



# Healthy Workplaces Campaign 2020-22

## LIGHTEN THE LOAD

### MSD-related statistics

# Overview

- MSDs prevalence
  - Impact of MSDs
  - MSD-related risk factors
  - MSDs prevention
- 
- **This PPT is based on the following reports:**

- EU-OSHA, Work-related musculoskeletal disorders: prevalence, costs and demographics in the EU, 2019 available at: <https://osha.europa.eu/es/publications/msds-facts-and-figures-overview-prevalence-costs-and-demographics-msds-europe/view>
- EU-OSHA, Work-related musculoskeletal disorders: Facts and Figures — Synthesis report of 10 EU Member states reports, 2020 (AT, DE, DK, ES, FI, FR, HU, IT, NL and SE) available at: <https://osha.europa.eu/en/publications/work-related-musculoskeletal-disorders-facts-and-figures-synthesis-report-10-eu-member/view>

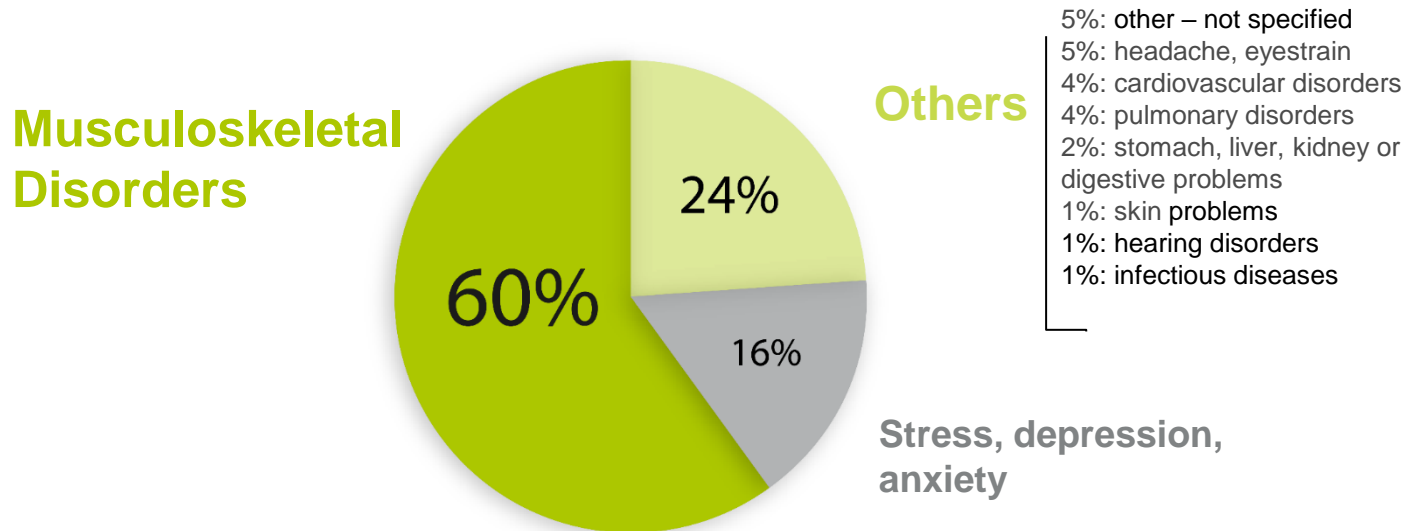


# MSDs prevalence

- Around 60% of all workers with a work-related health problem, identify MSDs as their most serious issue
- MSD complaints slightly decreased between 2010 and 2015
- MSD complaints vary considerably between Member States, sectors and occupations
- Women report slightly more MSDs than men
- MSDs prevalence is higher among older workers
- MSDs prevalence decreases with educational level
- MSD work-related accidents are among the most common accidents

# MSDs - Work-related health problem number 1

**Around 60% of all workers with a work-related health problem identify MSDs as their most serious issue**

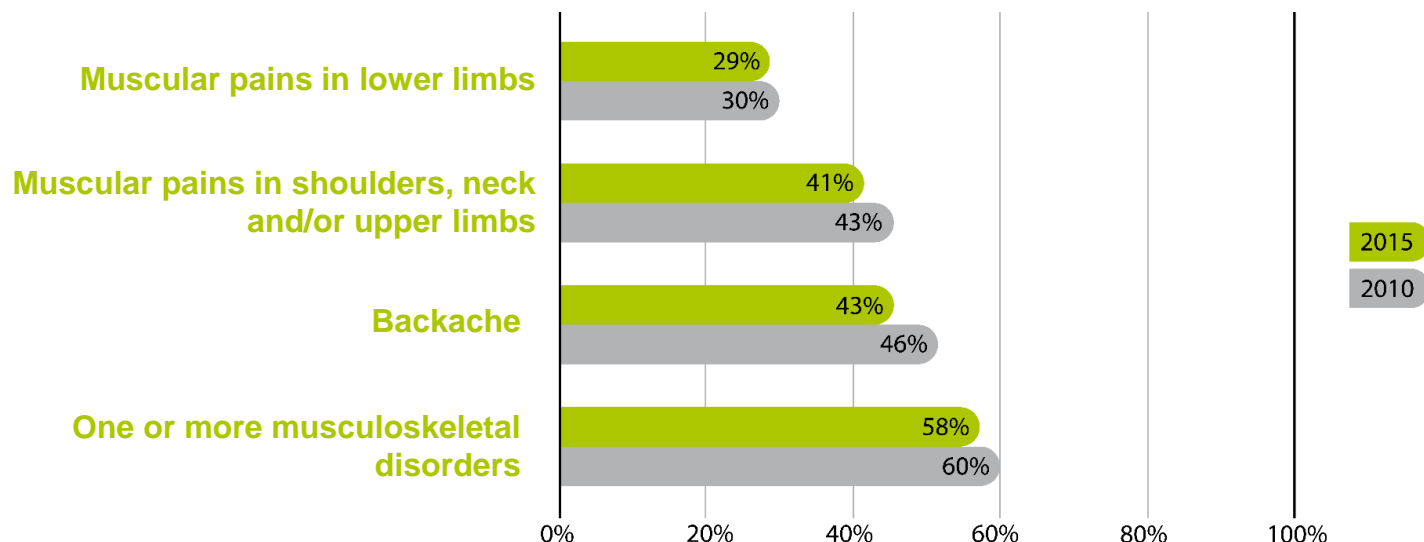


Percentage of workers reporting a work-related health problem, by type of problem, EU-27, 2013

Source: Eurostat, Labour Force Survey ad hoc module 'Accidents at work and other work-related health problems' (2013)

# MSD complaints only slightly decreasing

The proportion of workers reporting MSD complaints slightly decreased between 2010 and 2015

