



HEALTH AND SAFETY
AUTHORITY



Summary of Workplace Injury,
Illness and Fatality Statistics

2014-2015

2014-2015

Our Vision:

healthy, safe and productive lives

Acknowledgements

The results presented in this report come from analysis prepared by the *Economic and Social Research Institute (ESRI)* as part of a two-year research programme, Health, Safety and Wellbeing at Work. We are very grateful to the *Central Statistics Office (CSO)* for the provision of statistical data from the Quarterly National Household Survey (QNHS) for analysis and for the expertise provided by Paul M Crowley and Damien Lenihan of the Labour Market Statistics Division.

Contents

1	Introduction, overview and methodology	4
1.1	Introduction	5
1.2	Overview for 2014–2015	5
	Non-fatal injury	5
	Work-related illness	6
	Fatal injuries	7
	Implications	8
1.3	Data sources and methodology	8
	Health and Safety Authority (HSA)	8
	Quarterly National Household Survey (QNHS) module on work-related accidents and illness	10
	Eurostat statistics	11
	Occupational injury benefit statistics	11
1.4	Calculating accident, illness and fatality rates	12
1.5	Technical notes	12
2	Non-fatal injury and illness statistics	13
2.1	General injury and illness statistics	14
	Figure 2.1: Injuries reported to the HSA, 2005–2015	14
	Figure 2.2: Injuries reported by economic sector, 2014 (HSA)	14
	Figure 2.3: Numbers employed in each economic sector, 2009–2015, four-quarter average (data based on CSO statistical release, May 2016)	15
	Figure 2.4: Number and rate of people suffering injury and illness, 2009–2014 (CSO)	16
	Figure 2.5: Rate of injury and illness causing 4+ days lost per 1,000 workers, 2008–2014 (CSO)	17
	Figure 2.6: Rate of injuries (any days lost) per 1,000 workers by economic sector, 2014 (CSO)	17
	Figure 2.7: Rate of 4+ day injuries per 1,000 workers in selected sectors, 2008–2014 (CSO)	18
	Figure 2.8: Rate of illness (any days lost) per 1,000 workers by economic sector, 2014 (CSO)	18
	Figure 2.9: Occupational injury benefit claims (DSP), 2000–2015	19
	Figure 2.10: Rate of 4+ day injuries per 100,000 workers in the EU, 2013 (Eurostat)	19
2.2	Victim statistics	20
	Figure 2.11: Number and rate of injury/illness (0+ days) per 1,000 workers by economic sector and gender, 2014 (CSO)	20
	Figure 2.12: Rate of total injury (0+ days) per 1,000 workers by gender, 2008–2014 (CSO)	21
	Figure 2.13: Rate of total illness (0+ days) per 1,000 workers by gender, 2008–2014 (CSO)	21

Contents (cont'd)

Figure 2.14: Rates of total injury and total illness (0+ days) per 1,000 workers by age band, 2014 (CSO)	22
Figure 2.15: Rates of total injury and total illness (0 + days) per 1,000 workers by occupation, 2014 (CSO)	22
Figure 2.16: Proportion of reported non-fatal injuries by employment status, 2015 (HSA)	23
Figure 2.17: Workers by nationality and economic sector, 2014 (CSO statistical release May 2015)	23
Figure 2.18: Proportion of reported non-fatal injuries by nationality, 2015 (HSA)	24
2.3 Nature of accidents and type of injuries sustained	25
Figure 2.19: Proportion of reported non-fatal injuries by trigger, 2015 (HSA)	25
Figure 2.20: Number and percentage of non-fatal accidents by trigger, selected sectors, 2015 (HSA)	25
Figure 2.21: Injury type by gender, 2014 (CSO)	26
Figure 2.22: Illness type by gender, 2014 (CSO)	26
Figure 2.23a: Most injured body parts, 2015 (HSA)	26
Figure 2.23b: Most injured body parts, workers, 2015 (HSA)	27
Figure 2.24: Percentage of non-fatal injuries by absence from work, 2015 (HSA)	27
2.4 Work environment statistics	28
Figure 2.25a Reported non-fatal injuries by work environment, 2015 (HSA)	28
Figure 2.25b Reported non-fatal injuries by work environment, 2014 (HSA)	28
Figure 2.26: Reported non-fatal injuries (%) by size of employing organisation, 2015 (HSA)	29
Figure 2.27: Number of non-fatal injury reports by county, 2015 (HSA)	30
Figure 2.28: Rate of illness and injury by region, 2014 (CSO)	31
Figure 2.29: Number and rate of people suffering injury (0+ days) and illness (0+ days) by region, 2014 (CSO)	31
3 Fatal injury statistics	32
Figure 3.1: Rate of worker fatalities per 100,000 workers, 1998–2015 (HSA)	33
Figure 3.2: Number of reported fatalities by economic sector (worker and non-worker), 2015 (HSA)	33
Figure 3.3: Number of reported fatalities (worker and non-worker) by economic sector, 2009– 2015 (HSA)	34
Figure 3.4: Rate of reported worker fatalities by economic sector, 2015 (HSA)	35
Figure 3.5: Comparison of fatality rates in selected sectors, 2009–2015 (HSA)	35

Contents (cont'd)

Figure 3.6: Percentage of reported fatal injuries by employment status, 2015 (HSA)	36
Figure 3.7: Number of reported fatalities (worker and non-worker) by economic sector and age band, 2015 (HSA)	36
Figure 3.8: Number of reported fatalities (worker and non-worker) by age band, 2015 (HSA)	37
Figure 3.9: Number of reported worker fatalities by nationality and economic sector, 2015 (HSA)	37
Figure 3.10: Percentage of reported worker fatalities by nationality, 2015 (HSA)	38
Figure 3.11: Reported worker fatality rates (per 100,000 workers) by nationality, 2009–2015 (HSA)	38
Figure 3.12: Number of fatalities (worker and non-worker) by accident trigger, 2015 (HSA)	39
Figure 3.13: Number of reported fatalities (worker and non-worker) by region, 2009–2015	40
Figure 3.14: Worker fatality rates per 100,000 workers in the EU, 2013 (Eurostat)	40
Appendix – Classification of economic activities	41
NACE Rev 2 – Level 1 and 2	42
References	46





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). The tables also present information on the distribution of injuries and illnesses by attributes of the job and organisation, 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.

In practice, many of the workplace and worker characteristics that are associated with injury and illness are interrelated. For example, men and women tend to be concentrated in different industrial sectors and this influences patterns of occupational injury and illness by gender. In order to unpack these different influences and to assess the independent influence of each factor, statistical modelling is necessary. Such work was undertaken as part of a research programme involving the Health and Safety Authority (HSA) and the Economic and Social Research Institute (ESRI) (Russell *et al.*, 2015; Russell *et al.*, forthcoming, 2016). 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 different types of work-related illness. 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). Such research can provide insight into the types of factors and work experiences that lie behind the broad statistical picture presented here.

In Section 1.2, some of the main findings from the statistics report are outlined. The data come from a range of sources; Section 1.3 describes the sources and the methodology used to calculate the figures in the tables. 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 2014–2015

Non-fatal injury

There were 7,775 non-fatal injuries reported to the HSA in 2015. Of these injuries, 7,443 (96%) involved workers, while the remaining 332 involved members of the public, including family members. There was a small increase in the number of injuries reported to the HSA in 2015 compared to 2014 (Figures 2.1 and 2.2). The number of people in employment increased in 2015; taking this into account, the rate of reported injuries, as a proportion of those in employment, increased marginally, from 3.7 per 1,000 in 2014 employed to 3.8 per 1,000.¹

¹ These rates exclude accidents involving non-workers.

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 18% 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 CSO data based on self-reports reveals a different sectoral pattern (see below).

The estimates based on the CSO survey module on work-related accidents and illnesses reported directly by workers (see Section 2 for details) suggest that 18,796 people experienced work injuries requiring an absence from work of four or more days in 2014, a slight increase from the 18,442 reported in 2013. Expressed as a rate of those employed, this rate remained at 9.8 between 2013 and 2014; a slight increase on the rate of 9.6 in 2013 (Figures 2.4 and 2.5). In contrast, the rate of injuries resulting in zero to three days' absence decreased from 15.0 per 1,000 in 2013 to 10.7 in 2014. The year-on-year fluctuations can be quite large and some of this movement may be due to chance. Therefore, the charts also present a three-year rolling average, which smooths these fluctuations. The estimated number of days lost across the economy as a whole in 2014 due to work-related injury was 750,000, down from 758,000 days in 2013.

The highest rates of injury causing four or more days' absence from work in 2014 occurred in the transportation and storage sector, the agricultural sector and the industry sector, with rates of 27.4, 23.9 and 14.5 per 1,000 workers respectively (Figure 2.7). Including less serious accidents (0+ days' absence)², the injury rates across sector follow a similar pattern, with the highest rates found in the agriculture, forestry and fishing sector (51 per 1,000) and the transportation and storage sector (42 per 1,000). Higher injury rates for less serious accidents are also found in accommodation and food services, at 27 per 1,000 (Figure 2.6).

Consistent with previous years, female workers had lower injury rates than male workers in 2014 (Figure 2.12). There was a similar pace of decline in rates for both male and female workers from 2013. For all injuries (0+ days' absence), the male injury rate fell from 32 per 1,000 in 2013 to 28 per 1,000 in 2014. For women, this rate declined from 16 per 1,000 to 12 per 1,000 during the same time period.

Non-Irish national workers comprised 14.8% of the Irish workforce in 2014 (Figure 2.17). In 2015, 17% 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.

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 accounted for 6% of the non-fatal injury reports to the HSA. Such events were most common in the health sector, where they accounted for 20% of reported incidents (Figure 2.20).

Work-related illness

The rate of illness causing four or more (4+) days' absence from work increased from 10 cases per 1,000 workers in 2013 to 12.5 per 1,000 workers in 2014 (Figure 2.4). However, when the measure is narrowed to illnesses involving only zero to three days' absence (0–3 days), the rate is shown to have decreased from 19.2 in 2013

²Note that the 0+ figures include *all* work-related injuries (illnesses), including those where there was no absence from work and longer spells of four or more days.

to 13.2 per 1,000 workers in 2014. There was a large increase in the estimated number of days lost across the economy due to work-related illness, from 792,875 in 2013 to 1.1 million in 2014 (Figure 2.4). As the number of workers suffering short periods of work-related illness declined, it appears that the average duration of absences lengthened and long-term illnesses increased. 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 Quarterly National Household Survey (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 days lost.

The three sectors with the highest illness rates in 2014 (0+ days lost) were agriculture, forestry and fishing (46 per 1,000 workers), health and social work (36 per 1,000 workers) and public administration and defence (33 per 1,000) (Figure 2.8). In 2013, the previous year, health and social work had the highest illness rate, followed by the education sector.

Since 2011, women have experienced a higher illness rate than men. However, between 2013 and 2014, the illness rate for women fell from 34 to 27 per 1,000 female workers, bringing the rate almost level with that for male workers, which has remained at 25 per 1,000 since 2012 (Figure 2.13). Further 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).

As in previous years, in 2014 older workers had higher work-related illness rates than younger workers: the rate peaked at 32 per 1,000 workers for those aged between 45 and 54 years, compared to a rate of 24 per 1,000 for those aged under 44 years. However, the rate falls again for those over 55 years (Figure 2.14).

