HEALTH AND SAFETY AUTHORITY

# Summary of Workplace Injury, Illness and Fatality Statistics

# 2012-2013

# Our vision:
# A country where worker safety, health and welfare and the safe management of chemicals are central to successful enterprise

Acknowledgements

The results presented in this report come from analysis prepared by Helen Russell and Bertrand Maître of the Economic and Social Research Institute as background for a research study on trends in occupational injury and illness from boom to recession. That study is part of a two year research programme on Health, Safety and Wellbeing at Work involving the HSA and the ESRI and 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 CSO for the provision of the micro-data from the QNHS for analysis and for the expertise provided by Felix Coleman of the labour market statistics division.

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## 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 job and organisation attributes 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 inter-related. For example, men and women tend to be concentrated in different industrial sectors and this sectoral segregation might lie behind patterns of occupational injury and illness by gender. In order to unpack these different influences, statistical modelling is necessary and such work is currently underway as part of a research programme involving the Health and Safety Authority and the Economic and Social Research Institute (ESRI). Forthcoming research will complement the descriptive information presented here and provide further analysis of the risk factors and trends over time.

In section 1.2 some of the main findings from the statistics report are outlined. The data comes from a range of sources and section 1.3 describes the sources used 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 provide links to further sources of information on technical issues.

## 1.2 OVERVIEW FOR 2012 -2013

### Non-fatal injury

There were 6,598 non-fatal injuries reported to the Health and Safety Authority in 2013. Of these injuries 6,394 (97%) involved workers, while the remaining 202 involved members of the public, including family members. There was a small decrease in the number of injuries reported to the Authority in 2013 compared to 2012. While the number of people in employment increased in 2013, the rate of reported injuries as a proportion of those in employment declined marginally, from 3.6 per 1,000 employed to 3.4 per 1,000 employed.

The Health and Social Work sector submitted 22% of the non-fatal injury reports to the HSA and the manufacturing sector accounted for 16% of reports.

The estimates based on the CSO survey module on work related accidents and illnesses (see section 2 for details) suggest that 17,786 people experienced work injuries requiring an absence from work of four or more days in 2012, an increase from the 16,843 reported in 2011. Expressed as a rate of those employed, there was an increase in such injuries from 9.1 to 9.6 per 1,000 workers between 2011 and 2012 (Figure 2.4). However some of this difference may be due to changes in the questionnaire, and it remains to be seen whether this is the start on an underlying upward trend.

The highest rates of injury causing four or more days absence from work, (i.e., 4+ days) in 2012 occurred in Construction, the Health and

Social Work sector, and the Agricultural sector, with rates of 16.7, 15.9, and 14.2 per 1,000 workers respectively (Figure 2.7). Including less serious accidents (0+ days absence)[1] the injury rates were highest in Agriculture and Health (both 29 per 1,000) and Accommodation and Food sector and Transport and Storage sector (27 per 1,000, see Figure 2.6).

Consistent with previous years, female workers had lower injury rates than male workers in 2012 (Figure 2.12). The time series data suggest that male injury rates have declined more steeply than female injury rates. For all injuries (0+ days absence) the male injury rate fell from 38 per 1,000 in 2007 to 23 per 1,000 in 2012. For women the rate fell from 19 per 1,000 to 15 per 1,000 during the same time period.

Non-Irish national workers comprised 14.6% of the Irish workforce in 2013 and 16% of non-fatal injuries notified to the Health and Safety Authority in 2012 involved non-Irish national workers. Manual handling related injuries continue to account for about one third of all non-fatal injuries reported to the Authority.

Slip, trip and fall incidents were the second most common accident trigger (18%). Incidents involving aggression, fright, shock or violence accounted for 5% of the non-fatal injury reports to the HSA, such events were most common in the Health sector where they accounted for 15% of reported incidents.

### Work Related Illness

The rate of illness causing four or more (4+) days absence from work has increased from 10.6 cases per 1,000 workers in 2011 to 14.8 in 2012 (Figure 2.4). This was the fourth year in a row in which an increase in the illness rate was recorded. A study underway as part of the HSA/ESRI research programme, will investigate the factors underlying these trends.

The three sectors with the highest illness rates in 2012 (0+ days lost) were Agriculture, Forestry and Fishing (47 per 1,000 workers), Information/Communication (41 per 1,000 workers) and Education (37 per 1,000 workers). Two of these differ from the three sectors with the highest illness rates in 2011, which were- Agriculture, Public Administration and Defence and Administration and Support Services.

Women experienced a higher illness rate than men in 2012, 29 per 1,000 workers compared to 25 per 1,000 workers. This continues a pattern which emerged in 2011 (see Figure 2.13). Illness rates were also somewhat higher among older workers. The rate was 29 per 1,000 workers for those aged 55 to 64 compared to a rate of 25 per 1,000 workers for those aged 25 to 34 years. Additional statistical work, which combines data for a number of years will allow further analysis of these gender and age patterns and test the statistical significance (ESRI/HSA forthcoming).

[1] Note that the 0+ figures include all work related injuries (illnesses) including those where there was no absence from work and longer spells of 4 or more days.

## Fatal injuries

There were 47 work-related fatalities reported to the Health and Safety Authority in 2013, compared to 48 fatalities in 2012 and 54 in 2011. Of these fatalities, 40 involved workers, giving a worker fatality rate of 2.1 workers per 100,000. This was lower than the 2012 rate (2.3) and the 2011 rate (2.6). 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 with 17 worker deaths recorded in 2013 with an additional 4 deaths of non-workers. This compares to 28 fatalities in the Agriculture, Fishing and Forestry sector in 2012. The fatality rate for workers in this sector for 2013 was 15.9 per 100,000 workers. This is considerably lower than the rate of 29.1 per 100,000 workers in 2012, 30.2 in 2011 and 30.5 in 2010. One reason behind this fall in the fatality rate is the significant rise in the number employed in the agricultural sector during 2013, this has the effect of increasing the denominator. The CSO caution that this increase in the agricultural employment figures is uncertain and may be due to changes in the survey sample introduced post the 2011 Census (CSO, 2013).

There were 11 fatalities in the Construction sector during 2013, one of which involved a non-worker. This translates into a fatality rate of 9.8 per 100,000 workers up from a rate of 6.9 recorded in 2012.

Similar to previous years, 22 of the fatalities in 2013 involved self-employed persons, including 15 farmers. The 65+ age group accounted for 8 of the fatalities (17%). Non-Irish nationals accounted for 20% of worker fatalities in 2013 (8 fatalities). The fatality rate for non-Irish national workers was 2.9 per 100,000 compared to the rate for Irish workers of 2.0 per 100,000 workers.

The latest European statistics on fatality rates refer to the year 2012. These figures, compiled by Eurostat, report a fatality rate of 2.7 per 100,000 workers for Ireland. This is the fifth highest rate among the EU15 and is higher than the un-weighted average for the EU15 of 2 per 100,000 workers.

## Implications

The most recent labour market figures suggest that in the year to the first quarter of 2014 there was an increase in employment of 42,700 (CSO, 2014). The economic literature 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 & Jones,2005). Others suggest that employees are more likely to make managers aware of accidents in periods of greater job security and growth (Boone et al, 2011). The sectors showing most employment growth included those with traditionally high occupational injury levels such as agriculture, forestry and fishing, construction, accommodation and food and sectors with lower risks including professional, scientific and technical activities and administrative services. However the CSO

note that caution should be exercised in interpreting these sector level trends, particularly for agriculture, due to sample changes.

The triggers for occupational accidents have remained remarkably stable over the recent years. This highlights the potential to predict and prevent such accidents

In the case of fatal injuries those most at risk continue to be the self-employed in the construction and agricultural, forestry and fishing industry. The three year rolling average suggests that the fatality rate for workers has remained stable over recent years, nevertheless the deaths of 40 workers and 7 members of the public (including children) suggests that there is no room for complacency.

Ireland's ranking position within the EU fatality statistics was the same in 2011 as in 2010: 5th highest worker fatality rate within the EU15. This compares with ranking of 7th highest in 2009 and 2008. In each of these years the Irish rate was above the EU15 average.

While the fatal and non-fatal injury rates have remained stable over the three years (2010 to 2012) the figures suggest that there has been an upward trend in longer spells of work related illness from 2009 to 2012. Changes in the latest CSO module on occupational injuries mean that we must await next year's module to confirm the trends observed.

## 1.3 DATA SOURCES AND METHODOLOGY

A variety of sources are used to compile the summary statistics presented here.

No one source provides a comprehensive picture of occupational injury and illness so the strengths and limitations of each data-set are described.

### Health and Safety Authority (HSA)

Employers are legally required to report incidents to the Authority 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.[2] 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 2012, 6,590 worker injuries were recorded, while the CSO figures for the same period suggest that there were 17,786 work-related accidents that resulted in an absence of 4 or more days (see Figure 2.4 below).[3] These results suggest that approximately 37% of accidents/injuries are captured in the HSA. This is similar to the level of under-reporting estimated by the Health and Safety Executive in the UK, which operates a similar reporting regime.[4] The incentives and disincentives to reporting 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-

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

[3] If accidents among those not employed at the time of the survey but employed in the previous 12 month period are included in the CSO figures a total of 18,096 (4+ days) injuries are estimated.

[4] It is estimated that for the period 2011/12 only 44% of worker accidents were reported to the HSE (http://www.hse.gov.uk/statistics/tables/index.htm#riddor).

employed and smaller employers. For example, less than 1% of work-related accidents reported to the HSA in 2012 came from the self-employed compared to 21% of the injuries causing 4 or more days absence identified in the QNHS module. Similarly, 9% of non-fatal injuries reported to the HSA came from firms with less than ten employees compared to 25% of injuries in the CSO data.

The HSA data also contains 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 Authority's database are 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]

### Quarterly National Household Survey (QNHS) Module on Work Related Accidents and Illness

Since 1998 the Central Statistics Office (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 were 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. The module is usually fielded in Quarter 1 and the question normally relates to incidents occurring in the 12 months of the preceding calendar year. So for example the module fielded in Q1 2012 asked:

> *"How many, if any, injuries did you incur at work (excluding commuting) during the period January 2011 to December 2011?"*

The most recent data comes from the 2013 module which was held in Quarter 2 2013. The module was part of the European-wide labour force survey and a number of changes were introduced so that the data is harmonised

[5] The Safety Health and Welfare at Work (General Application) Regulations, 1993.

[6] Eurostat (2001) European statistics on accidents at work (ESAW) Methodology, 2001 Edition.

across the EU.[7] The first change 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.

The information on work-related injuries was collected in two steps. Respondents were initially asked:

> *"In the twelve months previous to this interview have you experienced any accidents at work or in the course of your work?"*

(NOTE: Accidents outside working hours and accidents during the journey from home to work or from work to home are excluded. However, accidents during a journey in the course of work are included).

This is followed by a question on the number of accidents which also introduces the qualification that the incident resulted in an injury:

> *How many accidents resulting in injury did you have during those months?*

For the analysis that follows the injury figures include only those who had an accident resulting in an injury i.e. those who answered 'yes' to both questions. This is the category that is most consistent with the previous modules which ask about injuries incurred at work.

Eurostat also specified a different set of response categories for the question on duration of absence from work resulting from the accident or illness. Previous modules allowed respondents to specify the exact number of days but the 2013 module provides closed categories. One consequence of this change is that the total number of days lost to the economy cannot be calculated in the latest data. Alterations to question wording or question order can result in non-negligible changes to survey responses.