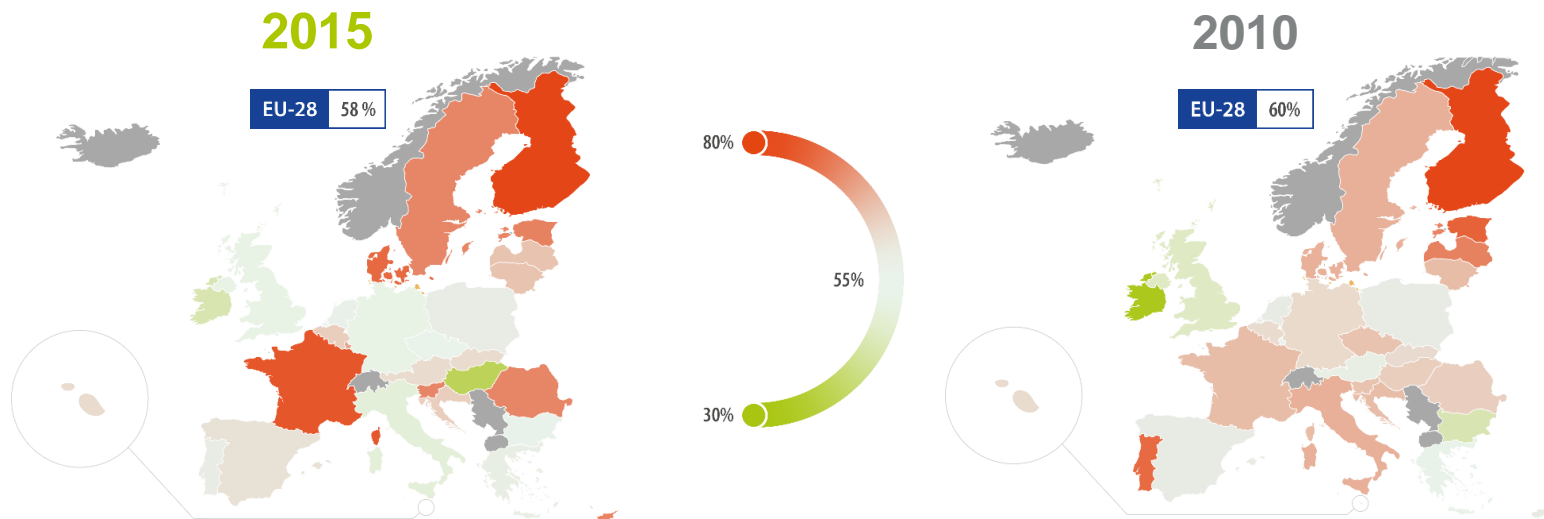


Percentage of workers reporting different musculoskeletal disorders in the past 12 months, EU-28, 2010 and 2015

Source: Panteia based on the fifth (2010) and sixth (2015) waves of the European Working Conditions Survey (EWCS)

# MSD complaints by Member State

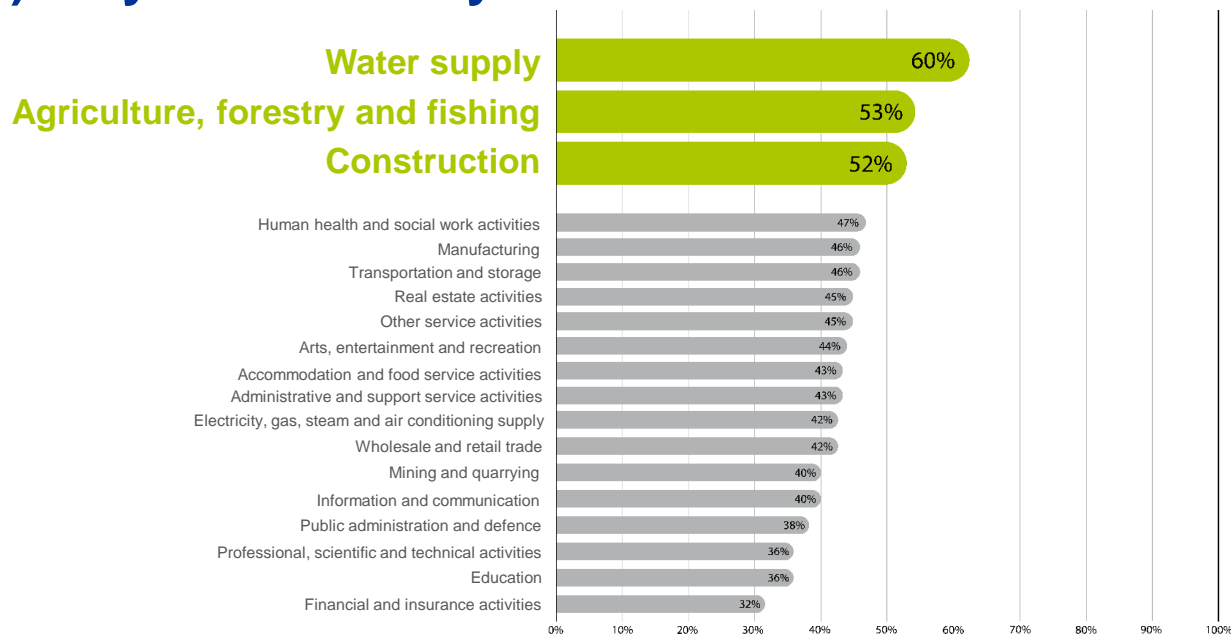
The proportions of workers reporting MSD complaints vary considerably between MS



Percentage of workers reporting that they suffered from one or more musculoskeletal disorders in the past 12 months, by Member State, 2010 and 2015

# Backache (and MSDs in general) by sector

The proportions of workers reporting backache (and MSDs in general) vary considerably between sectors

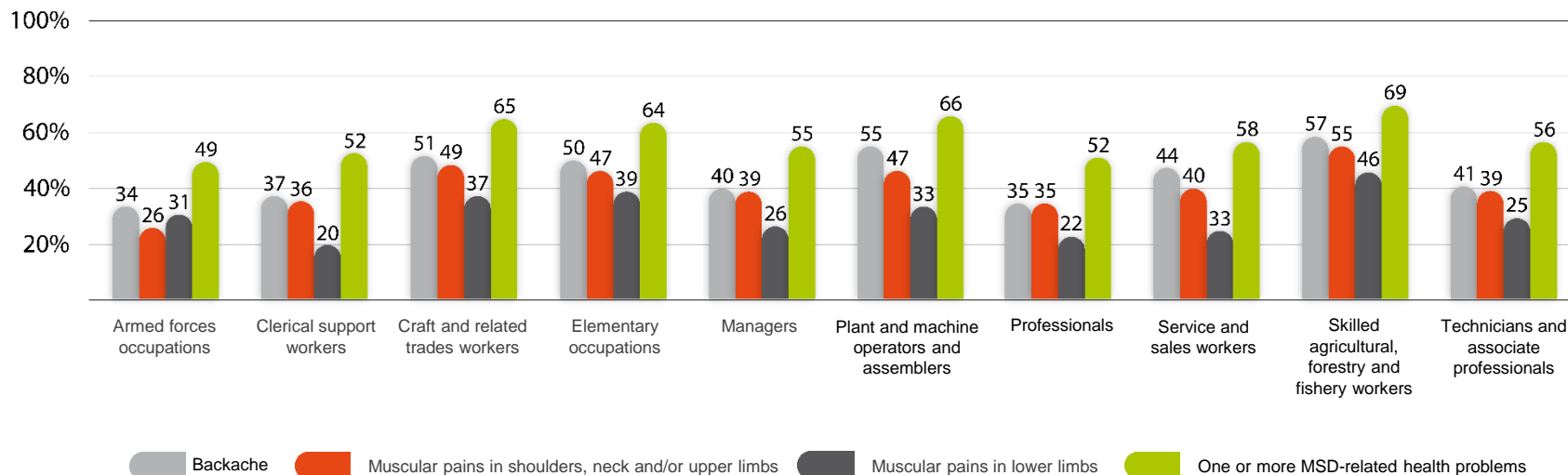


Percentage of workers reporting backache in the past 12 months, by sector (NACE rev 2), EU-28, 2015

Source: Panteia based on the sixth (2015) wave of the European Working Conditions Survey (EWCS)

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# MSDs prevalence highest among blue-collar workers



