



HEALTH AND SAFETY
AUTHORITY



Summary of Workplace Injury,
Illness and Fatality Statistics

2015-2016

2015-2016

Our Vision:

healthy, safe and productive lives

Acknowledgements

The results presented in this report come from analysis prepared by Oona Kenny, Bertrand Maître and Helen Russell of the Economic and Social Research Institute (ESRI) as part of a multi-annual research programme called *Health, Safety and Wellbeing at Work*, involving the Health and Safety Authority (HSA) and the ESRI. We would like to thank the members of the research steering group for their valuable input into the research. We are very grateful to the Central Statistics Office (CSO) for the provision of statistical release from the Quarterly National Household Survey (QNHS) for analysis and for the expertise provided by Damien Lenihan of the labour market statistics division.

Abbreviations

COPD	Chronic obstructive pulmonary disease
CSO	Central Statistics Office
ESAW	European Statistics on Accidents at Work
ESRI	Economic and Social Research Institute
HSA	Health and Safety Authority
ILO	International Labour Organization
ISCO	International Standard Classification of Occupations
NACE	<i>Nomenclature statistique des activités économiques dans la Communauté Européenne</i> (Statistical Classification of Economic Activities in the European Community)
OIB	Occupational injury benefits
QNHS	Quarterly National Household Survey
RTA	Road traffic accidents

Contents

Acknowledgements	ii
Abbreviations	ii
1 Introduction, overview and methodology	4
1.1 Introduction	5
1.2 Overview For 2014–2016	5
Non-fatal injury	5
HSA figures	6
CSO module results	6
Work-related illness	7
Fatal injuries	7
Implications	8
Findings from other sources	9
1.3 Data sources and methodology	10
Health and Safety Authority (HSA)	10
QNHS module on work-related accidents and illness	11
Eurostat statistics	12
Occupational injury benefit statistics	12
1.4 Calculating accident, illness and fatality rates	13
1.5 Technical Notes	13
2 Non-fatal injury and illness statistics	14
2.1 General injury and illness statistics	15
Figure 2.1: Injuries reported to the HSA, 2005–2016	15
Figure 2.2: Injuries reported by economic sector, 2016 (HSA)	
Figure 2.3: Numbers employed in each economic sector, 2009–2015, four-quarter average (Data based on CSO statistical release May 2017)	16
Figure 2.4: Number and rate of people suffering injury and illness, 2009–2015 (CSO)	17
Figure 2.5: Rate of and rolling average for injury and illness causing 4+ days lost per 1,000 workers, 2008–2015 (CSO)	18
Figure 2.6: Rate of injuries (any days lost) per 1,000 workers by economic sector, 2015 (CSO)	18
Figure 2.7: Rate of 4+ day injuries per 1,000 workers in selected sectors, 2008–2015 (CSO)	19
Figure 2.8: Rate of illness (any days lost) per 1,000 workers by economic sector, 2015 (CSO)	19
Figure 2.9: Occupational injury benefit claims (DSP), 2000–2016	20
Figure 2.10: Rate of 4+ day injuries per 100,000 workers in the EU15 zone, 2014 (Eurostat)	21
2.2 Victim statistics	22
Figure 2.11: Number and rate of injury/illness (0+ days) per 1,000 workers by economic sector and gender, 2015 (CSO)	22

Contents (cont'd)

Figure 2.12: Rate of total injury (0+ days) per 1,000 workers by gender, 2008–2015 (CSO)	23
Figure 2.13: Rate of total illness (0+ days) per 1,000 workers by gender, 2008–2015 (CSO)	23
Figure 2.14: Rates of total injury and total illness (0+ days) per 1,000 workers by age band, 2015 (CSO)	24
Figure 2.15: Rates of total injury and total illness (0 + days) per 1,000 workers by occupation, 2015 (CSO)	24
Figure 2.16: Proportion of reported non-fatal injuries by employment status, 2016 (HSA)	25
Figure 2.17: Workers by nationality and economic sector, 2015 (CSO statistical release May 2017)	25
Figure 2.18: Proportion of reported non-fatal injuries by nationality, 2016 (HSA)	26
2.3 Nature of accidents and type of injuries sustained	27
Figure 2.19: Proportion of reported non-fatal injuries by trigger, 2016 (HSA)	27
Figure 2.20: Number and percentage of non-fatal accidents by trigger, selected sectors, 2016 (HSA)	27
Figure 2.21: Injury type by gender, 2015 (CSO)	28
Figure 2.22: Illness type by gender, 2015 (CSO)	28
Figure 2.23a: Most injured body parts, 2016 (HSA)	28
Figure 2.23b: Most injured body parts, workers, 2016 (HSA)	29
Figure 2.24: Percentage of non-fatal injuries by absence from work, 2016 (HSA)	29
2.4 Work environment statistics	30
Figure 2.25a Reported non-fatal injuries by work environment, 2016 (HSA)	30
Figure 2.25b Reported non-fatal injuries by work environment, 2016 (HSA)	30
Figure 2.26: Reported non-fatal injuries (%) by size of employing organisation, 2016 (HSA)	31
Figure 2.27: Number of non-fatal injury reports by county, 2016 (HSA)	32
Figure 2.28: Rate of illness and injury by region, 2015 (CSO)	33
Figure 2.29: Number and rate of people suffering injury (0+ days) and illness (0+ days) by region, 2015 (CSO)	33
3 Fatal injury statistics	34
Figure 3.1: Rate of worker fatalities per 100,000 workers 1998–2016 (HSA)	35
Figure 3.2: Number of reported fatalities by economic sector (worker and non-worker), 2016 (HSA)	35

Contents (cont'd)

Figure 3.3: Number of reported fatalities (worker and non-worker) by economic sector, 2009–2016 (HSA)	36
Figure 3.4: Rate of reported worker fatalities by economic sector, 2016 (HSA)	37
Figure 3.5: Comparison of fatality rates in selected sectors, 2009–2016 (HSA)	37
Figure 3.6: Percentage of reported fatal injuries by employment status, 2016 (HSA)	38
Figure 3.7: Number of reported fatalities (worker and non-worker) by economic sector and age band, 2016 (HSA)	38
Figure 3.8: Number of reported fatalities (worker and non-worker) by age band, 2016 (HSA).	39
Figure 3.9: Number of reported worker fatalities by nationality and economic sector, 2016 (HSA)	39
Figure 3.10: Percentage of reported worker fatalities by nationality, 2016 (HSA)	40
Figure 3.11: Reported worker fatality rates (per 100,000 workers) by nationality, 2009–2016 (HSA)	40
Figure 3.12: Number of fatalities (worker and non-worker) by accident trigger, 2016 (HSA).	41
Figure 3.13: Number of reported fatalities (worker and non-worker) by region, 2009–2016 (HSA)	42
Figure 3.14: Worker fatality rates per 100,000 workers in the EU15 Zone, 2014 (Eurostat)	42
Appendix – Classification of economic activities	43
References	48



1

Introduction, overview and methodology

.....



1.1 Introduction

The following tables and graphs outline the most recently available statistics on occupational injury, illness and workplace fatalities in Ireland. The figures provide key descriptive information on the characteristics of workers who experience work-related injuries and illness, namely their age group, gender, nationality and employment status (self-employed/employee)¹. The tables also present information on the distribution of injuries and illnesses by the attributes of jobs and organisations, such as sector of economic activity, firm size and occupation. Information on the nature of the incident is also outlined, including the injury trigger, the nature of the injury/illness and the work environment in which it occurred. Trend data on the rates of injury and illness are derived using consistent methods so that the changes over time can be tracked.

The annual statistics report presents an overview of work-related injuries and illness in Ireland. Additional research provides insights into the types of factors and work experiences that lie behind the broad statistical picture (see Russell *et al.*, 2015; Russell *et al.*, 2016; Watson *et al.*, 2015; Watson *et al.*, 2017). These studies were carried out as part of a research programme involving the Health and Safety Authority (HSA) and the Economic and Social Research Institute (ESRI), and use statistical modelling to unpack different, often overlapping, influences. For example, men and women tend to be concentrated in different industrial sectors and this influences patterns of occupational injury and illness by gender (Russell *et al.*, 2015). These research reports complement the descriptive information presented here and provide further analysis of the risk factors and trends over time, including the risk factors for the two largest categories of work-related illness: musculoskeletal disorders and stress, anxiety and depression (Russell *et al.*, 2016). Other research undertaken as part of this programme has examined the exposure of Irish workers to different types of workplace risks – physical risks, chemical/biological risks, physically demanding work and psycho-social risks – comparing the situation in Ireland to that in other countries across the EU (Watson *et al.*, 2015). The most recent study highlights the higher rate of risks taken by some farmers and finds that more than one-third reported an accident or near miss on the farm and that this was more likely on larger farms (Watson *et al.*, 2017).

Section 1.2 outlines some of the main findings from the statistics report. The data come from a range of sources, which are described in Section 1.3, as well as the methodology used to calculate the tabulated data. Section 1.4 outlines how fatality, injury and illness rates are calculated, while Section 1.5 provides links to further sources of information on technical issues.

1.2 Overview for 2014–2016

Non-fatal injury

We draw on two main sources of information on work-related injury: the record of incidents reported to the HSA; and the data provided by the annual module on work-related injury and illness in the Quarterly National Household Survey (QNHS), collected by the CSO (see Section 1.3 for details).

¹ Hereafter, the terms injury and illness are used to relate to work-related injury and illness.

HSA figures

There were 8,381 non-fatal injuries reported to the HSA in 2016. Of these injuries, 7,957 (95%) involved workers, while the remaining 424 involved members of the public, including family members. For workers, only injuries involving four or more days' absence from work are reported to the HSA. There was a small increase in the number of injuries reported to the HSA in 2016 compared to 2015 (Figure 2.1). The number of people in employment also increased in 2016; taking this into account, the rate of reported injuries as a proportion of those in employment increased marginally, from 3.8 per 1,000 in 2015 to 3.9 per 1,000 in 2016.²

The largest number of non-fatal injury reports to the HSA came from the Health and Social Work sector. This sector submitted 19% of the non-fatal injury reports, while the Manufacturing sector accounted for 17% of reports (Figure 2.2). The Health sector is over-represented in the HSA statistics compared to its size in the labour market, where it accounts for 13% of all employment (Figure 2.3); however, this may be due to better employer reporting systems rather than a higher underlying injury rate. Under-reporting of accidents to the HSA varies significantly by sector (Russell *et al.*, 2015) and the Central Statistics Office (CSO) data based on self-reports reveals a different sectoral pattern (see below).

CSO module results

The CSO survey module provides figures on the injuries and illnesses reported directly by workers for the year 2015 (see Section 1.3 for details). These data suggest that 16,905 people experienced work injuries requiring an absence from work of four or more days in 2015, a 10% decrease from the 18,796 reported in 2014. When expressed as a rate of those employed, this represents a decrease to 8.6 per 1,000 workers from the rate of 9.8 in both 2013 and 2014 (Figures 2.4 and 2.5). The rate of injuries resulting in zero to three days' absence also decreased marginally, from 10.7 per 1,000 in 2014 to 10.5 in 2015. The year-on-year fluctuations can be quite large and some of this movement may be due to chance. Therefore, Figure 2.5 also presents a three-year rolling average, which smooths these fluctuations. The estimated number of days lost across the economy as a whole in 2015 due to work-related injury was 810,899, up from 750,011 in 2014.

The highest rates of injury causing four or more days' absence from work in 2015 include the Agriculture, Forestry and Fishing sector, the Industry sector and the Construction sector, with rates of 21.4, 15.1, and 14.4 per 1,000 workers respectively (Figure 2.7). Including less serious accidents (0+ days absence), the injury rates across sector follow a similar pattern, with the highest rates found in the Agriculture, Forestry and Fishing sector (41 per 1,000) and Industry (31 per 1,000).³ As was the case in 2014, higher injury rates for less serious accidents are also found for 2015 in Accommodation and Food Services, at 25 per 1,000 workers (Figure 2.6).

For all injuries (0+ days' absence), consistent with previous years, female workers had lower injury rates than male workers in 2015 (Figure 2.12). A decrease in injury rates for male workers from 27.5 per 1,000 in 2014 to 23.0 per 1,000 in 2015 was noted, while the rate for female workers increased from 12.3 per 1,000 to 14.4 per 1,000 over the same period.

Non-Irish national workers comprised 14.9% of the Irish workforce in 2016 (Figure 2.17). In 2015, 18% of non-fatal injuries notified to the HSA involved non-Irish national workers (Figure 2.18). Russell *et al.*, (2015) found that, taking sector, occupation, working hours and other factors into account, migrant workers were no more likely than Irish workers to have experienced a workplace injury. However, it is also likely that migrants are under-represented in the HSA and CSO figures.

² These rates exclude accidents involving non-workers.

³ Note that the 0+ figures include all work-related injuries, including those where there was no absence from work and longer spells of four or more days.

Manual handling-related injuries continue to account for about one-third of all non-fatal injuries reported to the HSA (33%), (Figure 2.19). Incidents involving aggression, fright, shock or violence, while accounting for only 6% of the non-fatal injury reports to the HSA, are most common in the Public Administration and Defence sector and the Health and Social Work sector, where they account for 21% and 16% of reported incidents respectively (Figure 2.20).

Work-related illness

The total rate of illness decreased from 25.7 to 21.0 per 1,000 workers between 2014 and 2015 (Figure 2.4). The illness rate causing zero to three days' absence (0–3 days) fell from 13.2 in 2014 to 11.6 per 1,000 workers in 2015. However, there was a larger decline in more serious illnesses involving four or more (4+) days' absence from work, which decreased from 12.5 per 1,000 workers in 2014 to 9.4 per 1,000 workers in 2015. These decreases are reflected in the figures for estimated number of days lost across the economy due to work-related illness, from 1.1 million in 2014 to 912,595 in 2015 (Figure 2.4). As the number of workers suffering both short periods of work-related illness and long-term illnesses declined, it appears that average duration of work absence decreased. However, the CSO note that the number of days absent is subject to error and may include 'potential days absent'. In addition, a previous estimate by the authors, on the precision of days lost across several waves of the QNHS module on work-related accident and illnesses, found that the margin of error around the total days lost is relatively wide; this is because a small number of cases account for a large proportion of the total number of days lost.

The three sectors with the highest illness rates in 2015 (0+ days lost) were Health and Social Work (41 per 1,000 workers), Accommodation and Food Services (33 per 1,000) and Transport and Storage (28 per 1,000) (Figure 2.8). Previously, in 2014, the Agriculture, Forestry and Fishing sector had the highest illness rate, followed by the Health and Social Work sector. In 2013, Health and Social Work and the Education sectors reported the highest illness rates.

Since 2011, women have experienced a higher illness rate than men (Figure 2.13). Other analysis has shown that in the period 2001 to 2007 there was no significant difference in men and women's illness rates, but in the period 2008 to 2012, women were more likely to experience work-related illness than men (Russell *et al.*, 2015). While illness rates for male and female workers decreased between 2014 and 2015, the rate fell more sharply for men, from 24.8 to 18.6 per 1,000 workers compared to that for women, which decreased from 26.7 to 23.9 per 1,000 workers in the same period.

As in previous years, in 2015 older workers had higher work-related illness rates than younger workers (Figure 2.14): the rate peaked at 29.9 per 1,000 for workers aged between 55 and 64 years, compared to a rate of 11.1 per 1,000 for those aged 25 to 34 years. The rate falls again for those over 65 years, presumably as older workers with an illness withdraw from the workplace.