This set of changes should be kept in mind when interpreting trends over time in the injury rates based on the QNHS data.

### *Work related Illness*

The QNHS module is also the source of information for the work-related illness statistics presented below. In the 2013 European-wide module information on work-related ill-health was collected using the following questions

> *In the 12 months prior to this interview and excluding any accidents you might have highlighted already, have you suffered from any physical or mental health problems?*
>
> *How many of these health problems are caused or made worse by work you are doing or have done in the past?*

Again, these questions specified by Eurostat are a departure from those in previous QNHS health and Safety Modules. In previous years respondents were asked

> *How many, **if any**, illnesses or disabilities have you experienced during the 12 months January 2010 to December 2010, 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 2011 to December 2011 how many days were you absent from your job as a result of your **most recent** work-related illness?*

[7] 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 comes 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 3 days of absence as well as fatal accidents. These data are reported in figures 2.10 and 3.15 below. There is a time-lag for the construction of the comparative statistics so that the most recent European-wide data refers to 2011. 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 is 11,101 for accidents resulting in more than three days absence, while the HSA figure is 7,094 or 6,865 excluding nonworkers 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 based on reporting levels by branch of economic activity. Eurostat also calculate the harmonised rates for a subset of sectors, excluding Public Administration, Health and Education, Mining/Quarrying, because these workers are not covered in many Member States.

The harmonised statistics produced by Eurostat are available at http://epp.euorstat.ec.eruopa.eu/portal/page/portal/health/health_safety_work.

## Occupational Injury Benefit Statistics

Figures on the number of claims for occupational injury benefits are provided by the Department of Social Protection. These represent claims made by insured persons who are injured during the course of their work. The injury must last at least 4 days.

A limitation of these data is that not all workers are covered by social insurance and not all injuries result in a claim. On 6 January 2014 the rules of the scheme changed so that payment is made from the 7th day of incapacity of work, rather than the 4th day of incapacity.

This change does not affect the figures presented below because they relate to the year 2013. The figures on "days lost" refer to the paid claim days, and therefore exclude the first three days of the claim and Sundays. This is the figure reported in previous HSA statistics report and is maintained for consistency.

## 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 was collected in quarter 2 2013 and refers to illness/injury in the 12 months prior to interview the employment levels were calculated across the four quarters from q3 2012 to q2 2013.

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 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://circa.europa.eu/irc/dsis/nacecpacon/info/data/en/2007%20introduction.htm
- 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://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-RA-12-002/EN/KS-RA-12-002-EN.PDF

## 2.1 GENERAL INJURY AND ILLNESS STATISTICS

**Figure 2.1: Injuries Reported to the HSA 2004 -2013**

| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Non-fatal incidents** | 8,100 | 8,027 | 7,976 | 8,303 | 8,069 | 7,002 | 7,583 | 7,094 | 6,804 | 6,598 |

Source: HSA database

Note: 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 2013 (HSA)**

| | Workers[1] | | Non-Workers | | All | |
|---|---|---|---|---|---|---|
| | N | % | N | % | N | % |
| Q-Health & Social Work | 1,413 | 22.1 | 22 | 10.9 | 1,435 | 21.8 |
| C-Manufacturing | 1,048 | 16.4 | 6 | 3.0 | 1,054 | 16.0 |
| G-Wholesale & Retail trade | 747 | 11.7 | 70 | 34.7 | 817 | 12.4 |
| O-Public Administration & Defence | 791 | 12.4 | 14 | 6.9 | 805 | 12.2 |
| H-Transportation & Storage | 798 | 12.5 | 6 | 3.0 | 804 | 12.2 |
| F-Construction | 398 | 6.2 | 11 | 5.4 | 409 | 6.2 |
| E-Water, Sewerage, Waste | 181 | 2.8 | 0 | 0.0 | 181 | 2.7 |
| I-Accommodation & Food | 158 | 2.5 | 21 | 10.4 | 179 | 2.7 |
| P-Education | 160 | 2.5 | 14 | 6.9 | 174 | 2.6 |
| N-Admin & Support Service | 169 | 2.6 | 1 | 0.5 | 170 | 2.6 |
| S-Other Service Activities | 134 | 2.1 | 1 | 0.5 | 135 | 2.0 |
| K-Financial & Insurance | 88 | 1.4 | 18 | 8.9 | 106 | 1.6 |
| A-Agriculture, Forestry & Fishing | 86 | 1.3 | 3 | 1.5 | 89 | 1.3 |
| J-Information & Communication | 74 | 1.2 | 0 | 0.0 | 74 | 1.1 |
| M-Professional, Scientific & Technical | 50 | 0.8 | 3 | 1.5 | 53 | 0.8 |
| R-Arts, Entertainment | 34 | 0.5 | 11 | 5.4 | 45 | 0.7 |
| B-Mining & Quarrying | 43 | 0.7 | 0 | 0.0 | 43 | 0.7 |
| D-Electricity, Gas, Etc. | 15 | 0.2 | 1 | 0.5 | 16 | 0.2 |
| L-Real Estate | 7 | 0.1 | 0 | 0.0 | 7 | 0.1 |
| **Total** | **6,394** | **100** | **202** | **100** | **6,596*** | **100** |

[1] The worker group includes 16 cases where employment status is missing. This applies to all statistics for 'workers'.

*Total excludes cases where the economic sector was missing.

N=Number

**Figure 2.3: Numbers employed in each economic sector 2008–2013 Four Quarter Average (Data based on CSO statistical release April 2014)**

| | Numbers employed | | | | | |
|---|---|---|---|---|---|---|
| **Economic Sector** | **2008** | **2009** | **2010** | **2011** | **2012** | **2013** |
| Agriculture, forestry and fishing | 115,350 | 96,325 | 85,225 | 82,900 | 93,800 | 106,750 |
| Industry* | 288,025 | 259,175 | 245,350 | 240,325 | 236,175 | 240,500 |
| Construction | 239,350 | 158,325 | 121,000 | 107,800 | 100,825 | 102,000 |
| Wholesale and retail trade | 310,700 | 282,600 | 276,675 | 273,200 | 272,925 | 272,325 |
| Transportation and storage | 93,950 | 95,725 | 93,525 | 94,900 | 88,525 | 88,150 |
| Accommodation and food service activities | 128,950 | 126,925 | 126,700 | 116,525 | 122,825 | 130,825 |
| Information and communication | 71,450 | 73,975 | 74,900 | 76,325 | 79,800 | 80,575 |
| Financial, insurance and real estate activities | 106,950 | 108,075 | 101,875 | 102,000 | 100,925 | 99,300 |
| Professional, scientific and technical activities | 113,825 | 103,500 | 100,350 | 100,050 | 103,625 | 109,600 |
| Administrative and support service activities | 76,775 | 67,600 | 62,125 | 67,225 | 61,825 | 61,675 |
| Public administration and defence; compulsory social security | 105,175 | 106,275 | 104,675 | 101,300 | 96,500 | 95,350 |
| Education | 145,350 | 147,500 | 149,675 | 144,000 | 145,925 | 146,375 |
| Human health and social work activities | 224,275 | 231,575 | 237,700 | 241,175 | 245,700 | 246,325 |
| Other NACE activities | 100,725 | 97,050 | 94,675 | 96,875 | 99,925 | 99,875 |
| Not stated | 7,475 | 6,650 | 7,725 | 5,450 | ** | ** |
| **Total** | **2,128,325** | **1,961,275** | **1,882,175** | **1,850,050** | **1,851,425** | **1,881,150** |

Source: Central Statistics Office, Ireland.

Note: The employment figures are calculated as an average of the four quarters for the calendar year, this is a change from previous HSA statistics reports. For the year 2012 due to the change in the date of the QNHS module the reference period for the purpose of calculating non-fatal accident and injury rates is Q3 2012 to Q2 2013.

* Industry=Mining & quarrying + Manufacturing + Electricity; gas, steam and air conditioning supply + water supply, sewerage, waste management and remediation activities: NACE B to E.

** 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 2008–2012 (CSO)**

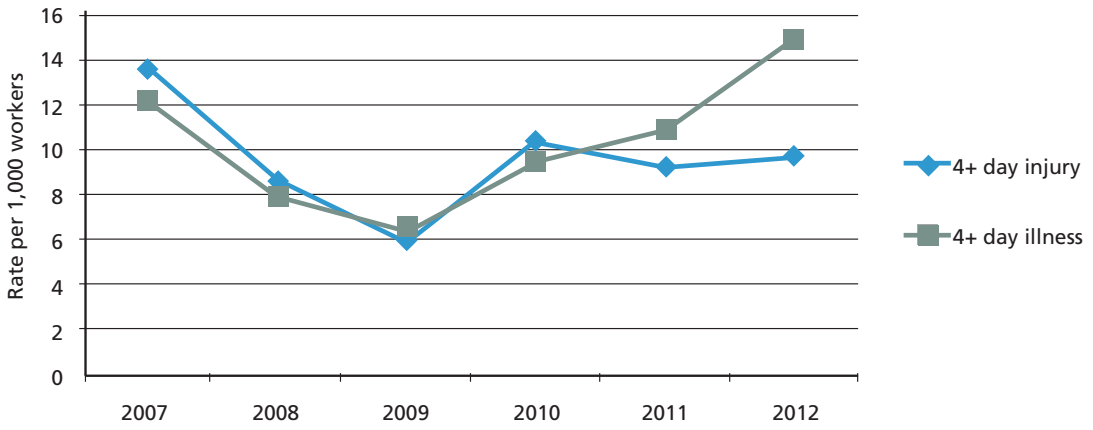
| | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Number | Rate per 1,000 | Number | Rate per 1,000 | Number | Rate per 1,000 | Number | Rate per 1,000 | Number | Rate per 1,000 |
| Total in employment | 2,128,325 | | 1,961,275 | | 1,882,175 | | 1,850,050 | | 1,851,425 | |
| Injury | | | | | | | | | | |
| Total suffering injury | 41,994 | 19.7 | 32,010 | 16.3 | 40,584 | 21.6 | 40,097 | 21.7 | 35,001 | 18.9 |
| 0-3 days' absence | 24,096 | 11.3 | 20,556 | 10.5 | 21,109 | 11.2 | 23,254 | 12.6 | 17,214 | 9.3 |
| 4+ days' absence | 17,898 | 8.4 | 11,454 | 5.8 | 19,475 | 10.3 | 16,843 | 9.1 | 17,786 | 9.6 |
| Days lost due to injury | 685,500 | | 283,200 | | 666,553 | | 590,690 | | n.a | |
| Illness | | | | | | | | | | |
| Total suffering illness | 40,874 | 19.2 | 30,593 | 15.6 | 38,704 | 20.6 | 48,436 | 26.2 | 50,210 | 27.1 |
| 0-3 days' absence | 24,047 | 11.3 | 18,328 | 9.3 | 20,856 | 11.1 | 28,748 | 15.5 | 22,735 | 12.3 |
| 4+ days' absence | 16,827 | 7.9 | 12,265 | 6.3 | 17,848 | 9.5 | 19,688 | 10.6 | 27,474 | 14.8 |
| Days lost due to illness | 751,600 | | 463,700 | | 704,494 | | 595,951 | | n.a | |
| Injury & Illness | | | | | | | | | | |
| Total injury or illness | 82,868 | 38.9 | 62603 | 31.9 | 79,288 | 42.1 | 88,533 | 47.9 | 85,210 | 46.0 |
| Total (4+ days' absence) | 34,725 | 16.3 | 23719 | 12.1 | 37,323 | 19.8 | 36,531 | 19.7 | 45,261 | 24.4 |
| **Total days lost** | **1,437,100** | | **746,900** | | **1,371,047** | | **1,186,641** | | **n.a** | |

The QNHS module on work-related injury and illness Q2 2013 does not collect the precise number of days lost so the economy-wide figure cannot be calculated.