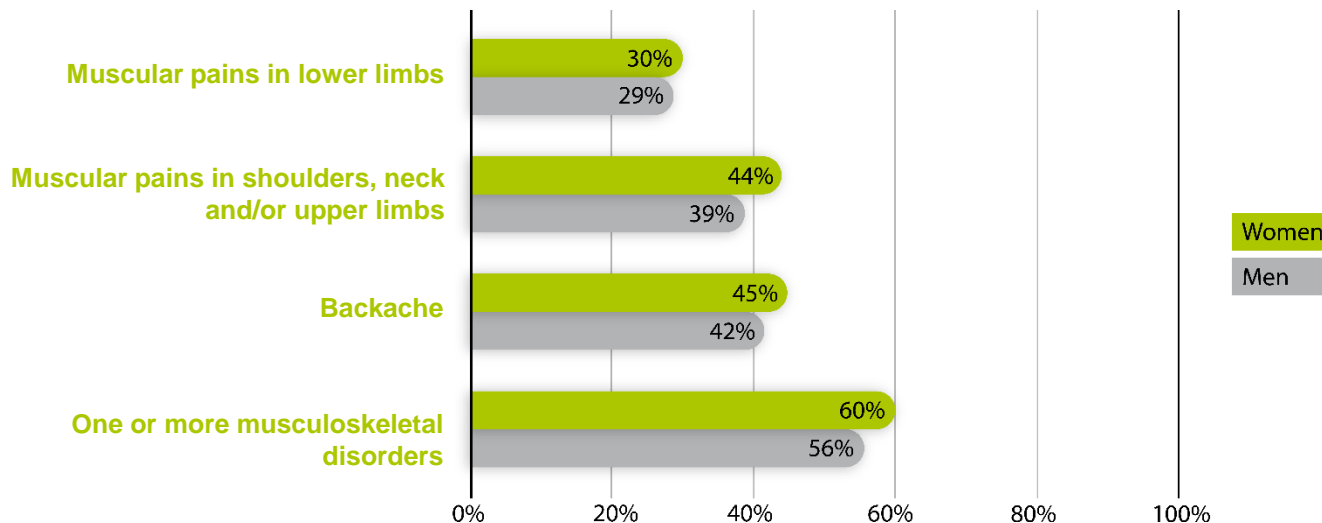
Percentage of workers reporting different musculoskeletal disorders in the past 12 months, by occupation (ISCO-08), EU-28, 2015

Source: Panteia based on the sixth (2015) wave of the European Working Conditions Survey (EWCS)



# MSDs by gender

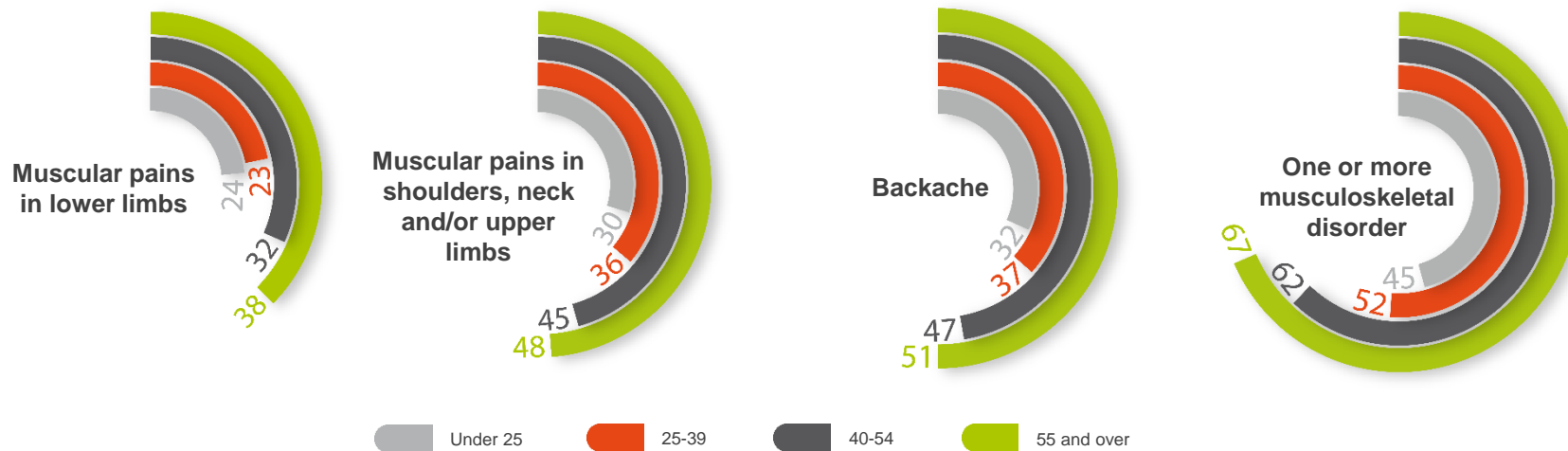
## Women report slightly more MSDs than men



Percentage of workers reporting different musculoskeletal disorders in the past 12 months, by gender, EU-28, 2015

Source: Panteia based on the sixth (2015) wave of the European Working Conditions Survey (EWCS)

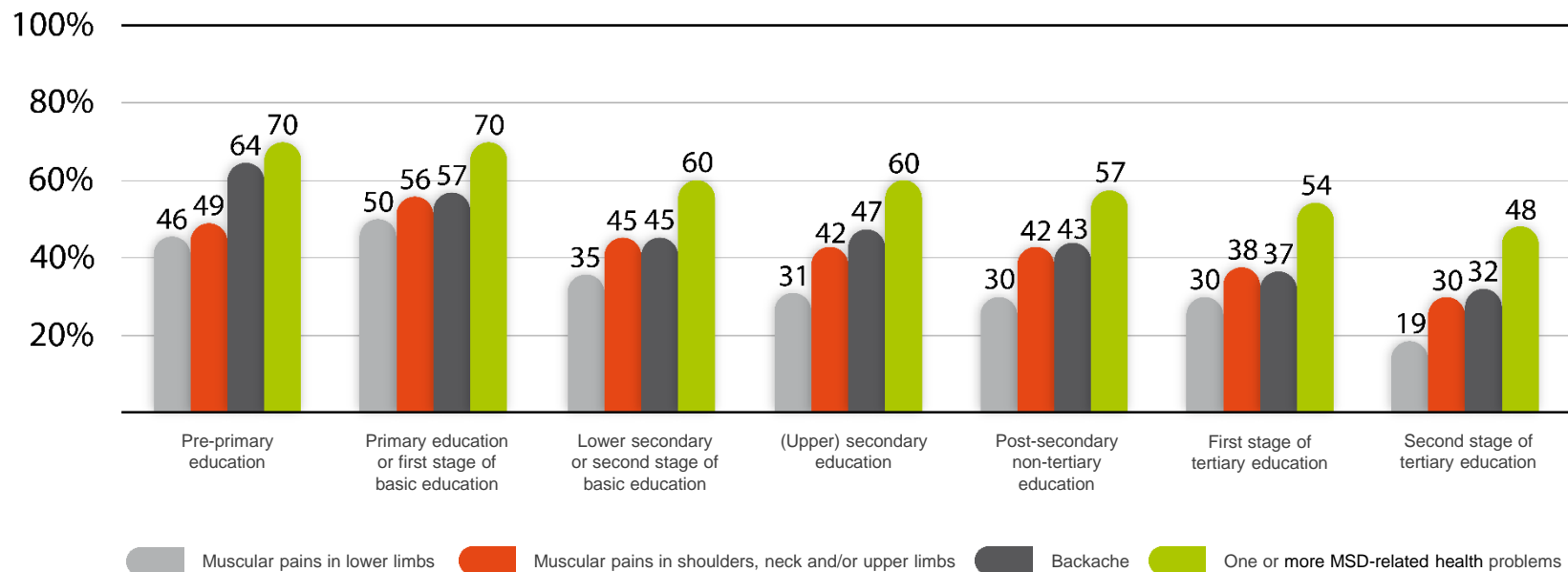
# MSDs prevalence is higher among older workers