Fatal injuries

There were 45 work-related fatalities reported to the HSA in 2016 (Figure 3.3), compared to 56 in 2015, a similar level of 55 fatalities in 2014, and 47 in 2013. Of the fatalities in 2016, 43 involved workers, with the remaining two involving members of the public, giving a worker fatality rate of 2.1 workers per 100,000 (Figure 3.1). This is slightly lower than the 2015 rate of 2.5 and the 2014 rate of 2.4 (Figure 3.1). The three-year rolling fatality rate has remained relatively stable since 2009, following a downward trend between 1999 and 2009 (Figure 3.1).

The highest number of fatalities occurred in the Agriculture, Forestry and Fishing sector, where 24 worker deaths were recorded in 2016, with one additional non-worker death (Figure 3.2). In 2015, the same sector saw 24 fatalities, in total (Figure 3.3). In 2016, the fatality rate for workers in this sector was 21.3 per 100,000 workers – higher than the 2015 rate of 19.1 but lower than the average rate of 25.9 per 100,000 workers for the years between 2010 and 2014 (Figure 3.5).

There were nine worker fatalities in the construction sector during 2016 making this the sector with the second highest number of fatalities since 2012 (Figure 3.4). This translates into a fatality rate of 6.6 per 100,000 workers; slightly lower than the rate of 8.0 recorded in 2015 but higher than that of 5.5 in 2014.

Self-employed workers were once again over-represented in fatal work accidents: a total of 23 such accidents in 2016 (just over one half of all fatalities) involved self-employed persons, including 18 farmers, three in the Construction sector, with the remaining two self-employed workers from the Fishing sector and the Forestry sector (Figure 3.4). Figure 3.7 shows that most of the fatal accidents in the Agriculture, Forestry and Fishing sector happened to workers in the older age groups. There was a linear relationship between numbers of all fatal accidents and increasing age in 2016 (Figure 3.8), with the highest number of accidents occurring among the 65+ age group (24%), similar to the pattern observed in 2014. The age profile of those fatally injured in 2015 was slightly younger, with most fatalities occurring among the 45–64 years group.

Non-Irish nationals accounted for 23% or 10 of 45 worker fatalities in 2016 (Figure 3.10). The fatality rate for non-Irish national workers was 3.2 per 100,000, compared to a rate for Irish workers of 1.9 per 100,000 (Figure 3.11). This is higher than the rate of 1.1 per 100,000 in 2015 and higher than all other years since 2009. This is a worrying development but could be due to random fluctuation and small numbers in the non-Irish national group; nevertheless, it will be kept under observation in future years.

The latest European statistics on fatality rates refer to the year 2014. These figures, compiled by Eurostat, report a fatality rate of 2.5 per 100,000 workers for Ireland. This is the fifth highest rate among the EU15 and higher than the EU15 average of 1.6 per 100,000 (Figure 3.14).

Implications

The most recent labour market figures suggest that in the year to the last quarter of 2016 there was an annual increase in employment of 2.8%, or 56,500 persons (CSO, 2017). Analysis of Irish data for the period 2001 to 2012 (Russell *et al.*, 2015) has found that the risk of injuries was significantly higher during the economic boom than in the recession, controlling for the numbers at work in different sectors of the economy and other compositional changes. These findings are consistent with the economic literature, which suggests that economic upturns may bring increased risks of occupational injury due to a rise in the number of inexperienced recruits, higher work intensity and longer working hours due to increased demands (Fairris, 1998; Davis and Jones, 2005). Other research suggests that in periods of financial instability, there may be a greater reluctance on behalf of employees to report injuries or take illness absence during recessionary periods (Boone *et al.*, 2006; 2011). These factors would also contribute to a pro-cyclical pattern.

The triggers for occupational injuries have remained remarkably stable over recent years, with a few exceptions. Between 2014 and 2015, the Public Administration sector reported an increase in the triggers of 'aggression, shock, violence', from 3.6% to 12.1%; in 2016, the rate almost doubled to 21.4%. In the same sector, 'loss of control of transport or handling equipment', increased from 5.4% in 2014 to 9.4% in 2015 and to 12.6% in 2016. However, the relative stability of triggers across economic sectors highlights the potential to predict and prevent such accidents within sectors.

In the case of fatal injuries, those most at risk continue to be the self-employed, particularly in the Agricultural sector. Additional research on farm safety showed that the average fatality rate in farming was nearly ten times than that of all other occupations between 2009 and 2015, with more than one-third of farmers (36%) reporting either an accident or a near miss, or that someone else had had an accident on their farm (Watson *et al.*, 2017). This study also found that farmers with larger holdings were more likely to take certain risks and to have an accident or near miss. Statistical analysis has shown that between 2004 and 2013, the fatality rate increased for workers in Agriculture, decreased for those in the Service sector, and did not significantly alter for those in Construction or Industry (Russell *et al.*, 2015). The three-year rolling average suggests that the fatality rate for workers has remained stable since 2011; nevertheless, the deaths of 43 workers and two members of the public or family members suggest that work-related fatalities are still a serious concern.

Ireland's ranking position within the EU15 worker fatality statistics wavered between sixth and seventh highest from 2008 to 2013.⁴ In 2014, it was ranked fifth highest.⁵ In each of these years the Irish rate was above the EU15 average.

Findings from other sources

A recent study carried out in Ireland comparing coroner files and HSA reports nationally suggests that work-related road traffic fatalities are under-recorded in the HSA register (Drummond *et al.*, 2016). This study found that, consistent with findings from other jurisdictions, 23% of road traffic accidents (RTAs) between 2008 and 2011 involved a worker. Of these 193 RTAs, 15% were worker fatalities; 23% were bystander type 1 fatalities and the remaining 62% were bystander type 2 fatalities.^{6,7} Current information on road traffic fatalities is available from the website of the Road Safety Authority: <http://www.rsa.ie/en/RSA/Road-Safety/Our-Research/>.

The fatality statistics presented also exclude deaths resulting from long-term work-related illnesses, such as cancer. There are a very limited number of alternative sources of information on deaths from long latency occupational diseases in Ireland. These include the National Cancer Registry and the register of deaths. The processes of these diseases are often complex, multi-causal and can have a long latency period, making it difficult to attribute death to occupational hazards (Drummond, 2007).

Evidence from developed countries suggests that the burden of long latency disease such as chronic obstructive pulmonary disease (COPD) and cancer attributed to workplace risk factors is substantial (Forouzanfar *et al.*, 2016). For example, in the UK there are an estimated 13,000 deaths each year linked to past exposures at work, primarily due to exposure to chemicals or dusts, and an estimated 14,000 new cases of breathing and lung problems caused or made worse by work. In the case of mesothelioma, the great majority of cases are considered to be work-related and this is now defined as an occupational disease (see Parkin, 2011). The average annual Irish incidence (number of new cases) of pleural mesothelioma has risen from 27 cases between 1994 and 2010, to 39 cases between 2010 and 2012, and again to 45 cases between 2012 and

⁴ It was seventh highest in 2008 and 2009, sixth highest in 2010, seventh highest in 2011, and sixth highest in 2012 and 2013.

⁵ Some of these ranking positions may be inconsistent with those reported in the Statistical Summaries for previous years due to data being updated by Eurostat

⁶ Bystander type 1 fatalities involve the death of someone who is not at work, the other party to the collision is working and work directly contributed to the accident.

⁷ Bystander type 2 fatalities involve the death of someone who is not at work, the other party to the collision is working, but there is insufficient or no evidence that work directly contributed to the accident.

2014 (see NCRI, 2012; NCRI, 2014; NCRI, 2016).⁸ In Ireland, over the period 1994 to 2009 and where occupation was known, 13% of those diagnosed with mesothelioma worked in Construction; 9% in Woodworking; 8% in Agriculture or Forestry and 6% in Plant and Machinery, Road Transport and Mining/Manufacturing. In total, men working in these sectors represented 48% of all mesothelioma cases compared to 20% of all male cancers (Jennings *et al.*, 2013).

Despite limitations in reporting and attributing to work, the injuries reported to the HSA provide a consistent record of a subset of work-related injuries and deaths, which has been collected in a similar manner over a period of years. The underlying definition of reportable accidents/injuries to the HSA is set down in legislation and has not changed in practice since 1993.

The occupational injury reports in the HSA's database comprise a valuable source of information on the characteristics of the accident victim, the nature of the incident, the working environment and the proximate cause of the incident termed a 'trigger'. The categories of injury recorded, work environment, injury triggers and the definitions to be used for other classification variables such as sector and occupation are set out by European Statistics on Accidents at Work (ESAW); see Eurostat (2013).

1.3 Data sources and methodology

A variety of sources are used to compile the summary statistics presented here. The report presents recent results up to 2016, depending on the data source used. The HSA results refer to the year 2016, while the QNHS results only reach 2015 and Eurostat data to 2014. No one source provides a comprehensive picture of occupational injury and illness so the strengths and limitations of each dataset are described.

Health and Safety Authority (HSA)

Employers are legally required to report incidents to the HSA when injuries result in four or more days' absence from work.⁹ The HSA figures therefore represent a subset of accidents where the injury is serious enough to warrant an absence from work of four or more days. Incidents related to a place of work or a work activity in which a member of the public is injured are also reportable to the HSA, in cases where the person requires treatment from a medical practitioner.¹⁰ In the tables based on the HSA data that follow, the table headings and notes will indicate whether the figures include or exclude 'non-workers'.

There is significant under-reporting of accidents to the HSA, as is the case in other national employer reporting systems. In 2015, 7,443 worker injuries were reported to the HSA (HSA, 2016) while the CSO figures for the same period suggest that there were 16,905 work-related accidents that resulted in four or more days' absence from work (Figure 2.4). These results suggest that approximately 44% of accidents/injuries are captured in the HSA, representing an increase on the 38% of reported cases in 2014. The incentives and disincentives to report non-fatal incidents can vary significantly across different groups. Comparison with figures from the CSO suggests that under-reporting of accidents to the HSA is particularly evident among the self-employed and smaller

⁸ The published figure for annual incidence of mesothelioma between 1994–2010 was 24 but an additional three cases were registered since publication of the 2012 annual report (communication from NCRI). These cases relate to all mesothelioma – 91% of which are pleural mesothelioma.

⁹ It should be noted that this refers to calendar days, so if one misses work on Friday and Monday due to the same injury, it is counted as four days (Friday, Saturday, Sunday and Monday).

¹⁰ For further information see

http://www.hsa.ie/eng/Topics/Accident_and_Dangerous_Occurrence_Reporting/#reportableaccidents.

employers. For example, over the period 2004 to 2012, only 1%–4% of injuries to self-employed people picked up in the QNHS were also picked up in the HSA statistics (see Russell *et al.*, 2015, Appendix 1). Under-reporting also differs significantly across sectors so that differences between sectors in the HSA statistics should be interpreted with caution (*ibid.*).

QNHS module on work-related accidents and illness

Since 1998, the CSO has conducted an annual special module on work-related accidents and illnesses within the QNHS, though in its earliest years only a small number of questions were included. The module is restricted to those who are employed at the time of the survey or who are not currently employed but worked during the 12-month reference period. Following previous practice, the illness and injury figures reported below refer only to those employed at the time of the survey or who had a job from which they were temporarily absent. The module is usually fielded in Quarter 1 (Q1) and since 2009 (except in 2013) the reference period has referred to the 12 months of the preceding calendar year.¹¹ **In the tables and graphs that follow, the year refers to the reference period in which the injury or illness occurred, rather than the date on which the survey was fielded.**

The most recent data come from the module that was held in Q1 2016, the reference period being 2015. Respondents were asked:

How many, if any, injuries did you incur at work (excluding commuting) during the period January 2015 to December 2015?

Those who said they experienced such an injury were asked:

Now thinking about the time(s) when you were in employment during January to December, how many days were you absent from your job as a result of your most recent injury at work?¹²

Information on work-related ill-health was collected using the following questions:

How many, if any, illnesses or disabilities have you experienced during the 12 months January 2015 to December 2015, that you believe were caused or made worse by your work?

Now thinking about the time(s) when you were in employment during the 12-month period January 2015 to December 2015, how many days were you absent from your job as a result of your most recent work-related illness?

The data for the year 2012 (collected in Q2 2013) are not strictly comparable to those for other years because they were collected as part of a European-wide labour force survey; a number of changes were introduced, for that year only, so that the data could be harmonised across the EU.¹³ Four main changes were made. Firstly, there was the shift in field date from Quarter 1 to Quarter 2. Secondly, the reference period was changed from the previous calendar year to the 12 months preceding the interview date. Thirdly, changes were made to the question wording. Fourthly, the information on days absent was collected in grouped categories rather than the actual number of days (see HSA, 2014, for further details).

¹¹ Before 2009, the module referred to the 12 months prior to the interview date (CSO personal communication).

¹² The number of days ranges from 0 to 231 for those who were absent for the whole year (52*5) – 29 annual leave and bank holidays.

¹³ The 2007 module was also carried out across the EU and therefore similar issues arise for that year (Venema *et al.*, 2009).

The data in the QNHS are re-weighted to reflect the national distribution of the population, and are grossed up to reflect the actual numbers in employment. In the case of both injury and illness statistics derived from the CSO, the small number of respondents experiencing such 'events' in the unweighted data mean that caution should be exercised when interpreting differences between groups and change over time. This issue is particularly relevant for descriptions of sub-groups such as age groups or workers within industrial sectors.

Eurostat statistics

Eurostat, the statistical agency of the European Union, sets out methodologies for Member States to collect information and produce statistics on occupational injuries and diseases. It compiles statistics based on injury data supplied by Member States.

European Statistics on Accidents at Work (ESAW) is the main data source from Eurostat and provides data on accidents based on administrative data from the Member States. The data come from national registers, public insurance/social security schemes or national bodies responsible for the collection of data on accidents at work. The data include non-fatal accidents at work causing more than three days of absence as well as fatal accidents. These data are reported in Figures 2.10 and 3.14 below. There is a time-lag for the construction of the comparative statistics so that the most recent European-wide data refer to 2014. The Irish data come from the reports to the HSA; however, the number of worker accidents (and the rates) cited by Eurostat differ from the HSA figures. For example, the Eurostat figure for Ireland in 2014 is 13,103 for worker accidents resulting in more than four days' absence, while the HSA figure is 7,431 or 7,057 excluding non-workers; see Figure 2.25a in HSA (2015). The difference arises because in countries without an insurance-based system (including Ireland) Eurostat adjusts the figures to take account of under-reporting. This adjustment is based on reporting levels by branch of economic activity. Eurostat also calculates the harmonised rates for a subset of sectors, excluding Public Administration, Health, Education and Mining/Quarrying, because these workers are not covered in many Member States.

The harmonised statistics produced by Eurostat are available at <http://ec.europa.eu/eurostat/web/health/health-safety-work/data/database>

Occupational injury benefit statistics

Figures on the number of claims for occupational injury benefits (OIB) are provided by the Department of Social Protection. These represent claims made by insured persons who are injured during the course of their work. Up until the end of 2013, claims could be made for injuries resulting in absences of four or more days.

In January 2014, the rules of the scheme changed so that payment is made from the seventh day of incapacity of work, rather than the fourth day of incapacity. This led to a drop in the number of claims between 2013 and 2014 (Figure 2.9), despite an increase in the number employed over that period. Since then, the number of claims has increased slightly, to 10,182 in 2015 and 10,485 in 2016, from 9,768 in 2014; however, this 2016 figure is still 1,000 claims below the number claiming under the old rules in 2013.

The change in eligibility requirements means that the number of paid days is no longer comparable across the period. The change also means that only those with more serious injuries (proxied by length of absence from work) will receive the occupational injury benefit. This higher threshold will affect both the 'paid claim days' and the 'total claim duration' as shorter spells are excluded. This greater selectivity is likely to account for much of the increase in the average total duration of absence among claimants (including non-paid days), which increased from 47 to 57 days between 2013 and 2014. Between 2015 and 2016, the average total duration increased modestly, from 58 days to 60 days respectively.