Fatal injuries

There were 56 work-related fatalities reported to the HSA in 2015 (Figure 3.3), compared to 55 in 2014³, 47 fatalities in 2013 and 48 in 2012. Of the fatalities in 2015, 50 involved workers, giving a worker fatality rate of 2.5 workers per 100,000 (Figure 3.1). This was slightly higher than the 2014 rate (2.4), the 2013 rate (2.1) and the 2012 rate (2.3). The three-year rolling fatality rate has remained relatively stable since 2009 following a downward trend between 2006 and 2009.

The highest number of fatalities occurred in the agriculture, forestry and fishing sector, where 21 worker deaths were recorded in 2015, with an additional three non-worker deaths (Figure 3.2). This compares to a total of 31 fatalities in the agriculture, forestry and fishing sector in 2014. The fatality rate for workers in this sector for 2015 was 19.1 per 100,000 workers. This is lower than the rate of 23.9 for 2014 and lower than the average rate of 26.4 per 100,000 workers for the years between 2010 and 2013 (Figure 3.5).

There were 10 worker fatalities in the construction sector during 2015 and one non-worker fatality, which is three more than the total fatalities for this sector in 2014 (Figure 3.4). This translates into a fatality rate of 8.0 per 100,000 workers, up from a rate of 5.5 recorded in 2014.

Self-employed workers were once again over-represented in fatal work accidents: 21 of the fatalities in 2015 involved self-employed persons, including 10 farmers, four self-employed workers in the fishing sector and one self-employed person in the forestry sector (Figure 3.4). The age profile of those fatally injured was slightly younger in 2015 than in 2014. In 2014, the 65+ age group accounted for the majority of fatalities (23%); however, in 2015 most fatalities occurred among the younger age groups of 45–54 years (27%) and 55–64

³ A fatality which occurred in 2014, has since been established to be non-work related. This reduces the number of fatalities in 2014 to 55, of which 46 were workers and 9 were non-workers.

years (25%) (Figures 3.7 and 3.8). Non-Irish nationals accounted for 6% of worker fatalities in 2015 (three out of 50 worker fatalities) (Figure 3.10). The fatality rate for non-Irish national workers was 1.1 per 100,000, compared to the rate for Irish workers of 2.8 per 100,000 (Figure 3.11).

The latest European statistics on fatality rates refer to the year 2013. These figures, compiled by Eurostat, report a fatality rate of 2.1 per 100,000 workers for Ireland. This is the sixth highest rate among the EU15 and is 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 first quarter of 2016, there was an annual increase in employment of 2.4% or 46,900 persons (CSO, 2016). Analysis of Irish data for the period 2001 to 2012 (Russell *et al.*, 2015) has found that the risk of injuries was significantly higher in 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 because of increased demands (Fairris, 1998; Davis and Jones, 2005). Other research suggests that in periods of financial instability reports may decrease due to greater reluctance of employees to report injuries or take illness absence during recessionary periods (Boone, *et al.* 2006, 2011), which 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% and 'loss of control of transport or handling equipment', from 5.4% to 9.4%. 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, forestry and fishing industries. 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 change 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 50 workers and six members of the public or family members (including children) suggests that there is no room for complacency.

Ireland's ranking position within the EU fatality statistics has improved: its worker fatality rate went from fifth highest in the EU15 in 2011 to sixth highest in 2012 and 2013. This compares with rankings of fifth highest in 2010, and seventh highest in 2009 and 2008. In each of these years, the Irish rate was above the EU15 average.

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 2013 or 2015, according to the data source used. The HSA results include the year 2015, while the QNHS results only go up 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. 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, where the person requires treatment from a medical practitioner.⁴ 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'.

It is known that there is significant under-reporting of accidents to the HSA, as is the case in other national employer reporting systems. In 2014, 7,057 worker injuries were reported to the HSA (HSA, 2015), while the CSO figures for the same period suggest that there were 18,796 work-related accidents that resulted in an absence of four or more days (Figure 2.4). These results suggest that approximately 38% of accidents/injuries are captured in the HSA. 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 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.*).

The HSA data also contain information on work-related fatalities or fatalities in the workplace during the relevant calendar year. A review of research in other jurisdictions and a pilot study in Ireland comparing coroner files and HSA reports for one county suggest that work-related road-traffic fatalities are under-recorded in the HSA register (Drummond, 2007). Recent information on road-traffic fatalities is available from 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 illness such as cancer.

There are a number of alternative sources of information on deaths from occupational diseases in Ireland, such as the National Cancer Registry and the register of deaths; however, the diseases' processes are often complex, multi-causal and can have a long latency period, making it difficult to attribute death to occupational hazards (Drummond, 2007).

Despite these limitations, the injuries reported to the HSA provide a consistent record of a subset of work-related injuries and deaths that 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 1993.⁵

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 'triggers'). 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).⁶

⁴For further information see http://www.hsa.ie/eng/Topics/Accident_and_Dangerous_Occurrence_Reporting/#reportableaccidents.

⁵*The Safety Health and Welfare at Work (General Application) Regulations, 1993* available at <http://www.irishstatutebook.ie/eli/1993/si/44/made/en/print>.

⁶*Eurostat (2013) European statistics on accidents at work (ESAW) Methodology, 2013 edition.*

Quarterly National Household Survey (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 the 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 2013), the reference period has referred to the 12 months of the preceding calendar year.⁷ **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 2015 and the reference period is 2014. Respondents were asked:

How many, if any, injuries did you incur at work (excluding commuting) during the period January 2014 to December 2014?

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?⁸

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 2014 to December 2014, 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 2014 to December 2014, 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.⁹ 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, 'Summary of Workplace Injury, Illness and Fatality Statistics 2013 – 2014' for further details).

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

⁷ Pre-2009, the module referred to the 12 months prior to the interview date (CSO personal communication).

⁸ The number of days ranges from 0 to 231 for those who were absent for the whole year (52*5) – 29 days' annual leave and bank holidays.

⁹ The 2007 module was also carried out across the EU and therefore similar issues arise for that year (Venema *et al.*, 2009).

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.

At the time of publication, the QNHS micro-data from the survey conducted in Q1 2015 was not available for in-house analysis, so we have used the CSO statistical release on injury and illness results that the CSO communicated to us.

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 this 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 that cause 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 2013. The Irish data come from the reports to the HSA; however, the number of accidents (and the rates) cited by Eurostat differ from the HSA figures. For example, the Eurostat figure for Ireland in 2013 is 13,444 for accidents resulting in more than three days' absence, while the HSA figure is 6,598, or 6,396 excluding non-workers (see Figure 2.25a, HSA (2014)), as ESAW does not include members of the public or family members (Eurostat, 2001). 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 calculate 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>.

Occupational injury benefit statistics

Figures on the number of claims for occupational injury benefit (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. In 2015, the number of claims increased slightly to 10,182, from 9,768 in 2014; however, this figure is still well 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. In 2015, the average total duration increased by one day to 58 days.

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 amongst 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 HSA. As the latest QNHS data on illness and injury were collected in Quarter 1 of 2015 and refer to illness/injury during the period January–December 2014, the employment levels were calculated across the four quarters: Q1 2014 to Q4 2014.

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>.
- European Statistics on Accidents at Work (ESAW): Variables, definitions and classifications relating to the victim, the incident and the circumstances of the incident, maintained by Eurostat:

<http://ec.europa.eu/eurostat/documents/3859598/5926181/KS-RA-12-102-EN.PDF/56cd35ba-1e8a-4af3-9f9a-b3c47611ff1c>.

A close-up photograph of a middle-aged man with a grey beard and glasses, wearing a white lab coat and a white safety cap. He is focused on his work, using a pipette to transfer a red liquid into a small vial. The background is a blurred laboratory setting with various pieces of equipment and shelves.

2

Non-fatal injury and illness statistics

.....

2.1 General injury and illness statistics

Figure 2.1: Injuries reported to the HSA, 2005–2015

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Non-fatal accidents	8,027	7,976	8,303	8,069	7,002	7,583	7,094	6,804	6,598	7,431	7,775

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, 2015 (HSA)

	Workers		Non-workers		All	
	N	%	N	%	N	%
Q–Health and social work	1,453	19.5%	37	11.1%	1,490	19.2%
C–Manufacturing	1,347	18.1%	11	3.3%	1,358	17.5%
G–Wholesale and retail	940	12.6%	144	43.4%	1,084	13.9%
O–Public administration and defence	885	11.9%	17	5.1%	902	11.6%
H–Transportation and storage	848	11.4%	6	1.8%	854	11.0%
F–Construction	590	7.9%	13	3.9%	603	7.8%
N–Administration and support service	269	3.6%	7	2.1%	276	3.6%
E–Water, sewerage, waste	182	2.4%	2	0.6%	184	2.4%
I–Accommodation and food	174	2.3%	25	7.5%	199	2.6%
P–Education	174	2.3%	38	11.4%	212	2.7%
S–Other service activities	139	1.9%	2	0.6%	141	1.8%
K–Financial and insurance	100	1.3%	12	3.6%	112	1.4%
A–Agriculture, forestry and fishing	85	1.1%	3	0.9%	88	1.1%
J–Information and communication	67	0.9%	1	0.3%	68	0.9%
M–Professional, scientific and technical	60	0.8%	1	0.3%	61	0.8%
B–Mining and quarrying	41	0.6%	0	0.0%	41	0.5%
R–Arts, entertainment	41	0.6%	12	3.6%	53	0.7%
D–Electricity, gas, etc.	30	0.4%	0	0.0%	30	0.4%
L–Real estate	16	0.2%	1	0.3%	17	0.2%
Missing	2	0.0%	0	0.0%	2	0.0%
All	7,443	100.0%	332	100.0%	7,775	100.0%

Figure 2.3: Numbers employed in each economic sector, 2009–2015, four-quarter average (data based on CSO statistical release, May 2016)

Economic sector	Numbers employed						
	2009	2010	2011	2012	2013	2014	2015
Agriculture, forestry and fishing	96,325	85,225	82,900	93,800	106,750	108,975	109,850
Industry ¹	259,175	245,350	240,325	236,175	240,500	239,000	248,200
Construction	158,325	121,000	107,800	100,825	102,000	109,425	125,425
Wholesale and retail trade	282,600	276,675	273,200	272,925	272,325	272,400	273,850
Transportation and storage	95,725	93,525	94,900	88,525	88,150	89,425	91,825
Accommodation and food	126,925	126,700	116,525	122,825	130,825	137,200	138,000
Information and communication	73,975	74,900	76,325	79,800	80,575	81,350	83,300
Financial, insurance and real estate	108,075	101,875	102,000	100,925	99,300	99,975	100,650
Professional, scientific and technical	103,500	100,350	100,050	103,625	109,600	115,950	116,750
Administrative and support services	67,600	62,125	67,225	61,825	61,675	64,375	65,250
Public administration and defence	106,275	104,675	101,300	96,500	95,350	96,450	99,650
Education	147,500	149,675	144,000	145,925	146,375	149,900	151,250
Health and social work	231,575	237,700	241,175	245,700	246,325	247,200	250,675
Other NACE activities	97,050	94,675	96,875	99,925	99,875	99,325	103,150
Not stated	6,650	7,725	5,450	**	**	4,700	**
Total²	1,961,275	1,882,175	1,850,050	1,851,425	1,881,150	1,913,900	1,963,550

¹ Industry=Mining and quarrying + manufacturing + electricity, gas, steam and air-conditioning supply + water supply, sewerage, waste management and remediation activities: NACE B to E.