Percentage of workers reporting different musculoskeletal disorders in the past 12 months, by age group, EU-28, 2015

Source: Panteia based on the sixth (2015) wave of the European Working Conditions Survey (EWCS)

# MSDs prevalence decreases with educational level



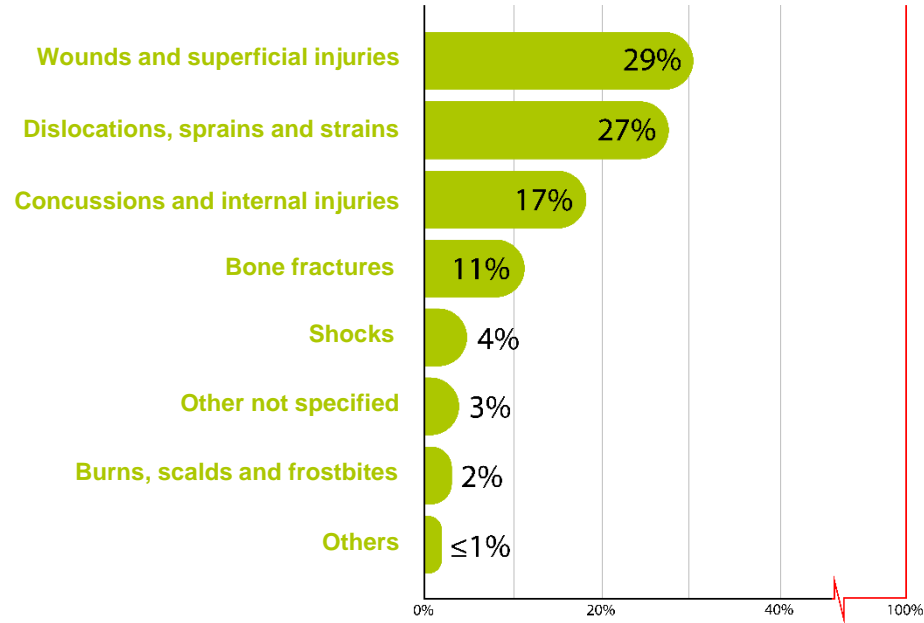
Percentage of workers reporting different musculoskeletal disorders in the past 12 months, by educational level, EU-28, 2015

Source: Panteia based on the sixth (2015) wave of the European Working Conditions Survey (EWCS)

# MSDs-related accidents

- **The types of accidents related to MSDs-related are: dislocations, sprains and strains, bone fractures, and traumatic amputations (loss of body parts).**
- **MSD work-related accidents are among the most common work-related accidents.**

Distribution of fatal and non-fatal accidents at work by type of injury, EU-28, 2016



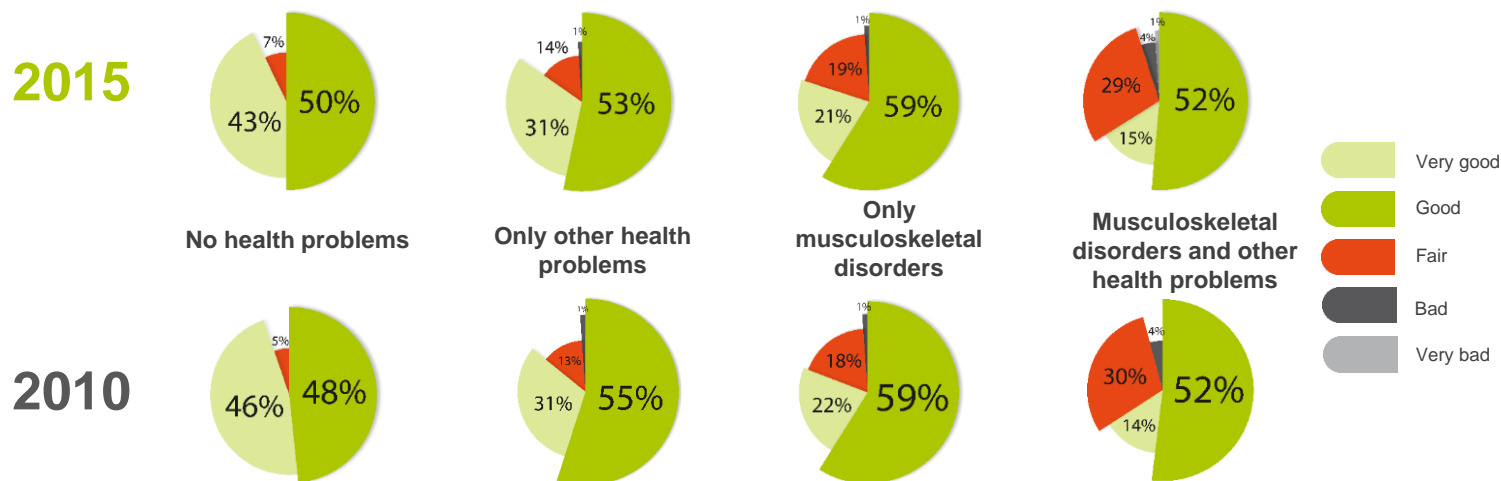
Source: Eurostat, European Statistics on Accidents at Work (ESAW)

# Impact of MSDs

- **MSDs have an impact on the general health of workers, for instance the proportion of workers with (very) good health is smaller for workers who suffer from MSDs**
- **Workers with MSDs tend to be absent from work more often than others**
- **Very high impact of MSDs in economic terms**
- **Lack of data on the economic impact of MSDs at EU level. Some data available at Member State level: More information available at:** EU-OSHA, Work-related musculoskeletal disorders: Facts and Figures — Synthesis report of 10 EU Member states reports, 2020 (AT, DE, DK, ES, FI, FR, HU, IT, NL and SE) <https://osha.europa.eu/en/publications/work-related-musculoskeletal-disorders-facts-and-figures-synthesis-report-10-eu-member/view>

# Workers with MSDs and Health

Proportion of workers with (very) good health is smaller for workers who suffer from MSDs (in the upper limbs, lower limbs and / or back)



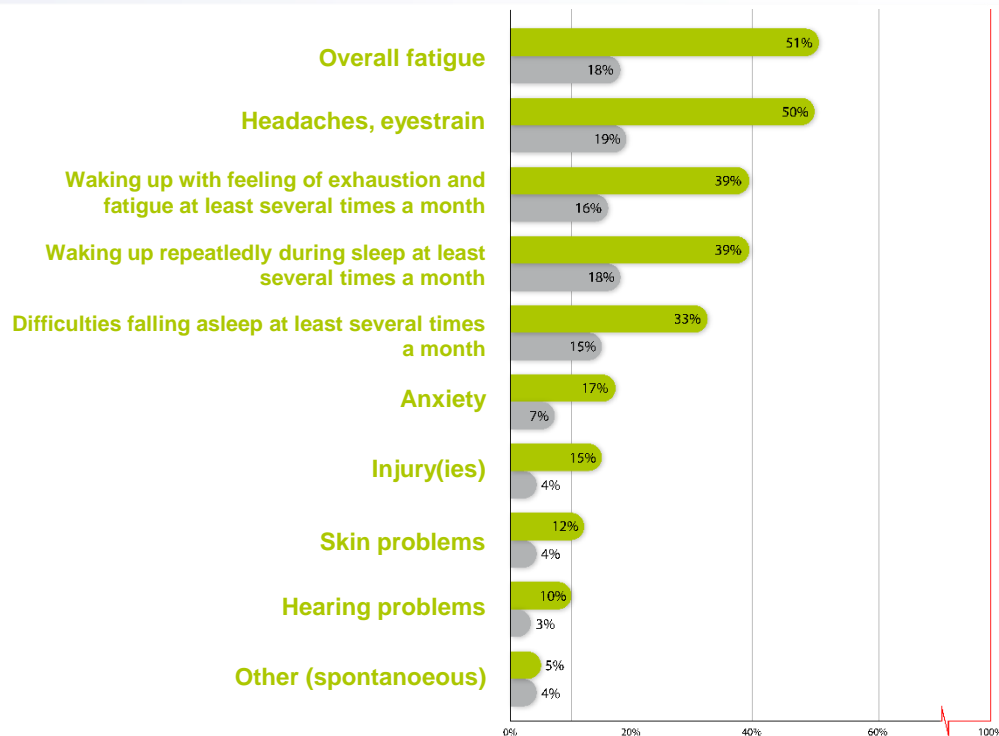
Percentage of workers reporting that their health is very good, good, fair, bad or very bad, by different health problems in the past 12 months, EU-28, 2010 and 2015