Note: For 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 2007–2012 (CSO)**




Note: The rate is calculated from the four-quarter average employment for the year as outlined in Figure 2.3

**Figure 2.6: Rate of injuries (any days lost) per 1,000 workers by economic sector 2012 (CSO)**

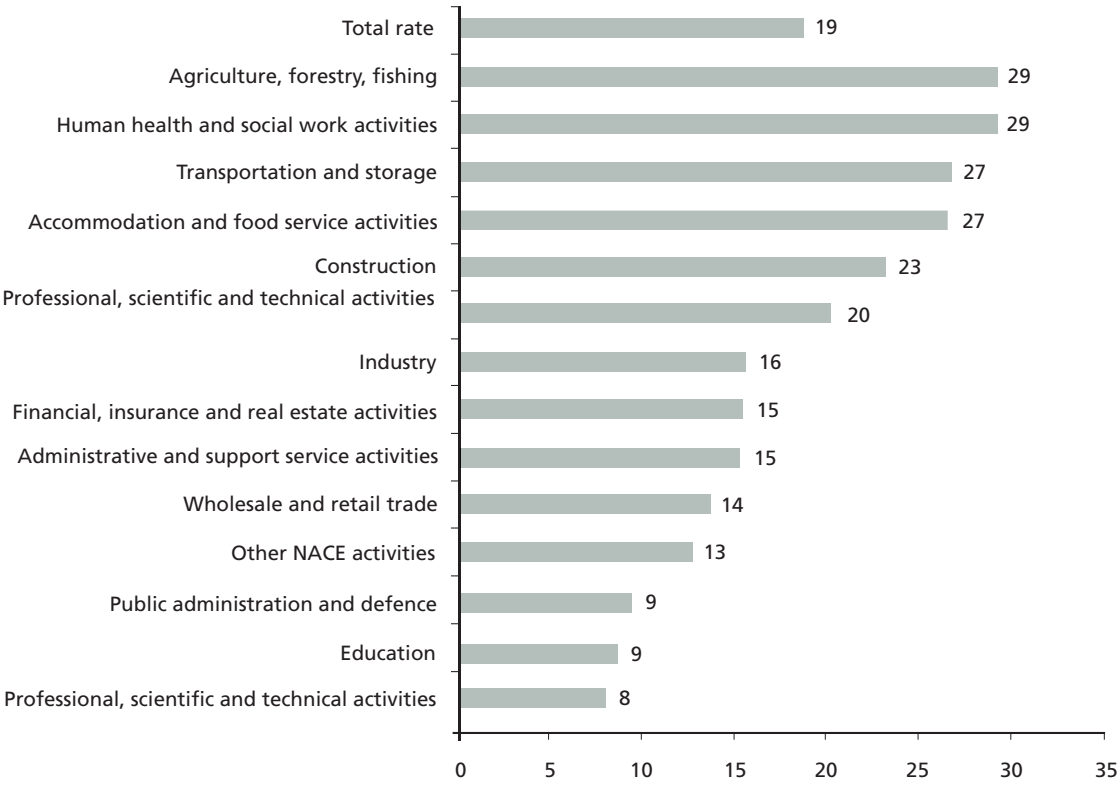


Figure 2.7: Rate of 4+ day injuries per 1,000 workers in selected sectors 2007-2012 (CSO)

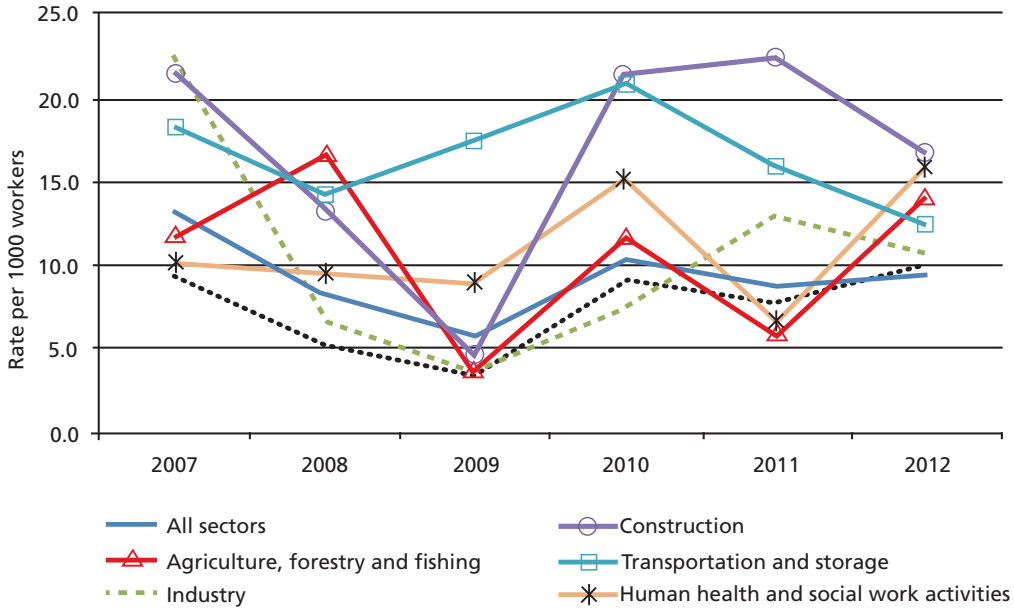



Figure 2.8: Rate of illness (any days lost) per 1,000 workers by economic sector 2012 (CSO)

**Figure 2.9: Occupational injury benefit claims (DSP)**

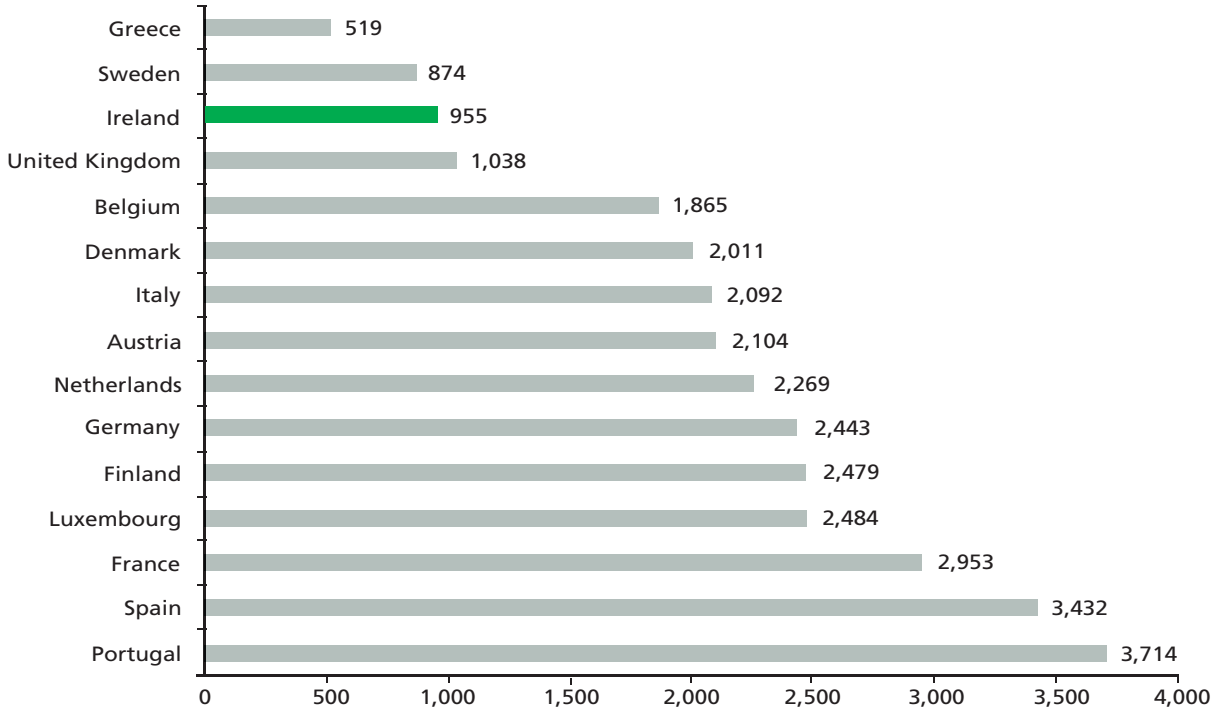
| Year | Claims allowed | Days lost | Avg. days lost per claim |
|---|---|---|---|
| 2000 | 11,995 | | |
| 2001 | 12,050 | | |
| 2002 | 12,280 | | |
| 2003 | 11,096 | | |
| 2004 | 11,705 | | |
| 2005 | 11,759 | | |
| 2006 | 12,416 | | |
| 2007 | 13,803 | 502,178 | 36 |
| 2008 | 13,017 | 494,866 | 38 |
| 2009 | 13,099 | 489,308 | 38 |
| 2010 | 11,813 | 423,394 | 36 |
| 2011 | 11,616 | 406,730 | 35 |
| 2012 | 10,927 | 392,436 | 36 |
| 2013 | 11,428 | 414,997 | 37 |

NO DATA

Source: Department of Social Protection

Note: The number of days lost refers to the number of paid claim days and therefore does not count the first three days of the claim or Sundays. Including these unpaid days leads to a figure of 537,862 days lost in 2013 and an average of 47 days per claim.

**Figure 2.10: Rate of 4+ day injuries per 100,000 Workers in the EU 2011 (Eurostat)**




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 3 on 'Data Sources and Methodology).

