



HEALTH AND SAFETY
AUTHORITY



Summary of Workplace Injury,
Illness and Fatality Statistics

2017-2018

2017-2018

Our Vision:

Healthy, safe and productive lives and enterprises

Acknowledgements

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Abbreviations

| | |
|------|---|
| CSO | Central Statistics Office |
| ESAW | European Statistics on Accidents at Work |
| ESRI | Economic and Social Research Institute |
| HSA | Health and Safety Authority |
| ILO | International Labour Organization |
| ISCO | International Standard Classification of Occupations |
| LFS | Labour Force Survey |
| NACE | <i>Nomenclature statistique des activités économiques dans la Communauté Européenne</i> (Statistical Classification of Economic Activities in the European Community) |
| NALA | National Adult Literacy Agency |
| NUTS | Nomenclature of Territorial Units for Statistics |
| OIB | Occupational Injury Benefits |
| QNHS | Quarterly National Household Survey |

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1

Introduction,
overview and
methodology

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1.1 INTRODUCTION

The Health and Safety Authority's annual Summary of Workplace Injury, Illness and Fatality Statistics presents the most recently available statistics on occupational injury, illness and workplace fatalities in Ireland. Data from relevant sources identify the most important trends in workplace safety, such as overall incidence of fatal and non-fatal injuries and reported illnesses, as well as the most common characteristics of accidents and illnesses. These include the age groups, gender, nationality and employment status of victims. They also feature information on the kinds of work-related injury or illness experienced, such as the body part injured or the working environment where the accident took place. Employment data from the Central Statistics Office facilitates the generation of accident and illness rates in each of the economic sectors, allowing the tracking of rates in economic sectors over time, and the identification of economic activities that pose challenges to worker health and safety.

The main findings of the statistics report are described in Section 1.2. Sources of data and methodologies are outlined in Section 1.3, while Section 1.4 explains how rates of fatal injuries, non-fatal injuries and illnesses are calculated. Detailed tables, graphs and descriptions are available in Section 2, Section 3 and Section 4.

Changes in this report

In 2019 the HSA undertook a review of the NACE economic sectors that fatal accidents were assigned from 2004 to 2018. This has led to a small number of changes in the number of fatal accidents assigned to some economic sectors. In addition, the overall number of fatal accidents has been updated, due to the late reporting of accidents in 2016 and 2017, as well as the reconsideration of some historical accidents. Details are provided in Appendix A.

Non-fatal accidents reported to the HSA for the years 2008 to 2017 have also been updated to reflect additional late-reported accidents.

In 2017 the Central Statistics Office revised historical estimates of the numbers employed in various economic sectors (CSO, 2018). These numbers, and all rates derived from them, have been updated in this report for all years. This means that numbers employed and rates have changed slightly compared with previous reports. These revisions will aid the comparability of rates of accidents and illnesses over time.

1.2 OVERVIEW FOR 2017–2018

Non-fatal injury

Statistics on work-related injury in this report derive from two main sources of information: the record of incidents reported to the HSA, and the data provided by the annual module on work-related injury and illness in the Labour Force Survey (LFS), collected by the CSO (see Section 1.3 for details). Figures referred to in this Overview are represented in tables and graphs in Section 2.

HSA figures

9,199 non-fatal injuries to workers and non-workers were reported to the HSA in 2018. The rate¹ of reported injuries to workers, as a proportion of those in employment, remained broadly stable at 3.9 per 1,000 in 2018, compared with 4.0 in the previous year.

¹ The calculation of rates is explained in Section 1.4.

Central Statistics Office module results - Injury

While HSA data are available for 2018, the CSO survey module is based on interviews that were undertaken in the first quarter of 2018, relating to the events of 2017. As a result, CSO data refer to 2017, when 22,500 people experienced work injuries requiring an absence from work of four or more days, a 70% increase from the 13,200 reported in 2016. Days lost to injury rose from 481,612 in 2016 to 884,400.

However, the CSO has informed the HSA that it is likely that the increase in injury figures between 2016 and 2017 is due to the replacement of the Quarterly National Household Survey (QNHS) with the Labour Force Survey (LFS) in 2017. This switch involved changes to the questionnaire and the interview mode, the introduction of a new sample, data processing changes and other methodological enhancements. Therefore, the 2017 data may not be comparable to previous series.

Central Statistics Office module results - Illness

In 2017, 29,800 people reported illnesses causing four or more days of absence from work, up from 17,100 in 2016, an increase of 74%. The number of days lost across the economy rose from 746,701 in 2016 to 1,104,700 in 2017, which is the highest number of days lost due to work-related illness since 2014, when 1,106,311 days were lost. However, as with the CSO's Injury data, the increase from 2016 to 2017 in illness data can be largely attributed to the replacement of the QNHS with the LFS in 2017, rather than a true increase in rates of accidents and illnesses.

Fatal injuries

There were 39 work-related fatalities in 2018, the lowest number recorded since the formation of the HSA in 1989. This is down from 48 in 2017, 48 in 2016 and 56 in 2015. While the number of fatal accidents fluctuates from year to year, rates of fatal accidents in recent years have been considerably lower than in the early 2000s.

The rate of fatal accidents to workers was 1.5 per 100,000 employed in 2018, also the lowest rate on record.

European comparison

The latest European statistics on fatality rates are published by Eurostat² and refer to the year 2016, when Ireland had the fifth highest rate among the EU15.³ However, there are important differences in the fatal accident data collected by the various member states, so caution should be taken in interpreting these figures. These include differences in the economic sectors covered by member states. According to the latest available metadata from 2014, for example, France includes accidents involving post or telecommunications only partially; in Greece accidents to police and firefighters are only partially covered. Several member states exclude accidents to self-employed people or family workers, while some include accidents to students. Some states include accidents that occurred during commuting.⁴

² Accidents at work by sex, age and NACE: https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hsw_mi01&lang=en

³ Some EU member states do not report fatal accidents to self-employed people. Thus, for comparability, figures are based on fatal accidents to employees only.

⁴ For information on national differences in Eurostat health and safety data, see: https://ec.europa.eu/eurostat/cache/metadata/Annexes/hsw_acc_work_esms_an3.xls.

1.3 DATA SOURCES AND METHODOLOGY

In this report, the most recent HSA data refer to the year 2018, while the most recently available data from the CSO's Labour Force Survey (LFS) are for 2017. Eurostat data are available up to 2016. 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.⁵ Incidents related to a place of work or a work activity in which a member of the public is injured are also reportable to the HSA, in cases where the person requires treatment from a medical practitioner.⁶ 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.

Labour Force Survey 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 Quarterly National Household Survey (QNHS), which was replaced in 2017 by the Labour Force Survey (LFS).⁷ In Quarter 1 of each year⁸, around 16,000 households are surveyed about work-related accidents or illnesses that occurred to workers during the previous 12 months. The module details the incidence and nature of accidents and illnesses, and the days of work lost. It also features demographic information like economic sector, gender, age, occupation, nationality and NUTS region.⁹

Comparison of HSA data with this LFS module suggests under-reporting of work-related injuries to the HSA. In 2017, 8,772 worker injuries were reported to the HSA while the CSO reported 22,500, suggesting that approximately 39% of work-related accidents/injuries were captured in HSA data. Under-reporting varies considerably between various economic sectors; hence, CSO estimates are considered the most reliable source of data when comparing accident rates between sectors.

