

Trends and Patterns in Occupational Health and Safety in Ireland

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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





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About this report

This report examines changes in occupational illnesses, non-fatal injuries and fatal injuries in Ireland between 2001 and 2012. For the purposes of this report:

- work-related injuries include any injuries incurred by workers in the course of their work, ranging from minor injuries that did not involve any absence from work to the most serious injuries that resulted in death; and
- work-related illness includes physical or mental health problems that have been caused or made worse by work.

Why is this report necessary?

Occupational injuries and ill-health impose significant burdens on individuals, families, employers, the economy and society. The most extreme consequences of work-related injuries and illness involve cases where workers or members of the public lose their life. Work-related accidents continue to claim the lives of around 50 people a year in Ireland, and these workers and their families pay the ultimate price for unsafe working conditions or practices. Therefore, understanding the factors associated with occupational injury and ill-health is important in terms of prevention and in targeting interventions.

In relation to the economic consequences, in 2011 alone, we estimated that over 590,000 working days were lost due to occupational accidents, and a further 596,000 days were lost due to work-related illness (HSA, 2014). The costs for society and the economy not only include lost productivity, but also compensation schemes for affected workers. For example, in 2011 expenditure on Occupational Injury Benefit amounted to €16.5 million, and expenditure on Disablement Benefit was €77.5 million (Department of Social Protection, 2012).

Given the scale of these effects, it is important to understand the factors that are associated with these outcomes and how risks have changed over time.

There are a number of longer-term trends in the Irish labour market that may influence workplace illnesses or injuries. These include the shift away from manufacturing and agriculture to service sector employment, the rise in female employment, increased participation of migrant workers, and the growth in part-time and other non-standard contracts of employment.

The European Agency for Safety and Health at Work has also identified the ageing workforce, new forms of employment contracts, high emotional demands at work, work intensification and poor work-life balance as key emerging psychosocial risks for the occupational health and safety of workers. Lack of physical activity and combined exposure to musculoskeletal disorders (MSDs) and psychosocial risk factors were identified among the top emerging physical risks.

These changes and emerging trends are likely to have significant implications for occupational health, safety and well-being at work in the future.

What research information does this report cover?

The study addresses two main questions:

1. How has the likelihood of experiencing a work-related injury or illness changed over the period 2001 to 2012?
2. What factors are important in accounting for the risk of work-related injury and illness – for example, work characteristics, personal characteristics, and changes in the economy?

To address these questions, we used several sources of information. No single source provides a comprehensive picture of occupational injury and illness; therefore, for this report, we examined information from two main sources, namely:

- The Quarterly National Household Survey (QNHS) Module on Work-Related Accidents and Illness compiled by the Central Statistics Office (CSO)

- The Health and Safety Authority (HSA) database of reported injuries and fatalities

We also examined figures provided by the Department of Employment Affairs and Social Protection on the number of claims made by insured workers who were injured at work, and we used statistical information from Eurostat – the statistical agency of the European Union that compiles statistics based on injury data supplied by Member States.

How was the report completed?

The primary source of information for this report came from the QNHS Module on Work-Related Accidents and Illness which is conducted by the CSO. We used the results of the surveys carried out in the years 2002 to 2013, which give information relating to people who had been in employment in the preceding 12 months. The QNHS is usually undertaken in the first quarter of each year, and statistics from the survey are published annually.

In this report, however, the information from the work-related accidents and illness sections of the survey for the years in question was combined for the first time. This allowed us to get a better overall picture of the changes and trends over a longer timeframe. This new approach was particularly valuable, as the years in question cover an extremely unstable period in the Irish labour market. The years 2001 to 2007 saw a period of exceptional growth, followed by deep recession from 2008 to 2012. The period also featured changes in the gender, nationality and age composition of the workforce. It was useful, therefore, to amalgamate the annual information to yield a more thorough and accurate analysis.

What were the main findings?

In relation to the first research question, we examined the information in two ways. First, we analysed the overall rates of injury and illness in relation to employment sectors and gender.

This analysis yielded the following findings:

- The injury rate fell from 29.6 per 1,000 workers in 2001 to 18.9 per 1,000 workers in 2012.
- The illness rate increased from 21.7 per 1,000 workers in 2001 to 27.1 per 1,000 workers in 2012.
- The injury rate for men fell more rapidly than for women between 2001 and 2012, while the increase in the illness rate was more marked for women.
- Over the period, the highest injury rates were found in five economic sectors: agriculture/forestry/fishing, industry, construction, transportation/storage, and human health and social work activities.

