

# Work-related Musculoskeletal Disorders, and Stress, Anxiety and Depression in Ireland:

Evidence from the QNHS 2002–2013

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This document is a  
summary version of the  
report named. The full  
report is available to  
download at [www.esri.ie](http://www.esri.ie)





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## About this report

This report builds on information about work-related accidents and illness gathered in the Quarterly National Household Survey (QNHS) carried out by the Central Statistics Office (CSO) every year. Our analysis covers the period 2002 – 2013.

We examined the information gathered by the survey and identified two categories of work-related illness that became the focus of our in-depth analysis.

These are:

- **musculoskeletal disorders (MSD)** – disorders related to soft tissue and bones that affect the body’s movement, and
- **stress, anxiety and depression (SAD)** – different mental health issues that can affect thinking, emotions, and behaviour to varying degrees and severity.

We considered these categories worthy of further examination and analysis as they represented the largest categories of work-related illness **reported by workers themselves**. We wanted to identify problems and trends, so that health and safety procedures can be refined and improved in the future.

## Why is this report necessary?

In 2013, about 55,000 workers in Ireland suffered from a work-related illness, and over 790,000 days of work were lost (HSA, 2015). A ‘work-related illness’ is defined as any physical or mental illness caused or aggravated by work.

Work-related illness affects not only the individuals themselves, but also their families, their employers, the health system and, therefore, the wider economy and society.

Over the period 2002 to 2013, MSD and SAD accounted for 68% of work-related illness in Ireland. No study has been undertaken in Ireland to find out how much this costs our economy, but studies in the UK found that MSD could be costing their economy about £10 billion (€11.2 billion) every year, and SAD between £7 – £13 billion (€7.8 – €14.5 billion) every year.

It is important, therefore, because of the high occurrence rate and the associated high cost, to focus on MSD and SAD with a view to improving worker health and wellbeing, and reducing the number of working days lost.

## What research information does this report cover?

The study addresses two main questions:

- How did trends in musculoskeletal disorders (MSD), and stress, anxiety and depression (SAD) develop as the Irish economy went through a period of economic growth (2002–2007), recession (2008–2011) and early recovery (2012–2013)?
- What are the contributing socio-demographic and work characteristic factors that increase the risk of MSD and SAD?

Using these questions as our guide, we analysed the survey information by focusing on:

- the characteristics (gender, age and nationality) of those reporting work-related MSD and SAD,
- the frequency and duration of absences from work caused by MSD and SAD, and
- the trends and predictors of MSD and SAD.

## How was the report completed?

We used the information on work-related accidents and illness gathered by the Quarterly National Household Survey (QNHS) over the period 2002 – 2013 as the main source of material for our analysis. In one quarter of each year – usually the first quarter – the QNHS includes a special section on work-related accidents and illnesses.

This special section is restricted to people who are in employment at the time of the survey, or had been employed in the previous 12 months. The questions relate to accidents and illnesses that have occurred in the 12 months leading up to the survey, and focus on gathering information about two specific issues:

- work-related injuries, and
- work-related illnesses.

Interviews with survey participants are carried out in the participants' own homes, so they can talk freely and not fear a backlash from their employer. In all, we used 162,000 cases over the 2002 – 2013 period for our analysis. We did not use interviews that gave 'proxy' information – that is, second-hand information where questions were answered on someone else's behalf.

Over the years in question, the survey questions changed slightly – for example, the order of questions may have changed, or the wording may have been slightly different. Perhaps the most significant difference in wording occurred in 2012 when specific mention of ‘mental health’ appeared in a question for the first and only time.

We included all reports of MSD and SAD even if the participant had not been absent from work or had not attended a doctor.

## What were the main findings?

The report covers the years 2002 – 2013 which reflects a period of exceptional change in the Irish economy, which went from strong employment growth to deep recession. The number of people in employment peaked at 2,169,000 in 2007 but this was followed by a low of 1,825,000 workers in 2012.

During the period under review, the following main features of work-related MSD and SAD were observed.

- Trends in MSD rates followed the pattern of boom and bust in the economy. The rate went from 11 per 1,000 workers in 2002 to 20 per 1,000 in 2006. The rate then fell during the recession to a low of 7 per 1,000 workers in 2009, before rising again to 14 per 1,000 in 2013.
- SAD rates did not appear to reflect the economic ups and downs. Throughout the period, the SAD rate averaged at about 4 per 1,000 workers. This rose in 2012 due to the change in wording in the survey question – where ‘mental health’ was mentioned for the first and only time.
- Men are more likely than women to report MSD, but this is explained by the difference in the kind of jobs and hours of work that men and women typically do. When this is taken into account, there is no significant gender gap.