LFS estimates of numbers employed are periodically revised using Census data. The latest revision applied data from the 2016 Census. In this report, all historical employment figures and rates are based on the most up to date employment estimates.¹⁰

⁵ It should be noted that this refers to calendar days, so if one misses work on Friday and Monday due to the same injury then it is counted as four days (Friday, Saturday, Sunday and Monday).

⁶ For further information see http://www.hsa.ie/eng/Topics/Accident_and_Dangerous_Occurrence_Reporting/#reportableaccidents.

⁷ Labour Force Survey data are available at the CSO website: https://www.cso.ie/px/pxeirestat/Database/eirestat/Labour%20Force%20Survey%20Quarterly%20Series/Labour%20Force%20Survey%20Quarterly%20Series_statbank.asp?SP=Labour%20Force%20Survey%20Quarterly%20Series&Planguage=0

⁸ In 2013 the survey was undertaken in Quarter 2 and changed slightly to harmonise with a Europe-wide survey.

⁹ Nomenclature of Territorial Units for Statistics, a standard for referencing national sub-regions. In Ireland these are: Border, Midlands, West, Dublin, Mid-East, Mid-West, South-East and South-West.

¹⁰ CSO Labour Force Survey tables available from: https://www.cso.ie/px/pxeirestat/Database/eirestat/Labour%20Force%20Survey%20Quarterly%20Series/Labour%20Force%20Survey%20Quarterly%20Series_statbank.asp?SP=Labour%20Force%20Survey%20Quarterly%20Series&Planguage=0

The most recent data relate to 2017. Data in the LFS are re-weighted to reflect the national distribution of employment and grossed up to reflect the actual numbers in employment. The small number of respondents experiencing injuries and illnesses means that caution should be exercised when interpreting differences between groups and changes over time.

Note that the 2017 data derive from the first year of the CSO's new Labour Force Survey. Changes to the questionnaire, interview mode, sample, data processing and other methodology mean that differences may arise between 2017 data and data from previous years and caution should be taken in interpreting changes in numbers and rates of accidents and illnesses.

Eurostat statistics

Eurostat is the statistical agency of the European Union, responsible for the methodologies member states use to capture information about occupational injuries and diseases. European Statistics on Accidents at Work (ESAW) is the main source of Eurostat data on work-related injury and illness.¹¹ The most recent ESAW data relate to the year 2016.

Each year, the HSA sends data on fatal and non-fatal accidents to Eurostat. These figures are adjusted by Eurostat to take account of under-reporting, using data derived from the CSO's LFS module on work-related accidents and illnesses. For example, the Eurostat figure for Ireland in 2016 is 10,228 for worker accidents resulting in more than four days' absence, while 8,622 non-fatal accidents were reported to the HSA for that year.

As of 2018, Eurostat have updated their NUTS regional classifications from NUTS 2013 to NUTS 2016. In Ireland, the principal changes are the transfer of South Tipperary from the South-East into the Mid-West region, and the movement of Louth from the Border to the Mid-East region. In this report, all historical data have been updated to NUTS 2016.

Occupational injury benefit statistics

In previous Summary of Workplace Injury, Illness and Fatality Statistics reports, figures were included on the number of claims for occupational injury benefits (OIB), provided by the Department of Employment Affairs and Social Protection (DEASP). Due to the introduction of a new reporting system in 2019, figures for 2018 are not yet complete and, thus, are not presented in this report.

Long latency illnesses

Fatality statistics presented here exclude deaths resulting from long-term work-related illnesses, including cancer. It is likely that the number of deaths due to work-related long latency disease is considerably higher than the number of deaths due to injuries. For example, in the United Kingdom 137 workers had fatal accidents in 2016/17 (HSE, 2017), while there were 2,496 deaths due to mesothelioma, which is primarily caused by work-related exposure to asbestos, in 2016 (Cancer Research UK, 2018).

In Ireland, deaths from pleural mesothelioma have increased steeply since 1994, when seven persons were diagnosed. All seven subsequently died. There were up to 46 diagnoses of pleural mesothelioma in 2012, leading to 44 deaths. Meanwhile, 46 patients were also diagnosed with the illness in 2016. Asbestos was widely

¹¹ Statistics produced by Eurostat are available at:

<http://ec.europa.eu/eurostat/web/health/health-safety-work/data/database>

used in construction and industry in the past, and typical victims of pleural mesothelioma include those who have worked as builders or plumbers (Irish Cancer Society, 2015). More information on the incidence of deaths due to cancer is available from the National Cancer Registry Ireland's Annual Report (NCRI, 2018).

Analysis of CSO data by the Irish Cancer Society revealed that 23% of skin cancer deaths in Ireland in 2016 were associated with outdoor work including Construction and Agriculture (Irish Cancer Society, 2019). These came to 61 fatalities caused by work-related skin cancer in 2016, which was more than all of the fatal work-related injuries in that year (48).

1.4 CALCULATING ACCIDENT, ILLNESS AND FATALITY RATES

In order to take account of changes in the level of employment, the rates of injury and illness are calculated per 1,000 workers. Fatality rates, being much less frequent, are calculated per 100,000 workers.

In this report, rates have been calculated using the average level of employment across the four quarters of the relevant year. Thus, for 2018, the average employment level was calculated across the four quarters of 2018:

$$(Q1+Q2+Q3+Q4)/4.$$

In 2018, the CSO undertook a revision of labour force data using new employment information from the 2016 Census.¹² In this report, all historical employment figures, and rates derived from them, are based on the most up to date employment estimates.

¹² For more information, see:

<https://www.cso.ie/en/releasesandpublications/in/lfs/informationnotice-labourforcesurveyquarter32017/>



2

Non-fatal injury and illness statistics

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2.1 HSA FIGURES: GENERAL INJURY AND ILLNESS STATISTICS

Of the 9,199 non-fatal injuries reported to the HSA in 2018, 8,772 (95%) involved workers, while the remaining 427 involved members of the public. This represents a slight decrease of 0.9% in the number of injuries causing four or more days' absence from work reported to the HSA, compared with 2017 (Figure 2.1).