For our second analysis, we grouped the data into two periods – one representing the boom period (2001-2007) and the other covering the recession (2008-2012). The main finding was that the recession period in Ireland was associated with a significantly lower probability of occupational injury and illness than the boom period. This was not due to there being fewer people at work or a change in the types of jobs.

In relation to the second research question, we analysed the risks of injury and illness in relation to certain factors – worker characteristics, job characteristics and occupation sectors. The main findings in relation to each of these factors are presented below.

Worker characteristics:

- Men are significantly more likely to experience work-related injuries than women – even when differences in occupations and working conditions are taken into account.
- The odds of injury decrease with age – that is, older workers are at lower risk of injury.

- Non-Irish workers are less likely to experience work-related injury.
- During the economic boom, there was no difference between men and women in the likelihood of suffering work-related illness. However, during the recession years, women were more likely than men to experience work-related illness.
- The likelihood of work-related illness increases with age.

Job characteristics:

- Longer working hours are associated with a higher probability of both injury and illness. However, those working a short number of hours (less than 20 hours a week) have the highest risk per hour worked.
- Highly variable working hours were also linked to higher risk of injury and illness. This result is important in light of the debate around zero-hour and minimum hours contracts.
- Those working shifts were found to have 1.6 times greater risk of injury than those working stable hours.
- Those working nights were 1.2 times more likely to have an accident than those working daytime hours.
- Those working more than 40 hours a week were 1.3 times more likely to have an accident than those working less than 30 hours.
- Long working hours and variable working hours are more common among self-employed workers, but the self-employed do not differ from employees in their risk of non-fatal injury or illness.
- The self-employed accounted for more than the average number in the fatal injury statistics. This is linked to the concentration of self-employed workers in the farming and construction sectors.

- Job experience – that is, the length of time a worker is doing the job – has a significant bearing on the risk of injury. Those holding a job for less than six months are four times more likely to experience a workplace injury than those who have been in the job for over five years.

Occupation sectors:

- The risk of work-related injuries is persistently higher in construction; farming, forestry and fishing; human health and social work activities; and industry.
- The difference in the risk of injury in the boom and the recession is widest in the agricultural sector, the industry sector, the construction sector and the retail sector.
- The risk of occupational ill-health is greater in the agriculture, construction, transport and health sectors.
- The relationship between boom or recession time periods and occupational illness varies somewhat across sectors.
- Workplace inspection was found to be associated with lower rates of injury and illness, and this effect was stronger among new recruits.

It is also important to present our findings in relation to work-related fatalities. These findings come from an analysis of the Health and Safety Authority's database.

- The fatality rate has been halved over the period 1998 to 2013, from 4 per 100,000 workers to 2 per 100,000 workers.
- During the period under review, the highest fatality rates were in the agriculture, forestry and fishing sectors, with very large variation ranging from 12.5 per 100,000 workers in 2009 to 30.5 per 100,000 workers in 2010.
- Over the period 2004 to 2013, the fatality rate increased significantly in the agriculture sector, despite an overall decline in workplace fatality rates.

What are the recommendations?

- Investment in training and mentoring of new recruits could help to reduce the number of work-related injuries.
- The underlying factors associated with risks in the high-risk sectors should be the focus of further research and future policy.
- Educating employers and employees on the injury and illness risks associated with variable working hours, shift hours and working nights would be important in informing prevention strategies.
- Action is needed to increase the reporting of self-employed workers and to improve protection for this group.



- Health and Safety inspections reinforcing the legislation are found to improve the risk figures. However, the number of inspections per 1,000 workers has declined in recent years. It is important that there is no further decline in the inspection rate as it could have negative consequences for workers.
- Another National Workplace Survey would be useful to provide detail on work tasks, work environment and working conditions, all of which would help to inform overarching policies. The last National Workplace Survey was conducted in 2009.

Where can I get further information?

You can download the full report “Trends and Patterns in Occupational Health and Safety in Ireland” from the ESRI website – www.esri.ie

You might also find the following web pages useful for general information on workplace risks and working conditions in Ireland.

Health and Safety Authority

www.hsa.ie/eng/Publications_and_Forms/Publications/Healthcare_Sector/Night_and_Shift_Work_2012.pdf

www.hsa.ie/eng/Topics/Inspections/enforcement/HSA_Inspections/

Chartered Institute of Personnel and Development (CIPD)

www.cipd.ie/news-views/news-articles/casual-temporary-workers

Further Information and Guidance:

Visit our website at www.hsa.ie, telephone our contact centre on **1890 289 389** or email wcu@hsa.ie

Use BeSMART, our free online risk assessment tool at www.besmart.ie

Check out our range of free online courses at www.hslearning.ie