Source: Panteia based on the fifth (2010) and sixth (2015) waves of the European Working Conditions Survey (EWCS)

# MSDs and comorbidities

## Headaches, eyestrain, overall fatigue and sleeping problems affect the lives of workers who suffer from MSDs

Note: Musculoskeletal disorders refer to backache and/or muscular pains in shoulders, neck, upper limbs and/or lower limbs (hips, legs, knees, feet etc.)

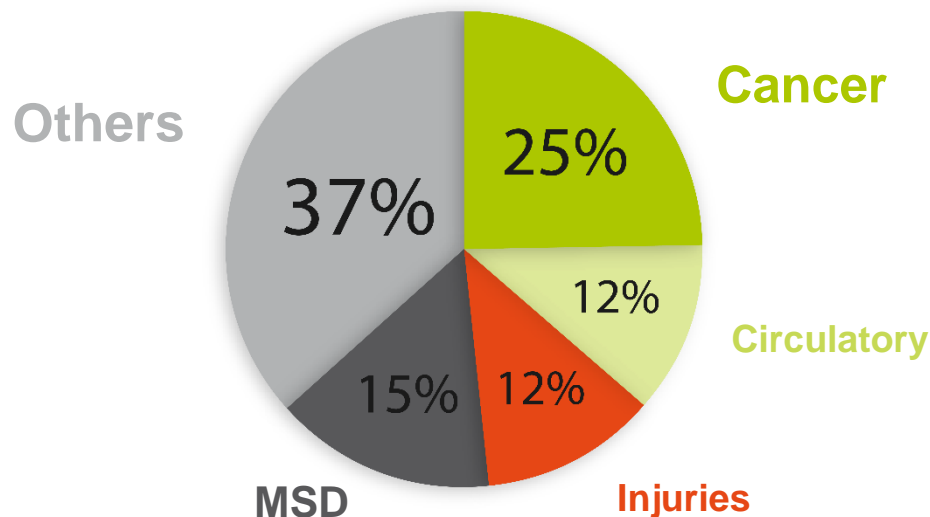


Percentage of workers reporting the different health problems that affect their life, by presence or absence of MSDs, EU-28, 2015

Source: Panteia based on the sixth (2015) wave of the European Working Conditions Survey (EWCS)

# Main work-related illnesses and DALYs

**Main work-related illnesses and DALYs (Years of life lost and lived with disability). Main part is due to cancer, followed by MSD**



Distribution of years of life lost and lived with disability (DALYs) per 100,000 workers, by main work-related illnesses, EU-28, 2017

Source: Panteia based on EU-OSHA, data visualisation (2017).

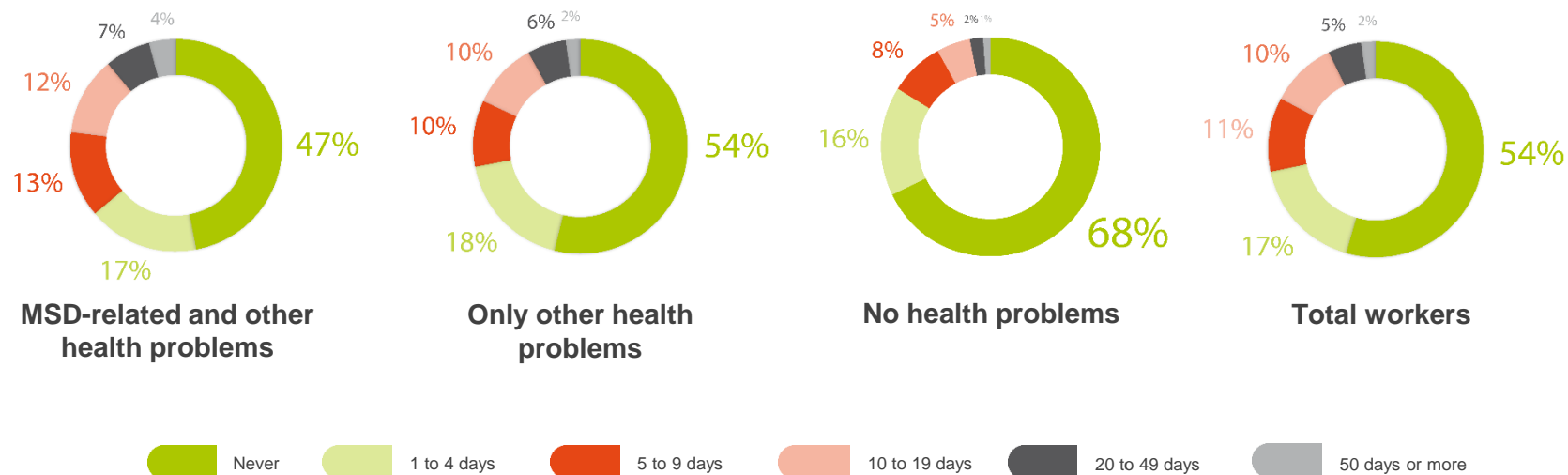
Available at: <https://visualisation.osha.europa.eu/osh-costs#!/eu-analysis-illness>