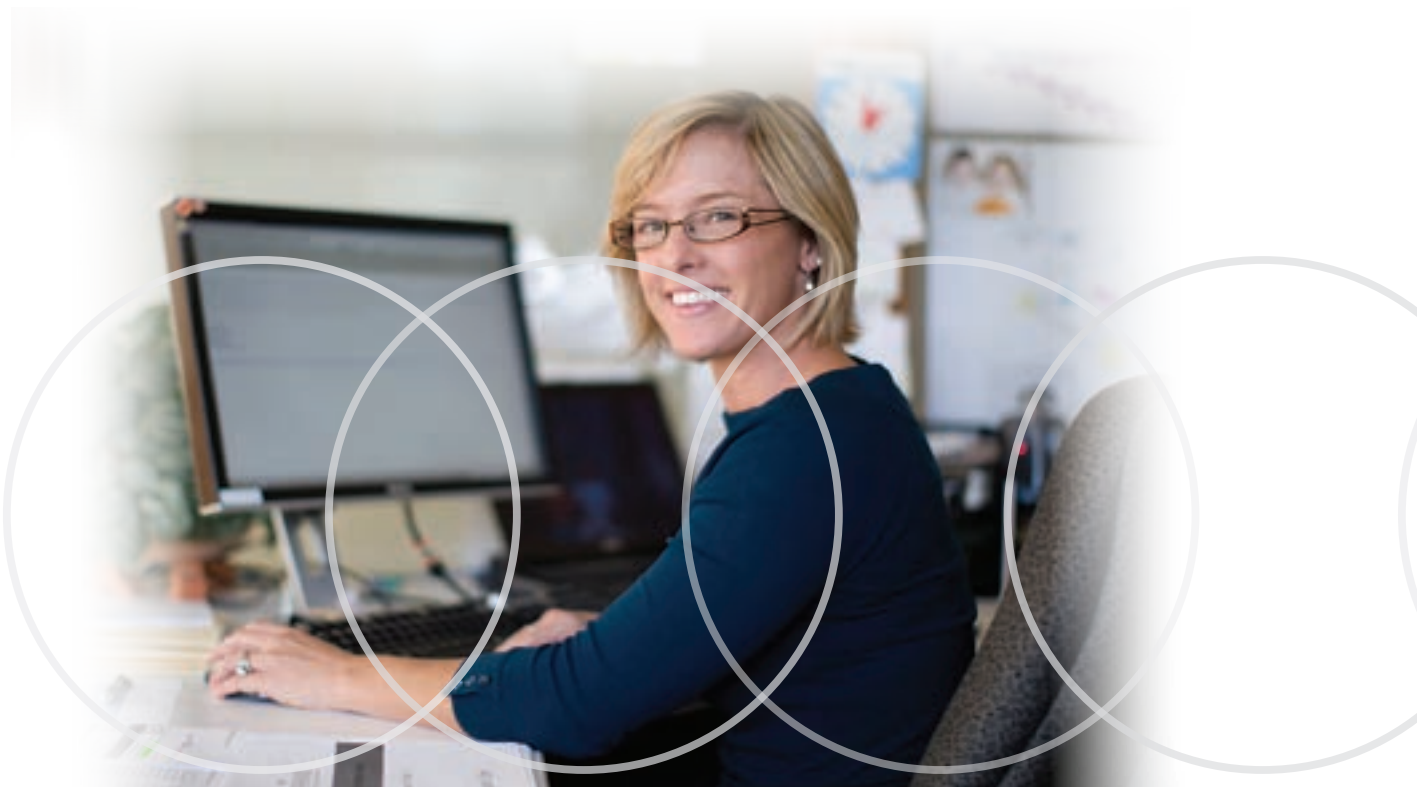
Taking into account the number of people employed in 2018, the rate of reported injuries to workers remained broadly stable at 3.9 per 1,000 workers in 2018, compared with 4.0 in 2017.

Figure 2.1: Injuries reported to the HSA, 2008–2018

| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Non-fatal accidents | 8,072 | 7,007 | 7,594 | 7,112 | 6,828 | 7,045 | 7,550 | 7,928 | 8,622 | 9,282 | 9,199 |

Source: HSA database

Note: Each year has been adjusted to include incidents that occurred within the relevant calendar year but were reported late to the HSA.



Victim Characteristics

The Health and Social Work sector accounted for 19% of the non-fatal injury reports to the HSA, followed by the Manufacturing sector, with 18% of reports (Figure 2.2). Note that the number of accidents reported in an economic sector may be affected by the size of the sector and the rate of under-reporting, as well as the general risk of incurring an accident.

Figure 2.2: Injuries reported by economic sector, 2018 (HSA)

| | Workers | | Non-workers | | All | |
|---|-------------|------------|-------------|------------|-------------|------------|
| | N | % | N | % | N | % |
| Q-Health and social work | 1,726 | 19.7 | 31 | 7.3 | 1,757 | 19.1 |
| C-Manufacturing | 1,607 | 18.3 | 9 | 2.1 | 1,616 | 17.6 |
| G-Wholesale and retail | 1,178 | 13.4 | 166 | 38.9 | 1,344 | 14.6 |
| H-Transportation and storage | 906 | 10.3 | 69 | 16.2 | 975 | 10.6 |
| O-Public administration and defence | 854 | 9.7 | 20 | 4.7 | 874 | 9.5 |
| F-Construction | 762 | 8.7 | 5 | 1.2 | 767 | 8.3 |
| N-Admin & support service | 335 | 3.8 | 3 | 0.7 | 338 | 3.7 |
| P-Education | 237 | 2.7 | 79 | 18.5 | 316 | 3.4 |
| I-Accommodation and food | 233 | 2.7 | 15 | 3.5 | 248 | 2.7 |
| S-Other service activities | 180 | 2.1 | 13 | 3.0 | 193 | 2.1 |
| E-Water, sewerage, waste | 179 | 2.0 | 2 | 0.5 | 181 | 2.0 |
| A-Agriculture, forestry and fishing | 118 | 1.3 | 3 | 0.7 | 121 | 1.3 |
| J-Information and communications | 101 | 1.2 | 1 | 0.2 | 102 | 1.1 |
| M-Professional, scientific and technical | 91 | 1.0 | 3 | 0.7 | 94 | 1.0 |
| K-Financial and insurance | 88 | 1.0 | 4 | 0.9 | 92 | 1.0 |
| B-Mining and quarrying | 62 | 0.7 | 0 | 0.0 | 62 | 0.7 |
| D-Electricity, gas, etc. | 50 | 0.6 | 1 | 0.2 | 51 | 0.6 |
| R-Arts, entertainment | 42 | 0.5 | 2 | 0.5 | 44 | 0.5 |
| L-Real estate | 22 | 0.3 | 1 | 0.2 | 23 | 0.3 |
| U-Activities of extraterritorial organisations and bodies | 1 | 0.0 | 0 | 0.0 | 1 | 0.0 |
| All | 8772 | 100 | 427 | 100 | 9199 | 100 |

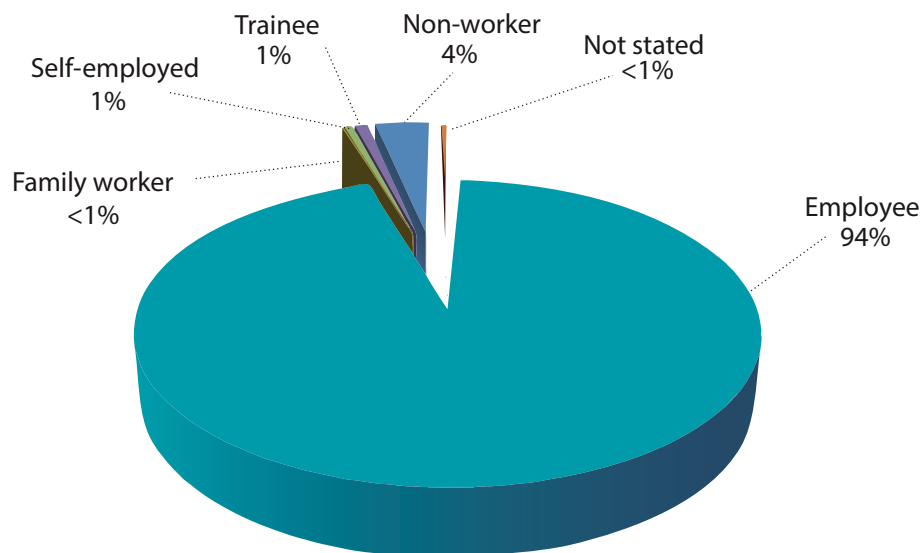
Note: Injuries reported for non-workers refer to the economic sector in which the injury occurred, for example a non-worker accident in a shop would be reported under 'Wholesale and retail'.