A further limitation of these data is that not all workers are covered by social insurance; for example, few of the self-employed are covered by the OIB system. Even among those insured, not all injuries result in a claim.

1.4 Calculating accident, illness and fatality rates

In order to take account of changes in the level of employment, both economy-wide and within different demographic groups and sectors, the rates of injury and illness are calculated per 1,000 workers. Fatality rates are calculated per 100,000 workers.

The question then arises as to what employment figure should be used for the denominator. Previous HSA statistics reports have used a variety of reference points. In the statistics that follow, the rates have been calculated using the average level of employment across the four quarters of the relevant year. As the recorded accidents and illnesses occur over a 12-month period, and because employment levels fluctuate seasonally, the four-quarter average provides a better basis for calculating the incidence rate than any one particular quarter. This calculation is used for reported accidents and illnesses from both the QNHS and the HSA. As the latest QNHS data on illness and injury were collected in Quarter 1 of 2016 and refer to illness/injury during the period January–December 2015, the employment levels were calculated across the four quarters – Q1 2015 to Q4 2015.

Since the fatality numbers were reported on a calendar year basis, the denominator for calculating the fatal injury rates is the number employed in the calendar year for all years. This is calculated by taking the average number employed across the four quarters of the calendar year, as reported in the QNHS statistics.

1.5 Technical notes

The HSA and the CSO use the following standard international classifications for statistics.

- **Economic activity:** NACE (Nomenclature statistique des activités économiques dans la Communauté Européenne: Statistical Classification of Economic Activities in the European Community), maintained by Eurostat (Statistical Agency of the European Commission). The full classification is available to download from the Eurostat website:
<http://ec.europa.eu/eurostat/en/web/products-manuals-and-guidelines/-/KS-RA-07-015>.
- **Occupation:** ISCO (International Standard Classification of Occupations), maintained by ILO (International Labour Organization). Further information on ISCO codes can be found on the ILO website:
<http://www.ilo.org/public/english/bureau/stat/isco/index.htm>.
- **Other information:** European Statistics on Accidents at Work (ESAW) provide information on variables, definitions and classifications relating to the victim, the incident and the circumstances of the incident. It is maintained by Eurostat: <http://ec.europa.eu/eurostat/documents/3859598/5926181/KS-RA-12-102-EN.PDF/56cd35ba-1e8a-4af3-9f9a-b3c47611ff1c>.



2

Non-fatal injury and illness statistics

.....

2.1 General injury and illness statistics

Figure 2.1: Injuries reported to the HSA, 2005–2016

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Non-fatal accidents	7,976	8,303	8,069	7,002	7,583	7,094	6,804	6,598	7,431	7,775	8,381

Source: HSA database

The figures reported in Figure 2.1 differ somewhat from those reported in the previously published HSA annual statistics reports. There are two reasons for this discrepancy. Previously published figures for the years 2004 to 2009 included 'dangerous occurrence' figures, and these have now been removed. Secondly, the figures for more recent years have been adjusted to include incidents that occurred within the relevant calendar year but were reported late to the HSA.

Figure 2.2: Injuries reported by economic sector, 2016 (HSA)

	Workers		Non-workers		All	
	N	%	N	%	N	%
Q – Health and social work	1,536	19.3%	55	13.0%	1,591	19.0%
C – Manufacturing	1,436	18.0%	11	2.6%	1,447	17.3%
G – Wholesale and retail	982	12.3%	187	44.1%	1,169	13.9%
H – Transportation and storage	952	12.0%	12	2.8%	964	11.5%
O – Public administration and defence	896	11.3%	19	4.5%	915	10.9%
F – Construction	592	7.4%	9	2.1%	601	7.2%
N – Admin and support service	377	4.7%	4	0.9%	381	4.5%
E – Water, sewerage, waste	207	2.6%	6	1.4%	213	2.5%
P – Education	196	2.5%	57	13.4%	253	3.0%
I – Accommodation and food	169	2.1%	22	5.2%	191	2.3%
S – Other service activities	162	2.0%	5	1.2%	167	2.0%
J – Information and communication	87	1.1%	1	0.2%	88	1.0%
K – Financial and insurance	85	1.1%	20	4.7%	105	1.3%
A – Agriculture, forestry and fishing	78	1.0%	1	0.2%	79	0.9%
M – Professional, scientific and technical	62	0.8%	0	0.0%	62	0.7%
B – Mining and quarrying	55	0.7%	0	0.0%	55	0.7%
D – Electricity, gas, etc.	44	0.6%	0	0.0%	44	0.5%
R – Arts, entertainment	29	0.4%	11	2.6%	40	0.5%
L – Real estate	11	0.1%	3	0.7%	14	0.2%
U – Activities of extraterritorial organisations and bodies	1	0.0%	1	0.2%	2	0.0%
All	7,957	100.0%	424	100.0%	8,381	100.0%

Note: Injuries reported for non-workers refer to the economic sector in which the injury occurred, for example a non-worker accident in a shop would be reported under Wholesale and retail.

Figure 2.3: Numbers employed in each economic sector, 2009–2015, four-quarter average (data based on CSO statistical release, May 2017)¹

Economic sector	Numbers employed						
	2010	2011	2012	2013	2014	2015	2016
Agriculture, forestry and fishing	85,225	82,900	93,800	106,750	108,975	109,850	112,850
Industry ²	245,350	240,325	236,175	240,500	239,000	248,200	257,950
Construction	121,000	107,800	100,825	102,000	109,425	125,425	135,775
Wholesale and retail trade	276,675	273,200	272,925	272,325	272,400	273,850	277,200
Transportation and storage	93,525	94,900	88,525	88,150	89,425	91,825	95,375
Accommodation and food	126,700	116,525	122,825	130,825	137,200	138,000	147,350
Information and communication	74,900	76,325	79,800	80,575	81,350	83,300	86,625
Financial, insurance and real estate	101,875	102,000	100,925	99,300	99,975	100,650	101,375
Professional, scientific and technical	100,350	100,050	103,625	109,600	115,950	116,750	119,175
Administrative and support services	62,125	67,225	61,825	61,675	64,375	65,250	67,900
Public administration and defence	104,675	101,300	96,500	95,350	96,450	99,650	101,100
Education	149,675	144,000	145,925	146,375	149,900	151,250	152,350
Health and social work	237,700	241,175	245,700	246,325	247,200	250,675	252,750
Other NACE activities	94,675	96,875	99,925	99,875	99,325	103,150	105,575
Not stated	7,725	5,450	~	~	4,700	~	~
Total³	1,882,175	1,850,050	1,851,425	1,881,150	1,913,965	1,963,550	2,020,000

Note: ~Refers to instances where cases are too few to report

¹ In 2013, there was a shift in field dates from Quarter 1 to Quarter 2, so for the year 2012 the employment levels were calculated across the four quarters from Q3 2012 to Q2 2013, instead of across the calendar year.

² Industry=Mining and quarrying + manufacturing + electricity, gas, steam and air conditioning supply + water supply, sewerage, waste management and remediation activities: NACE B to E.

³ The total four-quarter averages include the 'not stated' figures.

Figure 2.4: Number and rate of people suffering injury and illness, 2009–2015 (CSO)

	2010		2011		2012		2013		2014		2015	
	N	Rate per 1,000	N	Rate per 1,000	N	Rate per 1,000	N	Rate per 1,000	N	Rate per 1,000	N	Rate per 1,000
Total in employment	1,882,18		1,850,05		1,851,43		1,881,15		1,913,90		1,963,550	
Injury												
Total suffering injury	40,584	21.6	40,097	21.7	35,001	18.9	46,574	24.8	39,319	20.5	37,440	19.1
0–3 days' absence	21,109	11.2	23,254	12.6	17,214	9.3	28,132	15.0	20,523	10.7	20,535	10.5
4+ days' absence	19,475	10.3	16,843	9.1	17,786	9.6	18,442	9.8	18,796	9.8	16,905	8.6
Days lost due to injury ¹	666,553		590,690		n.a.		758,674		750,011		810,899	
Illness												
Total suffering illness	38,704	20.6	48,436	26.2	50,210	27.1	54,867	29.2	49,194	25.7	41,247	21.0
0–3 days' absence	20,856	11.1	28,748	15.5	22,735	12.3	36,039	19.2	25,227	13.2	22,793	11.6
4+ days' absence	17,848	9.5	19,688	10.6	27,474	14.8	18,828	10.0	23,966	12.5	18,454	9.4
Days lost due to illness	704,494		595,951		n.a.		792,875		1,106,311		912,595	
Injury and illness												
Total injury or illness	79,288	42.1	88,533	47.9	85,210	46	101,440	53.9	88,513	46.2	78,687	40.1
Total (4+ days' absence)	37,323	19.8	36,531	19.7	45,261	24.4	37,270	19.8	42,762	22.3	35,359	18.0
Total days lost	1,371,047		1,186,641		n.a.		1,551,549		1,856,322		1,723,494	

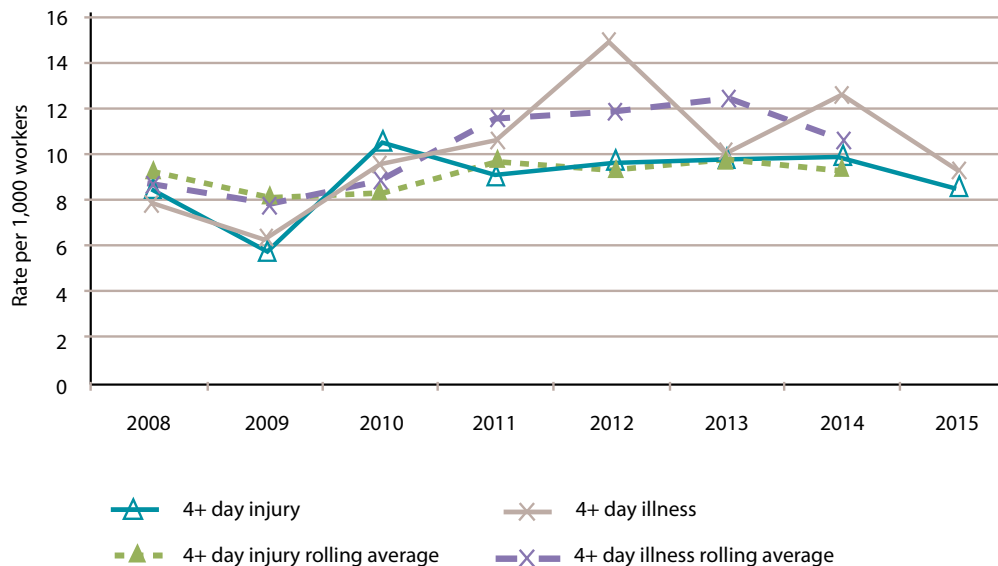
Notes: The days absent in 2012 are not strictly comparable with other years due to changes in response categories (see HSA, 2014, for details). The changes also mean that the total number of days lost cannot be calculated for 2012.

In all the statistics based on the CSO QNHS module that follow, the numbers of injuries and illnesses refer to those in employment at the time of the survey. The estimates are subject to sampling and other survey errors, and estimates and changes over time of a small magnitude can be taken to have lower precision.

n.a.: not available.

¹ Days lost data should be interpreted with care as respondents may have included potential days lost. The figures only refer to the most recent injury or illness.

Figure 2.5: Rate of injury and illness causing 4+ days lost per 1,000 workers, 2008–2015 (CSO)



Note: The rate is calculated from the four-quarter average employment for the year, as outlined in Figure 2.3. The increase for the 4+ day illness rate in 2012 is likely due to the change in the format of the question on illness in the 2013 European module (see Russell et al., 2016). Rolling averages are based on an average of 3 years.

Figure 2.6: Rate of injuries (any days lost) per 1,000 workers by economic sector, 2015 (CSO)

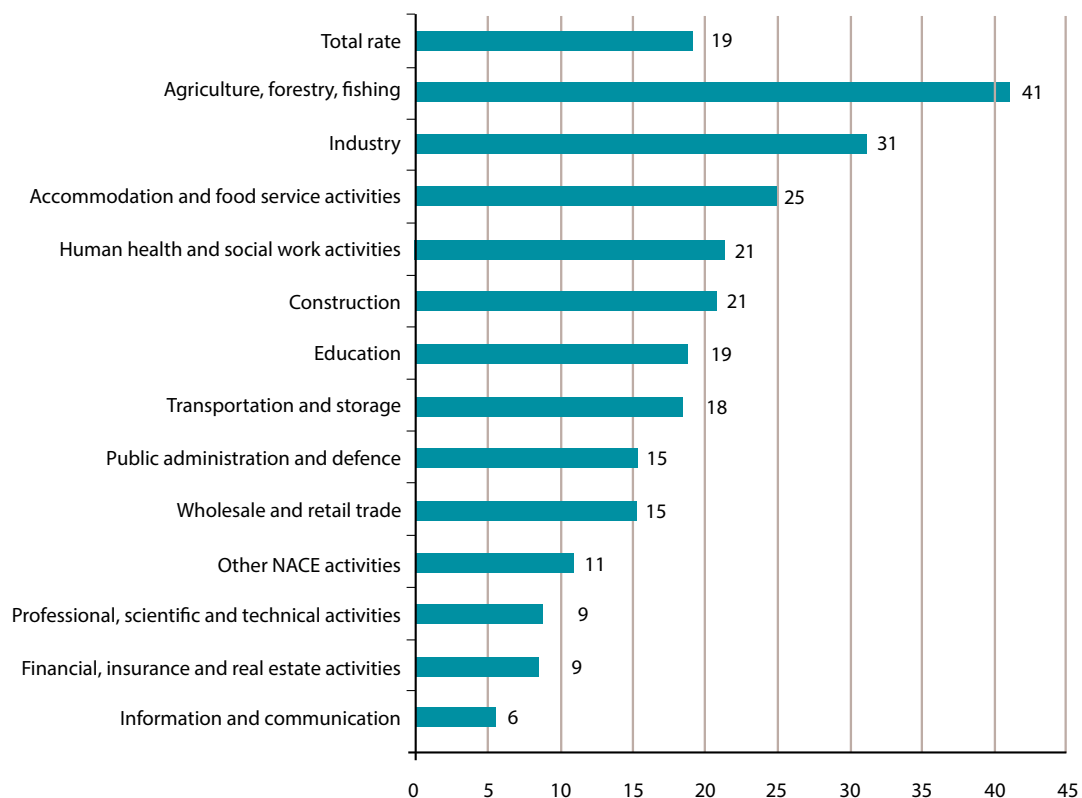


Figure 2.7: Rate of 4+ day injuries per 1,000 workers in selected sectors, 2008–2015 (CSO)