² The total four-quarter averages includes the 'not stated' figures.

** Figure is not reported by CSO as the estimate is unreliable due to the small size of the cell.

Figure 2.4: Number and rate of people suffering injury and illness, 2009–2014 (CSO)

	2009		2010		2011		2012		2013		2014	
	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	1,961		1,882.18		1,850.05		1,851.43		1,881.15		1,913.90	
Injury												
Total suffering injury	32,010	16.3	40,584	21.6	40,097	21.7	35,001	18.9	46,574	24.8	39,319	20.5
0–3 days' absence	20,556	10.5	21,109	11.2	23,254	12.6	17,214	9.3	28,132	15.0	20,523	10.7
4+days' absence	11,454	5.8	19,475	10.3	16,843	9.1	17,786	9.6	18,442	9.8	18,796	9.8
Days lost due to injury ¹	283,200		666,553		590,690		n.a.		758,674		750,011	
Illness												
Total suffering illness	30,593	15.6	38,704	20.6	48,436	26.2	50,210	27.1	54,867	29.2	49,194	25.7
0–3 days' absence	18,328	9.3	20,856	11.1	28,748	15.5	22,735	12.3	36,039	19.2	25,227	13.2
4+ days' absence	12,265	6.3	17,848	9.5	19,688	10.6	27,474	14.8	18,828	10.0	23,966	12.5
Days lost due to illness	463,700		704,494		595,951		n.a.		792,875		1,106,311	
Injury and illness												
Total injury or illness	62,603	31.9	79,288	42.1	88,533	47.9	85,210	46	101,440	53.9	88,513	46.2
Total (4+ days' absence)	23,719	12.1	37,323	19.8	36,531	19.7	45,261	24.4	37,270	19.8	42,762	22.3
Total days lost	746,900		1,371,047		1,186,641		n.a.		1,551,549		1,856,322	

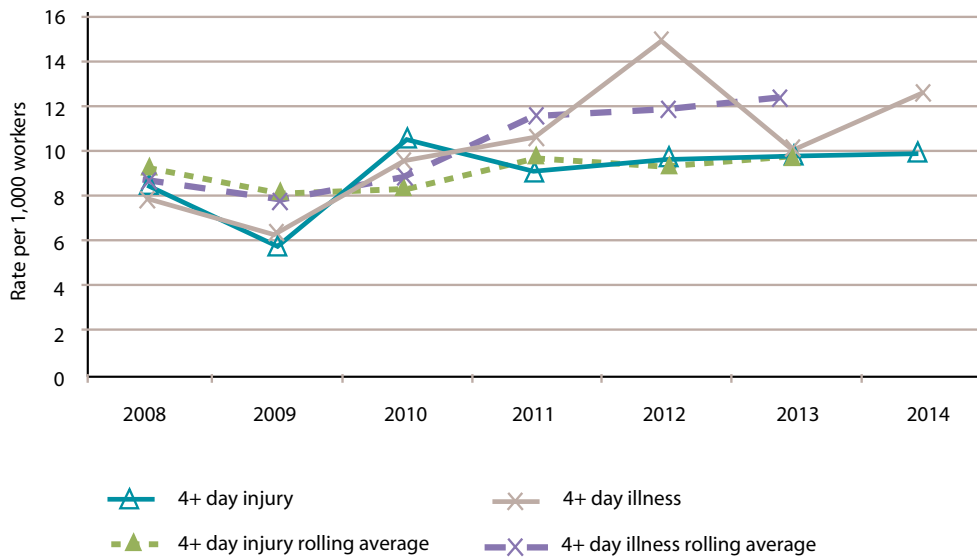
Note: The days absent in 2012 are not strictly comparable with other years due to changes in response categories (see HSA, 2014, *Summary of Workplace Injury, Illness and Fatality Statistics 2013–2014* for details). The changes also mean that the total number of days lost cannot be calculated for 2012.

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.

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.

Figure 2.5: Rate of injury and illness causing 4+ days lost per 1,000 workers, 2008–2014 (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.*, forthcoming 2016).

Figure 2.6: Rate of injuries (any days lost) per 1,000 workers by economic sector, 2014 (CSO)

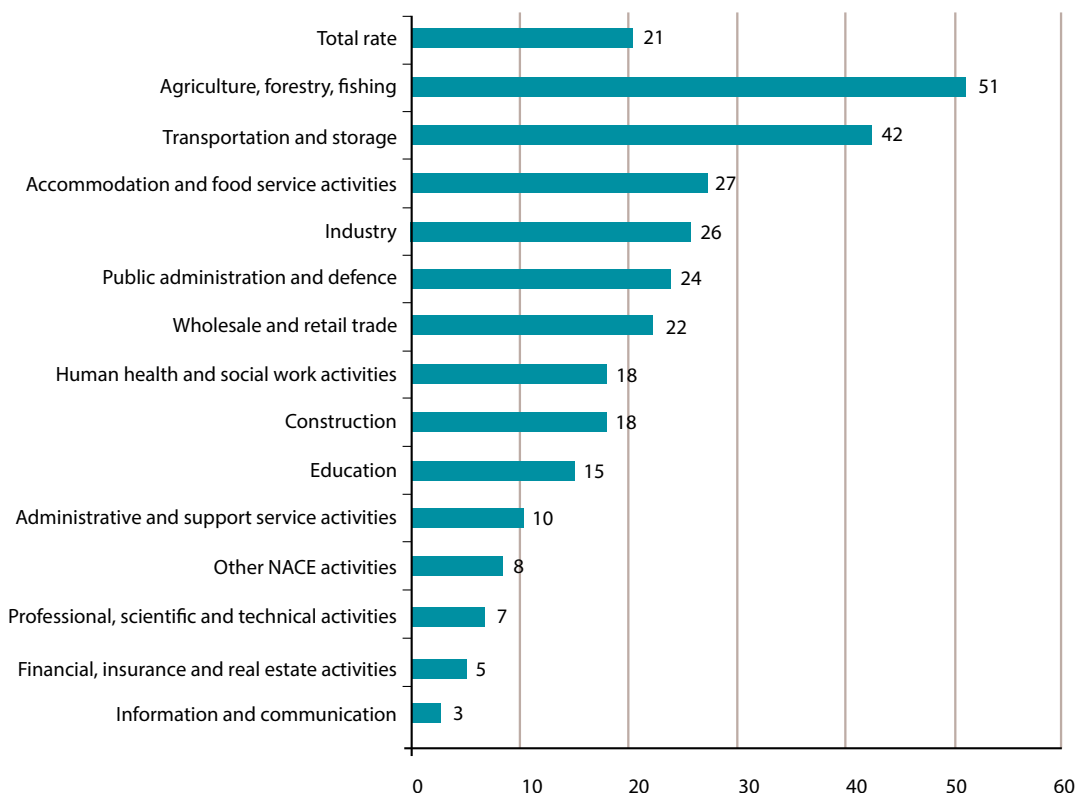


Figure 2.7: Rate of 4+ day injuries per 1,000 workers in selected sectors, 2008–2014 (CSO)

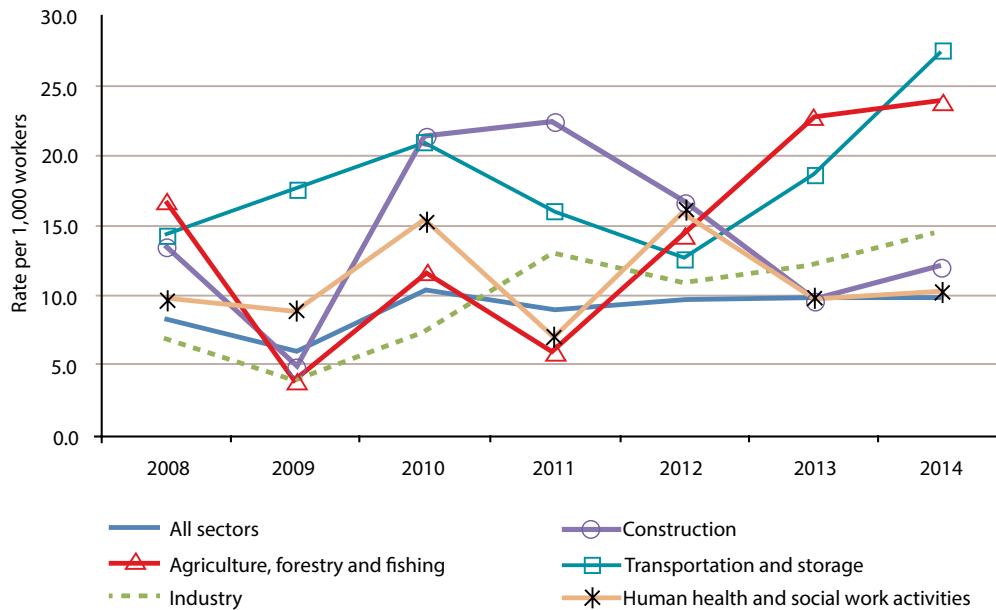


Figure 2.8: Rate of illness (any days lost) per 1,000 workers by economic sector, 2014 (CSO)