At 94%, the clear majority of non-fatal injuries reported to the HSA in 2018 were for employees (Figure 2.3). However, this figure should be treated with caution, as it is known that there is under-reporting of accidents by self-employed workers, such as those in the agriculture sector, and smaller companies.

For example, in 2017, 36% of people in employment worked in micro enterprises with fewer than 10 employees (CSO, 2019a). By contrast, only 5% of non-fatal accidents reported to the HSA in 2017 were to people in micro enterprises of fewer than 10 people. Similarly, 22% of workers in 2017 were employed in small enterprises of 10-49 employees, while only 19% of non-fatal accidents reported to the HSA were in enterprises of 10-49 employees.

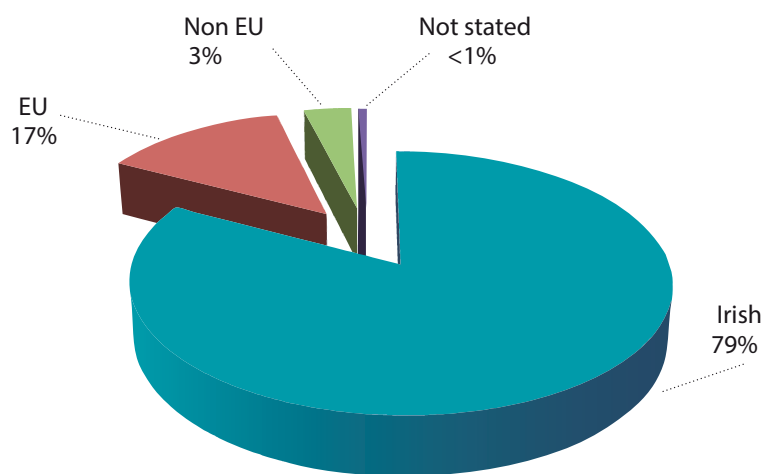
Fatal accidents, by contrast, are more common in smaller companies than larger companies; in 2017, 60% of fatal accidents to workers occurred to self-employed people (with no employees) and 93% occurred to workers in small or micro enterprises of fewer than 50 people. These figures suggest that compliance in reporting accidents to the HSA is lower for smaller companies than bigger companies and this affects micro enterprises of fewer than 10 employees more than moderately small enterprises of 10-49 employees.

Figure 2.3: Proportion of reported non-fatal injuries by employment status, 2018 (HSA)



Non-Irish workers comprised 16.2% of the workforce in 2018 and 20% of all workers who experienced non-fatal injuries reported to the HSA were non-Irish (Figure 2.4). However, it should be noted that under-reporting of injuries to the HSA is most prevalent in sectors that principally involve small businesses including Agriculture, Forestry and Fishing, which has a low proportion of non-Irish workers. Hence it cannot be taken that non-Irish workers have a disproportionately high risk of injury.

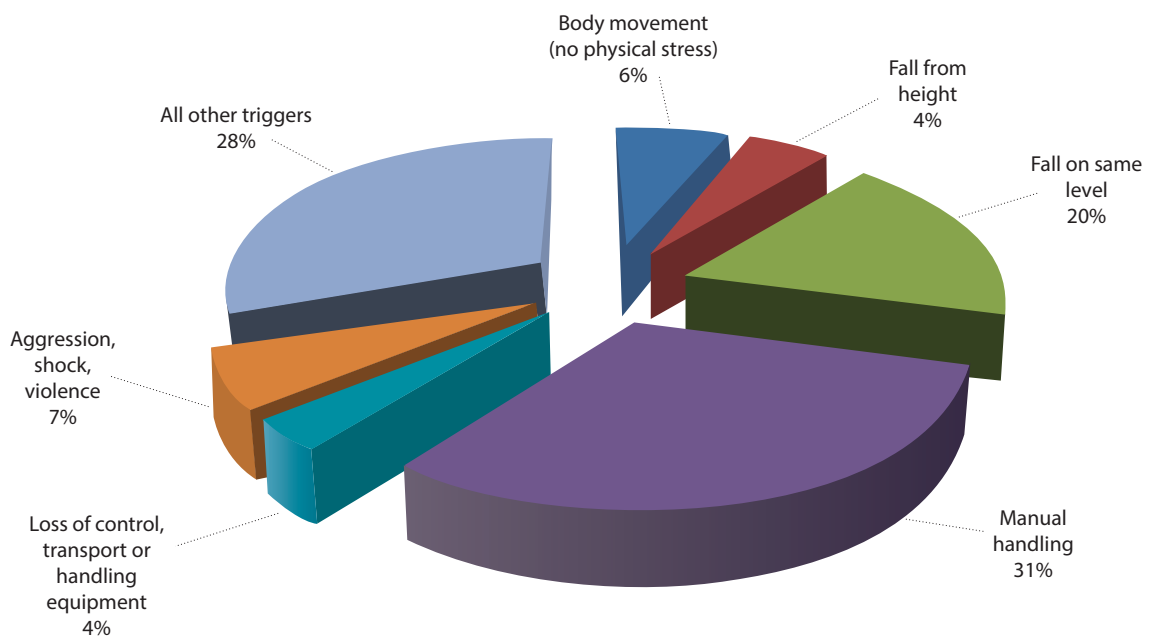
Figure 2.4: Proportion of reported non-fatal injuries by nationality, 2018 (HSA)



Accident characteristics

In recent years, manual handling has tended to be the most common cause of non-fatal injuries, contributing just under one-third of those reported to the HSA in 2018 (31%), (Figure 2.5). The next most prevalent cause of non-fatal injuries was falling on the same level, accounting for 20% of injuries. Such accidents could include tripping or slipping events that led to a fall.

Figure 2.5: Proportion of reported non-fatal injuries by trigger, 2018 (HSA)



Incidents involving aggression, fright, shock or violence caused 7% of the non-fatal injury reports to the HSA but were concentrated primarily in the Public Administration and Defence sector and the Health and Social Work sector, where they accounted for around 20% of reported incidents in both sectors (Figure 2.6). This was the most common trigger for reported non-fatal accidents in Public Administration and Defence. Losses of control of means of transport accounted for 10.2% of accidents in Public Administration and Defence, compared with just 1.3% in Health and Social Work.

Falls on the same level were most prominent in Wholesale and Retail, where they represented 25.8% of all non-fatal accidents reported to the HSA. Falls from height were most prominent in the Construction sector, representing 14.5% of all non-fatal accidents reported in that sector.