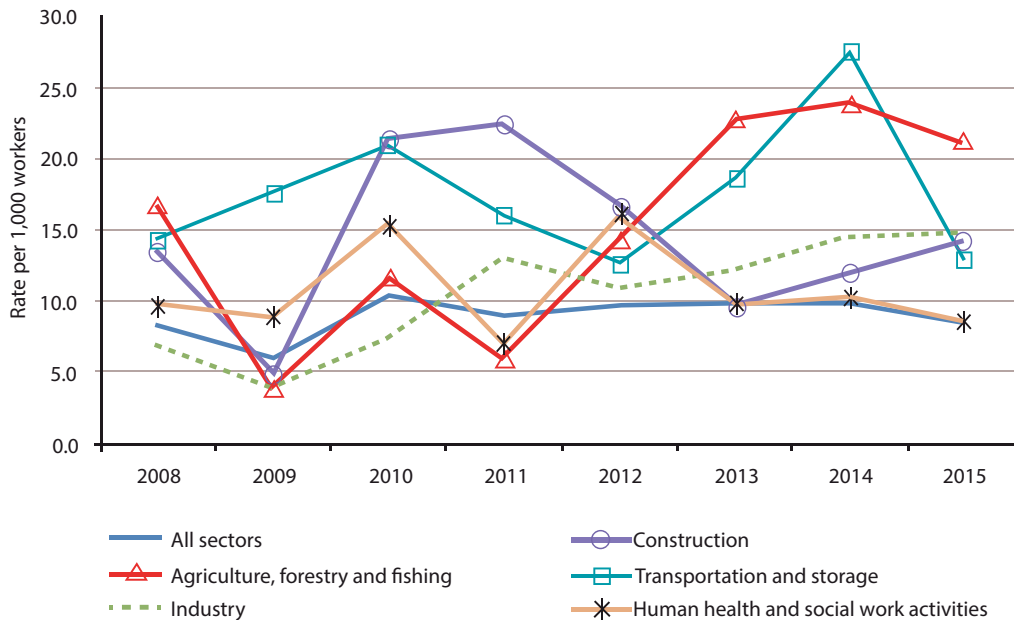


Figure 2.8: Rate of illness (any days lost) per 1,000 workers by economic sector, 2015 (CSO)

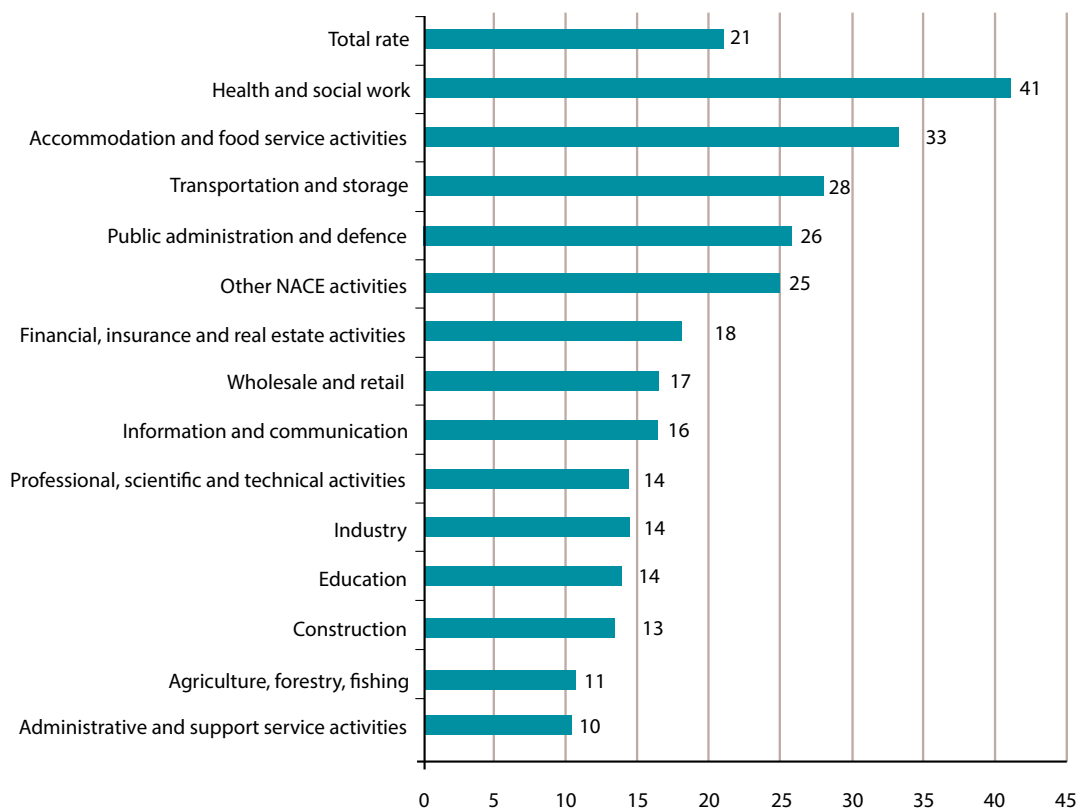


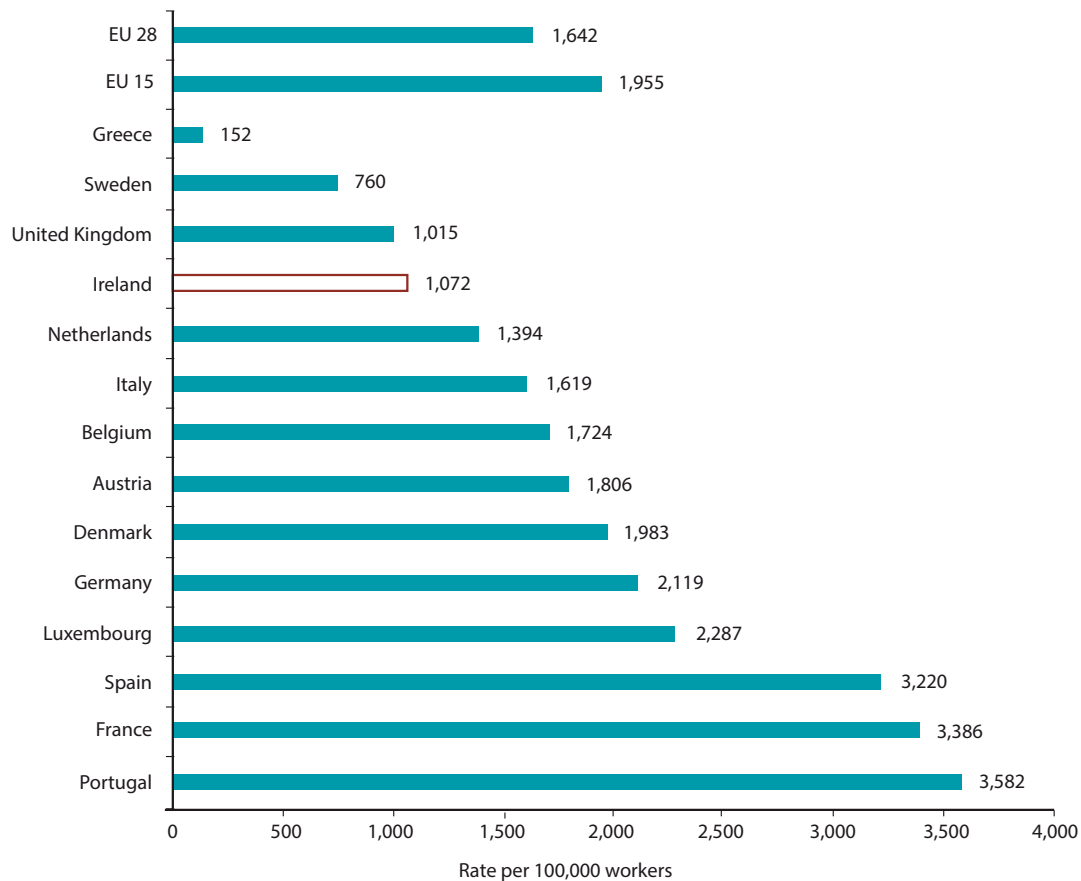
Figure 2.9: Occupational injury benefit claims (DSP), 2000–2016

Year	Claims allowed	Claim days (paid days only)	Avg. duration (paid days only)	Total days lost (incl. unpaid days)	Avg. total duration (incl. unpaid days)
2000	11,995	NO DATA			
2001	12,050				
2002	12,280				
2003	11,096				
2004	11,705				
2005	11,759				
2006	12,416				
2007	13,803	502,178	36		
2008	13,017	494,866	38		
2009	13,099	489,308	38		
2010	11,813	423,394	36		
2011	11,616	406,730	35	506,403	47
2012	10,972	392,436	36	509,831	47
2013	11,428	414,997	37	537,862	47
2014	9,768	414,640	43	550,050	57
2015	10,182	441,091	43	589,067	58
2016	10,485	475,216	45	631,988	60

Source: Department of Social Protection

Notes: Claim days refers to the number of paid claim days; therefore, up to 2013, these figures do not count the first three days of the claim or Sundays. From 2014 onwards, claims were only paid from the seventh day. Total days lost includes these unpaid days.

Figure 2.10: Rate of 4+ day injuries per 100,000 workers in the EU15 zone, 2014 (Eurostat)



Source of data: Eurostat, Accidents at work by sex and age (NACE Rev. 2, A, C-N) [hsw_mi01]. Last updated 23 November 2016; extracted 19 May 2017.

Notes: The Eurostat 4+ injury rates are based on figures submitted by national agencies but are adjusted to take account of different reporting levels across countries (see discussion in Section 1.3 Data sources and methodology).

Other European statistics on persons reporting an accident at work resulting in sick leave and based on the EU-LFS are also available from the Eurostat web site at: <http://ec.europa.eu/eurostat/web/health/health-safety-work/data/database>

2.2 Victim statistics

Figure 2.11: Number and rate of injury/illness (0+ days) per 1,000 workers by economic sector and gender, 2015 (CSO)

Economic sector	Numbers employed (1,000s)		Injury rate per 1000 workers		Illness rate per 1000 workers	
	Male	Female	Male	Female	Male	Female
Agriculture, forestry and fishing	97,125	12,725	42.9	26.9	12.2	~
Industry	179,550	68,650	38.5	12.4	14.2	15.0
Construction	117,650	7,775	22.2	~	14.3	~
Wholesale and retail trade	140,825	133,050	14.0	16.7	17.7	15.3
Transportation and storage	75,750	16,050	20.0	11.3	32.2	8.1
Accommodation and food services	62,725	75,275	35.6	16.2	52.1	17.6
Information and communication	58,000	25,275	4.7	7.5	19.1	10.3
Financial, insurance & real estate	48,675	52,000	7.0	9.9	18.8	17.2
Professional, scientific & technical	69,475	47,225	12.4	3.7	8.1	23.9
Administrative and support services	33,025	32,200	~	~	6.9	14.1
Public administration and defence	50,950	48,675	30.2	~	10.1	42.4
Education	40,675	110,575	6.2	23.4	6.0	16.8
Health and social-work activities	47,975	202,750	18.2	22.2	20.7	45.9
Other NACE activities	41,825	61,350	22.9	2.6	39.8	15.0
Total	1,067,025	896,550	23.0	14.4	18.6	23.9

Notes: ~ indicates that there are too few cases to report. In the case of injury and illness rates this means that there are too few cases to calculate the rate with confidence (ie not that the rate is zero).

Figure 2.12: Rate of total injury (0+ days) per 1,000 workers by gender, 2008–2015 (CSO)

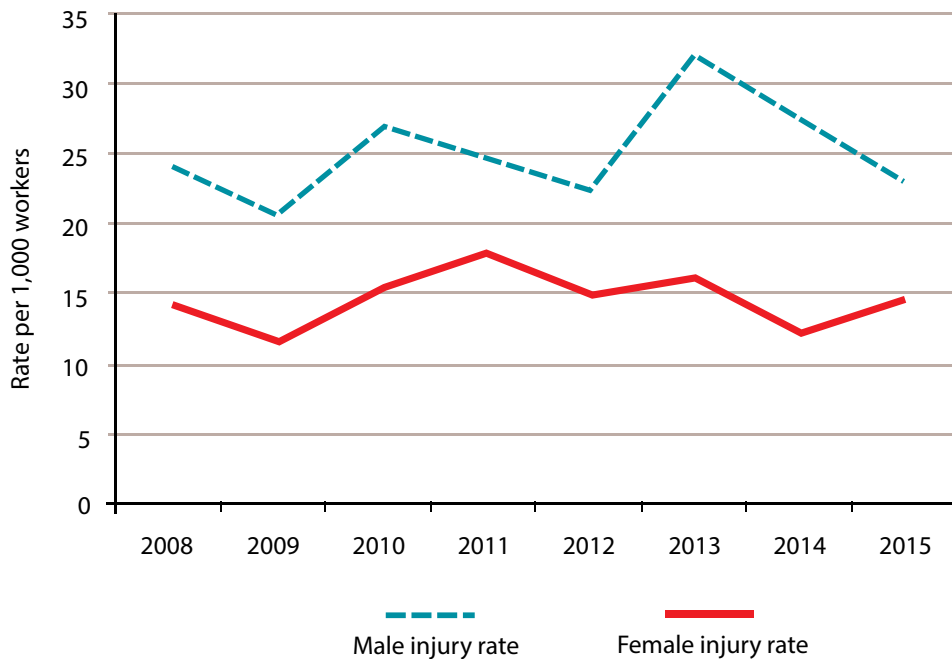


Figure 2.13: Rate of total illness (0+ days) per 1,000 workers by gender, 2008–2015 (CSO)

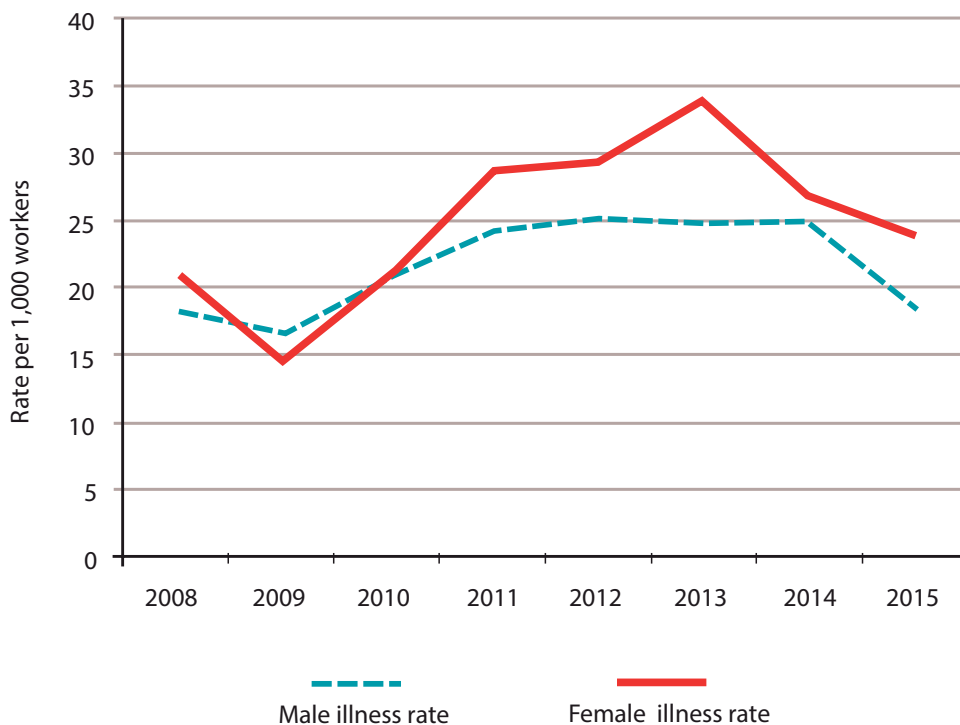


Figure 2.14: Rates of total injury and total illness (0+ days) per 1,000 workers by age band, 2015 (CSO)

Age range	Injury rate 2015	Illness rate 2015
15–19	~	~
20–24	~	~
25–34	16.3	11.1
35–44	20.6	23.9
45–54	18.6	23.1
55–64	15.9	29.9
65+	30.7	12.6
Total	19.1	21.0

Note: ~ indicates that there are too few cases to report

Figure 2.15: Rates of total injury and total illness (0 + days) per 1,000 workers by occupation, 2015 (CSO)

Occupation	Injury rate 2015	Illness rate 2015
Managers and administrators	21.1	16.9
Professional	16.3	24.5
Associate professional and technical	21.6	20.0
Clerical and secretarial	6.7	21.6
Craft and related	34.3	22.8
Personal and protective service	10.2	28.0
Sales	14.7	9.8
Plant and machines operatives	29.1	30.1
Elementary occupations*	13.0	14.4
All occupations	19.1	21.0

Note: * includes elementary agricultural (e.g. farm workers), construction, process plant (e.g. packers), administration (e.g. postal workers), cleaning, security, sales, storage and other occupations. See ONS (2010) for a detailed description of the Standard Occupational Classification (SOC) 2010.