## 2.2 VICTIM STATISTICS

**Figure 2.11: Number and rate of injury/illness (0+ days) per 1,000 workers by economic sector and gender 2012 (CSO)**

| | Number employed | | Injury rate per 1,000 workers | | Illness rate per 1,000 workers | |
|---|---|---|---|---|---|---|
| | Male | Female | Male | Female | Male | Female |
| Agriculture, forestry and fishing | 82,700 | 11,125 | 28.8 | 33.7 | 46.7 | 46.2 |
| Industry | 166,475 | 69,675 | 21.7 | 16.5 | 12.3 | 19.2 |
| Construction | 94,650 | 6,200 | 24.7 | - | 36.7 | - |
| Wholesale and retail trade | 141,425 | 131,500 | 16.9 | 13.4 | 30.5 | 29.6 |
| Transportation and storage | 72,325 | 16,175 | 32.7 | - | 24.1 | 31.8 |
| Accommodation and food service activities | 58,025 | 64,750 | 27.9 | 25.4 | 11.3 | 29.5 |
| Information and communication | 56,400 | 23,350 | 12.4 | - | 42.0 | 37.3 |
| Financial, insurance and real estate activities | 47,675 | 53,225 | 15.1 | 16.1 | 9.0 | 21.5 |
| Professional, scientific and technical activities | 62,400 | 41,225 | 11.6 | 2.7 | 7.7 | 30.4 |
| Administrative and support service activities | 31,325 | 30,500 | 27.2 | 3.2 | 18.5 | 11.4 |
| Public administration and defence | 50,750 | 45,775 | 24.2 | - | 32.7 | 16.7 |
| Education | 37,625 | 108,325 | - | 12.7 | 35.8 | 37.5 |
| Human health and social work activities | 49,800 | 195,900 | 45.3 | 24.9 | 23.8 | 32.5 |
| Other NACE activities | 39,725 | 60,175 | 20.9 | 9.1 | 17.9 | 34.0 |
| **Total** | **992,850** | **858,575** | **22.2** | **14.9** | **25.0** | **29.2** |

- number too small to report rate

Figure 2.12: Rate of total injury (0+ days) per 1,000 workers by gender 2007-2012 (CSO)

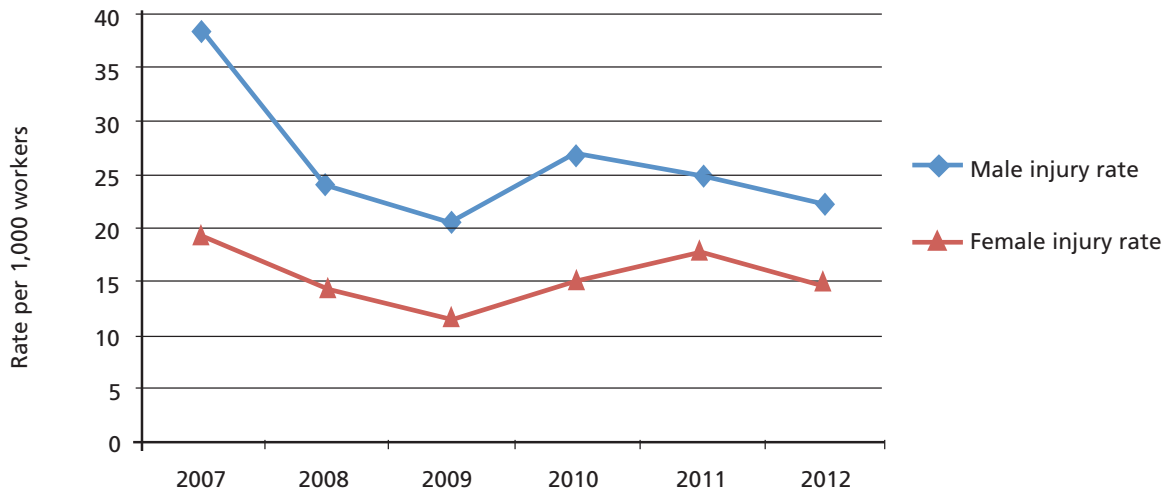
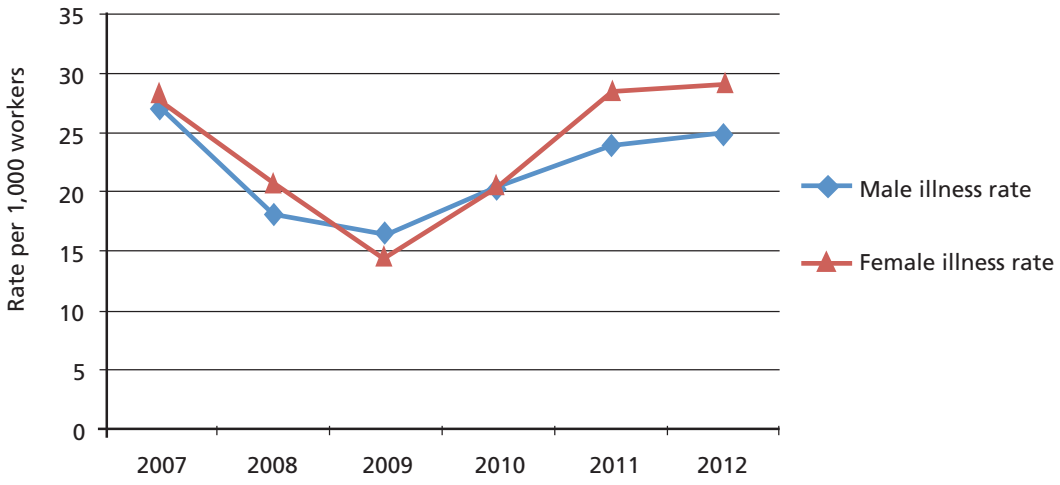



Figure 2.13: Rate of total illness (0+ days) per 1,000 workers by gender 2007-2012 (CSO)



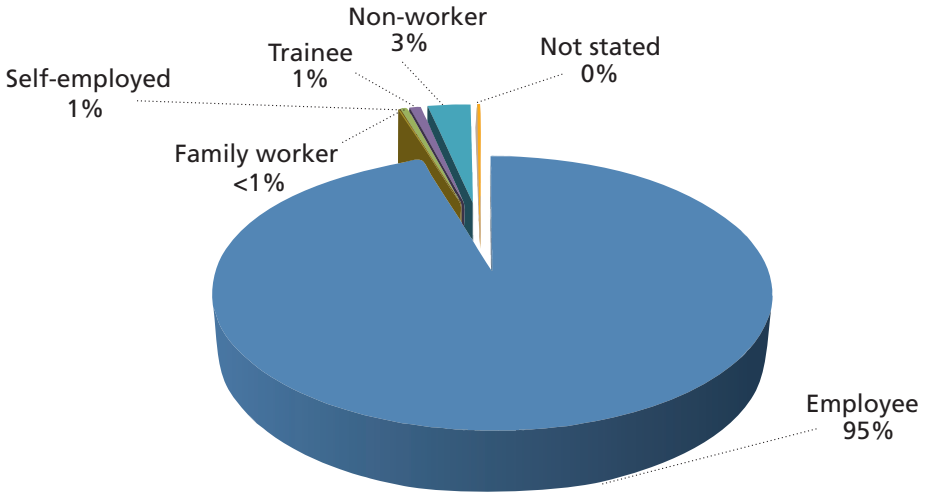
| Figure 2.14: Rates of total injury and total illness (0+ days) per 1,000 workers by age band 2012 (CSO) | | |
|---|---|---|
| **Age range** | **Injury rate 2012** | **Illness rate 2012** |
| 15-19 | * | * |
| 20-24 | * | * |
| 25-34 | 20.5 | 25.4 |
| 35-44 | 20.0 | 27.6 |
| 45-54 | 18.9 | 32.0 |
| 55-64 | 15.2 | 29.5 |
| 65+ | * | * |
| **Total** | **18.9** | **27.1** |

* 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 2012 (CSO) | | |
|---|---|---|
| **Occupation** | **Injury rate 2012** | **Illness rate 2012** |
| Managers and Administrators | 24.7 | 27.3 |
| Professional | 12.3 | 28.6 |
| Associate Professional and Technical | 24.1 | 31.3 |
| Clerical and Secretarial | 5.9 | 16.8 |
| Craft and Related | 29.5 | 36.4 |
| Personal and Protective Service | 24.4 | 37.0 |
| Sales | 9.2 | 23.6 |
| Plant and Machines Operatives | 29.9 | 27.3 |
| Elementary Occupations* | 16.2 | 13.7 |
| Other/not stated | - | 31.1 |
| **All occupations** | **18.9** | **27.1** |

*includes elementary agricultural (eg. farm workers), construction, process plant (eg. packers), administration (eg. postal workers), cleaning, security, sales, storage and other occupations. See CSO (2012) for a detailed description of the SOC 2010.

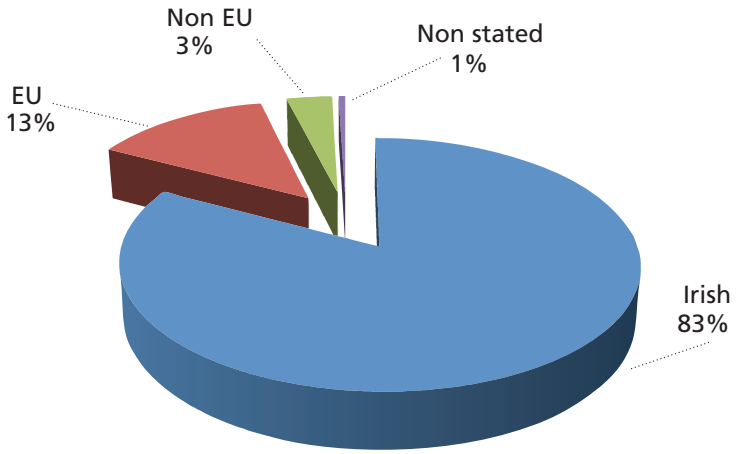
Figure 2.16: Reported non-fatal injuries by employment status 2013 (HSA)




| Figure 2.17: Workers by nationality and economic sector 2012 (CSO statistical release April 2013) | | | |
|---|---|---|---|
| | Number of workers | | |
| **Economic Sector** | **Irish** | **Non-Irish** | **% Non-Irish** |
| Agriculture, forestry and fishing | 86,725 | 7,070 | 7.5% |
| Industry | 193,213 | 42,955 | 18.2% |
| Construction | 89,875 | 10,954 | 10.9% |
| Wholesale and retail trade | 228,868 | 44,070 | 16.1% |
| Transportation and storage | 78,169 | 10,344 | 11.7% |
| Accommodation and food service activities | 83,305 | 39,524 | 32.2% |
| Information and communication | 64,181 | 15,592 | 19.5% |
| Financial, insurance and real estate activities | 91,833 | 9,081 | 9.0% |
| Professional, scientific and technical activities | 92,615 | 11,010 | 10.6% |
| Administrative and support service activities | 47,532 | 14,288 | 23.1% |
| Public administration and defence | 94,356 | - | - |
| Education | 136,513 | 9,423 | 6.5% |
| Human health and social work activities | 209,620 | 36,057 | 14.7% |
| Other NACE activities | 82,793 | 17,129 | 17.1% |
| **Total** | **1,579,596** | **269,642** | **14.6%** |

- unweighted number of non-nationals in public administration too small to report

**Figure 2.18: Distribution of reported non-fatal injuries by nationality 2013 (HSA)**




Note: EU refers to those from the EU27.