Figure 2.6: Number and percentage of non-fatal accidents by trigger, selected sectors, 2018 (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) | 116 | 6.1 | 47 | 6.1 | 58 | 4.3 | 74 | 7.6 | 42 | 4.8 | 92 | 5.2 |
| Fall from height | 77 | 4.0 | 111 | 14.5 | 44 | 3.3 | 47 | 4.8 | 43 | 4.9 | 25 | 1.4 |
| Fall on same level | 289 | 15.1 | 137 | 17.9 | 347 | 25.8 | 208 | 21.3 | 169 | 19.3 | 333 | 19.0 |
| Manual handling | 688 | 36.0 | 204 | 26.6 | 479 | 35.6 | 332 | 34.1 | 176 | 20.1 | 516 | 29.4 |
| Loss of control of means of transport | 45 | 2.4 | 27 | 3.5 | 39 | 2.9 | 67 | 6.9 | 89 | 10.2 | 23 | 1.3 |
| Aggression, shock, violence | 8 | 0.4 | 5 | 0.7 | 6 | 0.4 | 38 | 3.9 | 177 | 20.3 | 344 | 19.6 |
| All other* | 687 | 36.0 | 236 | 30.8 | 371 | 27.6 | 209 | 21.4 | 178 | 20.4 | 424 | 24.1 |
| Total | 1910 | 100 | 767 | 100 | 1344 | 100 | 975 | 100 | 874 | 100 | 1757 | 100 |

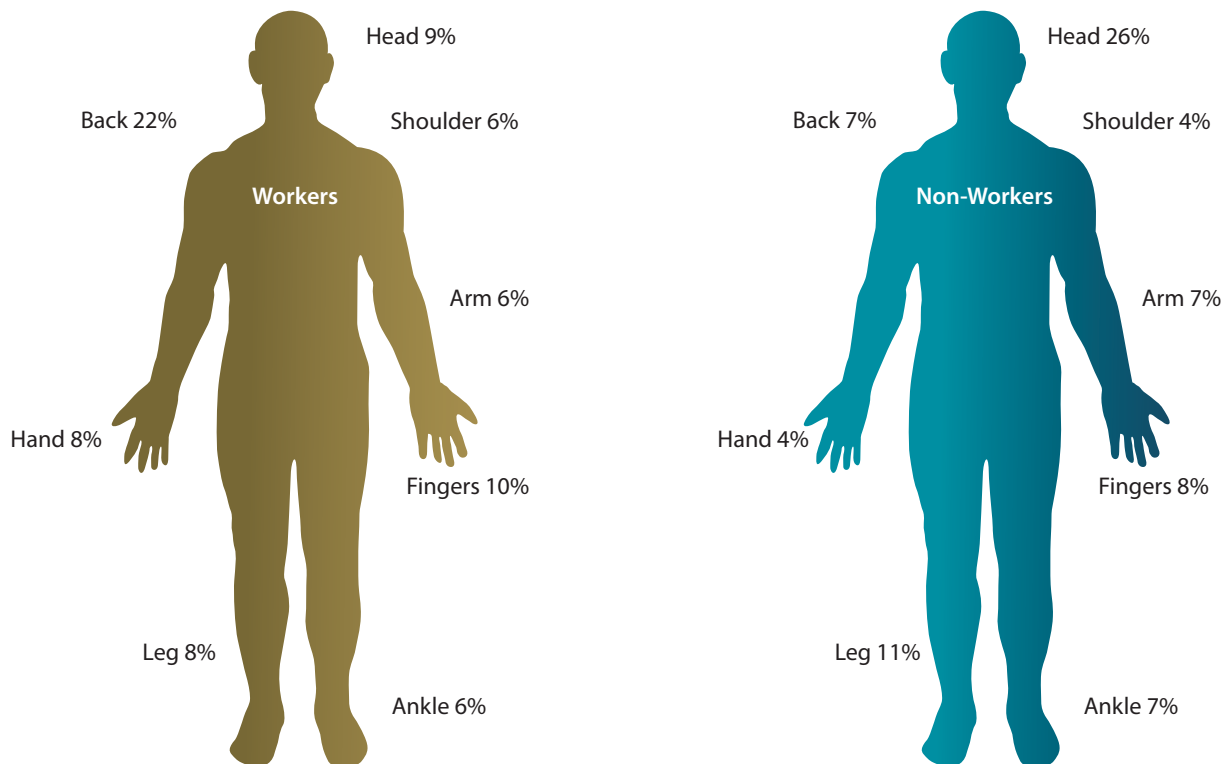
*Includes a small number of cases where the accident trigger is not recorded.



By far the most common part of the body to be injured in non-fatal accidents to workers was the back (including spine and vertebra), which was recorded in 22% of accidents reported to the HSA (Figure 2.7). Other injured parts of the body included the fingers (10%), head (9%), legs (8%) and hands (8%). This suggests that non-fatal accidents to workers occurred to a broad range of regions of the body, with the back being the most commonly affected area.

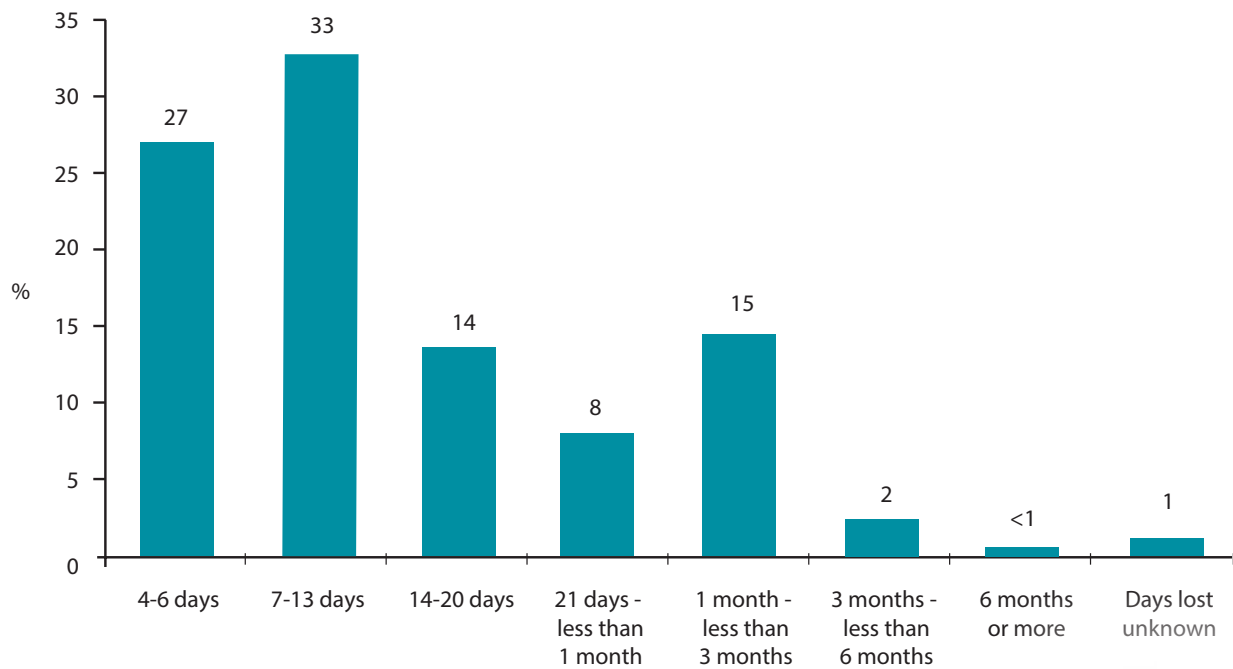
By contrast, the most commonly affected area for non-workers was the head, involved in 26% of injuries. Back injuries were less common, comprising just 7% of all non-fatal accidents to non-workers. This may illustrate the role of manual handling in causing injuries to workers; this is probably less likely to affect non-workers.

Figure 2.7: Most injured body parts 2018 (HSA)



Most non-fatal injuries reported to the HSA resulted in relatively low periods of time off work (Figure 2.8). Accidents leading to 4-6 days' absence and 7-13 days' absence comprised 60% of all non-fatal accidents reported to the HSA.