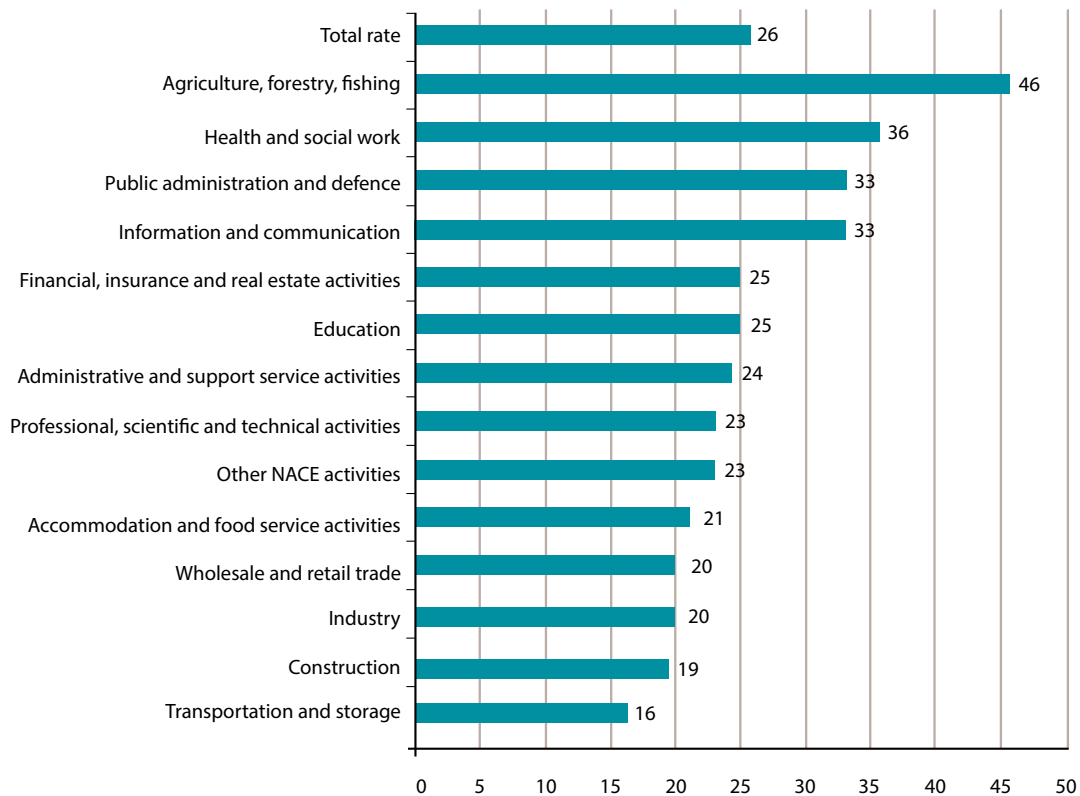


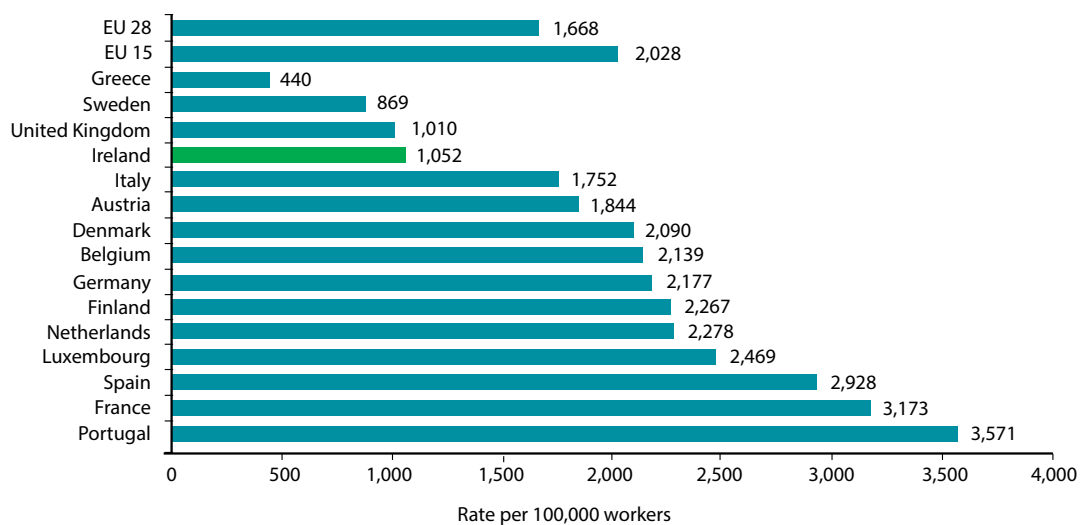
Figure 2.9: Occupational injury benefit claims (DSP), 2000–2015

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	NO DATA			
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		

Source: Department of Social Protection

Notes: Claim days refer to the number of paid claim days; therefore up to 2013 it does 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 EU 15 zone, 2013 (Eurostat)



Source of data: Eurostat, Accidents at work by sex and age (NACE Rev. 2, A, C-N) [hsw_mi01]. Last updated 29/02/16; extracted 6 May 2016.

Note: 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, 2014 (CSO)

	Numbers employed		Injury rate per 1000 workers		Illness rate per 1000 workers	
	Male	Female	Male	Female	Male	Female
Agriculture, forestry and fishing	95,800	13,200	56	14.3	50.2	12.8
Industry	173,100	66,000	28.9	17.3	20.3	18.4
Construction	101,300	8,100	19.1	-	21	0
Wholesale and retail trade	138,300	134,100	32.7	11.2	19.4	21.3
Transportation and storage	72,200	17,200	50.4	8.9	18.5	7
Accommodation and food services	65,500	71,700	36.5	18.8	24.4	18.5
Information and communication	57,800	23,600	0	9.3	24.9	51.8
Financial, insurance & real estate	48,600	51,500	10.6		25.4	24.8
Professional, scientific & technical	70,400	45,600	8	4.8	19.1	29
Administrative and support services	32,600	31,800	15.6	5	35.2	13.1
Public administration and defence	49,600	46,900	39.2	7.6	27	39.4
Education	41,700	108,200	10.7	16.8	24.5	25.3
Health and social-work activities	49,200	198,000	18.8	18.3	26.5	38
Other NACE activities	41,400	58,000	20.2		22.2	23.3
Not stated	*	*				
Total	1,039,100	874,800	27.5	12.3	24.8	26.7

Figure 2.12: Rate of total injury (0+ days) per 1,000 workers by gender, 2008–2014 (CSO)

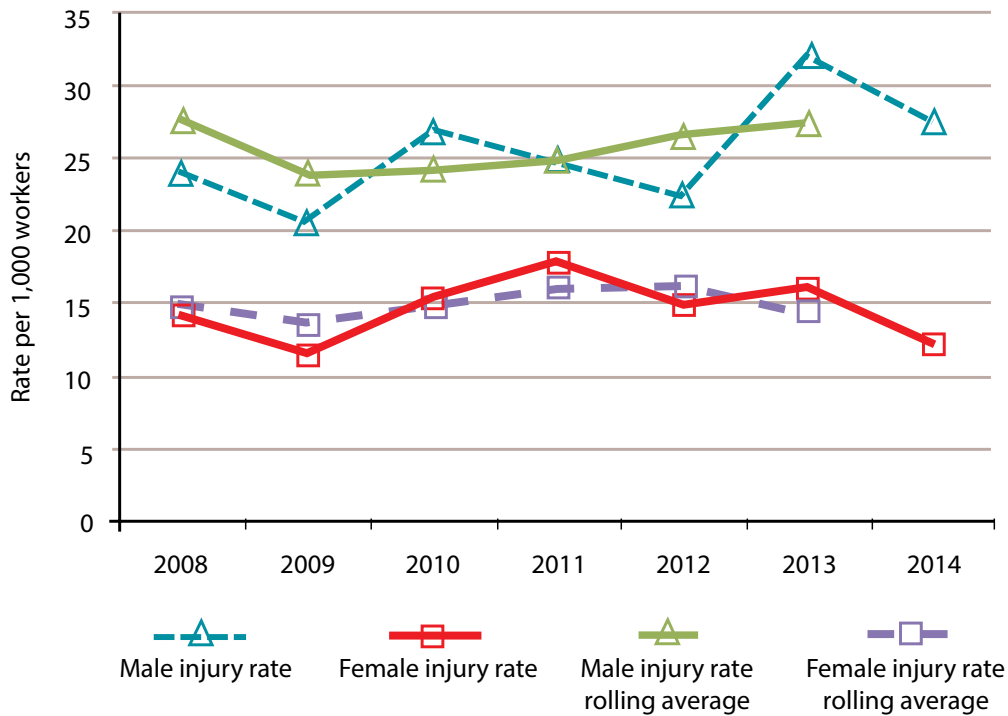


Figure 2.13: Rate of total illness (0+ days) per 1,000 workers by gender, 2008–2014 (CSO)

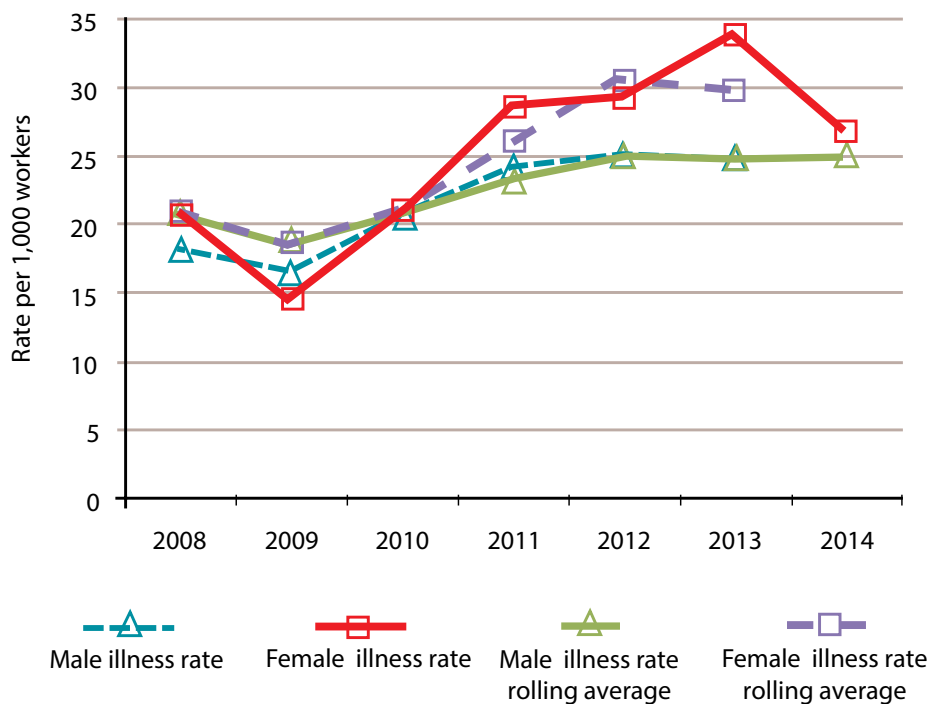


Figure 2.14: Rates of total injury and total illness (0+ days) per 1,000 workers by age band, 2014 (CSO)

Age range	Injury rate 2014	Illness rate 2014
15–19	*	*
20–24	*	*
25–34	20.0	23.5
35–44	23.8	24.4
45–54	24.4	32.0
55–64	14.6	26.3
65+	19.4	29.8
Total	20.5	25.7

* Figure is not reported as the estimate is unreliable due to the small size of the cell.

Figure 2.15: Rates of total injury and total illness (0+ days) per 1,000 workers by occupation, 2014 (CSO)

Occupation	Injury rate 2014	Illness rate 2014
Managers and administrators	14.3	16.1
Professional	12.8	37.6
Associate professional and technical	16.1	25.6
Clerical and secretarial	5.9	18.4
Craft and related	38.0	30.0
Personal and protective service	20.6	26.5
Sales	16.0	14.5
Plant and machines operatives	24.3	16.4
Elementary occupations*	33.7	29.5
All occupations	20.5	25.7

* Includes elementary agricultural (for example farm workers), construction, process plant (for example packers), administration (for example postal workers), cleaning, security, sales, storage and other occupations. See the Office of National Statistics (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, 2015 (HSA)