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# MSDs and Absenteeism

## Workers with MSDs tend to be absent from work more often than others

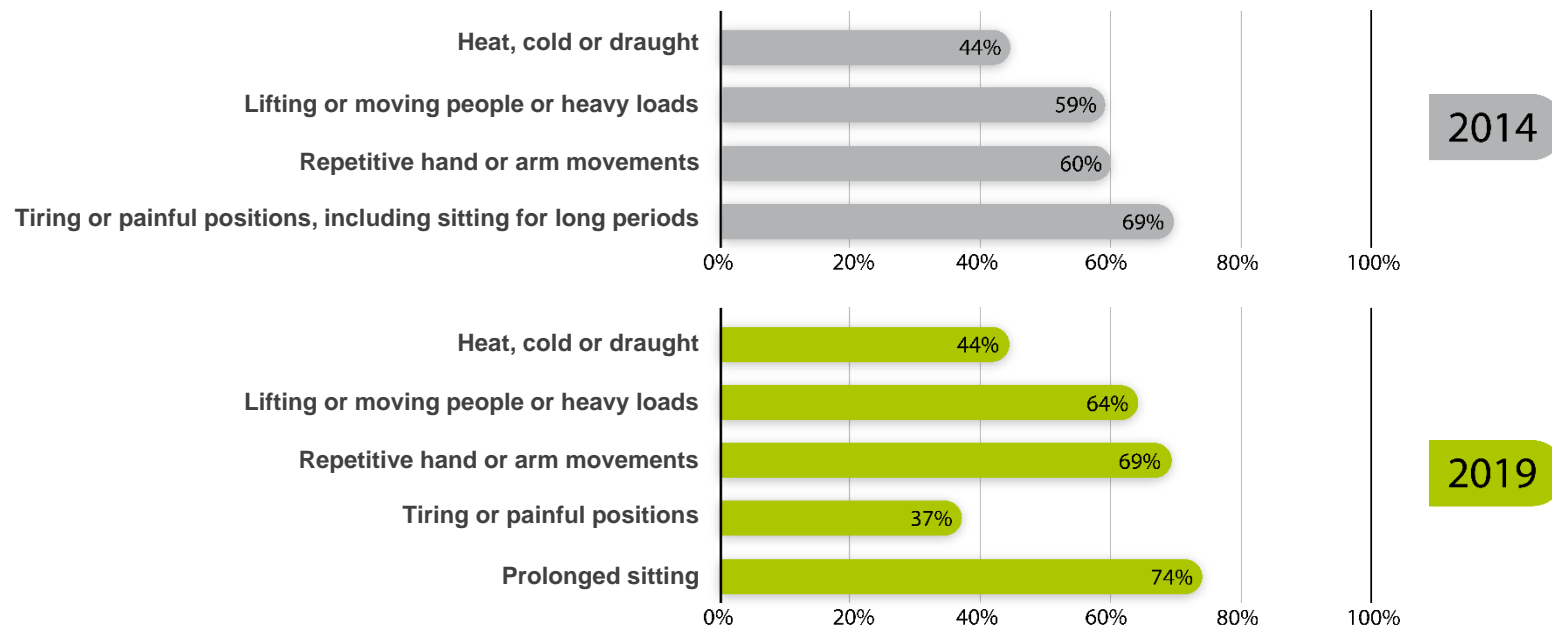


Number of days absent in the past 12 months due to a health problem: distribution of workers, for worker with MSDs and/or other health problems and without health problems, EU-28, 2015

# MSD-related risk factors

- **High prevalence of MSDs-risk factors in EU establishments**
- **Significant relationship identified between self-reported MSDs and some physical risk factors**
- **For most physical risk factors prevalence is slightly decreasing, except for working with computers, laptops, smartphones**
- **Significant relationship identified between self-reported MSDs and organisational and psychological risk factors**
- **Work-related stress applies to more than half of workers**

# Most prevalent MSDs-related risk factors present in EU establishments



Percentages of employees working in establishments where different physical risk factors are in place (% establishments, EU28, 2019 and 2014)

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"

Source: EU-OSHA based on ESENER 2014 and ESENER 2019. (ESENER – European Survey of Enterprises on New and Emerging Risks)

# Associations between self-reported MSDs and physical risk factors

Body Area	Significant relationship identified	
Back	<ul style="list-style-type: none"> <li>• Vibrations from hand tools</li> <li>• Working in tiring or painful positions</li> <li>• Carrying or moving heavy loads</li> <li>• Repetitive hand or arm movements</li> </ul>	<ul style="list-style-type: none"> <li>• Lifting or moving people</li> <li>• Working with computers, laptops, etc.</li> <li>• Sitting</li> <li>• Being exposed to low temperatures</li> </ul>
Lower limbs	<ul style="list-style-type: none"> <li>• Vibrations from hand tools</li> <li>• Working in tiring or painful positions</li> <li>• Carrying or moving heavy loads</li> <li>• Repetitive hand or arm movements</li> </ul>	<ul style="list-style-type: none"> <li>• Being exposed to low temperatures</li> <li>• Lifting or moving people</li> <li>• Working with computers, laptops, etc.</li> </ul>
Upper limbs	<ul style="list-style-type: none"> <li>• Vibrations from hand tools</li> <li>• Working in tiring or painful positions</li> <li>• Carrying or moving heavy loads</li> <li>• Repetitive hand or arm movements</li> </ul>	<ul style="list-style-type: none"> <li>• Being exposed to low temperatures</li> <li>• Lifting or moving people</li> <li>• Working with computers, laptops, etc.</li> <li>• Sitting</li> </ul>

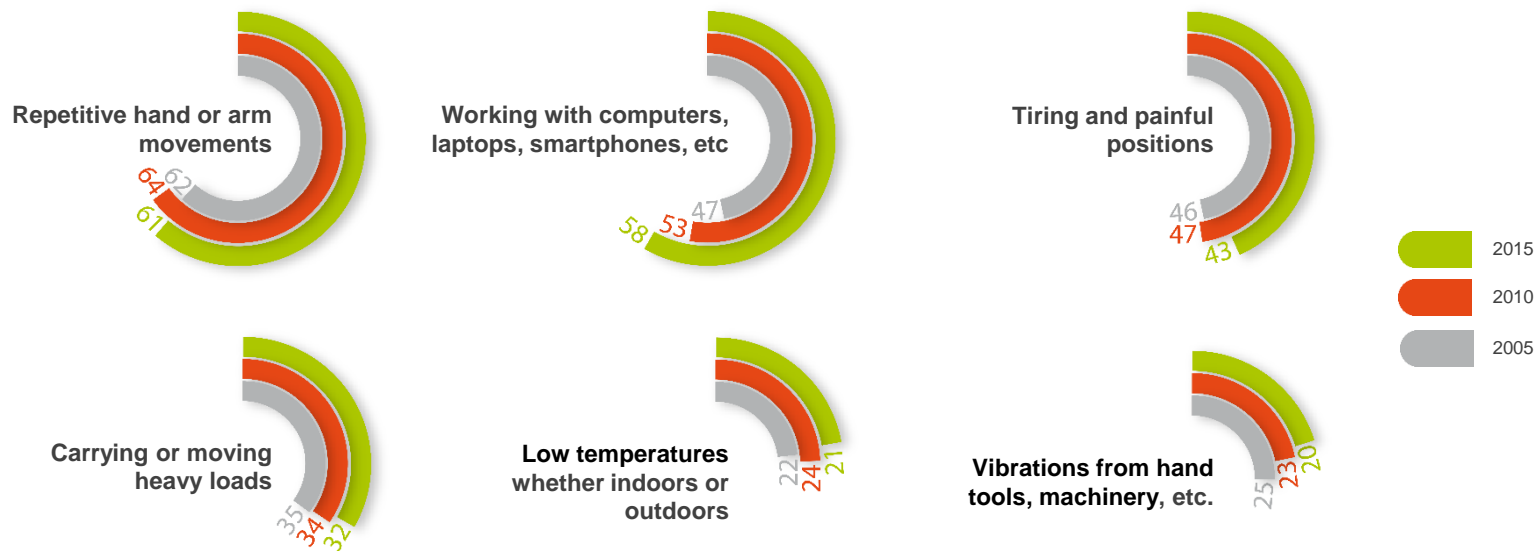
This table is based on the results of various binary logistic regressions that have been estimated to explain the prevalence of self-reported MSD complaints in the 6<sup>th</sup> (2015) wave of EWCS.