Figure 2.16: Proportion of reported non-fatal injuries by employment status, 2016 (HSA)

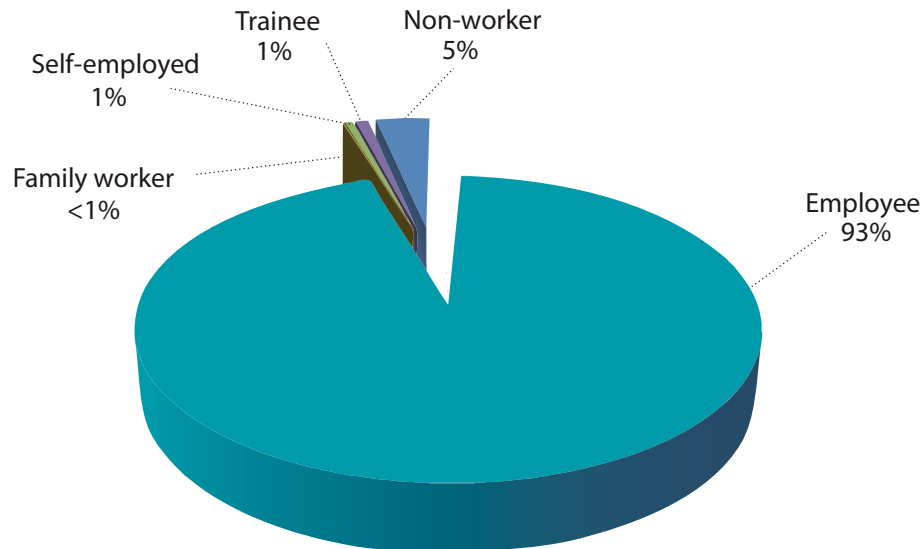
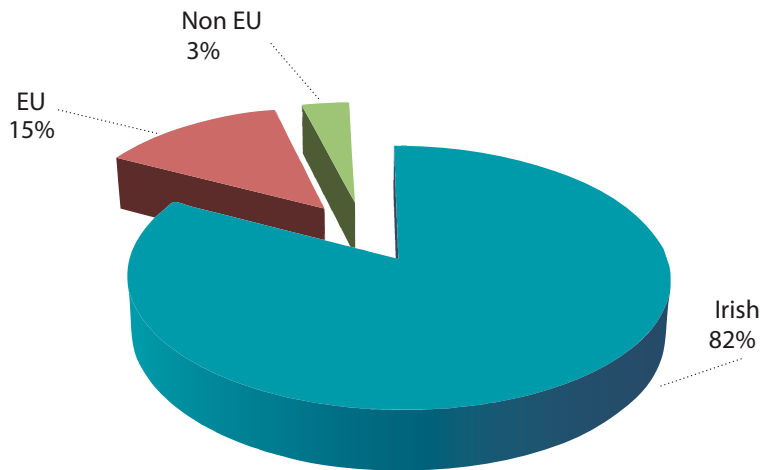


Figure 2.17: Workers by nationality and economic sector, 2015 (CSO statistical release May 2017)

Economic sector	Number of workers		
	Irish	Non-Irish	% non-Irish
Agriculture, forestry and fishing	104,125	5,725	5.2%
Industry	202,325	45,875	18.5%
Construction	110,175	15,300	12.2%
Wholesale and retail trade	229,375	44,475	16.2%
Transportation and storage	82,500	9,350	10.2%
Accommodation and food service activities	89,500	48,525	35.2%
Information and communication	64,625	18,650	22.4%
Financial, insurance and real estate activities	88,900	11,800	11.7%
Professional, scientific and technical activities	102,125	14,625	12.5%
Administrative and support service activities	49,275	15,925	24.4%
Public administration and defence	96,625	~	~
Education	141,675	9,650	6.4%
Human health and social work activities	221,050	29,625	11.8%
Other NACE activities	83,475	19,700	19.1%
Total	1,670,125	293,450	14.9%

Note: ~ indicates that there are too few cases to report

Figure 2.18: Proportion of reported non-fatal injuries by nationality, 2016 (HSA)



Note: The EU refers to those from the EU28



2.3 Nature of accidents and type of injuries sustained

Figure 2.19: Proportion of reported non-fatal injuries by trigger, 2016 (HSA)

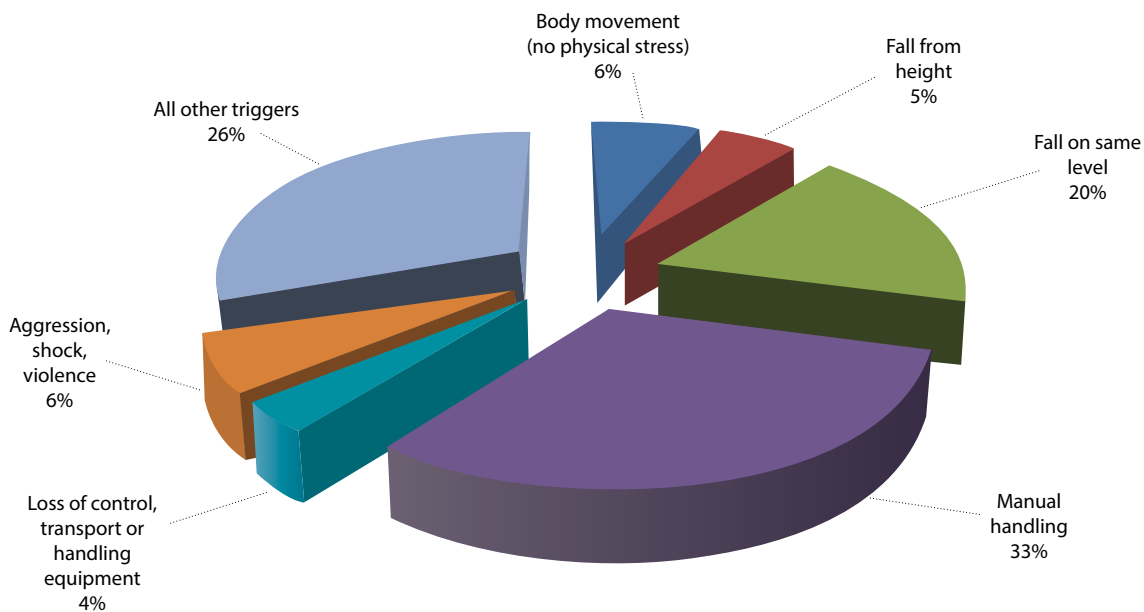


Figure 2.20: Number and percentage of non-fatal accidents by trigger, selected sectors, 2016 (HSA)

	Industry		Construction		Wholesale and retail		Transportation and storage		Public admin and defence		Health and social work	
	N	%	N	%	N	%	N	%	N	%	N	%
Body movement (no physical stress)	121	6.9%	43	7.2%	62	5.3%	58	6.0%	37	4.0%	105	6.6%
Fall from height	78	4.4%	78	13.0%	38	3.3%	37	3.8%	41	4.5%	37	2.3%
Fall on same level	300	17.1%	111	18.5%	282	24.1%	188	19.5%	165	18.1%	283	17.9%
Manual handling	677	38.5%	173	28.8%	502	42.9%	389	40.4%	182	19.9%	469	29.7%
Loss of control – transport or handling equipment	38	2.2%	25	4.2%	22	1.9%	49	5.1%	115	12.6%	29	1.8%
Aggression, shock, violence	4	0.2%	6	1.0%	3	0.3%	13	1.3%	196	21.4%	253	16.0%
All other ¹	541	30.8%	164	27.3%	260	22.2%	230	23.9%	178	19.5%	404	25.6%
Total	1759	100%	600	100%	1169	100%	964	100%	914	100%	1580	100%

¹ Includes a small number of cases where the accident trigger is not recorded.

Figure 2.21: Injury type by gender, 2015 (CSO)

	Male		Female		Total	
	Number	Rate	Number	Rate	Number	Rate
Wound or superficial injury	6,186	5.8	3,804	4.2	9,990	5.1
Bone fracture	2,434	2.3	793	0.9	3,226	1.6
Dislocation, sprain or strain	9,439	8.8	4,655	5.2	14,094	7.2
Amputation, concussion or internal injury, burn, scald or frostbite	1,394	1.3	937	1.0	2,331	1.2
Poisoning or infection, suffocation (asphyxiation), other type of injury, not specified	5,042	4.7	2,756	3.1	7,799	4.0
Total	24,495	23.0	12,945	14.4	37,440	19.1

Figure 2.22: Illness type by gender, 2015 (CSO)

	Male		Female		Total	
	Number	Rate	Number	Rate	Number	Rate
Bone, joint or muscle problem	9,445	8.9	9,795	10.9	19,241	9.8
Breathing or lung problem	396	0.4	2,827	3.2	3,223	1.6
Hearing problem, headache, eyestrain, heart/circulatory problem, disease	3,707	3.5	2,549	2.8	6,256	3.2
Stress, depression or anxiety	2,459	2.3	3,252	3.6	5,711	2.9
Skin problem, other types of complaint, not stated	3,830	3.6	2,985	3.3	6,815	3.5
Total	19,838	18.6	21,409	23.9	41,247	21.0

Note: Totals may not sum as figures for those in employment are rounded to nearest decimal.

Figure 2.23a: Most injured body parts, 2016 (HSA)

Body part	All		Workers only	
	N	%	N	%
Back, including spine and vertebrae in the back	1,880	22.4	1,856	23.3
Finger(s)	729	8.7	708	8.9
Leg, including knee	678	8.1	634	8.0
Hand	611	7.3	595	7.5
Ankle	498	5.9	473	5.9
Shoulder and shoulder joints	573	6.8	562	7.1
Arm, including elbow	475	5.7	455	5.7
All others, including unknown	2,937	35.0	2,674	33.6
Total	8,381	100.0	7,957	100.0

Figure 2.23b: Most injured body parts, workers, 2016 (HSA)

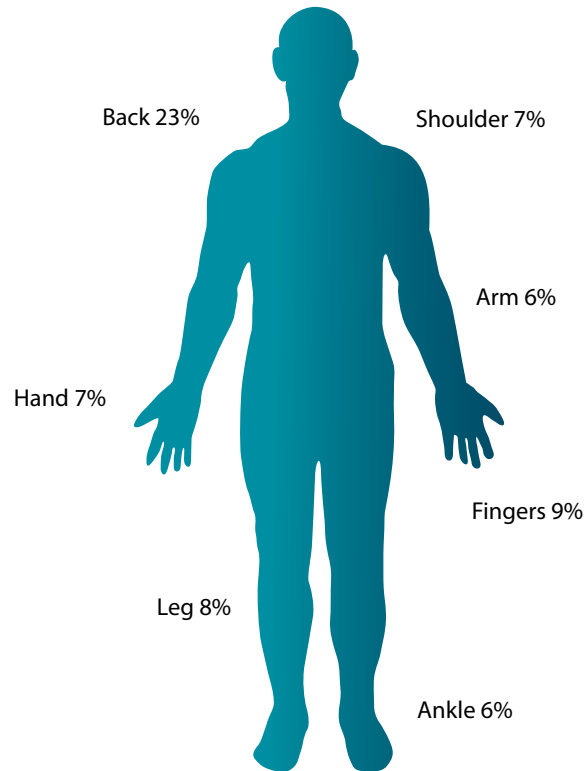
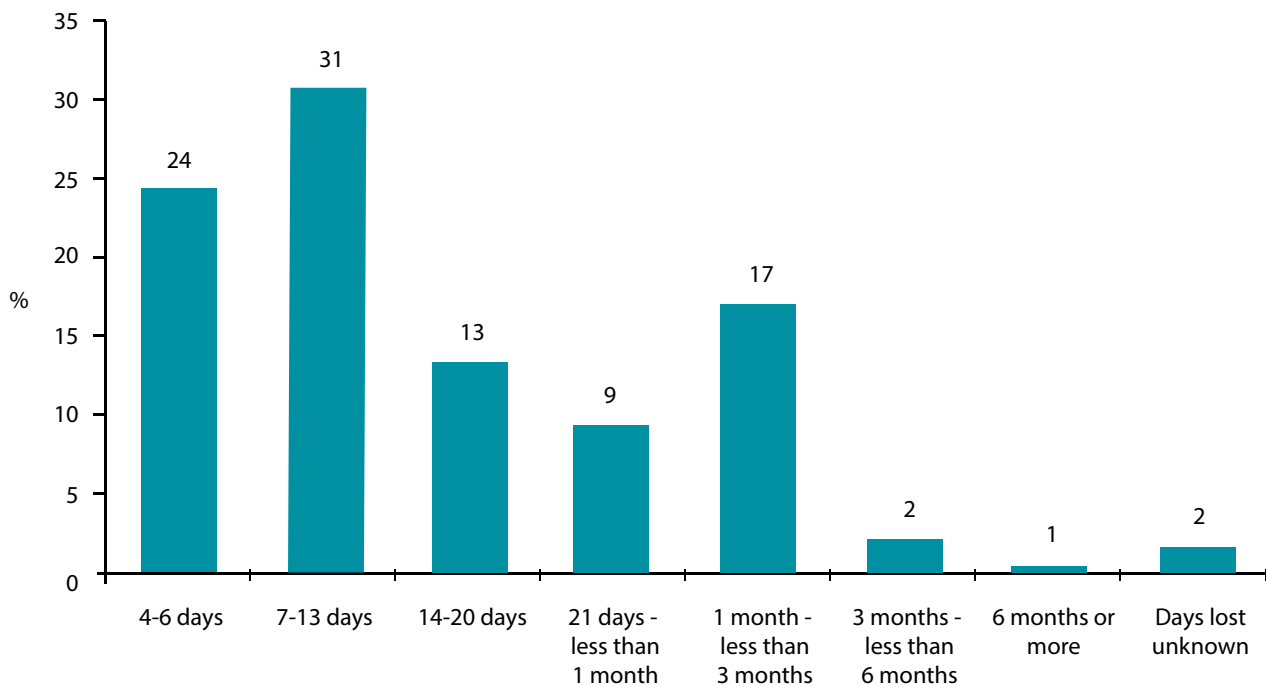


Figure 2.24: Percentage of non-fatal injuries by absence from work, 2016 (HSA)



Note: Excludes 'non-workers'; includes those whose employment status is missing.

2.4 Work environment statistics

Figure 2.25a: Reported non-fatal injuries by work environment, 2016 (HSA)

	All		Workers only	
	N	%	N	%
Construction site	419	5.0	413	5.2
Farming, forestry, fishing (not on vessel)	132	1.6	131	1.6
Hospital and other healthcare	1,399	16.7	1,369	17.2
Public thoroughfare ¹	844	10.1	825	10.4
Production area, factory, workshop	2,014	24.0	2,000	25.1
Area for storage/ loading	338	4.0	335	4.2
Shop, sales, service-activity area	1,359	16.2	1,121	14.1
Other	1,859	22.2	1,746	21.9
Unknown	17	.2	17	.2
Total	8,381	100.0	7,957	100.0

¹This grouping also includes the category 'land or rail transport' (for example train, bus, car).