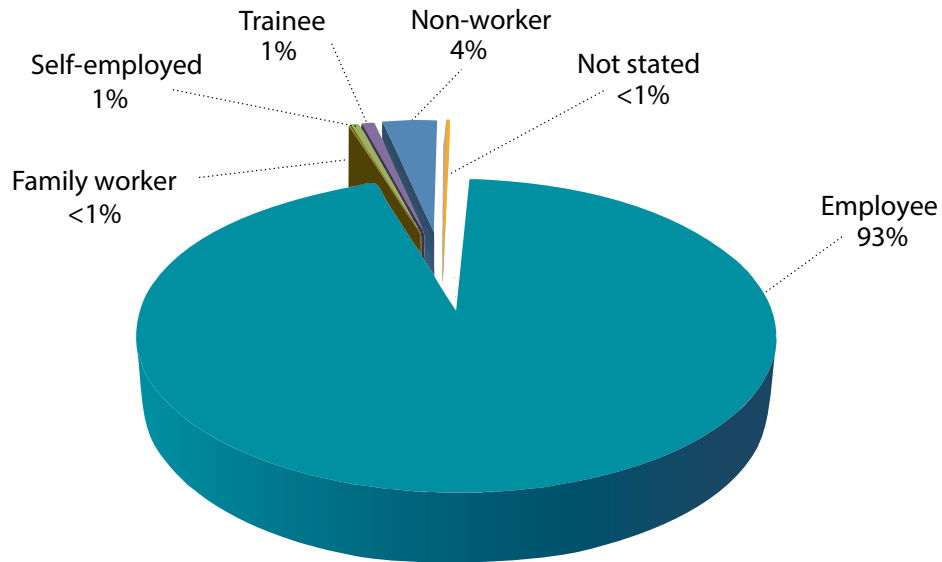
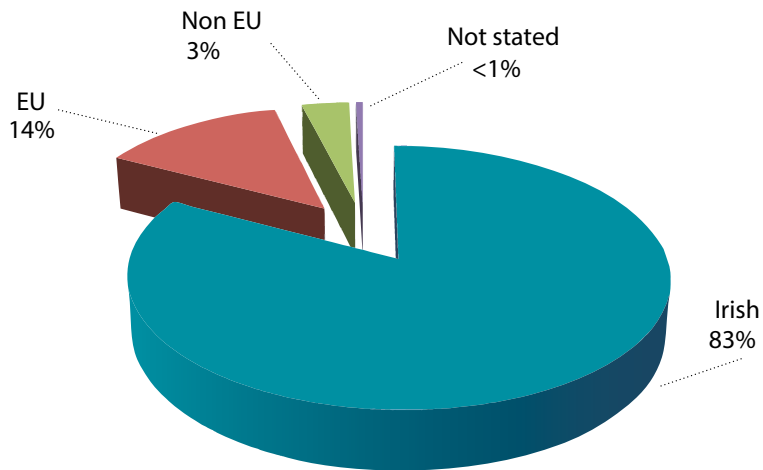


Figure 2.17: Workers by nationality and economic sector, 2014 (CSO statistical release May 2015)

Economic sector	Number of workers		
	Irish	Non-Irish	% non-Irish
Agriculture, forestry and fishing	101,850	7,125	6.5%
Industry	193,175	45,825	19.2%
Construction	97,175	12,225	11.2%
Wholesale and retail trade	225,075	47,350	17.4%
Transportation and storage	79,400	10,000	11.2%
Accommodation and food-service activities	90,650	46,525	33.9%
Information and communication	64,800	16,575	20.4%
Financial, insurance and real-estate activities	89,775	10,250	10.2%
Professional, scientific and technical activities	102,325	13,600	11.7%
Administrative and support-service activities	49,000	15,375	23.9%
Public administration and defence	94,275	-	-
Education	140,000	9,900	6.6%
Human-health and social-work activities	218,675	28,525	11.5%
Other NACE activities	8,265	16,700	16.8%
Not stated	**	*	
Total	1,631,125	282,800	14.8%

Figure 2.18: Proportion of reported non-fatal injuries by nationality, 2015 (HSA)



Note: The EU refers to those from the EU27.



2.3 Nature of accidents and type of injuries sustained

Figure 2.19: Proportion of reported non-fatal injuries by trigger, 2015 (HSA)

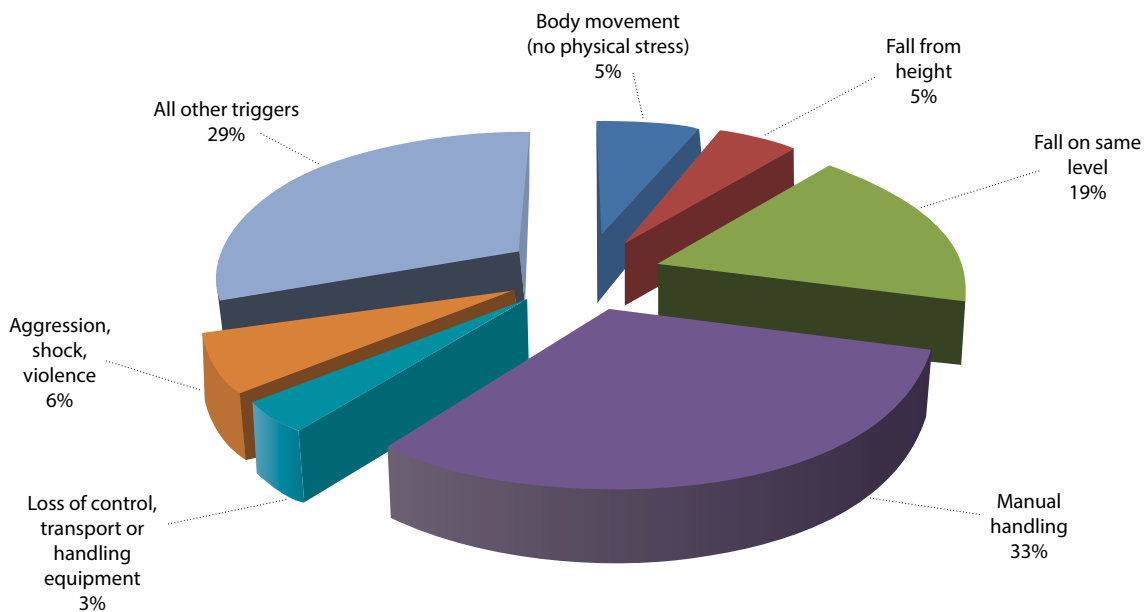


Figure 2.20: Number and percentage of non-fatal accidents by trigger, selected sectors, 2015 (HSA)

	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)	92	5.7	31	5.2	44	4.1	53	6.2	33	3.7	71	4.8
Fall from height	66	4.1	71	11.8	49	4.5	24	2.8	29	3.2	36	2.4
Fall on same level	209	13.0	112	18.6	271	25.0	135	15.9	150	16.6	255	17.2
Manual handling	613	38.1	183	30.4	414	38.2	354	41.6	200	22.2	456	30.8
Loss of control – transport or handling equipment	47	2.9	20	3.3	18	1.7	53	6.2	85	9.4	27	1.8
Aggression, shock, violence	11	0.7	4	0.7	7	0.6	17	2.0	109	12.1	298	20.1
All other ¹	573	35.6	180	30.0	280	25.9	214	25.2	295	32.7	338	22.8
Total	1,611	100.0	601	100.0	1,083	100.0	850	100.0	901	100.0	1,481	100.0

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

Figure 2.21: Injury type by gender, 2014 (CSO)

	Male		Female		Total	
	Number	Rate	Number	Rate	Number	Rate
Wound or superficial injury	11,257	10.8	2,976	3.4	14,233	7.4
Bone fracture	2,823	2.7	1,423	1.6	4,245	2.2
Dislocation, sprain or strain	9,950	9.6	3,630	4.1	13,580	7.1
Amputation, concussion or internal injury, burn, scald or frostbite	744	0.7	421	0.5	1,166	0.6
Poisoning or infection, suffocation (asphyxiation), other type of injury, not specified	3,814	3.7	2,281	2.6	6,095	3.2
Total	28,588	27.5	10,731	12.3	39,319	20.5

Figure 2.22: Illness type by gender, 2014 (CSO)

	Male		Female		Total	
	Number	Rate	Number	Rate	Number	Rate
Bone, joint or muscle problem	11,013	10.6	9,891	11.3	20,905	10.9
Breathing or lung problem	1,768	1.7	1,026	1.2	2,795	1.5
Hearing problem, headache, eyestrain, heart/circulatory problem, disease	4,947	4.8	4,855	5.6	9,803	5.1
Stress, depression or anxiety	3,365	3.2	3,851	4.4	7,215	3.8
Skin problem, other types of complaint, not stated	4,724	4.5	3,753	4.3	8,476	4.4
Total	25,817	24.8	23,377	26.7	49,194	25.7

Figure 2.23a: Most injured body parts, 2015 (HSA)

Body part	All		Workers only	
	N	%	N	%
Back, including spine and vertebrae in the back	1,790	23	1,776	23.9
Finger(s)	726	9.3	707	9.5
Leg, including knee	637	8.2	606	8.1
Hand	542	7	531	7.1
Ankle	449	5.8	473	6.4
Shoulder and shoulder joints	481	6.2	433	5.8
Arm, including elbow	436	5.6	416	5.6
All others, including unknown	398	5.1	334	4.5
Total	7,775	100	7,443	100

Figure 2.23b: Most injured body parts, workers, 2015 (HSA)

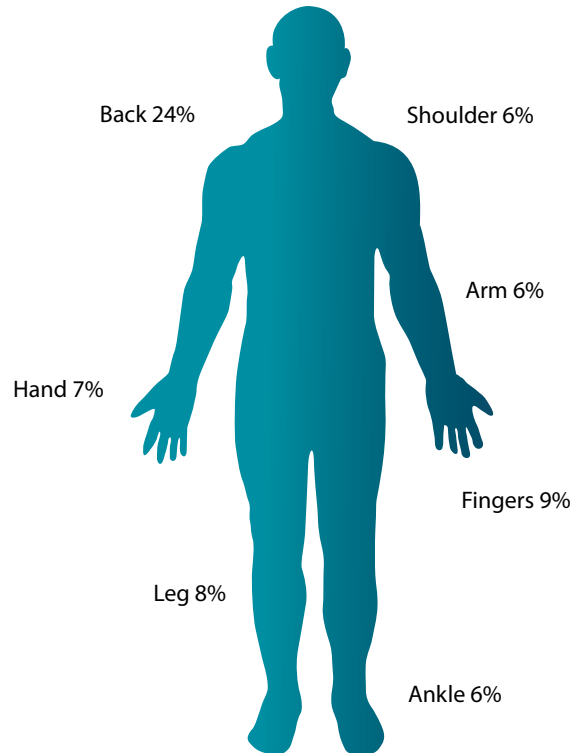
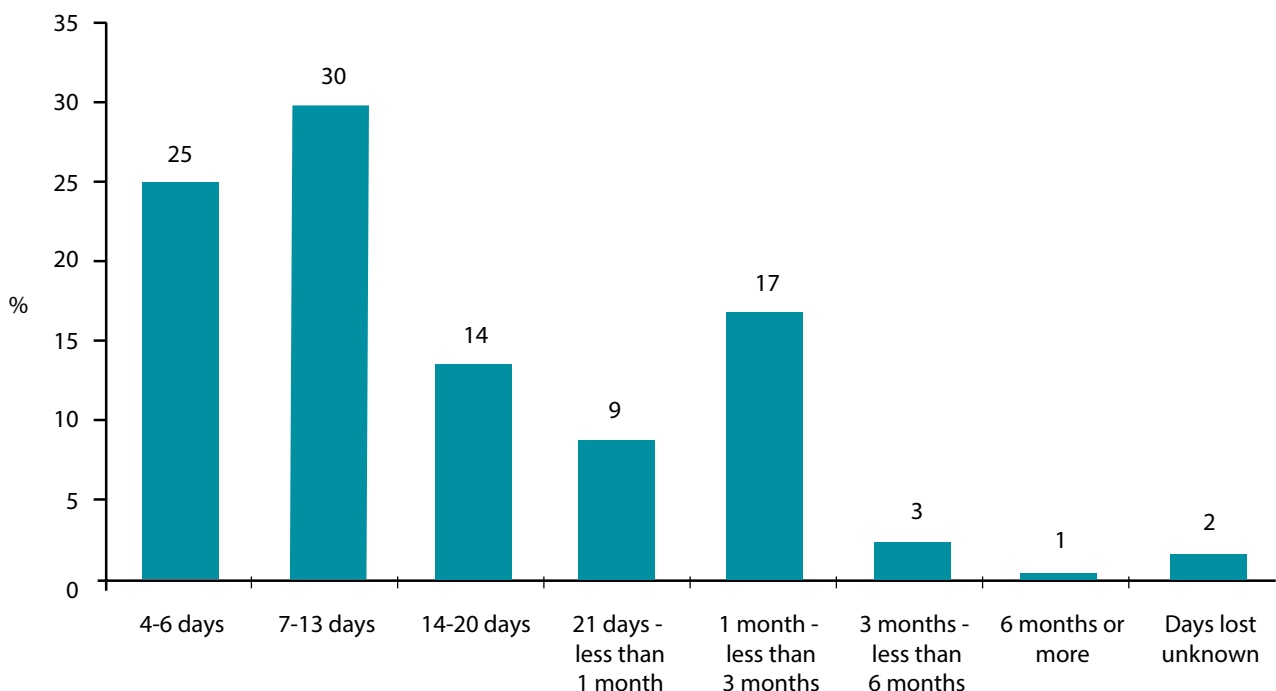