Source: Panteia, 2019

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# Physical risk factors

**For most physical risk factors prevalence is slightly decreasing, except for working with computers, laptops, smartphones**



Percentage of workers reporting that they are exposed to different physical risk factors at their work at least a quarter of the time, EU-28, 2005, 2010 and 2015

Source: Panteia based on the fourth (2005), fifth (2010) and sixth (2015) waves of the European Working Conditions Survey (EWCS)

# Associations between self-reported MSDs and organisational and psychosocial risk factors

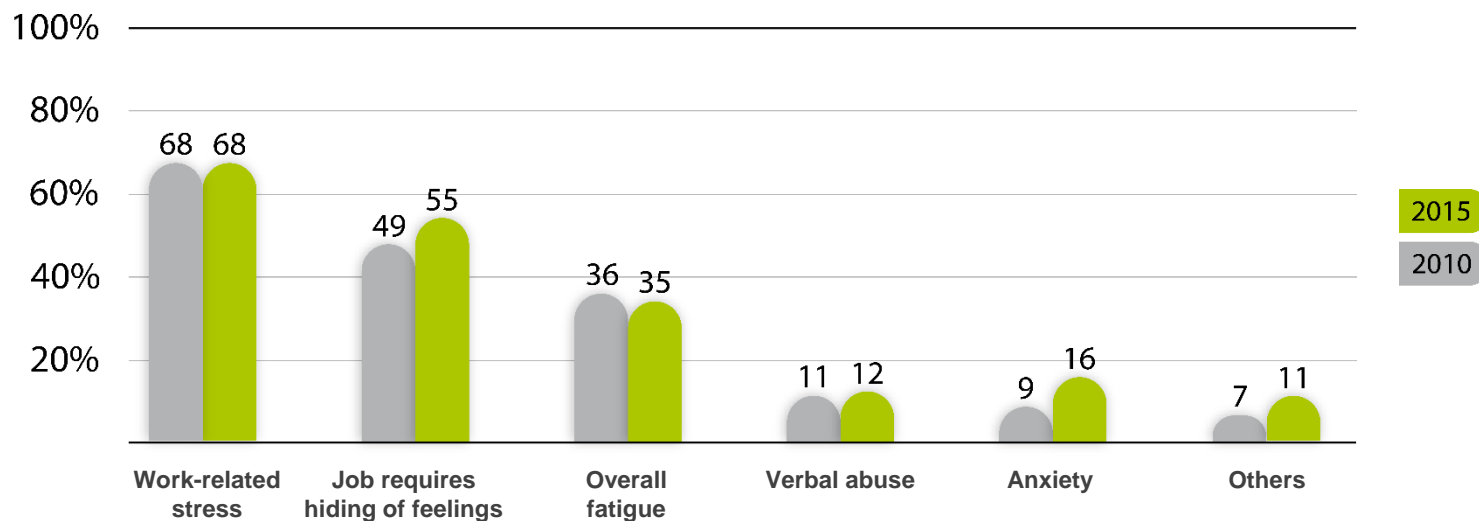
Body Area	Significant relationship identified	
Back	<ul style="list-style-type: none"> <li>• Anxiety</li> <li>• Overall fatigue</li> <li>• Sleeping problems</li> <li>• At work subjected to                             <ul style="list-style-type: none"> <li>– verbal abuse</li> <li>– unwanted sexual attention</li> <li>– bullying /harassment</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Mental well-being</li> <li>• Feeling energised</li> <li>• Knowing what is expected at work</li> <li>• Pace of work depends on                             <ul style="list-style-type: none"> <li>– direct demands from customers etc.</li> <li>– direct control by management</li> </ul> </li> </ul>
Lower limbs	<ul style="list-style-type: none"> <li>• Anxiety</li> <li>• Overall fatigue</li> <li>• Sleeping problems</li> <li>• Mental well-being</li> <li>• Feeling energised</li> </ul>	<ul style="list-style-type: none"> <li>• At work subjected to                             <ul style="list-style-type: none"> <li>– verbal abuse</li> <li>– unwanted sexual attention</li> </ul> </li> <li>• Knowing what is expected at work</li> <li>• Able to choose or change order of tasks</li> </ul>
Upper limbs	<ul style="list-style-type: none"> <li>• Anxiety</li> <li>• Overall fatigue</li> <li>• Sleeping problems</li> <li>• Mental well-being</li> <li>• At work subjected to                             <ul style="list-style-type: none"> <li>– verbal abuse</li> <li>– threats</li> <li>– physical violence</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Employee voice</li> <li>• Job gives the feeling of work well done</li> <li>• Take a break when you wish</li> <li>• Fairly treated at workplace</li> <li>• Job requires hiding of feelings</li> <li>• Work-related stress</li> <li>• Working at very high speed</li> </ul>

This table is based on the results of various binary logistic regressions that have been estimated to explain the prevalence of self-reported MSD complaints in the 6<sup>th</sup> (2015) wave of EWCS.

Source: Panteia, 2019

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# Work-related stress applies to more than half of workers



Percentage of workers reporting different organisational and psychosocial risks, EU-28, 2010 and 2015

Source: Panteia based on the fifth (2010) and sixth (2015) waves of the European Working Conditions Survey (EWCS)

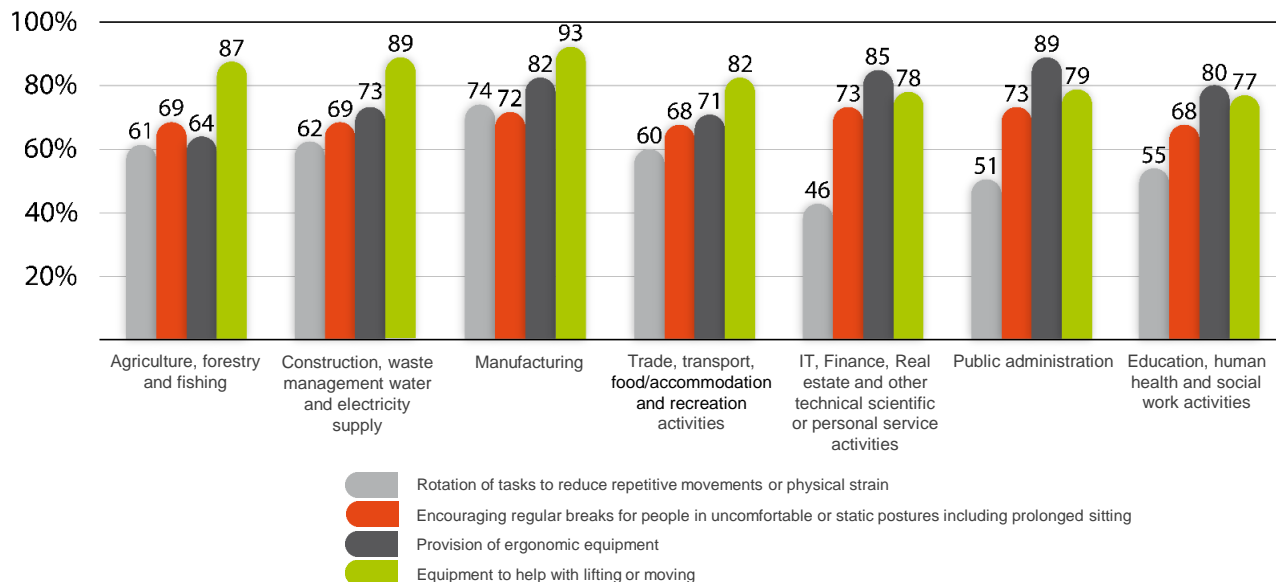
# MSDs Prevention

- **Most employees work in establishments where one or several preventive measures are in place**
- **Availability of preventive measures increases by establishment size**
- **On average 72% of enterprises have return to work measures after long-term sickness absence**
- **Preventive measures prove to be effective**