## 2.3 NATURE OF ACCIDENTS AND TYPE OF INJURIES SUSTAINED

**Figure 2.19: Non-fatal injuries by trigger 2013 (HSA)**

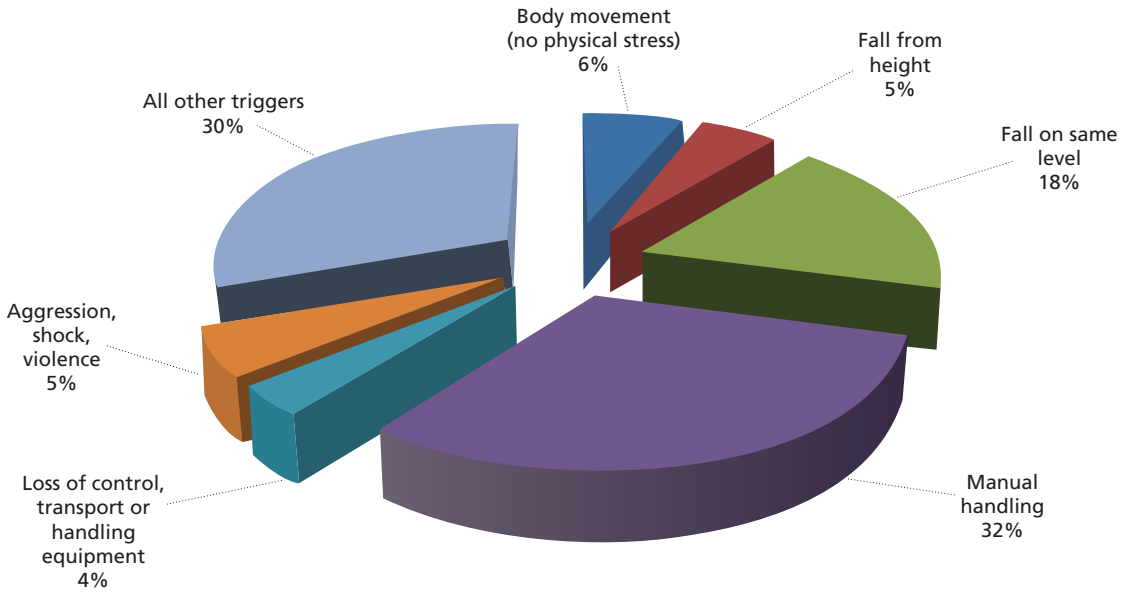



**Figure 2.20: Number and Percentage of non-fatal accidents by trigger, Selected Sectors 2013 (HSA)**

| | Manufacturing | | Construction | | Wholesale & Retail | | Transport & Storage | | Public Admin & Defence | | Health & Social Work | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **N** | **%** | **N** | **%** | **N** | **%** | **N** | **%** | **N** | **%** | **N** | **%** |
| Body movement no physical stress | 86 | 8.2 | 32 | 7.8 | 29 | 3.5 | 65 | 8.1 | 50 | 6.2 | 164 | 11.4 |
| Fall from height | 50 | 4.7 | 48 | 11.7 | 40 | 4.9 | 47 | 5.8 | 38 | 4.7 | 25 | 1.7 |
| Fall on same level | 144 | 13.7 | 73 | 17.8 | 169 | 20.7 | 131 | 16.3 | 125 | 15.5 | 278 | 19.4 |
| Manual handling | 319 | 30.3 | 87 | 21.3 | 318 | 38.9 | 249 | 31.0 | 142 | 17.6 | 299 | 20.8 |
| Loss of control transport or handling equipment | 11 | 1.0 | 17 | 4.2 | 22 | 2.7 | 41 | 5.1 | 77 | 9.6 | 35 | 2.4 |
| Aggression, shock, violence | 1 | 0.1 | 4 | 1.0 | 8 | 1.0 | 18 | 2.2 | 57 | 7.1 | 221 | 15.4 |
| Loss of control of hand tool, machine or object being worked on | 114 | 10.8 | 50 | 12.2 | 79 | 9.7 | 22 | 2.7 | 26 | 3.2 | 25 | 1.7 |
| All other[1] | 329 | 31.2 | 98 | 23.9 | 152 | 18.6 | 231 | 28.7 | 290 | 36.0 | 388 | 27.2 |
| **Total** | **1,054** | **100** | **409** | **100** | **817** | **100** | **804** | **100** | **805** | **100** | **1,435** | **100** |

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

N = Number

**Figure 2.21: Injury type by gender 2012 (CSO)**

| | Male | | Female | | Total | |
|---|---|---|---|---|---|---|
| **Injury Type** | **Number** | **Rate** | **Number** | **Rate** | **Number** | **Rate** |
| Wound or superficial injury | 7,437 | 7.5 | 3,637 | 4.2 | 11,074 | 6.0 |
| Bone fracture | 3,755 | 3.8 | 1,044 | 1.2 | 4,799 | 2.6 |
| Dislocation, sprain or strain | 6,375 | 6.4 | 4,504 | 5.2 | 10,879 | 5.9 |
| Amputation, concussion, internal injury, burn, scald or frost bite | 2,355 | 2.4 | 1,222 | 1.4 | 3,577 | 1.9 |
| Poisoning or infection, suffocation (asphyxiation), other type of injury, not specified | 2,675 | 2.7 | 2,387 | 2.8 | 5,062 | 2.7 |
| **Total** | **22,597** | **22.8** | **12,794** | **14.9** | **35,391** | **19.1** |

**Figure 2.22: Illness type by gender 2012 (CSO)**

| | Male | | Female | | Total | |
|---|---|---|---|---|---|---|
| **Illness Type** | **Number** | **Rate** | **Number** | **Rate** | **Number** | **Rate** |
| Bone, joint or muscle problem | 13,773 | 13.9 | 10,712 | 12.5 | 24,485 | 13.2 |
| Breathing or lung problem | 694 | 0.7 | 991 | 1.2 | 1,685 | 0.9 |
| Hearing problem, headache, eyestrain, heart/circulatory problem, disease | 2,000 | 2.0 | 2,618 | 3.0 | 4,618 | 1.7 |
| Stress, depression, anxiety | 6,587 | 6.6 | 9,535 | 11.1 | 16,122 | 8.7 |
| Skin problem, other types of complaint, not stated | 2,531 | 2.5 | 2,082 | 2.4 | 4,613 | 3.3 |
| **Total** | **22,597** | **22.8** | **12,794** | **14.9** | **51,523** | **19.1** |

| Figure 2.23a: Most injured body parts, 2013 (HSA) | | | | |
|---|---|---|---|---|
| | All | | Workers Only | |
| | Number | % | Number | % |
| Back, including spine & vertebra in the back | 1,453 | 22.0 | 1,445 | 22.6 |
| Finger(s) | 593 | 9.0 | 584 | 9.1 |
| Leg, including knee | 502 | 7.6 | 485 | 7.6 |
| Hand | 499 | 7.6 | 493 | 7.7 |
| Ankle | 414 | 6.3 | 392 | 6.1 |
| Shoulder and shoulder joints | 404 | 6.1 | 396 | 6.2 |
| Arm, including elbow | 369 | 5.6 | 356 | 5.6 |
| All others including unknown | 2,364 | 35.8 | 2,245 | 35.1 |
| **Total** | **6,598** | **100.0** | **6,396** | **100.0** |

**Figure 2.23b: Most injured body parts, Workers 2013 (HSA)**

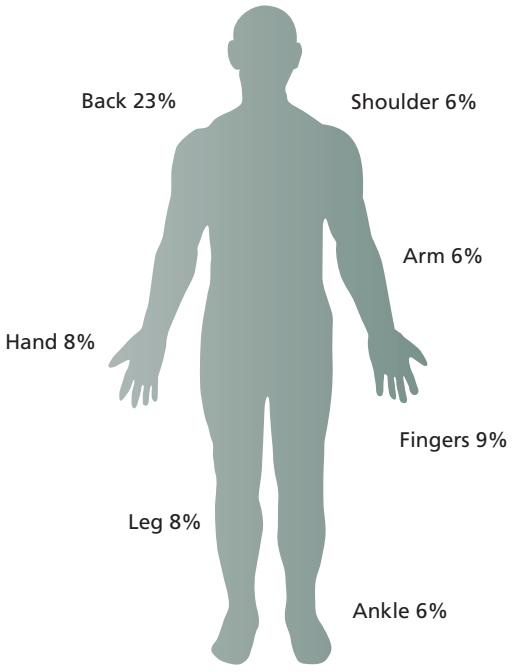
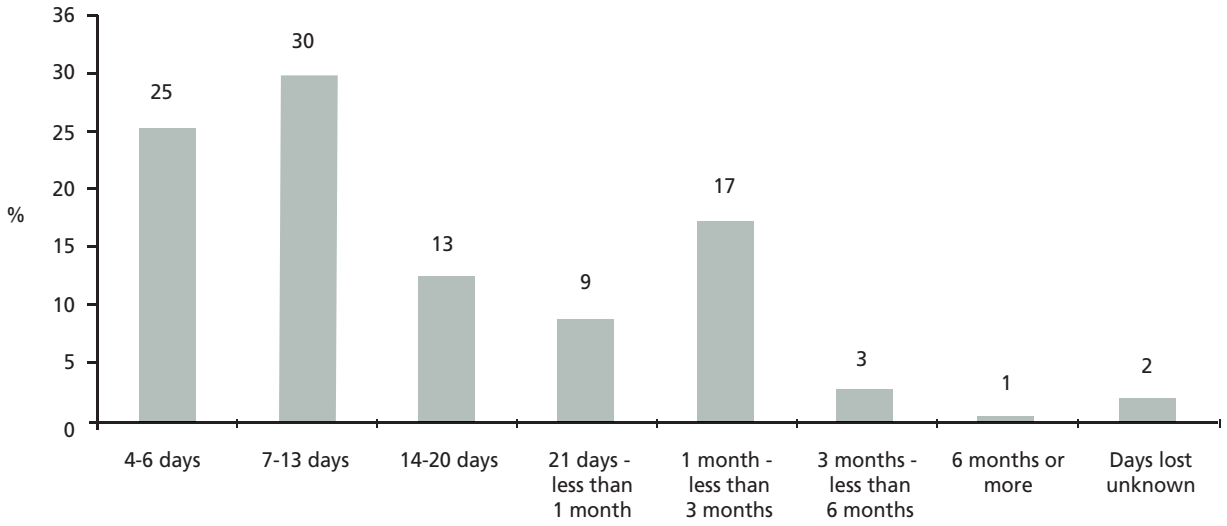


Figure 2.24: Percentage of non-fatal injuries by absence from work 2013 (HSA)




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 2013 (HSA)**

| | All | | Workers Only | |
|---|---|---|---|---|
| | Number | % | Number | % |
| Construction site | 227 | 3.4 | 224 | 3.5 |
| Farming, Forestry, Fishing (not on vessel) | 88 | 1.3 | 85 | 1.3 |
| Hospital & other healthcare | 1,204 | 18.2 | 1,198 | 18.7 |
| Public thoroughfare | 719 | 10.9 | 707 | 11.1 |
| Production area, factory, workshop | 1,374 | 20.8 | 1,363 | 21.3 |
| Area for storage loading | 445 | 6.7 | 441 | 6.9 |
| Shop, sales, service activity area | 651 | 9.9 | 567 | 8.9 |
| Other | 1,871 | 28.4 | 1,793 | 28.0 |
| Unknown | 19 | 0.3 | 18 | 0.3 |
| **Total** | **6,598** | **100** | **6,396** | **100** |

Figure 2.25b Chart of reported non-fatal injuries by work environment 2013 (HSA)