Figure 2.24: Percentage of non-fatal injuries by absence from work, 2015 (HSA)



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, 2015 (HSA)

	All		Workers only	
	N	%	N	%
Construction site	349	4.5	342	4.6
Farming, forestry, fishing (not on vessel)	141	1.8	135	1.8
Hospital and other healthcare	1,264	16.3	1,250	16.8
Public thoroughfare ¹	734	9.4	720	9.7
Production area, factory, workshop	1,724	22.2	1,717	23.1
Area for storage/ loading	430	5.5	425	5.7
Shop, sales, service-activity area	1,079	13.9	922	12.4
Other	2,029	26.1	1,909	25.6
Unknown	25	0.3	23	0.3
Total	7,775	100.0	7,443	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, 2014 (HSA)

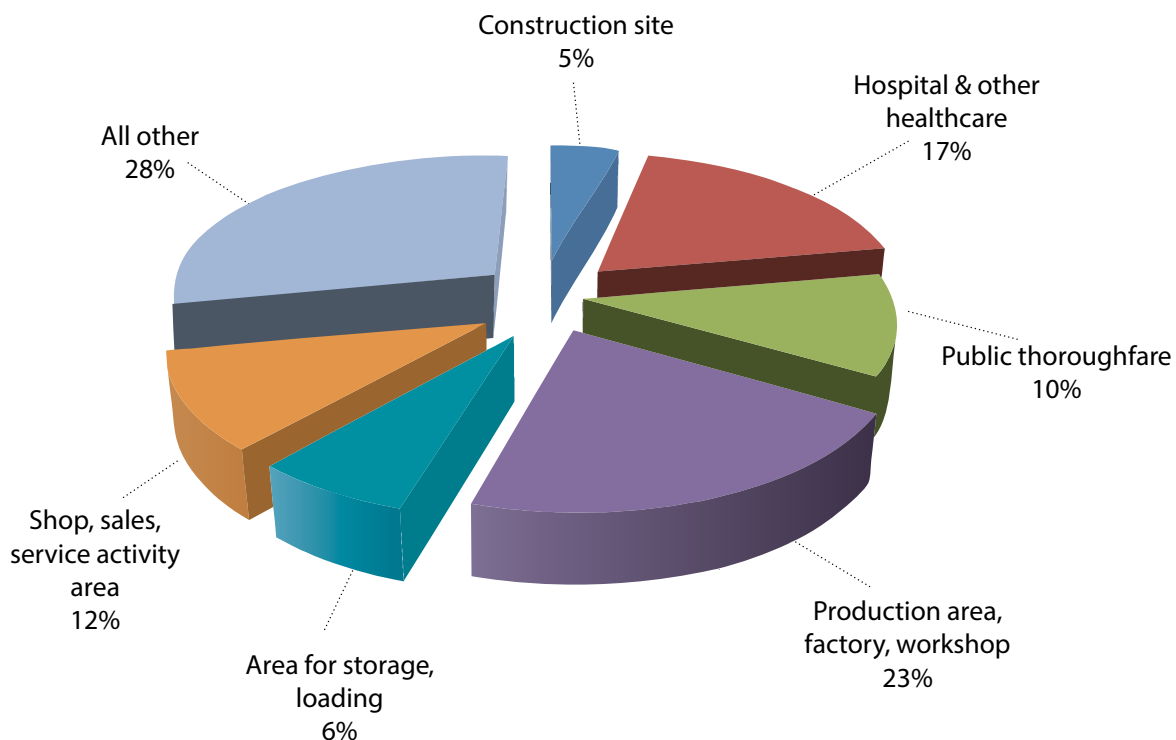


Figure 2.26: Reported non-fatal injuries (%) by size of employing organisation, 2015 (HSA)

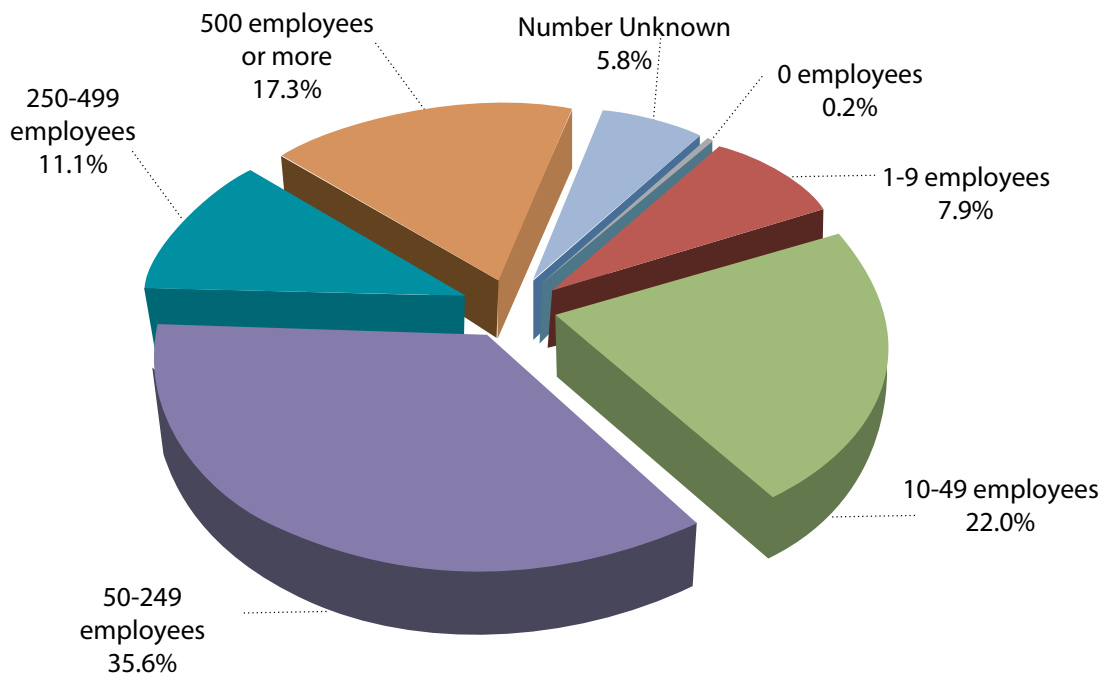


Figure 2.27: Number of non-fatal injury reports by county, 2015 (HSA)

	Non-workers	workers	Total
Leitrim	1	23	24
Roscommon	6	54	60
Longford	1	56	57
Monaghan	2	56	58
Carlow	8	59	67
Sligo	5	95	100
Laois	6	98	104
Cavan	6	100	106
Donegal	10	112	122
Tipperary South	5	115	120
Kilkenny	2	124	126
Waterford	9	132	141
Westmeath	3	137	140
Clare	7	139	146
Wicklow	10	145	155
Offaly	8	148	156
Mayo	11	149	160
Dublin North	6	153	159
Wexford	9	153	162
Tipperary North	8	158	166
Louth	10	162	172
Kerry	3	247	250
Galway	15	251	266
Meath	15	278	293
Limerick	12	313	325
Kildare	9	415	424
Cork	36	844	880
Dublin	37	1,353	1,390
Dublin South	72	1,368	1,440
Unknown	–	6	6
Total	332	7,443	7,775

Figure 2.28: Rate of illness and injury by region, 2014 (CSO)

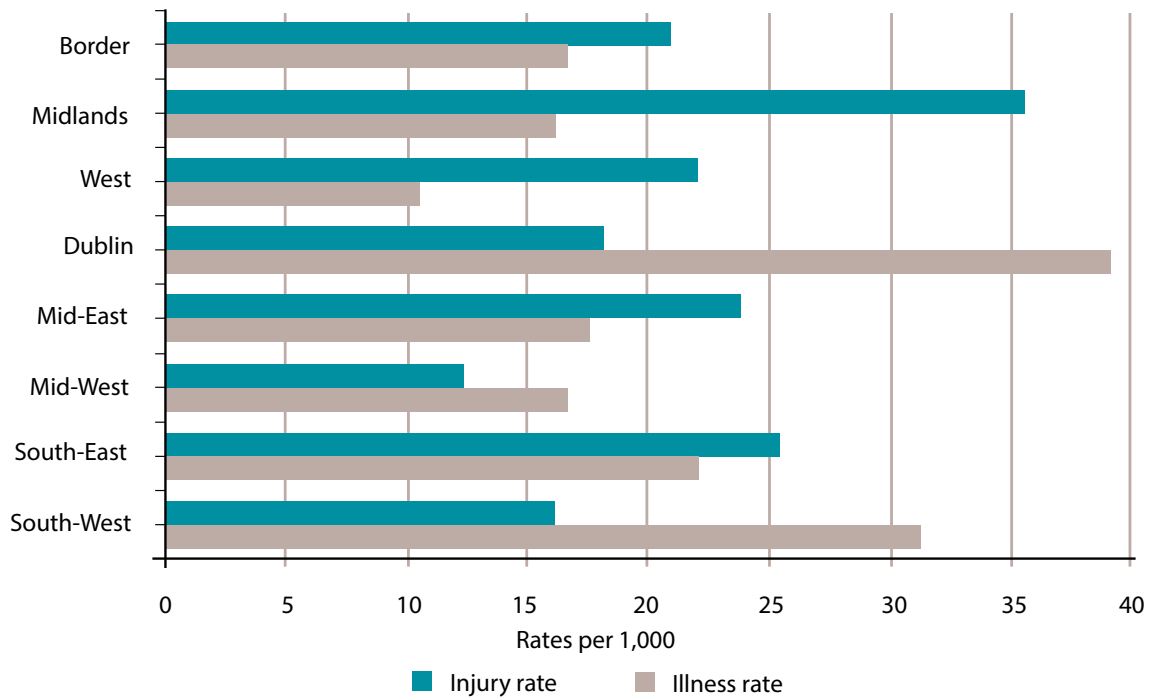


Figure 2.29: Number and rate of people suffering injury (0+ days) and illness (0+ days) by region, 2014 (CSO)

Region	Total employed	Injury (0+ days)		Illness (0+ days)	
		Number	Rate per 1,000	Number	Rate per 1,000
Border	186,325	3,895	20.9	3,116	16.7
Midlands	112,550	4,003	35.6	1,825	16.2
West	180,925	4,017	22.2	1,926	10.6
Dublin	578,325	10,527	18.2	22,732	39.3
Mid-East	230,275	5,502	23.9	4,037	17.5
Mid-West	150,225	1,843	12.3	2,513	16.7
South-East	200,350	5,125	25.6	4,433	22.1
South-West	274,900	4,407	16.0	8,612	31.3
All	1,913,900	39,319	20.5	49,194	25.7

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.