Figure 2.25b: Reported non-fatal injuries by work environment, 2016 (HSA)

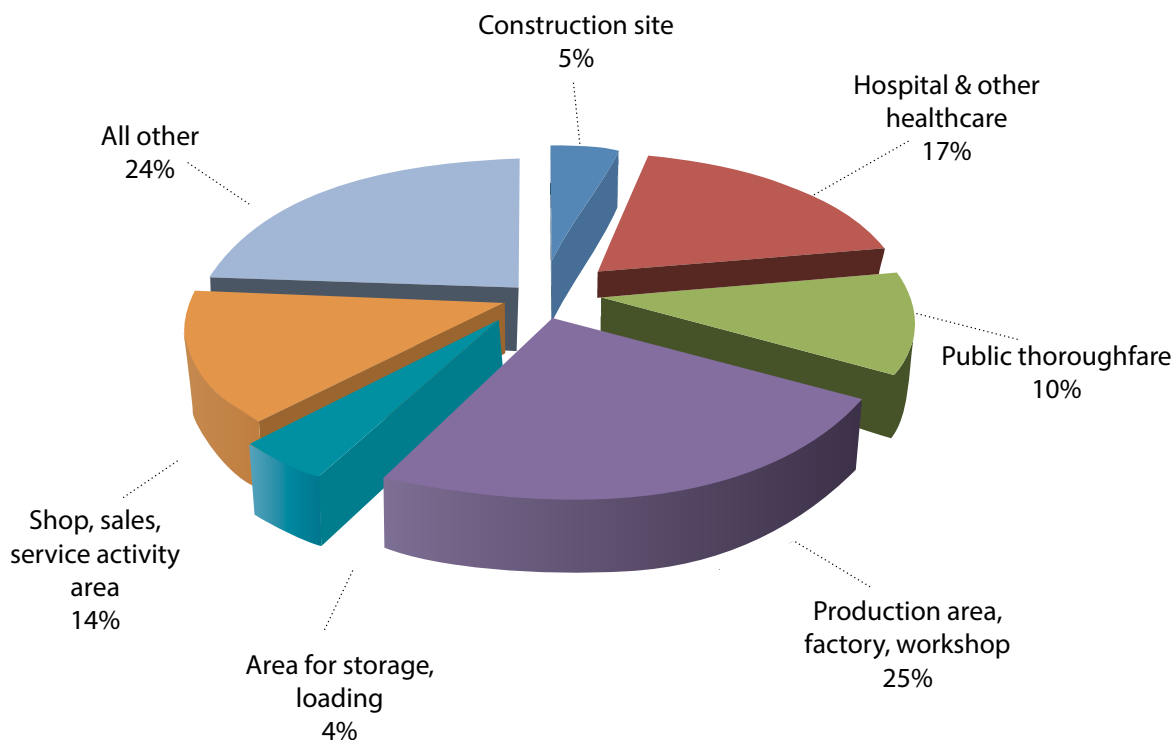


Figure 2.26: Reported non-fatal injuries (%) by size of employing organisation, 2016 (HSA)

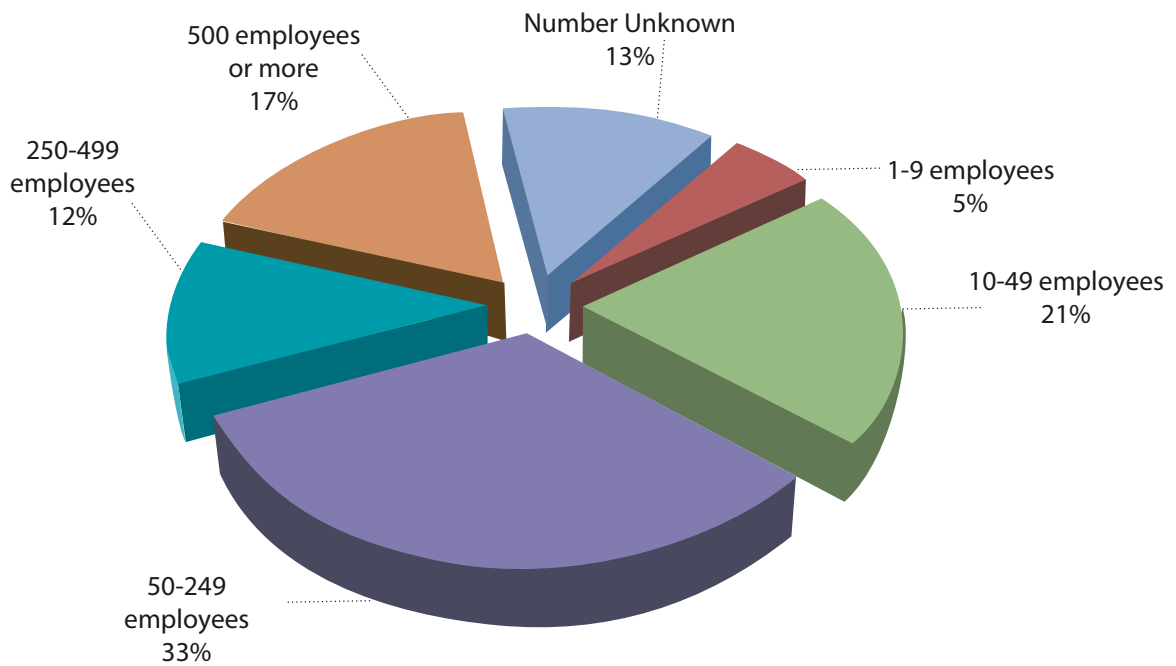


Figure 2.27: Number of non-fatal injury reports by county, 2016 (HSA)

	Non-workers	Workers	Total
Leitrim	4	28	32
Longford	2	58	60
Roscommon	2	66	68
Carlow	6	73	79
Laois	2	94	96
Donegal	6	95	101
Monaghan	7	95	102
Sligo	9	96	105
Clare	15	104	119
Cavan	11	130	141
Tipperary South	1	130	131
Mayo	10	134	144
Offaly	30	135	165
Waterford	17	139	156
Kilkenny	5	140	145
Westmeath	10	146	156
Tipperary North	6	147	153
Wicklow	14	156	170
Dublin North	7	179	186
Wexford	9	195	204
Louth	20	197	217
Kerry	10	218	228
Meath	15	275	290
Galway	15	308	323
Limerick	18	364	382
Kildare	23	394	417
Cork	39	917	956
Dublin South	65	1,462	1,527
Dublin	46	1,478	1,524
Unknown	-	4	4
Total	424	7,957	8,381

Figure 2.28: Rate of illness and injury by region, 2015 (CSO)

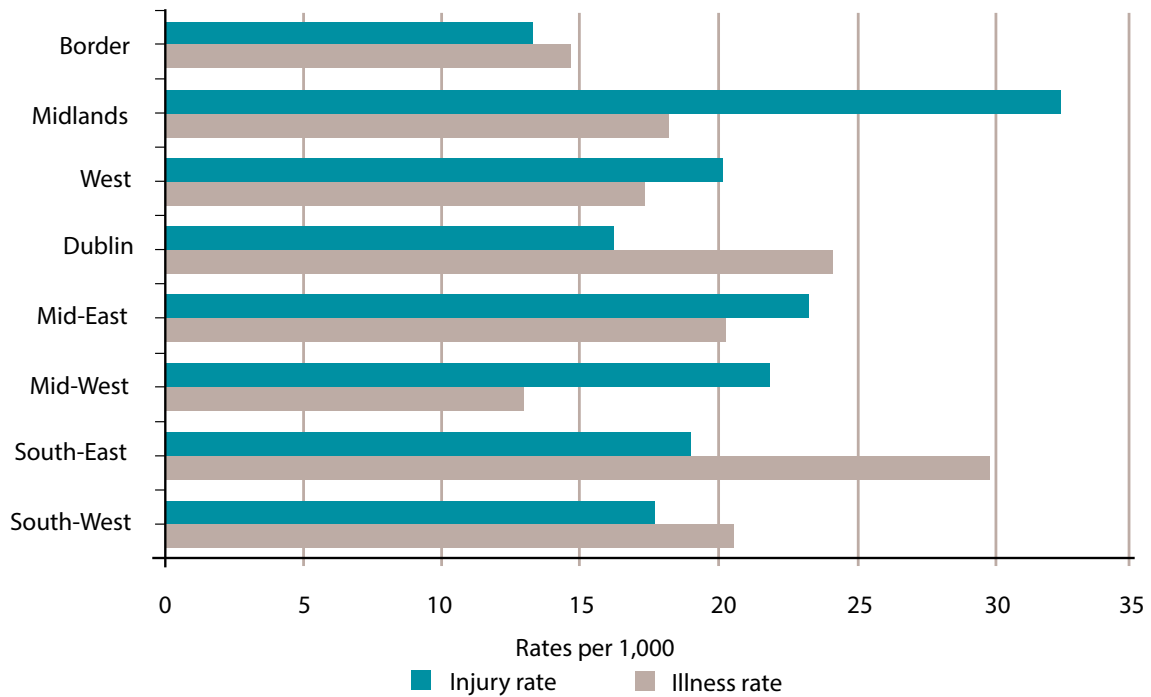


Figure 2.29: Number and rate of people suffering injury (0+ days) and illness (0+ days) by region, 2015 (CSO)

Region	Total employed (000s)	Injury (0+ days)		Illness (0+ days)	
		Number	Rate per 1,000	Number	Rate per 1,000
Border	193,550	2,575	13.3	2,844	14.7
Midlands	117,500	3,816	32.5	2,138	18.2
West	179,775	3,632	20.2	3,129	17.4
Dublin	598,175	9,725	16.3	14,477	24.2
Mid-East	233,575	5,447	23.3	4,732	20.3
Mid-West	152,850	3,337	21.8	1,989	13.0
South-East	205,325	3,910	19.0	6,140	29.9
South-West	282,800	4,999	17.7	5,798	20.5
All	1,963,550	37,440	19.1	41,247	21.0

Note: The employment figures that are used to calculate the employment rates come from a household survey (QNHS) so they refer to the region where people reside rather than where they work. Totals may not sum as figures for those in employment are rounded to nearest decimal.

Border: Cavan, Donegal, Leitrim, Louth, Monaghan, Sligo

Mid-East: Kildare, Meath, Wicklow

Midlands: Laois, Longford, Offaly, Westmeath

Mid-West: Clare, Limerick, Tipperary North

West: Galway, Mayo, Roscommon

South-East: Carlow, Kilkenny, Tipperary South, Waterford, Wexford

Dublin: Dublin

South-West: Cork, Kerry

A man wearing a bright red hard hat and a red work uniform is operating a forklift in a warehouse. He is looking towards the camera with a serious expression. The background shows industrial shelving and equipment.

3

Fatal injury statistics

.....

Figure 3.1: Rate of worker fatalities per 100,000 workers 1998–2016 (HSA)

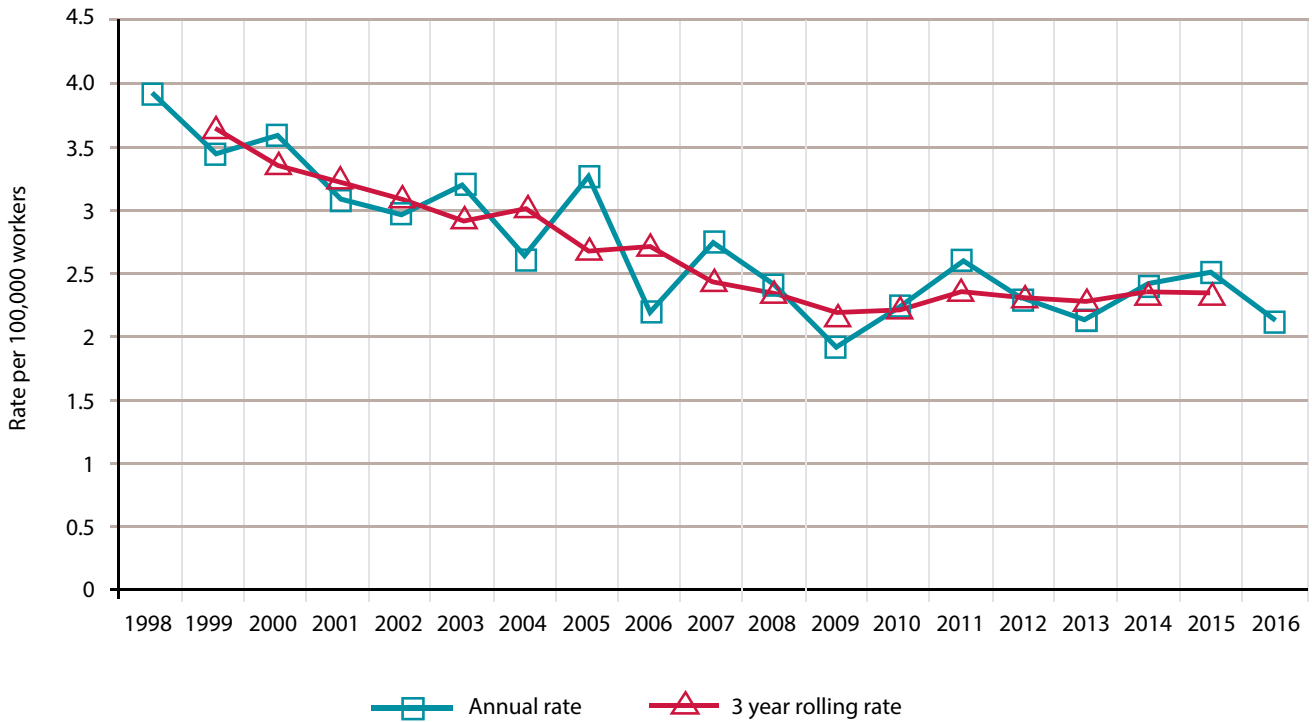
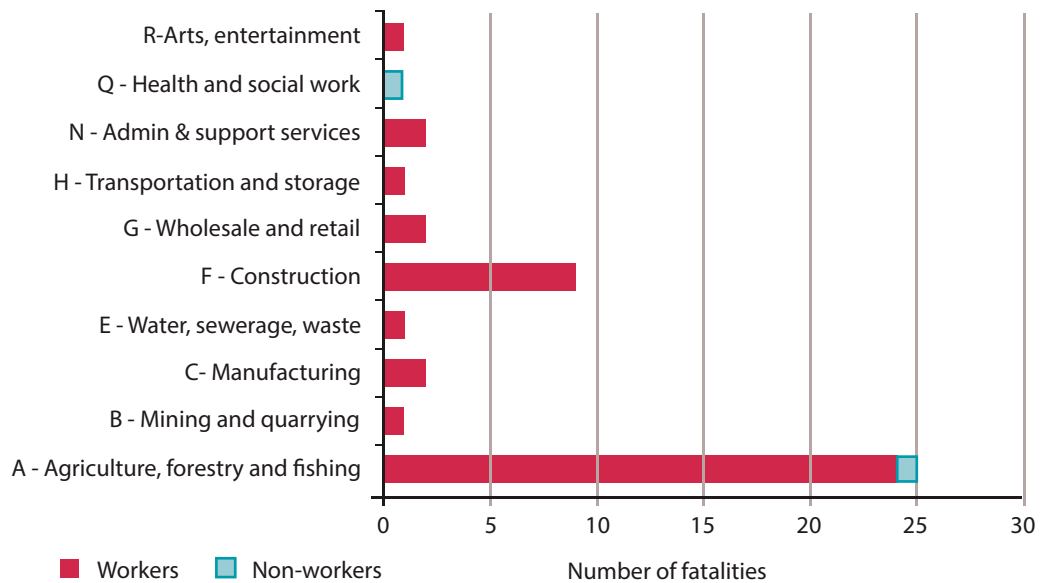


Figure 3.2: Number of reported fatalities by economic sector (worker and non-worker), 2016 (HSA)



Sector keys

A – Agriculture, forestry and fishing; B – Mining and quarrying; C – Manufacturing; E – Water supply: sewerage, waste management and remediation activities; F – Construction; G – Wholesale/retail trade, repair of vehicles, personal and household goods; H – Transportation and storage; M – Professional, scientific and technical activities; N – Administrative and support-service activities; O – Public administration and defence; compulsory social security; P – Education; Q – Human health and social work activities, R–U – Other NACE activities.