Figure 2.8: Percentage of non-fatal injuries by absence from work, 2018 (HSA)



Working environment describes the area where accidents took place. The most common working environment in non-fatal accidents reported to the HSA in 2018 was production area, factory or workshop, where 26.1% of non-fatal injuries were reported (Figure 2.9). Other prominent working environments included shops, sales and service activity areas (19.5%) and hospitals or other healthcare areas (16.6%). Public thoroughfares, which mainly comprise public roads but also parking areas and waiting rooms, were the environment of 10.2% of non-fatal accidents.

Note that under-reporting by micro enterprises of fewer than 10 employees in sectors such as Agriculture, Forestry and Fishing is likely to affect the working environment figures.

Figure 2.9: Reported non-fatal injuries by work environment, 2018 (HSA)

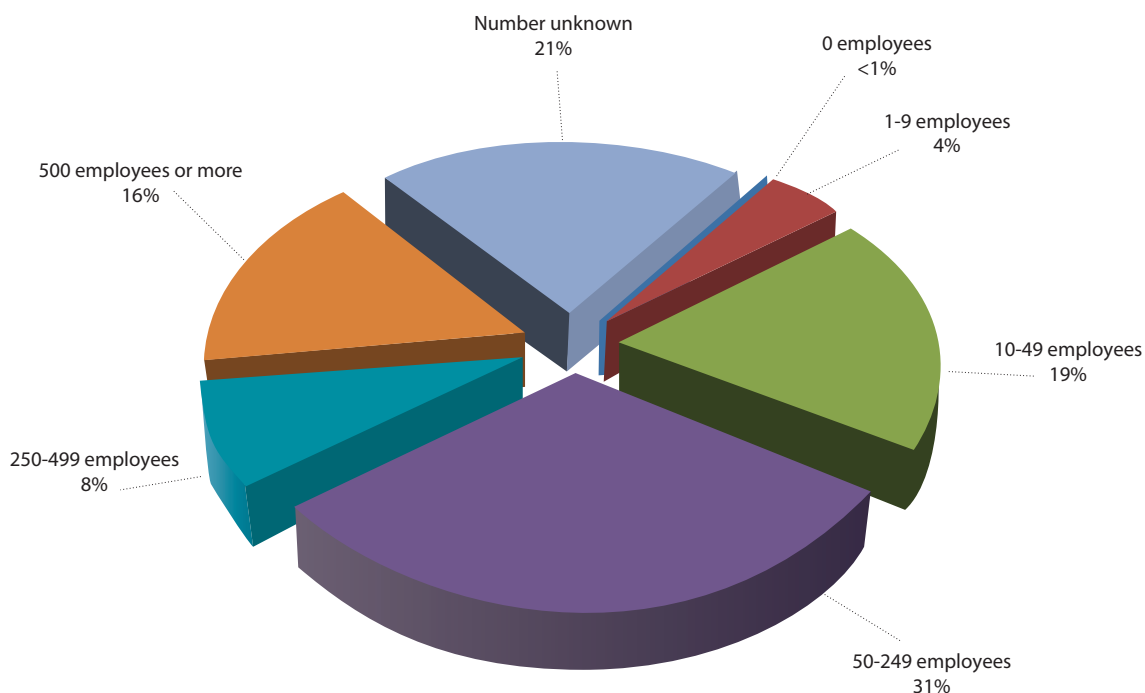
| | All | | Workers only | |
|--|--------------|--------------|--------------|--------------|
| | Number | % | Number | % |
| Production area, factory, workshop | 2,399 | 26.1 | 2,383 | 27.2 |
| Shop, sales, service activity area | 1,792 | 19.5 | 1,578 | 18.0 |
| Hospital & other healthcare | 1,524 | 16.6 | 1,501 | 17.1 |
| Other | 1,451 | 15.8 | 1,368 | 15.6 |
| Public thoroughfare* | 941 | 10.2 | 864 | 9.8 |
| Construction site | 581 | 6.3 | 579 | 6.6 |
| Area for storage/ loading | 344 | 3.7 | 341 | 3.9 |
| Farming, Forestry, Fishing (not on vessel) | 162 | 1.8 | 153 | 1.7 |
| Unknown | 5 | .1 | 5 | .1 |
| Total | 9,199 | 100.0 | 8,772 | 100.0 |

* Including land or rail transport (for example train, bus or car).



Most non-fatal injuries reported to the HSA were by employers of 10 or more employees (Figure 2.10). Self-employed people with no employees comprised 0.1% of all reported non-fatal accidents; this illustrates the under-reporting of accidents by self-employed people, micro enterprises and small enterprises.

Figure 2.10: Reported non-fatal injuries (%) by size of employing organisation, 2018 (HSA)



The highest number of non-fatal injuries reported to the HSA in 2018 was in county Dublin, where 3,424 accidents were reported (Figure 2.11). The lowest number of accidents was in Leitrim, with just 34 reported accidents. This is in keeping with recent years; Dublin and Leitrim also had the highest and lowest numbers respectively in 2017.

Under-reporting of non-fatal injuries is most common in micro enterprises (fewer than 10 employees) and small businesses (10-49 employees), and in sectors like Agriculture, Forestry and Fishing. This means that counties with fewer large employers, or with significant agricultural activity, may be more likely to under-report accidents.

Analysis of regional accident rates revealed lowest reported accidents in the West and Border regions, and highest rates in the Midlands and Dublin regions. In the West and Border regions, a greater proportion of workers are employed by small businesses than in Dublin. For example, 48% of workers in Leitrim worked in businesses employing fewer than 10 people in 2017, compared with 32% in Kildare and just 16% in Dublin (CSO, 2019a).

It is possible that the low rates in the Western and Border counties reflect lower levels of reporting, rather than true lower incidence of work-related injuries.

Figure 2.11: Number of non-fatal injury reports by county, 2018 (HSA)

| | Non-workers | Workers | Total |
|-----------------|-------------|--------------|--------------|
| Leitrim | 0 | 34 | 34 |
| Carlow | 4 | 65 | 69 |
| Roscommon | 2 | 80 | 82 |
| Sligo | 2 | 95 | 97 |
| Longford | 0 | 102 | 102 |
| Tipperary North | 9 | 109 | 118 |
| Monaghan | 8 | 114 | 122 |
| Laois | 3 | 123 | 126 |
| Cavan | 3 | 143 | 146 |
| Donegal | 7 | 145 | 152 |
| Clare | 9 | 155 | 164 |
| Kerry | 4 | 165 | 169 |
| Kilkenny | 2 | 170 | 172 |
| Offaly | 12 | 170 | 182 |
| Mayo | 7 | 176 | 183 |
| Tipperary South | 7 | 186 | 193 |
| Wicklow | 18 | 175 | 193 |
| Louth | 14 | 187 | 201 |
| Westmeath | 7 | 201 | 208 |
| Waterford | 10 | 200 | 210 |
| Wexford | 11 | 236 | 247 |
| Meath | 10 | 313 | 323 |
| Galway | 7 | 327 | 334 |
| Limerick | 13 | 387 | 400 |
| Kildare | 15 | 484 | 499 |
| Cork | 38 | 1,008 | 1,046 |
| Dublin | 205 | 3,219 | 3,424 |
| Unknown | 0 | 3 | 3 |
| Total | 427 | 8,772 | 9,199 |

2.2 CSO MODULE RESULTS

Under-reporting of accidents to the HSA varies significantly by sector. Each year the Central Statistics Office (CSO) asks worker respondents to a special module of the Labour Force Survey (LFS) to describe their experiences of work-related accidents and illnesses over the previous 12 months. This provides information about non-fatal injuries that is not affected by under-reporting.