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

3

Fatal injury statistics

.....



Figure 3.1: Rate of worker fatalities per 100,000 workers, 1998–2015 (HSA)

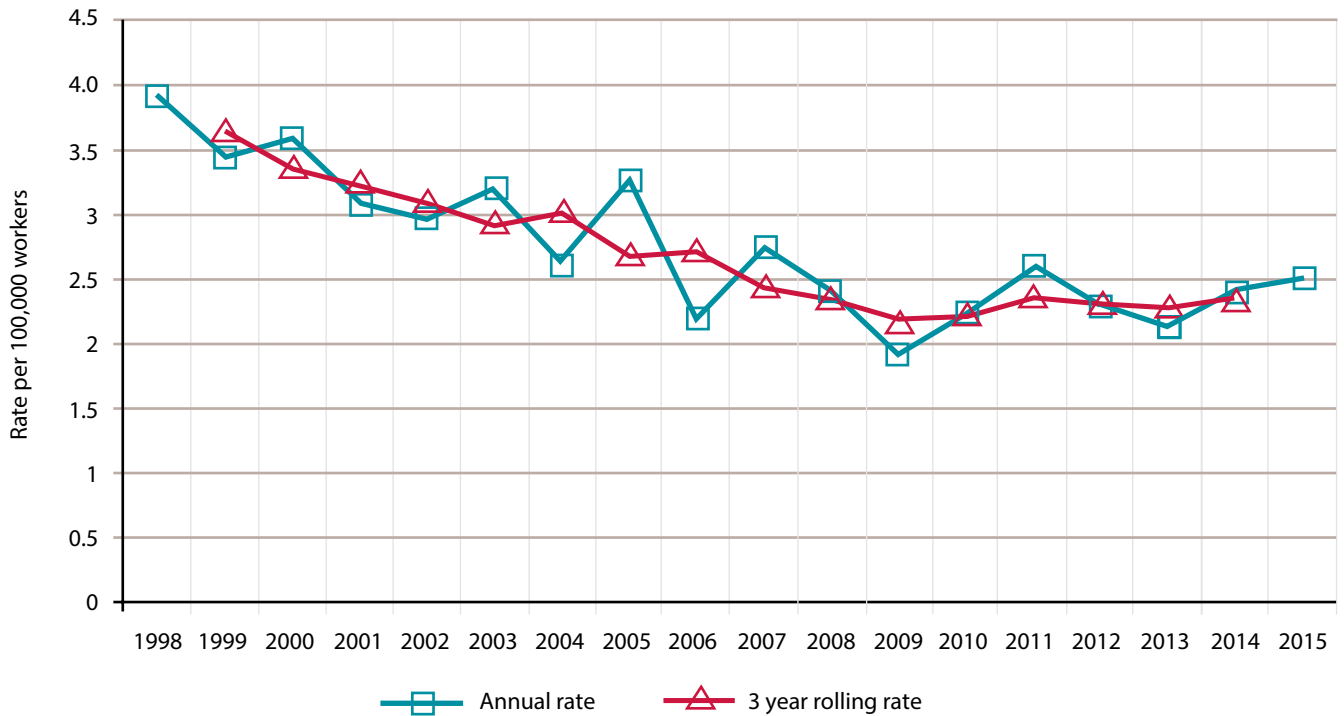
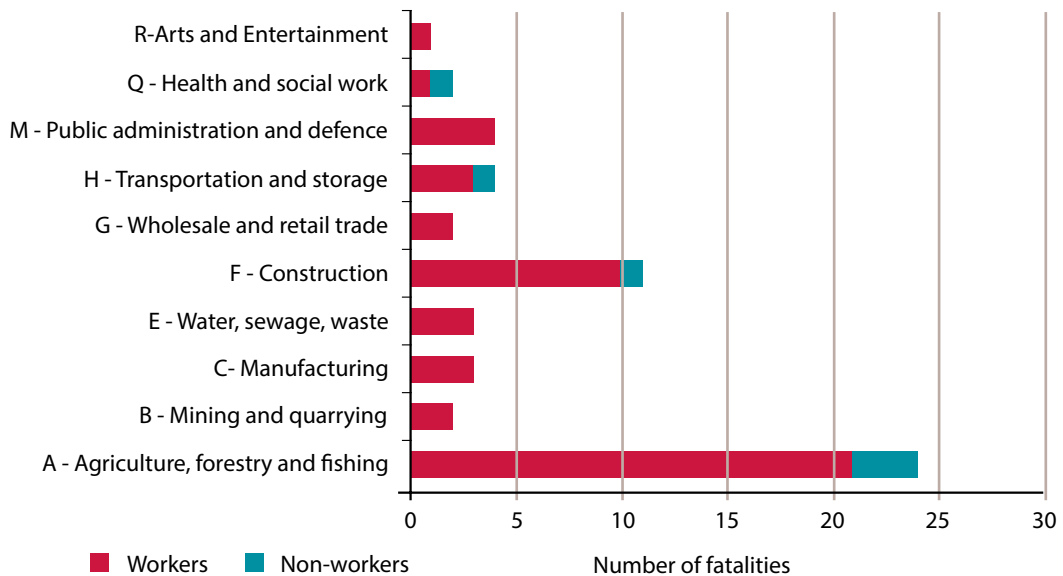


Figure 3.2: Number of reported fatalities by economic sector (worker and non-worker), 2015 (HSA)



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, 2009–2015 (HSA)

Economic sector	2009	Number of fatalities						Total
		2010	2011	2012	2013	2014	2015	2009-2015
A–Total agriculture, forestry and fishing	13	29	27	28	21	31	24	173
Agriculture	10	22	22	20	16	30	18	138
Forestry	1	3	0	1	0	0	1	6
Fishing	2	4	5	7	5	1	5	29
B–Mining and quarrying	2	0	1	1	2	0	2	8
C–Manufacturing	1	2	2	0	1	3	3	12
D–Electricity, gas, steam and air conditioning supply	0	0	0	0	1	1	0	2
E–Water supply, sewerage, waste management and remediation activities	0	2	3	4	1	0	3	13
F–Construction	10	6	6	8	11	8	11	60
G–Wholesale and retail trade	2	4	2	3	3	4	2	20
H–Transportation and storage	6	3	7	1	4	4	4	29
I–Accommodation and food services	1	0	1	0	0	0	0	2
J–Information and communication	0	0	0	0	0	0	0	0
K–Financial and insurance activities	0	0	0	0	0	0	0	0
L–Real-estate activities	0	0	0	0	0	0	0	0
M–Professional, scientific and technical activities	1	0	2	1	1	1	0	6
N–Administrative and support-service activities	1	0	0	1	0	2	0	4
O–Public administration and defence	2	0	1	0	0	0	4	7
P–Education	2	0	0	0	1	0	0	3
Q–Human-health and social-work activities	1	1	1	1	0	0	2	7
R–U–Other NACE activities	1	1	1	0	1	1	1	6
Total	43	48	54	48	47	55¹	56	296

¹ Following investigation, a fatality included in the 2013–2014 report was determined not to be work related. Therefore, the total number of fatalities for 2014 has been revised from 56 to 55.

Figure 3.4: Rate of reported worker fatalities by economic sector, 2015 (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	15*	2	0	21	19.1	3	24
Industry (NACE B–E)	7	0	0	1	8	3.2	0	8
Construction	7	3	0	0	10	8.0	1	11
Wholesale and retail trade	2	0	0	0	2	0.7	0	2
Transportation and storage	0	3	0	0	3	3.3	1	4
Public administration and defence	4	0	0	0	4	4.0	0	4
Health and social work	1	0	0	0	1	0.4	1	2
Other NACE activities (R–U)	1	0	0	0	1	1.0	0	1
Total persons	26	21	2	1	50	2.5	6	56

*10 in farming, 4 in fishing and 1 in forestry

Figure 3.5: Comparison of fatality rates in selected sectors, 2009–2015 (HSA)

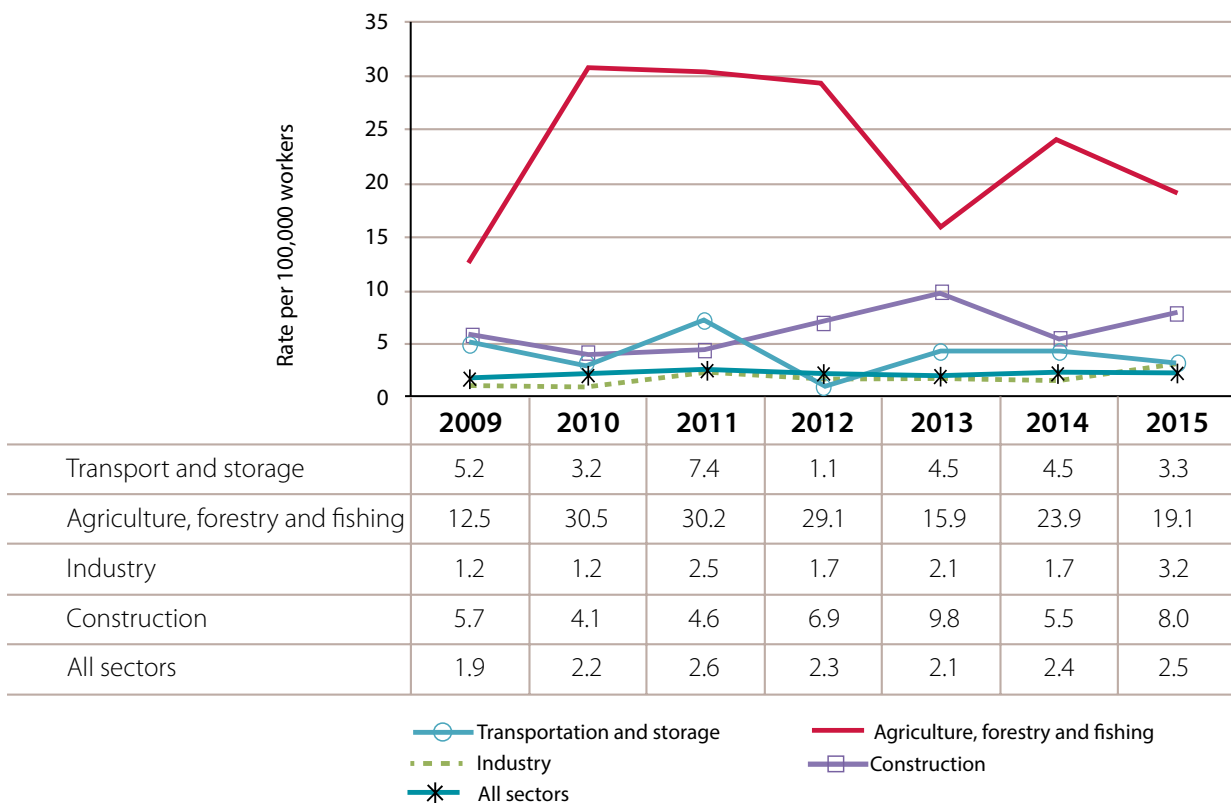


Figure 3.6: Percentage of reported fatal injuries by employment status, 2015 (HSA)