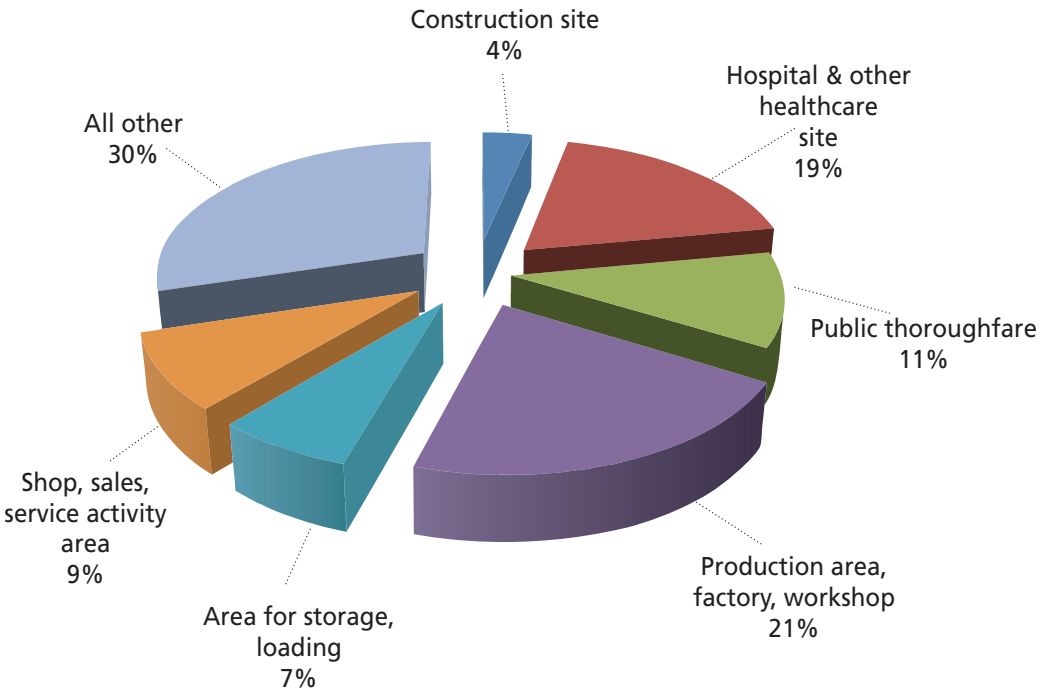
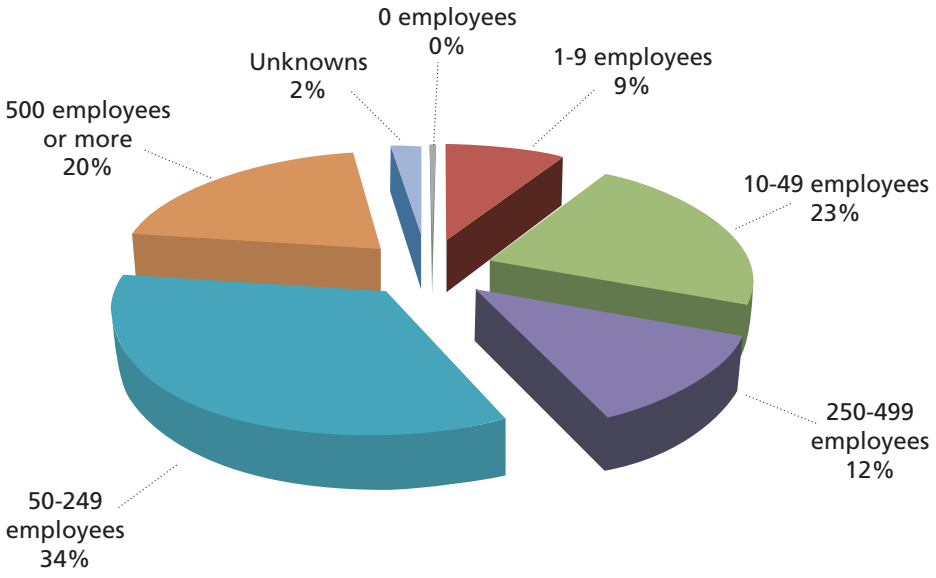
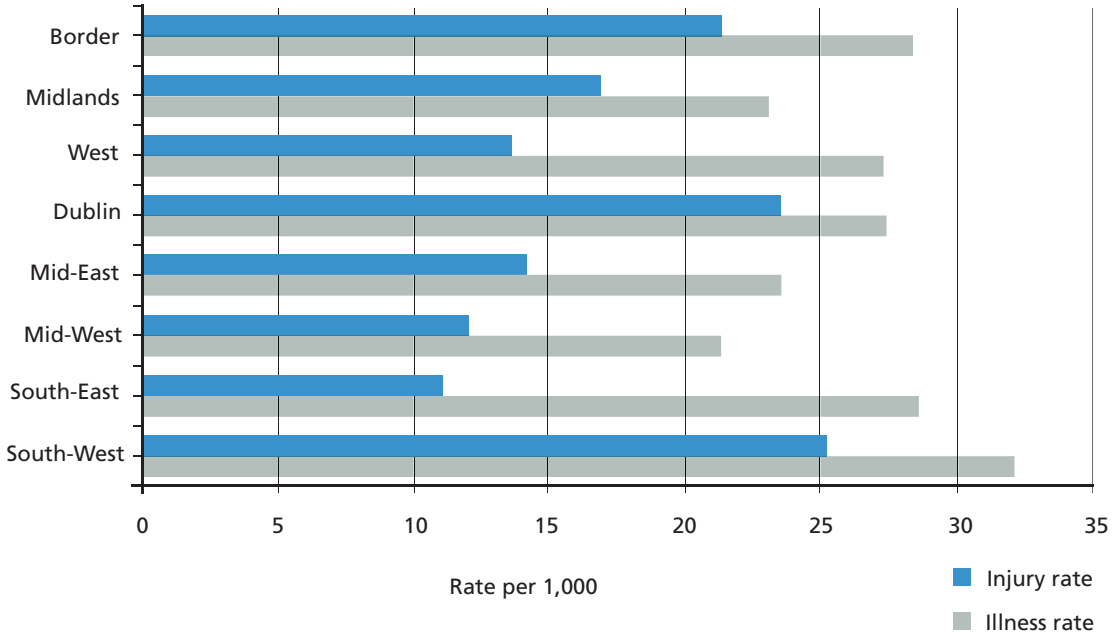



Figure 2.26: Reported non-fatal injuries (%) by size of employing organisation 2013 (HSA)



| Figure 2.27: Number of non-fatal injury reports by county 2013 (HSA) | | | |
|---|---|---|---|
| | **Workers** | **Non-Workers** | **All** |
| Clare | 120 | 5 | 125 |
| Cork | 740 | 29 | 769 |
| Cavan | 81 | 1 | 82 |
| Carlow | 63 | 5 | 68 |
| Donegal | 100 | 10 | 110 |
| Dublin | 2,472 | 69 | 2,541 |
| Galway | 253 | 12 | 265 |
| Kildare | 328 | 5 | 333 |
| Kilkenny | 106 | 2 | 108 |
| Kerry | 221 | 2 | 223 |
| Longford | 39 | 2 | 41 |
| Louth | 138 | 2 | 140 |
| Limerick | 315 | 7 | 322 |
| Leitrim | 18 | 1 | 19 |
| Laois | 73 | 6 | 79 |
| Meath | 182 | 7 | 189 |
| Monaghan | 49 | 2 | 51 |
| Mayo | 112 | 7 | 119 |
| Offaly | 114 | 3 | 117 |
| Roscommon | 35 | 2 | 37 |
| Sligo | 76 | 4 | 80 |
| Tipperary | 262 | 3 | 265 |
| Waterford | 133 | 4 | 137 |
| Westmeath | 100 | 2 | 102 |
| Wicklow | 116 | 2 | 118 |
| Wexford | 147 | 8 | 155 |
| **All** | **6,393** | **202** | **6,595** |

**Figure 2.28 Rate of illness and injury (0+ days) by region 2012 (CSO)**



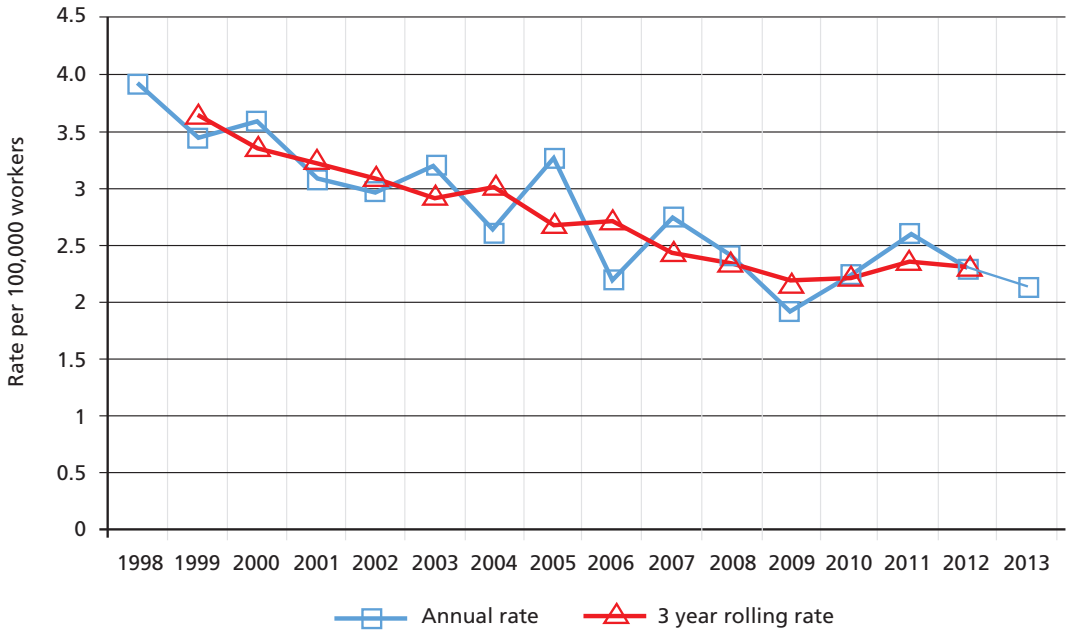

| Region | Total employed | Injury (0+ days) | | Illness (0+ days) | |
|---|---|---|---|---|---|
| | | Number | Rate per 1,000 | Number | Rate per 1,000 |
| Border | 175,950 | 3,753 | 21.3 | 4,982 | 28.3 |
| Midlands | 106,900 | 1,802 | 16.9 | 2,467 | 23.1 |
| West | 182,625 | 2,475 | 13.6 | 4,991 | 27.3 |
| Dublin | 551,725 | 13,009 | 23.6 | 15,104 | 27.4 |
| Mid-East | 222,150 | 3,132 | 14.1 | 5,237 | 23.6 |
| Mid-west | 149,600 | 1,797 | 12.0 | 3,199 | 21.4 |
| South-East | 184,950 | 2,041 | 11.0 | 5,303 | 28.7 |
| South-West | 277,425 | 6,990 | 25.2 | 8,927 | 32.2 |

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.