# Preventive measures

## Most employees work in establishments where one or several preventive measures are in place

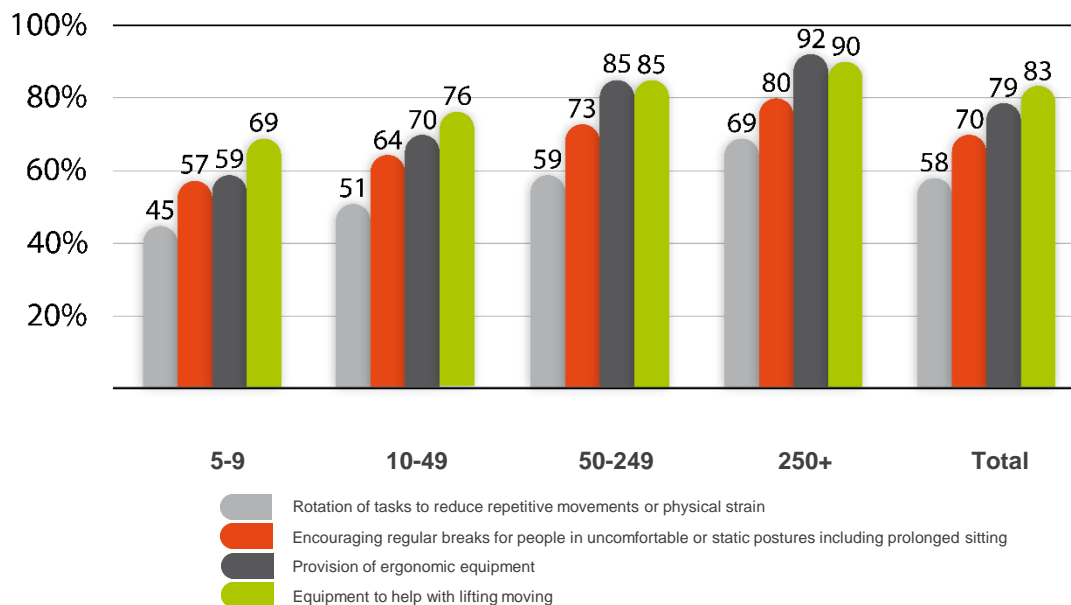


Percentage of employees working in establishments where different preventive measures are in place, by sector EU-28, 2019

Source: EU-OSHA based on ESENER 2019. (ESENER – European Survey of Enterprises on New and Emerging Risks)

# Preventive measures by establishment size

## Availability of preventive measures increases by establishment size

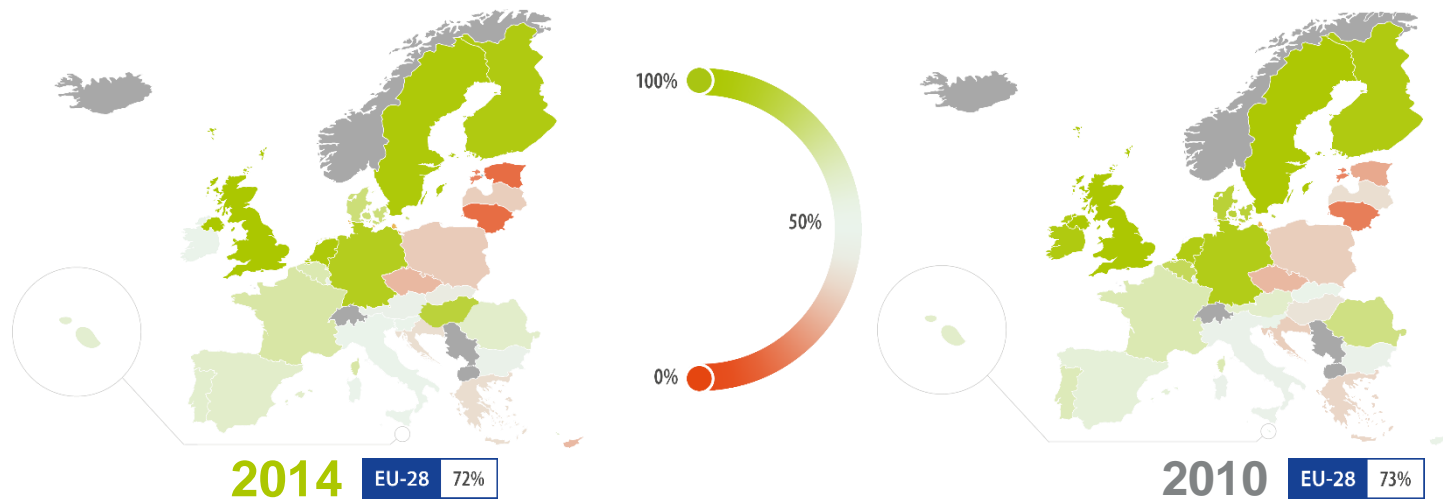


Percentage of employees working in establishments where different preventive measures are in place, by establishment size, EU-28, 2019

Source: EU-OSHA based on ESENER 2019. (ESENER – European Survey of Enterprises on New and Emerging Risks)

# Return to work measures

**On average 72% of enterprises have return to work measures after long-term sickness absence. However large country differences**



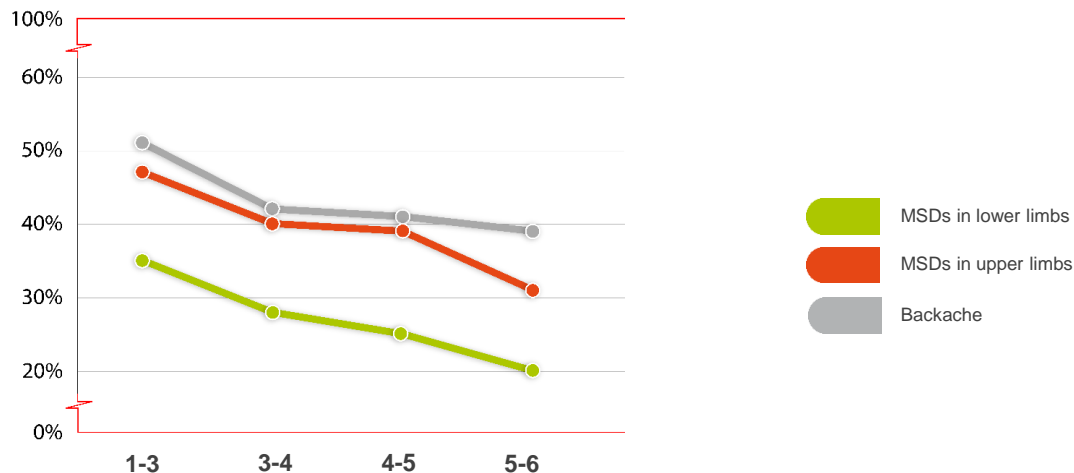
Percentage of employees working in establishments with support measures for employees in place to return to work after a long-term sickness, by country, EU-28, 2014 and 2019

Source: EU-OSHA based on ESENER 2014 and ESENER 2019

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# Preventive measures prove to be effective

## Workers in countries and sectors where more preventive measures are in place are less likely to report MSD complaints



Percentage of workers having MSDs in back, upper limbs and lower limbs, by average number of precautionary measures in place, EU 28, 2015.

Source: Panteia based on sixth (2015) wave of European Working Condition Survey (EWCS) and second European Survey of Enterprises on New and Emerging Risks (ESENER 2014)

# Join us and lighten the load!

- Find out more on the campaign website:  
[healthy-workplaces.eu](https://healthy-workplaces.eu)
  - Subscribe to our campaign newsletter:  
<https://healthy-workplaces.eu/en/healthy-workplaces-newsletter>
-     [#EUhealthyworkplaces](https://twitter.com/EUhealthyworkplaces)
- Keep up to date with activities and events through social media: