WRULDs suggests, any region of the neck, shoulders, upper arms, elbows, forearms, wrists and hand can be affected. More information is available in the European Agency for Safety and Health at Work's factsheet (<http://osha.europa.eu/en/publications/factsheets/72/view>) and E-fact (<http://osha.europa.eu/en/publications/e-facts/efact16/view>) on WRULDs.

This checklist aims to provide employers, workers, their supervisors and OSH professionals with basic information about WRULDs and how they may be prevented. It helps to identify the particular factors that can contribute to workers developing these disorders. Furthermore, it gives examples about the practical steps that can be taken to prevent or reduce the risks of workers sustaining WRULDs. This approach is based upon the application of ergonomics — the study of the relationship between workers and their environment — which aims to design better working systems by matching work demands to the capacities, capabilities and characteristics of the full range of individuals in the workforce. It provides a systematic approach to identifying problems and introducing solutions.

The risk factors that may cause or contribute to WRULDs can be grouped into three categories:

- physical risk factors such as work involving awkward postures or repetitive movements;
- psychosocial risk factors, which are associated with levels of workplace stress;
- individual risk factors, which vary according to an individual's own characteristics.

There are two important factors to look out for at work:

- the size of the load: the amount of physical effort applied, including the weights that are handled or the forces to be resisted; and
- time: the length and frequency of the physical activity leading to tiredness and the resulting need for recovery.

European Agency for Safety and Health at Work - <http://osha.europa.eu>

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WRULDs



Checklist for preventing bad working postures

Part A: Introduction

A good working posture is a prerequisite for preventing work-related musculoskeletal disorders (MSDs). These are impairments of the bodily structures such as muscles, joints, tendons, ligaments and nerves, or localised blood circulation systems that are caused or aggravated primarily by the performance of work and by the effects of the immediate environment where the work is carried out. A good posture is one that is comfortable and in which the joints are naturally aligned — the neutral body posture. Working with the body in a neutral position reduces stress and strain on the muscles, tendons, and skeletal system, and therefore reduces the risk of workers developing MSDs.

Awkward postures are those where the various parts of the body are not in their natural position. As a joint moves further away from its natural position, more muscular effort is needed to achieve the same force and muscle fatigue occurs. Moreover, non-neutral positions can increase the strain on tendons, ligaments and nerves. They increase the risk of injury and should be avoided if at all possible.

Figure 1: Awkward postures – body parts are not in their natural positions



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Bad working postures

On-going activities relevant to MSDs

Healthy Workplaces Campaigns:

- 2012-13: Working together for risk prevention:
 - Leadership
 - Workers participation
- 2014-15: Practical solutions for psychosocial risks

OiRA (Online interactive Risk Assessment Tool):

- Hairdressers (Cyprus)
- Road transport (France)
- Leather and tanning (EU)
- Office work (Cyprus)
- Maintenance
- Psychosocial risks

Older workers project, 2013-2015

ESENER (enterprise survey), 2013-14:

- Work-related MSDs
- Psychosocial risks

Thank you!!!

More information:

MSDs

<http://osha.europa.eu/en/topics/msds>

EU-OSHA

<https://osha.europa.eu>

NAPO

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NAPOO – Modern Stressful Times