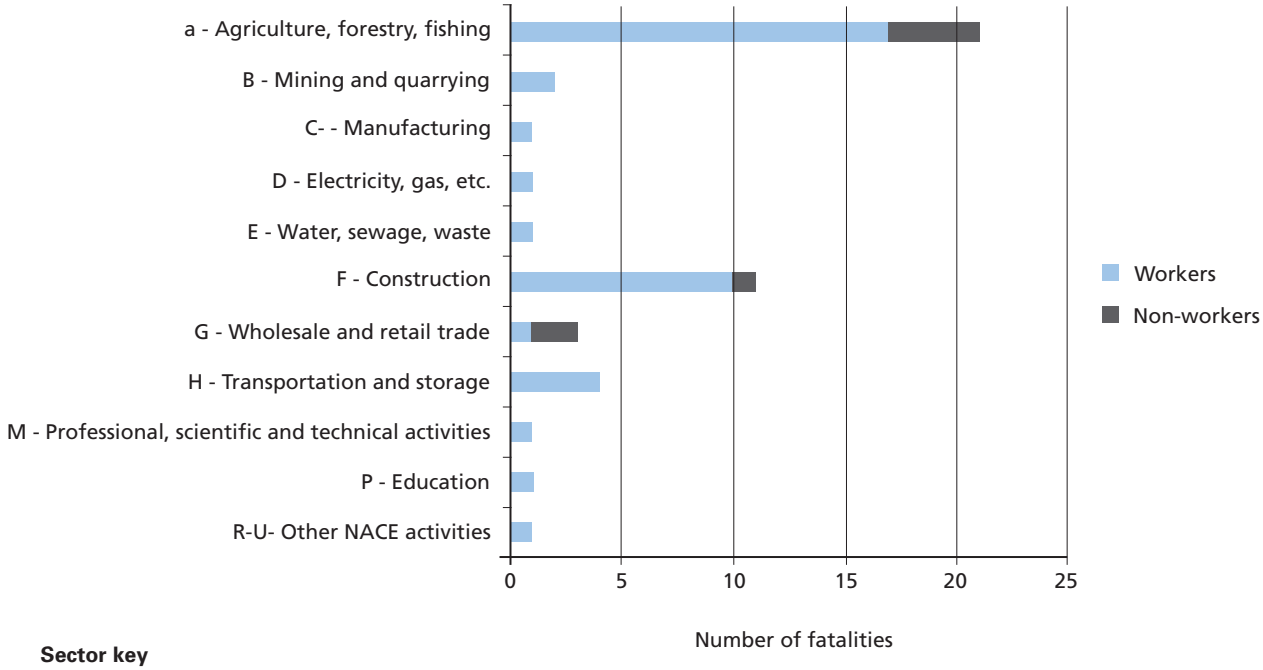
**Border:** Cavan, Donegal, Leitrim, Louth, Monaghan, Sligo.
**Midlands:** Laois, Longford, Offaly, Westmeath
**West:** Galway, Mayo, Roscommon
**Dublin:** Dublin
**Mid-East:** Kildare, Meath, Wicklow
**Mid-West:** Clare, Limerick, Tipperary North
**South-East:** Carlow, Kilkenny, Tipperary South, Waterford, Wexford
**South-West:** Cork, Kerry

## 3 FATAL INJURY STATISTICS

### Figure 3.1: Rate of worker fatalities per 100,000 workers 1998-2013 (HSA)




### Figure 3.2: Number of reported fatalities by economic sector (worker and non-worker) 2013 (HSA)




**Sector key**

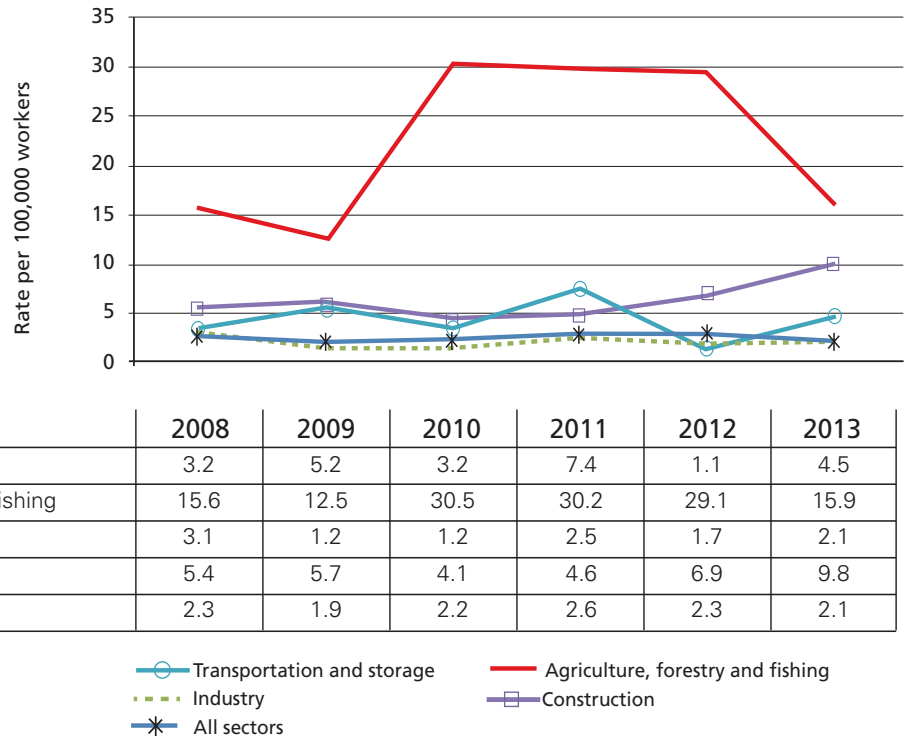
A – Agriculture, forestry and fishing; B - Mining and quarrying; E– Water supply; sewerage, waste management and remediation activities; F – Construction; G – Wholesale/Retail trade, repair of vehicles, personal and household goods;H – Transportation and storage; M - Professional, scientific and technical activities; N - Administrative and support service activities; P-Education; R-U-Other Nace activities

| Figure 3.3: Number of reported fatalities (worker and non-worker) by economic sector 2008- 2013 (HSA) | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Economic Sector (NACE Rev.2)** | **Number of fatalities** | | | | | | **Total 2008-13** |
| | **2008** | **2009** | **2010** | **2011** | **2012** | **2013** | |
| A-Total agriculture, forestry and fishing | 22 | 13 | 29 | 27 | 28 | 21 | 140 |
| Agriculture | 20 | 10 | 22 | 22 | 20 | 16 | 110 |
| Forestry | 1 | 1 | 3 | 0 | 1 | 0 | 6 |
| Fishing | 1 | 2 | 4 | 5 | 7 | 5 | 24 |
| B-Mining and quarrying | 1 | 2 | 0 | 1 | 1 | 2 | 7 |
| C-Manufacturing | 6 | 1 | 2 | 2 | 0 | 1 | 12 |
| D-Electricity;gas, steam and air conditioning supply | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| E-Water supply, sewerage, waste management and remediation activities | 2 | 0 | 2 | 3 | 4 | 1 | 12 |
| F-Construction | 15 | 10 | 6 | 6 | 8 | 11 | 56 |
| G-Wholesale and retail trade | 3 | 2 | 4 | 2 | 3 | 3 | 17 |
| H-Transportation and storage | 3 | 6 | 3 | 7 | 1 | 4 | 24 |
| I-Accommodation and food services | 0 | 1 | 0 | 1 | 0 | 0 | 2 |
| J-Information and communication | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| K-Financial and insurance activities | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| L-Real estate activities | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| M-Professional, scientific and technical activities | 1 | 1 | 0 | 2 | 1 | 1 | 6 |
| N-Administrative and support service activities | 0 | 1 | 0 | 0 | 1 | 0 | 2 |
| O-Public administration and defence | 1 | 2 | 0 | 1 | 0 | 0 | 4 |
| P-Education | 0 | 2 | 0 | 0 | 0 | 1 | 3 |
| Q-Human health and social work activities | 0 | 1 | 1 | 1 | 1 | 0 | 4 |
| R-U-Other NACE activities | 3 | 1 | 1 | 1 | 0 | 1 | 7 |
| **Total** | **57** | **43** | **48** | **54** | **48** | **47** | **297** |

Note: There may be some differences between the figures in this table and tables in previous publications for the same year. This is due to reclassification of industrial categories and / or late reporting/ confirmation of fatal injuries.

| Figure 3.4: Number of reported worker fatalities by economic sector 2013 (HSA) | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Economic Sector** | **Worker** | | | | | **Non-Worker** | **Total** |
| | **Employee** | **Self-Employed** | **Family Worker** | **Total** | **Rate per 100,000** | | |
| Agriculture, forestry and fishing | 1 | 15 | 1 | 17 | 15.9 | 4 | 21 |
| Industry (NACE B-E) | 4 | 1 | 0 | 5 | 2.1 | 0 | 5 |
| Construction | 6 | 4 | 0 | 10 | 9.8 | 1 | 11 |
| Wholesale and retail trade | 0 | 1 | 0 | 1 | 0.4 | 2 | 3 |
| Transportation and storage | 4 | 0 | 0 | 4 | 4.5 | 0 | 4 |
| Professional, scientific and technical activities | 1 | 0 | 0 | 1 | 0.9 | 0 | 1 |
| Education | 1 | 0 | 0 | 1 | 0.7 | 0 | 1 |
| Other NACE activities | 0 | 1 | 0 | 1 | 1.0 | 0 | 1 |
| Total persons | 17 | 22 | 1 | 40 | 2.1 | 7 | 47 |

**Figure 3.5: Comparison of fatality rates in selected sectors 2008–2013 (HSA))**




| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|---|---|---|---|---|---|---|
| Transport and storage | 3.2 | 5.2 | 3.2 | 7.4 | 1.1 | 4.5 |
| Agriculture, forestry and fishing | 15.6 | 12.5 | 30.5 | 30.2 | 29.1 | 15.9 |
| Industry | 3.1 | 1.2 | 1.2 | 2.5 | 1.7 | 2.1 |
| Construction | 5.4 | 5.7 | 4.1 | 4.6 | 6.9 | 9.8 |
| All sectors | 2.3 | 1.9 | 2.2 | 2.6 | 2.3 | 2.1 |

**Figure 3.6: Percentage of reported fatal injuries by employment status 2013 (HSA)**

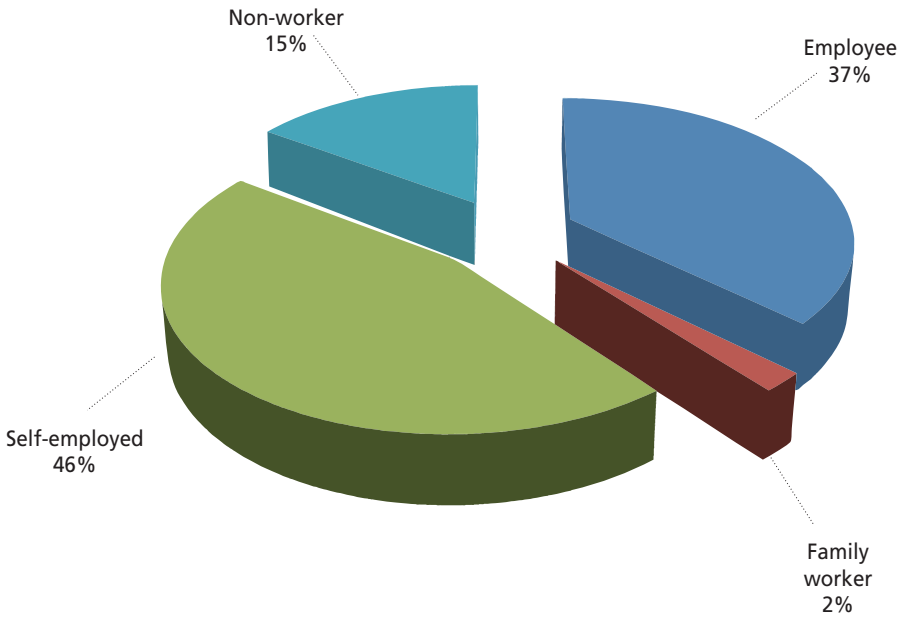


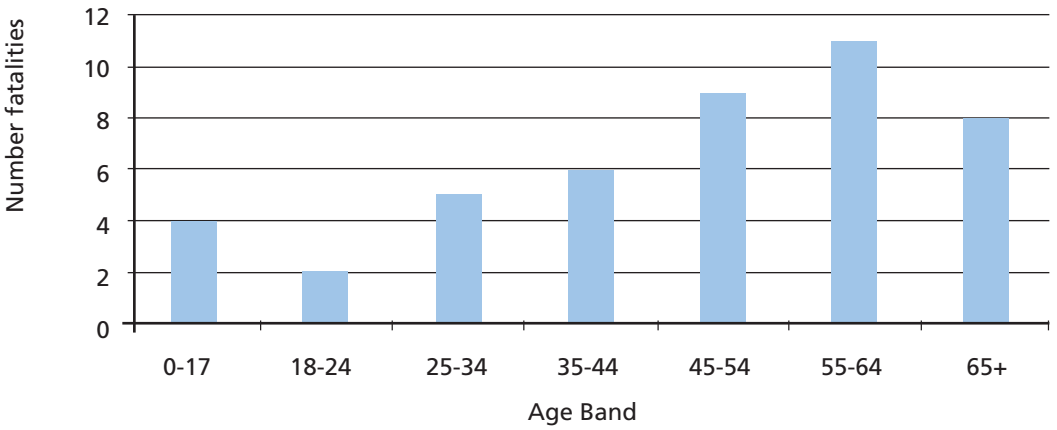
**Figure 3.7: Number of reported fatalities (worker and non-worker) by economic sector and age band 2013 (HSA)**