The most recent LFS module is based on interviews that were undertaken in the first quarter of 2018, relating to the events of 2017. Each year, respondents who are currently in employment are asked how many days of work they have lost due to their most recent work-related injury or illness.

The latest LFS module gives an estimate of 22,500 people experiencing work-related injuries requiring an absence from work of four or more days in 2017, a 70% increase from the 13,200 reported in 2016, and a 33% increase from the 16,905 reported in 2015 (Figure 2.12). The rate of less serious injuries resulting in zero to three days' absence also increased, from 8.3 per 1,000 in 2016 to 11.9 in 2017. The rate of work-related injuries is prone to fluctuation year on year, e.g. it ranged from 24 per 1,000 workers in 2013 to 14.4 per 1,000 workers in 2016; between 2012 and 2017, on average around 2% of workers reported any kind of work-related injury each year.

The estimated number of days lost to work-related injury across the economy in 2017 was 884,400, up considerably from 481,612 in 2016. However, this is closer to the 810,899 days lost in 2015.

Between 2016 and 2017, the total rate of work-related illnesses also increased, from 17.8 to 28.3 per 1,000 workers. The illness rate causing just zero to three days' absence rose from 9.8 per 1,000 workers in 2016 to 14.7 per 1,000 workers in 2017, while the rate of people suffering more serious illnesses involving four or more days' absence from work also increased, from 8 per 1,000 workers in 2016 to 13.6 per 1,000 workers in 2017. On average, around 2-3% of workers reported any kind of work-related illness each year.

Increases were also found in the estimated number of days lost across the economy due to work-related illness, from 746,701 in 2016 to 1,104,700 in 2017. This is the highest number of days lost due to work-related illness since 2014, when 1,106,311 days were lost. By contrast, in 2017 only 50,191 days were lost nationwide to industrial disputes, illustrating the significant burden that work-related accidents and illnesses pose to workers and employers, and to the economy (CSO, 2019b).

It should be noted that some year-to-year fluctuation is to be expected in data derived from representative surveys. Note also that the 2017 data derive from the LFS whereas in previous years data was collected as part of the QNHS. As this change involved modifications to the questionnaire, sample, interview mode etc., caution should be taken in interpreting the changes between 2016 and 2017.

Figure 2.12: Number and rate of people suffering injury and illness, 2012–2017 (CSO)

| | 2012 ¹ | | 2013 | | 2014 | | 2015 | | 2016 | | 2017 | |
|--------------------------------------|-------------------|----------------|------------------|----------------|------------------|----------------|------------------|----------------|------------------|----------------|------------------|----------------|
| | 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 | 1,899,725 | | 1,937,775 | | 1,988,775 | | 2,057,350 | | 2,132,250 | | 2,194,150 | |
| Injury | | | | | | | | | | | | |
| Total suffering injury | 35,001 | 18.4 | 46,574 | 24 | 39,319 | 19.8 | 37,440 | 18.2 | 30,800 | 14.4 | 49,500 | 22.6 |
| 0–3 days' absence | 17,214 | 9.1 | 28,132 | 14.5 | 20,523 | 10.3 | 20,535 | 10 | 17,600 | 8.3 | 26,100 | 11.9 |
| 4+ days' absence | 17,786 | 9.4 | 18,442 | 9.5 | 18,796 | 9.5 | 16,905 | 8.2 | 13,200 | 6.2 | 22,500 | 10.3 |
| Days lost due to injury ² | n.a. | | 758674 | | 750,011 | | 810,899 | | 481,612 | | 884,400 | |
| Illness | | | | | | | | | | | | |
| Total suffering illness | 50,210 | 26.4 | 54,867 | 28.3 | 49,194 | 24.7 | 41,247 | 20 | 37,900 | 17.8 | 62,000 | 28.3 |
| 0–3 days' absence | 22,735 | 12 | 36,039 | 18.6 | 25,227 | 12.7 | 22,793 | 11.1 | 20,800 | 9.8 | 32,200 | 14.7 |
| 4+ days' absence | 27,474 | 14.5 | 18,828 | 9.7 | 23,966 | 12.1 | 18,454 | 9 | 17,100 | 8 | 29,800 | 13.6 |
| Days lost due to illness | n.a. | | 792875 | | 1,106,311 | | 912,595 | | 746,701 | | 1,104,700 | |
| Injury and illness | | | | | | | | | | | | |
| Total injury or illness | 85,210 | 44.9 | 101,440 | 52.3 | 88,513 | 44.5 | 78,687 | 38.2 | 68,700 | 32.2 | 111,500 | 50.8 |
| Total (4+ days' absence) | 45,261 | 23.8 | 37,270 | 19.2 | 42,762 | 21.5 | 35,359 | 17.2 | 30,300 | 14.2 | 52,300 | 23.8 |
| Total days lost | n.a. | | 1,551,549 | | 1,856,322 | | 1,723,494 | | 1,228,312 | | 1,989,100 | |

Notes: The days absent in 2012 are not strictly comparable with other years (see HSA, 2014, for details). All statistics based on the CSO LFS module refer to those in employment at the time of the survey; estimates are subject to sampling and other survey errors, and changes over time of a small magnitude can be taken to have lower precision.

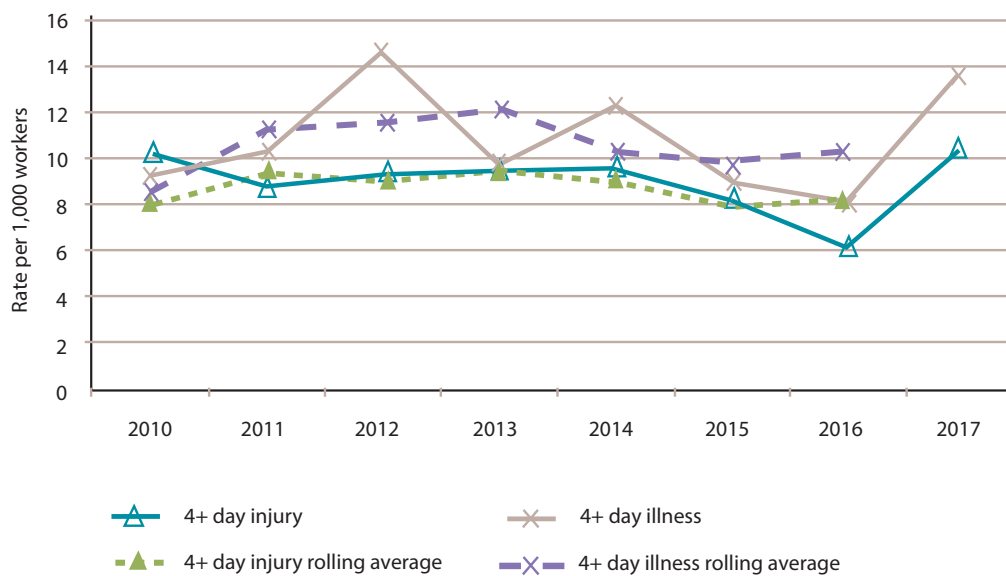
¹ Numbers employed in 2012 are based on the four quarters from Q3 2012 to Q2 2013.