- Women are more likely to report SAD illnesses no matter what kind of work they are engaged in.
- Non-Irish workers have a significantly lower rate of MSD than native Irish workers. This does not hold true for SAD illnesses.
- Both MSD and SAD are strongly associated with age:
  - o **MSD** – over 25s are at higher risk than the under 25s
  - o **SAD** – the rates peak in the 35 – 54 age group
- The risk of MSD is highest for workers in the construction, agriculture and health sectors.
- The risk of SAD is highest in the service sector – particularly for those working in education.
- Those working long hours and new recruits are at a higher risk of SAD.
- Personal service workers, skilled manual workers, new recruits and the self-employed are at higher risk of MSD illnesses.
- Shift workers and night workers have a higher risk of experiencing MSD, and shift workers also face a higher risk of SAD.
- The average absence from work is slightly longer for those who experienced SAD (17 days) compared to those with MSD (16 days). In both cases a substantial proportion of workers did not take leave from work due to one of these illnesses: 50% in the case of MSD and 43% in the case of SAD.



## What are the recommendations?

### Future surveys

- Future QNHS questionnaires should pay particular attention to the wording of the question about work-related illness. In the 2012 survey when the wording was changed and mental health was specifically mentioned, the rate rose dramatically. This suggests that mental health issues are under-reported in the surveys before and after this point. Including a dedicated question about mental health in future surveys would provide valuable information.
- The QNHS lacks detail in certain aspects. For example, it offers little detail about work tasks or work pressure. A new round of the National Workplace Survey, which was previously carried out in 2005 and 2009, could provide much needed evidence on these issues and their relationship to self-assessed health and work-related illness.
- To get a better, more accurate picture of work-related illnesses and their impacts, different types of survey approaches should be considered. A 'longitudinal' study – that is, a study that examines an issue over a long period of time – would give a more accurate and detailed picture of how work influences people's health in the short and longer term.

### Policy

- Monitoring and preventing MSD in the workplace needs to broaden its scope to include groups of workers who the study now identifies as being 'high risk' – for example, self-employed workers and new recruits.
- The age profile of the average worker is changing. For example, the proportion of workers over 55 rose to 16% in 2013 from 11% in 1998. Therefore, the ageing workforce needs to be considered in terms of the length of the working day and the physical demands of the job.
- This study found that higher workplace inspection rates were linked to lower levels of MSD. Increased inspections, therefore, could be an important element of MSD prevention.

- Long hours of work are strongly associated with SAD, which suggests that action to minimise very long working hours should be taken. Therefore, it is important to enforce existing legislation on excessive working hours and tackle the culture of working ‘long hours’.
- For sectors and occupations where a higher risk of SAD has been identified, there is value in conducting audits of stress-related hazards – for example, work demands, organisation of work hours, control over work, work-family spillover or conflict, and work relationships (support or conflict).
- Supporting employers by raising awareness and improving risk assessment of psychosocial risks (stress, conflict, depression, and so on) is important to prevent illness and manage SAD rates.
- The stress audit tool for organisations called Work Positive, developed by the HSA and Health Scotland, could be reviewed and expanded to help organisations identify possible causes of stress at work. Other communications tools – such as workshops and publications for employers and employees – would also promote awareness to prevent and manage risks.



## Where can I get further information?

You can download the full report “Work-related Musculoskeletal Disorders, and Stress, Anxiety and Depression in Ireland: Evidence from the QNHS 2002–2013” from the ESRI website – [www.esri.ie](http://www.esri.ie)

You might also find the following list of web pages useful for general information on MSD and SAD.

Health and Safety Authority

[www.hsa.ie/eng/Publications\\_and\\_Forms/Publications/Manual\\_Handling\\_and\\_Musculoskeletal\\_Disorders/Guide\\_on\\_Prevention\\_and\\_Management\\_of\\_Musculoskeletal\\_Disorders\\_MSDs\\_.pdf](http://www.hsa.ie/eng/Publications_and_Forms/Publications/Manual_Handling_and_Musculoskeletal_Disorders/Guide_on_Prevention_and_Management_of_Musculoskeletal_Disorders_MSDs_.pdf)

Arthritis Ireland

[www.arthritisireland.ie/go/fit\\_for\\_work/msds/types\\_of\\_msds](http://www.arthritisireland.ie/go/fit_for_work/msds/types_of_msds)

Mental Health Ireland

[www.mentalhealthireland.ie/a-to-z/stress/](http://www.mentalhealthireland.ie/a-to-z/stress/)

[www.mentalhealthireland.ie/workplace/](http://www.mentalhealthireland.ie/workplace/)

### Further Information and Guidance:

Visit our website at **[www.hsa.ie](http://www.hsa.ie)**, telephone our contact centre on **1890 289 389** or email **[wcu@hsa.ie](mailto:wcu@hsa.ie)**

Use BeSMART, our free online risk assessment tool at **[www.besmart.ie](http://www.besmart.ie)**

Check out our range of free online courses at **[www.hsalearning.ie](http://www.hsalearning.ie)**