| | Economic sector | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Age Band** | **A** | **B** | **C** | **D** | **E** | **F** | **G** | **H** | **M** | **P** | **R-U** | **Total** |
| 0-17 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 18-24 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 |
| 25-34 | 1 | 0 | 0 | 0 | 0 | 2 | 1 | 1 | 0 | 0 | 0 | 5 |
| 35-44 | 2 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 6 |
| 45-54 | 5 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 9 |
| 55-64 | 3 | 0 | 1 | 0 | 0 | 4 | 0 | 1 | 0 | 1 | 1 | 11 |
| 65+ | 5 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 8 |
| age unknown | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| **Total** | **21** | **2** | **1** | **1** | **1** | **11** | **3** | **4** | **1** | **1** | **1** | **47** |

**Sector key**

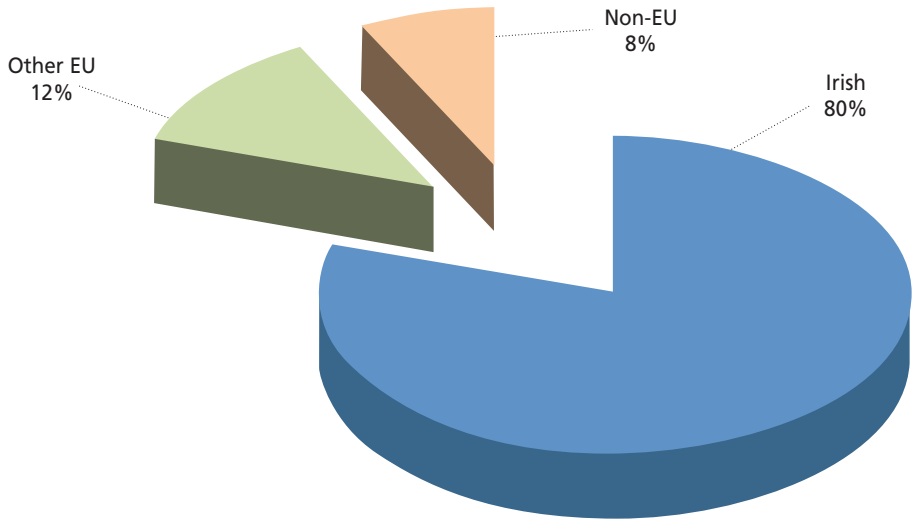
A – Agriculture, forestry and fishing; B - Mining and quarrying; E– Water supply; sewerage, waste management and remediation activities; F – Construction; G – Wholesale/Retail trade, repair of vehicles, personal and household goods;H – Transportation and storage; M - Professional, scientific and technical activities; N - Administrative and support service activities; P-Education; R-U-Other Nace activities

Figure 3.8: Number of reported fatalities (worker and non-worker) by age band 2013 (HSA)




| Figure 3.9: Number of reported worker fatalities by nationality and economic sector 2013 (HSA) | | | |
|---|---|---|---|
| **Economic Sector** | **Irish** | **Other EU** | **Non-EU** |
| A - Agriculture, forestry and fishing | 17 | 0 | 0 |
| B - Mining and quarrying | 1 | 0 | 1 |
| C - Manufacturing | 1 | 0 | 0 |
| D - Electricity, gas, etc | 1 | 0 | 0 |
| E - Water, sewerage, waste | 0 | 0 | 1 |
| F - Construction | 8 | 1 | 1 |
| G - Wholesale and retail trade | 1 | 1 | 0 |
| H -Transportation and storage | 1 | 2 | 0 |
| M - Professional, scientific and technical activities | 0 | 1 | 0 |
| P - Education | 1 | 0 | 0 |
| R-U- Other NACE activities | 1 | 0 | 0 |
| **Total** | **32** | **5** | **3** |

**Figure 3.10: Percentage of reported worker fatalities by nationality 2013 (HSA)**



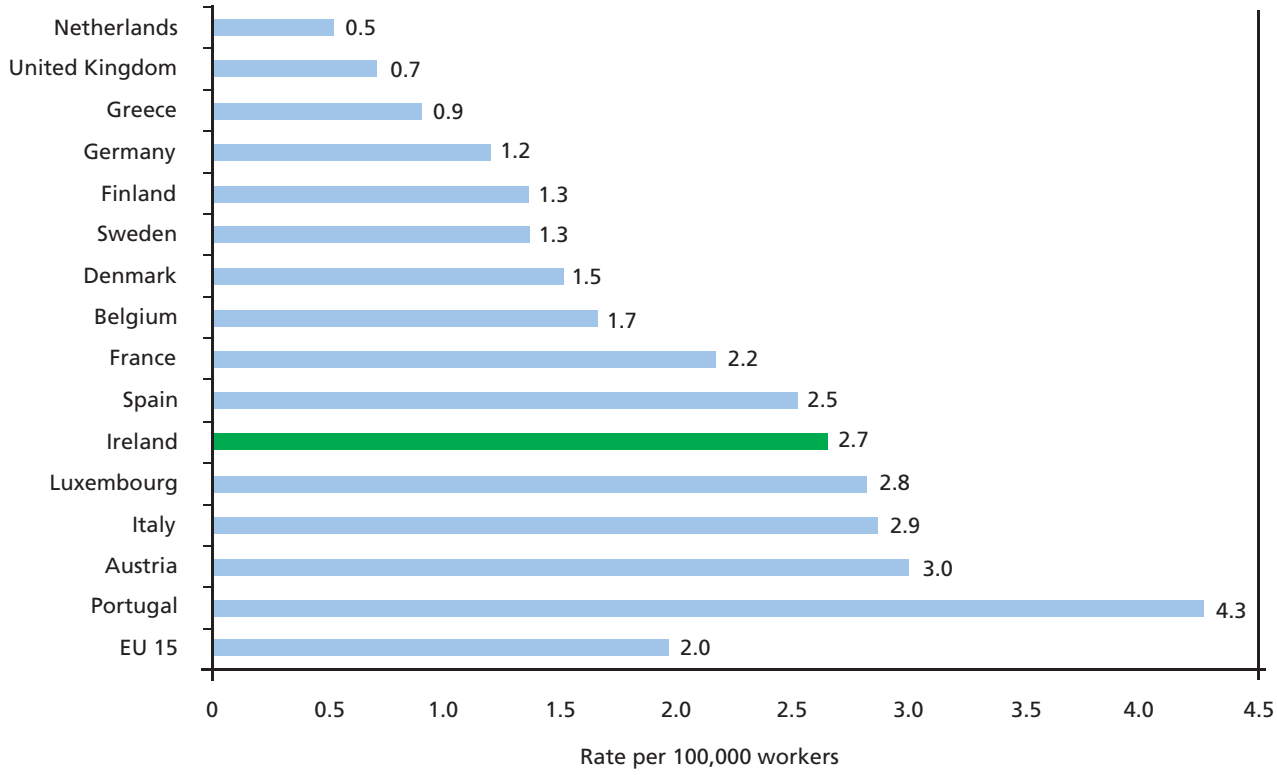

| Figure 3.11: Reported worker fatality rates (per 100,000 workers) by nationality 2008–2013 (HSA) | | | | | | |
|---|---|---|---|---|---|---|
| | **2008** | **2009** | **2010** | **2011** | **2012** | **2013** |
| Irish workers | 2.4 | 1.9 | 2.3 | 2.6 | 2.3 | 2.0 |
| Non-Irish national workers | 1.2 | 1.7 | 1.8 | 2.6 | 2.2 | 2.9 |
| All workers | 2.3 | 1.9 | 2.2 | 2.6 | 2.3 | 2.2 |

| Figure 3.12: Number of reported fatalities (worker and non-worker) by accident trigger 2013 (HSA | |
|---|---|
| | **Number** |
| Accident trigger unknown | 4 |
| Breakage of material at joints | 1 |
| Electrical problem - direct contact | 2 |
| Explosion | 1 |
| Fall from height | 9 |
| Fall on same level (slip, stumble etc) | 1 |
| Fall, collapse of material - from above | 4 |
| Loss of control of animal | 1 |
| Loss of control of means of transport or handling equipment | 9 |
| Loss of control of object being worked on | 2 |
| Other breakage/collapse related trigger | 2 |
| Other loss of control trigger | 3 |
| Other triggers not listed | 8 |
| **Total** | **47** |

| Figure 3.13: Number of reported fatalities (worker and non-worker) by region 2008-2013 (HSA) | | | | | | |
|---|---|---|---|---|---|---|
| | | | **Year** | | | |
| | **2008** | **2009** | **2010** | **2011** | **2012** | **2013** |
| Border | 5 | 12 | 10 | 4 | 9 | 7 |
| Midlands | 3 | 2 | 4 | 4 | 6 | 4 |
| West | 5 | 1 | 5 | 5 | 6 | 7 |
| Dublin | 5 | 8 | 2 | 4 | 2 | 4 |
| Mid-East | 6 | 5 | 5 | 3 | 1 | 2 |
| Mid-West | 12 | 5 | 7 | 9 | 10 | 2 |
| South-East | 5 | 3 | 5 | 8 | 3 | 7 |
| South-West | 16 | 7 | 10 | 17 | 11 | 14 |
| **Total** | **57** | **43** | **48** | **54** | **48** | **47** |

**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 2011 (Eurostat)**




Note: The EU15 figures is calculated as an un-weighted average of country rates

## NACE REV 2 – LEVEL 1 & 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 |
| **ELECTRICITY, GAS, STEAM AND AIR CONDITIONING SUPPLY** | | | | |
| D | 35 | | 2 | Electricity, gas, steam and air conditioning supply |

| NACE Rev 2 Code | | | Level | NACE Rev 2 Description |
|---|---|---|---|---|
| **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 |
| **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 |

| NACE Rev 2 Code | | | Level | NACE Rev 2 Description |
|---|---|---|---|---|
| **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 |
| **HUMAN 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 |
| **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 EXTRA TERRITORIAL ORGANISATIONS AND BODIES** | | | | |
| U | 99 | | 2 | Activities of extraterritorial organisations and bodies |

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