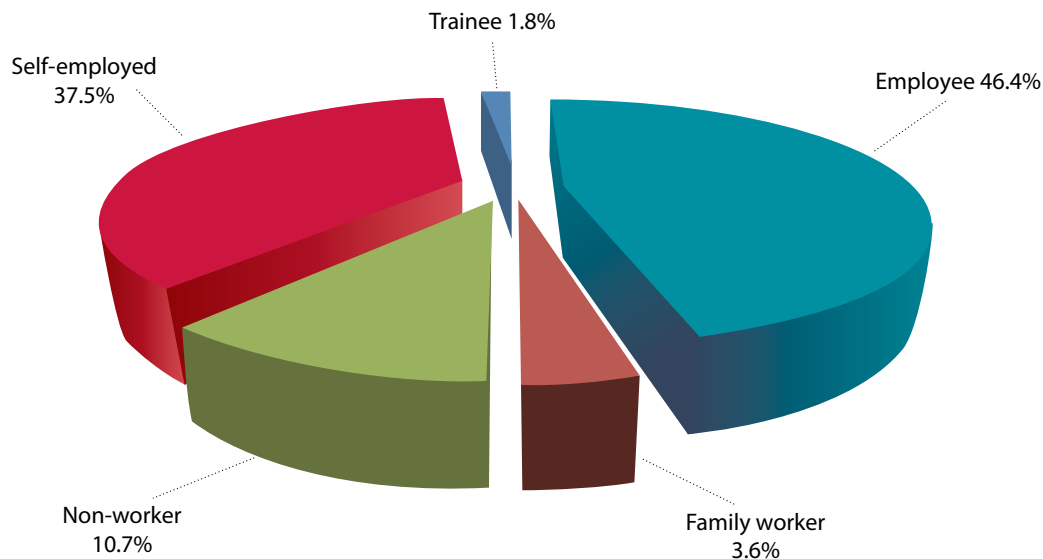


Figure 3.7: Number of reported fatalities (worker and non-worker) by economic sector and age band, 2015 (HSA)

Age	Economic Sector										Total
	A	B	C	E	F	G	H	O	Q	R	
0–17 years	4	0	0	0	0	0	0	0	0	0	4
18–24 years	0	0	2	0	2	0	0	0	0	0	4
25–34 years	3	1	1	1	1	0	0	0	0	0	7
35–44 years	2	0	0	0	1	0	0	1	1	0	5
45–54 years	4	1	0	2	3	1	1	1	1	1	15
55–64 years	6	0	0	0	3	0	3	2	0	0	14
65+ years	5	0	0	0	1	1	0	0	0	0	7
Total	24	2	3	3	11	2	4	4	2	1	56

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.

Figure 3.8: Number of reported fatalities (worker and non-worker) by age band, 2015 (HSA)

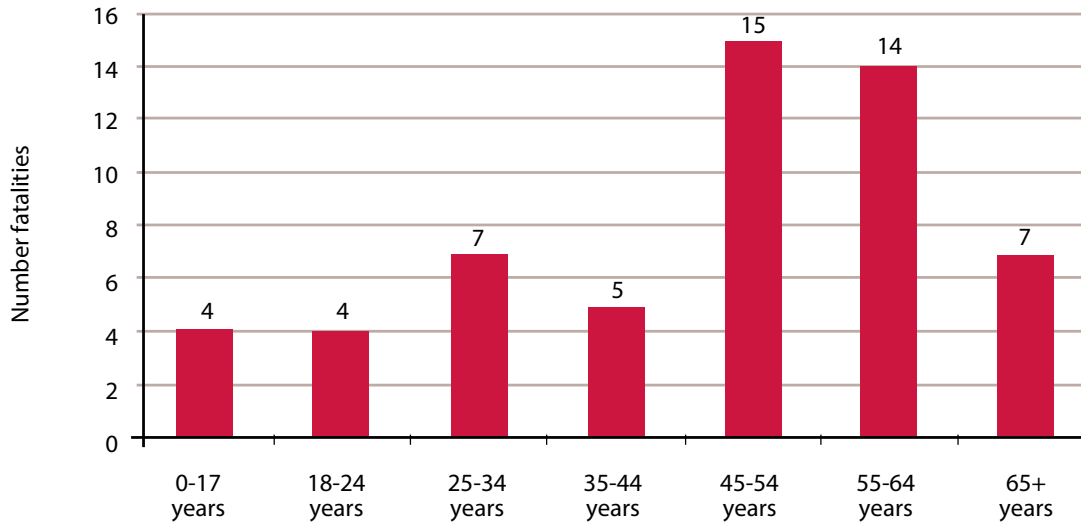


Figure 3.9: Number of reported worker fatalities by nationality and economic sector, 2015 (HSA)

Economic sector	Irish	Other EU	Other outside EU
A–Agriculture, forestry and fishing	22	1	1
B–Mining and quarrying	2	0	0
C–Manufacturing	2	0	0
E–Water, sewerage, waste	3	0	0
F–Construction	10	1	0
G–Wholesale and retail trade	2	0	0
H–Transportation and storage	4	0	0
O–Public administration and defence	4	0	0
Q–Health and social work	2	0	0
R–U–Other NACE activities	1	0	0
Total	52	2	1

Figure 3.10: Percentage of reported worker fatalities by nationality, 2015 (HSA)

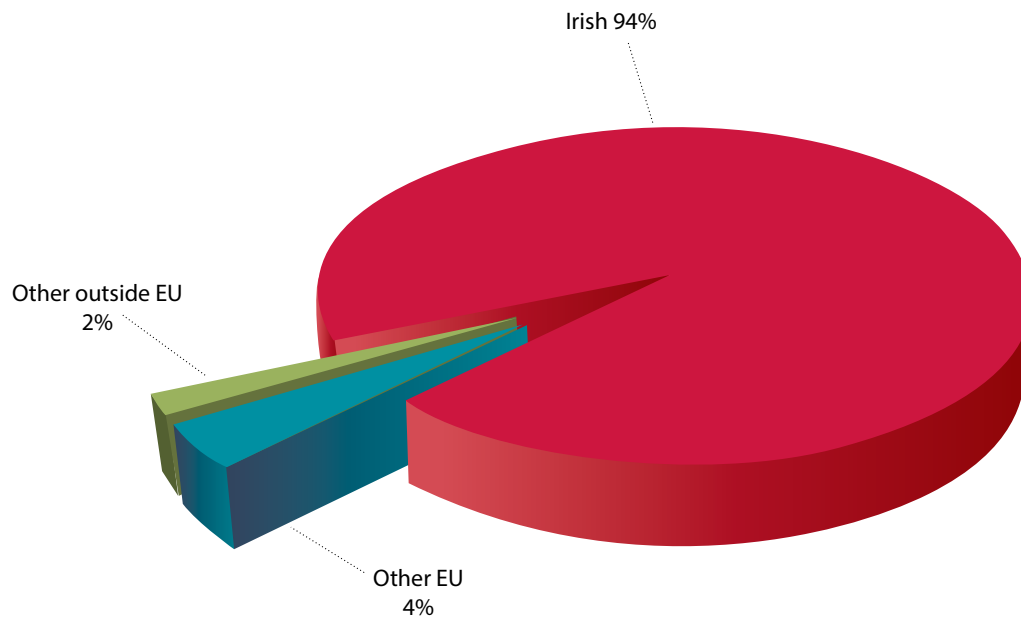


Figure 3.11: Reported worker fatality rates (per 100,000 workers) by nationality, 2009–2015 (HSA)

	2009	2010	2011	2012	2013	2014	2015
Irish workers	1.9	2.3	2.6	2.4	2.0	2.6	2.8
Non-Irish national workers	1.7	1.8	2.6	2.2	2.9	1.4	1.1
All workers	1.9	2.2	2.6	2.3	2.2	2.4	2.5

Figure 3.12: Number of fatalities (worker and non-worker) by accident trigger, 2015 (HSA)

Accident trigger	Number	Percent
Fall from height	8	14.3
Loss of control of means of transport or handling equipment	8	14.3
Slip, fall, collapse of material agent – from below (dragging the victim down)	5	8.9
Breakage of material – at joint, at seams	4	7.1
Gaseous state – vapourisation, aerosol formation, gas formation	4	7.1
Loss of control (total or partial) – of animal	3	5.4
Slip, fall, collapse of material agent – from above (falling on the victim)	3	5.4
Explosion	2	3.6
Fall of person – to a lower level	2	3.6
Fall on same level (slip, stumble, etc.)	2	3.6
Loss of control (total or partial) – of means of transport or handling equipment	2	3.6
No information	2	3.6
Overflow, leakage, emission of gas	2	3.6
Presence of victim or third person creating a danger	2	3.6
Breakage, bursting, splitting, slipping, fall, collapse of material agent – not specified	1	1.8
Fall, collapse of material – from above	1	1.8
Loss of control (total or partial) – of object (being carried, moved, handled, etc.)	1	1.8
Loss of control of machine	1	1.8
Loss of control of object being worked on	1	1.8
Slipping – stumbling and falling – fall of person – on the same level	1	1.8
Violence, aggression, threat – from people external to the company towards victims performing their duties (bank hold-up, bus drivers, etc.)	1	1.8
Total	56	100%

3 Fatal injury statistics

Figure 3.13: Number of reported fatalities (worker and non-worker) by region, 2009–2015

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

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 EU 15 Zone, 2013 (Eurostat)





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. (not elsewhere classified)
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., van Ours, J.C., Wuellrich, J.-P. and Zweimuller, J. (2011) *Recessions are Bad for Workplace Safety*, IZA Discussion Paper Series, No. 5,688.
- Boone, J. and van Ours, J.C. (2006) Are recessions good for workplace safety? *Journal of Health Economics*, 25, pp1,069–1,093.
- CSO (2015) *Quarterly National Household Survey, Quarter 1 2015*, Statistical Release, 21 May 2015, Cork: Central Statistics Office.
- CSO (2016) *Quarterly National Household Survey, Quarter 1 2016*, Statistical Release, 24 May 2016, Cork: Central Statistics Office.
- Davis, R. and Jones, P. (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.
- 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*, 51(2), pp187–203.
- Health and Safety Authority (2014). *Summary of Workplace Injury, Illness and Fatality Statistics 2012–2013*. Dublin: HSA.
- Health and Safety Authority (2015) *Summary of Workplace Injury, Illness and Fatality Statistics 2013–2014*. Dublin: HSA.
- Russell, H., Maître, B., and Watson, D. (2015). *Trends and Patterns in Occupational Health and Safety in Ireland*, Dublin: ESRI, Research Series Number 40.
- Russell, H., Maître, B., and Watson, D. (forthcoming, 2016) *Work Related Musculo Skeletal Disorders and Stress, Anxiety and Depression in Ireland: Evidence from the QNHS 2002–2013*, Dublin: ESRI.
- Venema, A., van den Heuval, S. and Gueskens, G. (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., Russell, H. Maître, B. (2015). *Workplace Risks and Worker Outcomes in Ireland from a Comparative Perspective: An Analysis of the European Working Conditions Survey, 2005 and 2010*, Dublin: ESRI, Research Series Number 46.

*healthy,
safe and
productive
lives*

**Health and Safety
Authority**

Tel. 1890 289 389

International
Callers

00353 1 6147000

www.hsa.ie