3 Fatal injury statistics

Figure 3.3: Number of reported fatalities (worker and non-worker) by economic sector, 2009–2016 (HSA)

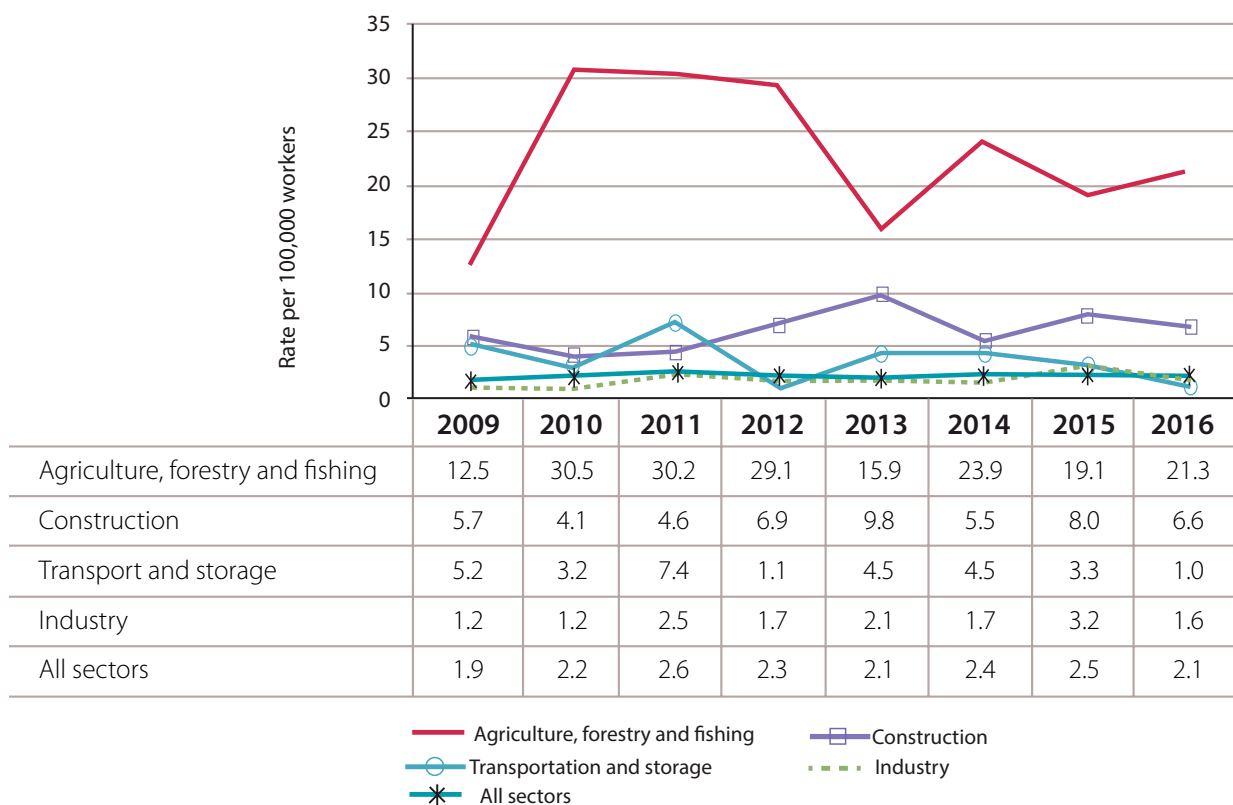
Economic sector	Number of fatalities								Total
	2009	2010	2011	2012	2013	2014	2015	2016	2009-2016
A–Total agriculture, forestry and fishing	13	29	27	28	21	31	24	25	198
Agriculture	10	22	22	20	16	30	18	20	158
Forestry	1	3	0	1	0	0	1	1	7
Fishing	2	4	5	7	5	1	5	4	33
B–Mining and quarrying	2	0	1	1	2	0	2	1	9
C–Manufacturing	1	2	2	0	1	3	3	2	14
D–Electricity, gas, steam and air conditioning supply	0	0	0	0	1	1	0	0	2
E–Water supply, sewerage, waste management and remediation activities	0	2	3	4	1	0	3	1	14
F–Construction	10	6	6	8	11	8	11	9	69
G–Wholesale and retail trade	2	4	2	3	3	4	2	2	22
H–Transportation and storage	6	3	7	1	4	4	4	1	30
I–Accommodation and food services	1	0	1	0	0	0	0	0	2
J–Information and communication	0	0	0	0	0	0	0	0	0
K–Financial and insurance activities	0	0	0	0	0	0	0	0	0
L–Real-estate activities	0	0	0	0	0	0	0	0	0
M–Professional, scientific and technical activities	1	0	2	1	1	1	0	0	6
N–Administrative and support-service activities	1	0	0	1	0	2	0	2	6
O–Public administration and defence	2	0	1	0	0	0	4	0	7
P–Education	2	0	0	0	1	0	0	0	3
Q–Human-health and social-work activities	1	1	1	1	0	0	2	1	7
R–U–Other NACE activities	1	1	1	0	1	1	1	1	7
Total	43	48	54	48	47	55	56	45	396

Figure 3.4: Rate of reported worker fatalities by economic sector, 2016 (HSA)

Economic sector	Worker						Non-Worker	
	Employee	Self-employed	Family worker	Trainee	Total	Rate per 100,000	Non-Worker	Total
Agriculture, forestry and fishing	4	20*	0	0	24	21.3	1	25
Industry (NACE B–E)	4	0	0	0	4	1.6	0	4
Construction	6	3	0	0	9	6.6	0	9
Wholesale and retail trade	2	0	0	0	2	0.7	0	2
Transportation and storage	1	0	0	0	1	1.0	0	1
Administration and support service	1	0	0	1	2	2.9	0	2
Health and social work	0	0	0	0	0	0.0	1	1
Other NACE activities (R–U)	1	0	0	0	1	0.9	0	1
Total persons	19	23	0	1	43	2.1	2	45

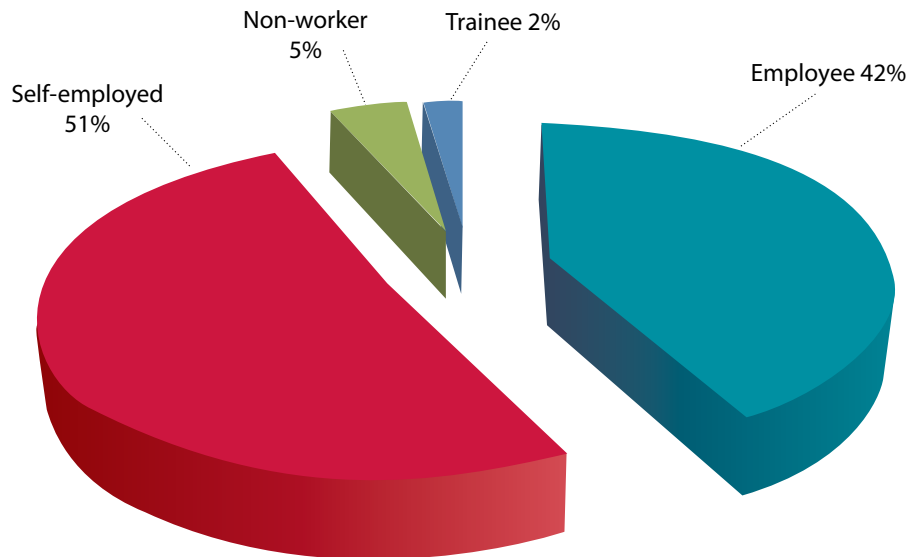
Note: * 18 in agriculture, one in fishing and one in forestry.

Figure 3.5: Comparison of fatality rates in selected sectors, 2009–2016 (HSA)



3 Fatal injury statistics

Figure 3.6: Percentage of reported fatal injuries by employment status, 2016 (HSA)



Note: numbers are small for some groups (n=19 for employee; n= 23 for self-employed; n=2 for non-worker and n=1 for trainee).

Figure 3.7: Number of reported fatalities (worker and non-worker) by economic sector and age band, 2016 (HSA)

Age	Economic Sector										Total
	A	B	C	E	F	G	H	N	Q	R	
0–17 years	1	0	0	0	0	0	0	0	0	0	1
18–24 years	1	0	0	0	1	0	0	1	0	0	3
25–34 years	2	0	0	0	1	1	1	0	0	1	6
35–44 years	1	0	2	0	2	0	0	1	0	0	6
45–54 years	4	1	0	1	1	1	0	0	0	0	8
55–64 years	6	0	0	0	4	0	0	0	0	0	10
65+ years	10	0	0	0	0	0	0	0	1	0	11
Total	25	1	2	1	9	2	1	2	1	1	45

Note:

A – Agriculture, forestry and fishing; B – Mining and quarrying; C – Manufacturing, E – Water supply: sewerage, waste management and remediation activities; F – Construction; G – Wholesale/retail trade, repair of vehicles, personal and household goods; H – Transportation and storage; M – Professional, scientific and technical activities; N – Administrative and support-service activities; O – Public administration and defence; compulsory social security; P – Education; Q – Human health and social work activities, R – U – Other NACE activities.

Figure 3.8: Number of reported fatalities (worker and non-worker) by age band, 2016 (HSA)

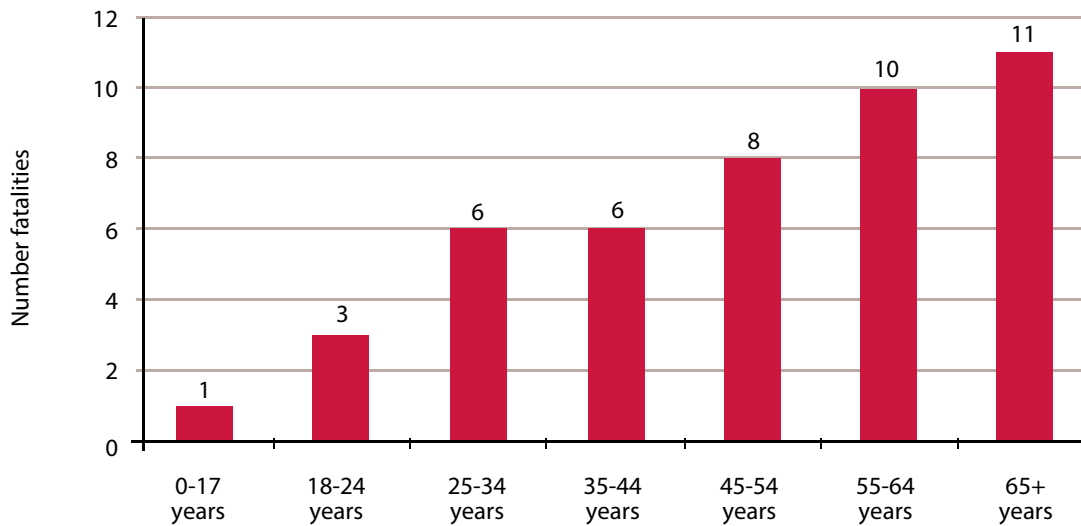
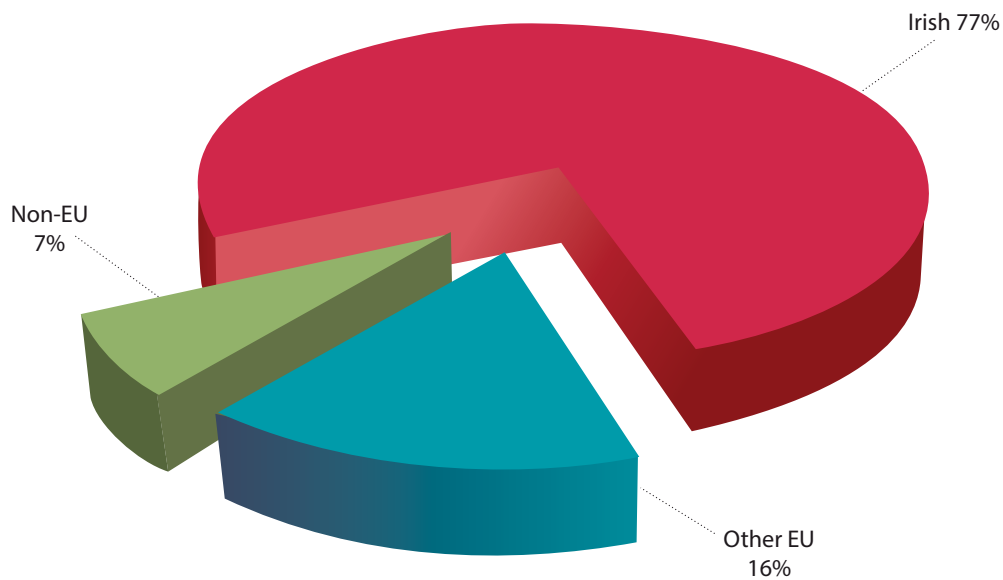


Figure 3.9: Number of reported worker fatalities by nationality and economic sector, 2016 (HSA)

Economic sector	Irish	Other EU	Non-EU
A–Agriculture, forestry and fishing	21	2	1
B–Mining and quarrying	1	0	0
C–Manufacturing	2	0	0
E–Water, sewerage, waste	0	1	0
F–Construction	7	2	0
G–Wholesale and retail trade	1	1	0
H–Transportation and storage	1	0	0
N – Administrative and support	0	0	2
R–U–Other NACE activities	0	1	0
Total	33	7	3

3 Fatal injury statistics

Figure 3.10: Percentage of reported worker fatalities by nationality, 2016 (HSA)



Note: numbers are small for the non-Irish groups (n=7 for other EU group; n=3 for non-EU group).

Figure 3.11: Reported worker fatality rates (per 100,000 workers) by nationality, 2009–2016 (HSA)

	2009	2010	2011	2012	2013	2014	2015	2016
Irish workers	1.9	2.3	2.6	2.4	2	2.6	2.8	1.9
Non-Irish national workers	1.7	1.8	2.6	2.2	2.9	1.4	1.1	3.2
All workers	1.9	2.2	2.6	2.3	2.2	2.4	2.5	2.1

Figure 3.12: Number of fatalities (worker and non-worker) by accident trigger, 2016 (HSA)

Accident trigger	Number	Percent
Loss of control of means of transport or handling equipment	10	22.2
Fall from height	7	15.6
Fall, collapse of material - from above	6	13.3
Accident trigger unknown	3	6.7
Breakage of material at joints	3	6.7
Loss of control of machine	3	6.7
Fall, collapse of material - from below	2	4.4
Fall, collapse of material - on same level	2	4.4
Loss of control of animal	2	4.4
Loss of control of object being worked on	2	4.4
Electrical problem - direct contact	1	2.2
Fire, flare up	1	2.2
Other shock, fright, violence trigger	1	2.2
Person in inappropriate area	1	2.2
Violence, aggression, threat by co-worker	1	2.2
Total	45	100%

3 Fatal injury statistics

Figure 3.13: Number of reported fatalities (worker and non-worker) by region, 2009–2016 (HSA)

Region	2009	2010	2011	2012	2013	2014	2015	2016
Border	12	10	4	9	7	10	15	5
Midlands	2	4	4	6	4	3	1	3
West	1	5	5	6	7	6	8	4
Dublin	8	2	4	2	4	8	3	3
Mid-East	5	5	3	1	2	2	3	6
Mid-West	5	7	9	10	2	5	7	5
South-East	3	5	8	3	6	11	8	7
South-West	7	10	17	11	14	10	11	12
Total	43	48	54	48	46	55	56	45

Border: Cavan, Donegal, Leitrim, Louth, Monaghan, Sligo

Midlands: Laois, Longford, Offaly, Westmeath

West: Galway, Mayo, Roscommon

Dublin: Dublin

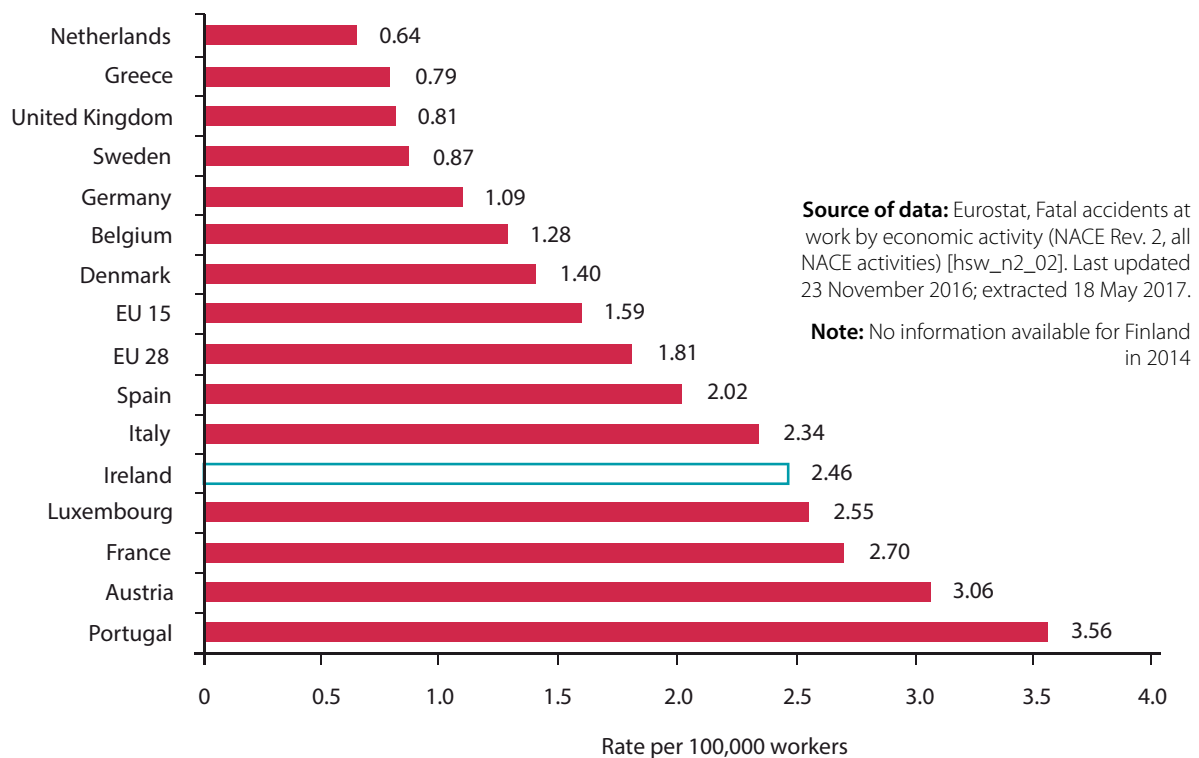
Mid-East: Kildare, Meath, Wicklow

Mid-West: Clare, Limerick, Tipperary North

South-East: Carlow, Kilkenny, Tipperary South, Waterford, Wexford

South-West: Cork, Kerry

Figure 3.14: Worker fatality rates per 100,000 workers in the EU15 Zone, 2014 (Eurostat)



A woman wearing a yellow hard hat and a green high-visibility jacket is operating a yellow surveying instrument mounted on a red and yellow tripod. She is wearing orange gloves and looking towards the right. The background shows a construction site with a steel framework under a cloudy sky.

Appendix

Classification of economic activities

.....

Appendix – Classification of economic activities

NACE Rev 2 – Level 1 and 2

NACE Rev 2 Code		Level	NACE Rev 2 Description
AGRICULTURE, FORESTRY AND FISHING			
A	01	2	Crop and animal production, hunting and related service activities
A	02	2	Forestry and logging
A	03	2	Fishing and aquaculture
MINING AND QUARRYING			
B	05	2	Mining of coal and lignite
B	06	2	Extraction of crude petroleum and natural gas
B	07	2	Mining of metal ores
B	08	2	Other mining and quarrying
B	09	2	Mining support-service activities
MANUFACTURING			
C	10	2	Manufacture of food products
C	11	2	Manufacture of beverages
C	12	2	Manufacture of tobacco products
C	13	2	Manufacture of textiles
C	14	2	Manufacture of wearing apparel
C	15	2	Manufacture of leather and related products
C	16	2	Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials
C	17	2	Manufacture of paper and paper products
C	18	2	Printing and reproduction of recorded media
C	19	2	Manufacture of coke and refined petroleum products
C	20	2	Manufacture of chemicals and chemical products
C	21	2	Manufacture of basic pharmaceutical products and pharmaceutical preparations
C	22	2	Manufacture of rubber and plastic products
C	23	2	Manufacture of other non-metallic mineral products
C	24	2	Manufacture of basic metals
C	25	2	Manufacture of fabricated metal products, except machinery and equipment
C	26	2	Manufacture of computer, electronic and optical products
C	27	2	Manufacture of electrical equipment
C	28	2	Manufacture of machinery and equipment n.e.c.
C	29	2	Manufacture of motor vehicles, trailers and semi-trailers
C	30	2	Manufacture of other transport equipment
C	31	2	Manufacture of furniture
C	32	2	Other manufacturing
C	33	2	Repair and installation of machinery and equipment

NACE Rev 2 Code		Level	NACE Rev 2 Description
ELECTRICITY, GAS, STEAM AND AIR-CONDITIONING SUPPLY			
D	35	2	Electricity, gas, steam and air-conditioning supply
WATER SUPPLY: SEWERAGE, WASTE MANAGEMENT AND REMEDIATION ACTIVITIES			
E	36	2	Water collection, treatment and supply
E	37	2	Sewerage
E	38	2	Waste collection, treatment and disposal activities; materials recovery
E	39	2	Remediation activities and other waste management services
CONSTRUCTION			
F	41	2	Construction of buildings
F	42	2	Civil engineering
F	43	2	Specialised construction activities
WHOLESALE AND RETAIL TRADE: REPAIR OF MOTOR VEHICLES AND MOTORCYCLES			
G	45	2	Wholesale and retail trade and repair of motor vehicles and motorcycles
G	46	2	Wholesale trade, except of motor vehicles and motorcycles
G	47	2	Retail trade, except of motor vehicles and motorcycles
TRANSPORTATION AND STORAGE			
H	49	2	Land transport and transport via pipelines
H	50	2	Water transport
H	51	2	Air transport
H	52	2	Warehousing and support activities for transportation
H	53	2	Postal and courier activities
ACCOMMODATION AND FOOD SERVICE ACTIVITIES			
I	55	2	Accommodation
I	56	2	Food and beverage service activities
INFORMATION AND COMMUNICATION			
J	58	2	Publishing activities
J	59	2	Motion picture, video and television programme production, sound recording and music publishing activities
J	60	2	Programming and broadcasting activities
J	61	2	Telecommunications
J	62	2	Computer programming, consultancy and related activities
J	63	2	Information service activities

Appendix – Classification of economic activities

NACE Rev 2 – Level 1 and 2

NACE Rev 2 Code		Level	NACE Rev 2 Description
FINANCIAL AND INSURANCE ACTIVITIES			
K	64	2	Financial service activities, except insurance and pension funding
K	65	2	Insurance, reinsurance and pension funding, except compulsory social security
K	66	2	Activities auxiliary to financial services and insurance activities
REAL-ESTATE ACTIVITIES			
L	68	2	Real-estate activities
PROFESSIONAL, SCIENTIFIC AND TECHNICAL ACTIVITIES			
M	69	2	Legal and accounting activities
M	70	2	Activities of head offices; management consultancy activities
M	71	2	Architectural and engineering activities; technical testing and analysis
M	72	2	Scientific research and development
M	73	2	Advertising and market research
M	74	2	Other professional, scientific and technical activities
M	75	2	Veterinary activities
ADMINISTRATIVE AND SUPPORT-SERVICE ACTIVITIES			
N	77	2	Rental and leasing activities
N	78	2	Employment activities
N	79	2	Travel agency, tour operator and other reservation service and related activities
N	80	2	Security and investigation activities
N	81	2	Services to buildings and landscape activities
N	82	2	Office administrative, office support and other business support activities
PUBLIC ADMINISTRATION AND DEFENCE; COMPULSORY SOCIAL SECURITY			
O	84	2	Public administration and defence; compulsory social security
EDUCATION			
P	85	2	Education
HEALTH AND SOCIAL WORK ACTIVITIES			
Q	86	2	Human health activities
Q	87	2	Residential care activities
Q	88	2	Social-work activities without accommodation

NACE Rev 2 Code		Level	NACE Rev 2 Description
ARTS, ENTERTAINMENT AND RECREATION			
R	90	2	Creative, arts and entertainment activities
R	91	2	Libraries, archives, museums and other cultural activities
R	92	2	Gambling and betting activities
R	93	2	Sports activities and amusement and recreation activities
OTHER SERVICE ACTIVITIES			
S	94	2	Activities of membership organisations
S	95	2	Repair of computers and personal and household goods
S	96	2	Other personal service activities
ACTIVITIES OF HOUSEHOLDS AS EMPLOYERS; UNDIFFERENTIATED GOODS AND SERVICES – PRODUCING ACTIVITIES OF HOUSEHOLDS FOR OWN USE			
T	97	2	Activities of households as employers of domestic personnel
T	98	2	Undifferentiated goods and services – producing activities of private households for own use
ACTIVITIES OF EXTRATERRITORIAL ORGANISATIONS AND BODIES			
U	99	2	Activities of extraterritorial organisations and bodies

References

- Boone, J., J.C. van Ours, J.P. Wuellrich and J. Zweimuller (2011). 'Recessions are bad for workplace safety', IZA Discussion Paper Series, No. 5688.
- Boone, J. and J.C. van Ours (2006). 'Are recessions good for workplace safety?' *Journal of Health Economics*, Vol. 25, pp. 1069-1093.
- CSO (2016). *Quarterly National Household Survey, Quarter 1 2016*, Statistical Release 24 May 2016, Cork: Central Statistics Office.
- CSO (2017). *Quarterly National Household Survey, Quarter 1 2015*, Statistical Release 23 May 2017, Cork: Central Statistics Office.
- Davis, R. and P. Jones (2005). *Trends and context to rates of workplace injury*, Health and Safety Executive, UK Research Report 386.
- Drummond, A. (2007). *An investigation into the official data sources and collection methods used to capture work-related death statistics in the Republic of Ireland*, Dublin: Department of Enterprise, Trade and Employment and the Health and Safety Authority.
- Drummond, A., Codd, M. and McQuillan, N. (2016). *Fatal collisions on the road and safety and health: Report submitted to the IOSH Research Committee*, Dublin: UCD Centre for Safety and Health at Work.
- Eurostat (2001). *European Statistics on Accidents at Work (ESAW) methodology, 2001 Edition*, Luxembourg: Eurostat.
- Eurostat (2013). *European Statistics on Accidents at Work (ESAW) methodology, 2013 Edition*, Luxembourg: Eurostat.
- Fairris, D. (1998). 'Institutional change in shop floor governance and the trajectory of post-war injury rates in US manufacturing 1946–1970', *Industrial and Labour Relations Review*, Vol. 51, No. 2, pp. 187-203.
- Forouzanfar M.H., L. Alexander, H.R. Anderson et al. (2016) 'Global, regional, and national comparative risk assessment of 79 behavioural, environmental and occupational, and metabolic risks or clusters of risks in 188 countries, 1990–2013: A systematic analysis for the Global Burden of Disease Study 2013', *Lancet*, Vol. 386, pp. 2287-323.
- Health and Safety Authority (2016). *Summary of workplace injury, illness and fatality statistics 2014–2015*, Dublin: HSA.
- Health and Safety Authority (2015). *Summary of workplace injury, illness and fatality statistics 2013–2014*, Dublin: HSA.
- Health and Safety Executive (2016) (UK) Health and Safety Statistics 2016, available at <http://www.hse.gov.uk/statistics/overall/hssh1516.pdf?pdf=hssh1516>.
- Jennings, C.J., P.M. Walsh, S. Deady, B.J. Harvey, and W. Thomas (2013). 'Malignant pleural mesothelioma incidence and survival in the Republic of Ireland 1994–2009', *Cancer Epidemiology*, Vol. 38, No. 1, pp. 35-41.

- National Cancer Registry Ireland (2012). Cancer Trends No 17. *Mesothelioma*, available at <http://www.ncri.ie/publications/cancer-trends-and-projections/cancer-trends-mesothelioma>.
- National Cancer Registry Ireland (2014). *Cancer in Ireland 1994–2012: Annual report of the National Cancer Registry*, available at http://www.ncri.ie/sites/ncri/files/pubs/NCRReport_19942012.
- National Cancer Registry Ireland. (2016). *Cancer in Ireland 1994–2014: Annual report of the National Cancer Registry*, available at http://www.ncri.ie/sites/ncri/files/pubs/NCRReport_2016.pdf.
- Parkin, D.M. (2011). 'Cancers attributable to occupational exposures in the UK in 2010', *British Journal of Cancer*, Vol. 105, pp. S70–S72.
- Russell, H., B. Maître and D. Watson (2015). *Trends and patterns in occupational health and safety in Ireland*, Research Series Number 40, Dublin: The Economic and Social Research Institute.
- Russell, H., B. Maître and D. Watson, D. (2016). *Work-related musculoskeletal disorders and stress, anxiety and depression in Ireland: Evidence from the QNHS 2002–2013*, Research Series Number 53, Dublin: The Economic and Social Research Institute.
- Venema, A., S. van den Heuvel and G. Gueskens (2009). *Health and safety at work: Results of the Labour Force Survey 2007 ad hoc module on accidents at work and work-related health problems*, Austria TNO.
- Watson, D., H. Russell and B. Maître (2015). *Workplace risks and worker outcomes in Ireland from a comparative perspective: An analysis of the European Working Conditions Survey, 2005 and 2010*, Research Series Number 46, Dublin: The Economic and Social Research Institute.
- Watson, D., O. Kenny, B. Maître and H. Russell (2017). *Risk taking and accidents on Irish farms: An analysis of the 2013 Health and Safety Authority Survey*, Research Series Number 60, Dublin: The Economic and Social Research Institute.

Legislation

- S.I. No. 44/1993 *Safety Health and Welfare at Work (General Application) Regulations, 1993* available at <http://www.irishstatutebook.ie/eli/1993/si/44/made/en/print>.



A series of 26 horizontal lines for writing notes, spaced evenly down the page.

*healthy,
safe and
productive
lives*

**Health and Safety
Authority**

Tel. 1890 289 389

International
Callers

00353 1 6147000

www.hsa.ie