² Days lost data should be interpreted with care as respondents may have included potential days lost. Respondents are asked to give the exact number of days that were lost due to their most recent injury or illness only.

The rate of people experiencing work-related injuries leading to four or more calendar days of lost work was 10.3 per 1,000 workers in 2017, which is an increase from the rate of 6.2 in 2016 and 8.2 in 2015 (Figure 2.13).

The rate for work-related illnesses involving four or more days' absence from work rose from 8 per 1,000 workers in 2016 to 13.6 per 1,000 workers in 2017. This is the highest since 2012, when it was 14.5 per 1,000.

Figure 2.13: Rate of and rolling average for injury and illness causing 4+ days lost per 1,000 workers, 2010–2017 (CSO)

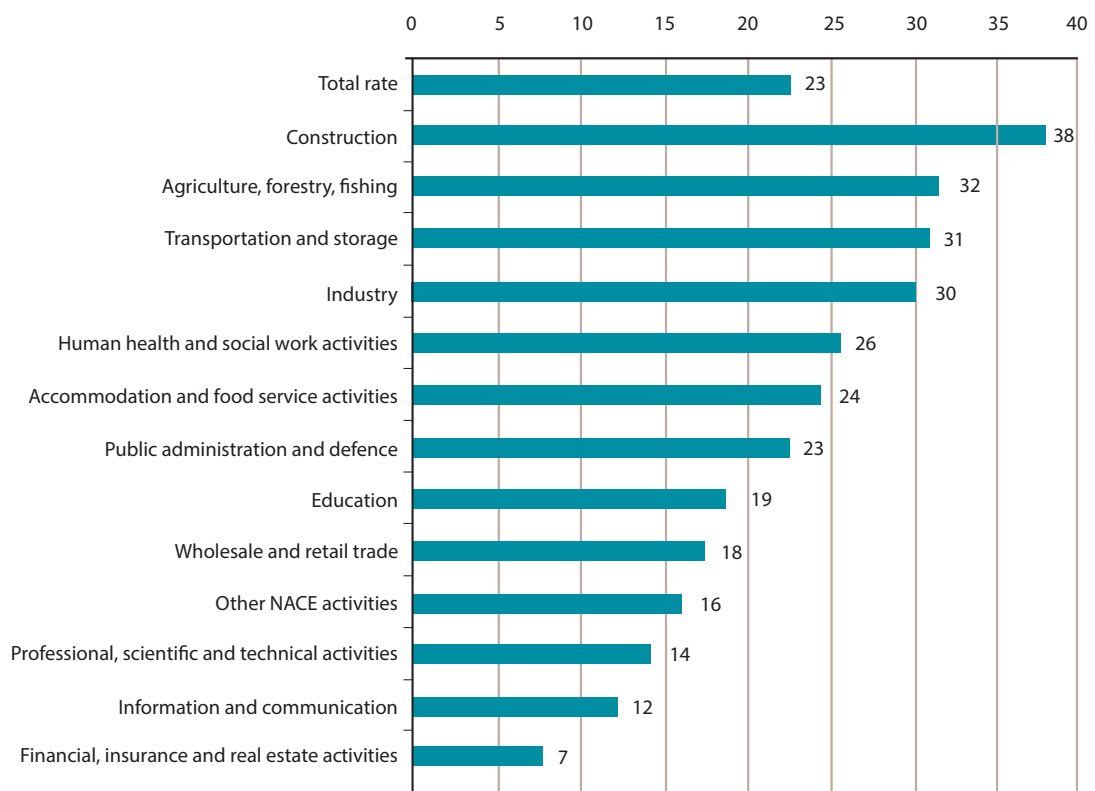


Note: The rate is calculated from the four-quarter average employment for the year, as outlined in Figure 4.1. The increase for the 4+ day illness rate in 2012 is likely due to the change in the format of the question on illness in the 2013 European module (see HSA, 2014, p. 8-9). Rolling averages are based on an average of 3 years.

Note that it is likely that increases in injury and illness rates in 2017 are largely due to the switch from collecting data as part of the QNHS to the LFS.

Including less serious accidents (0+ days' absence), the highest non-fatal injury rates were found in the Construction sector (38 per 1,000) and Agriculture, Forestry and Fishing (32 per 1,000). High injury rates were also found in Transportation and Storage, at 31 per 1,000 workers, and Industry, at 30 per 1,000 workers (Figure 2.14).

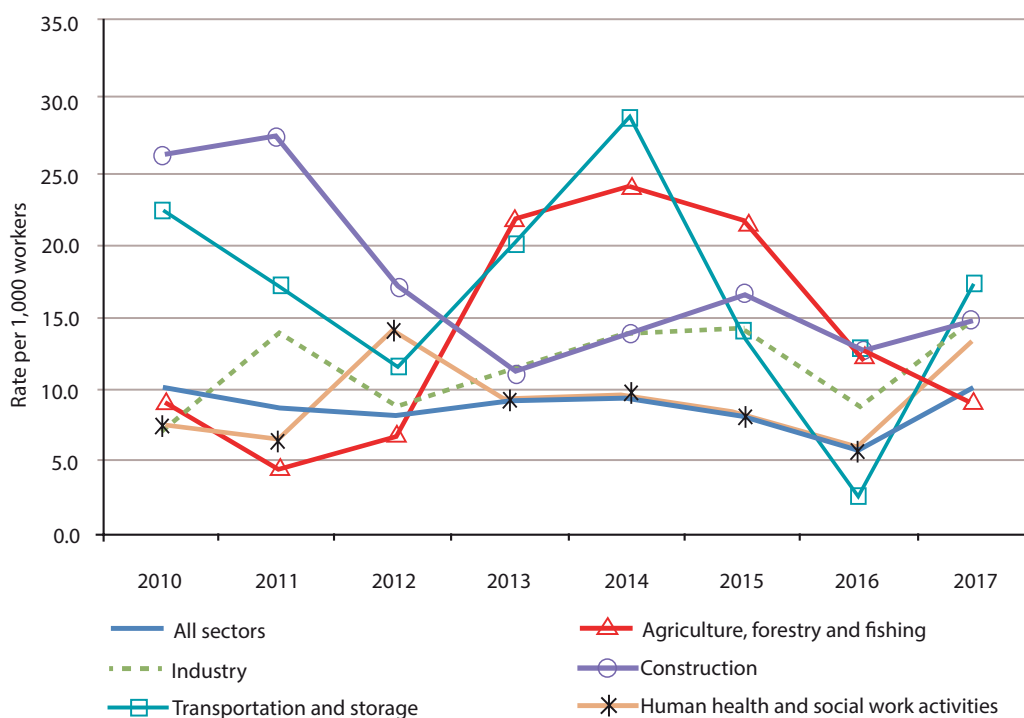
Figure 2.14: Rate of injuries (any days lost) per 1,000 workers by economic sector, 2017 (CSO)



The Transportation and Storage sector had the highest rate of injury causing four or more days' absence from work in 2017 (17.1 per 1,000 workers). Other sectors with relatively high rates of injury were the Industry¹³ and Construction sectors (both 14.8 per 1,000) (Figure 2.15).

However, increases in rates from 2016 to 2017 may have been affected by changes in methodology as the CSO moved from the old QNHS to the updated LFS. Caution should be taken in interpreting this year-to-year change.

Figure 2.15: Rate of 4+ day injuries per 1,000 workers in selected sectors, 2010–2017 (CSO)



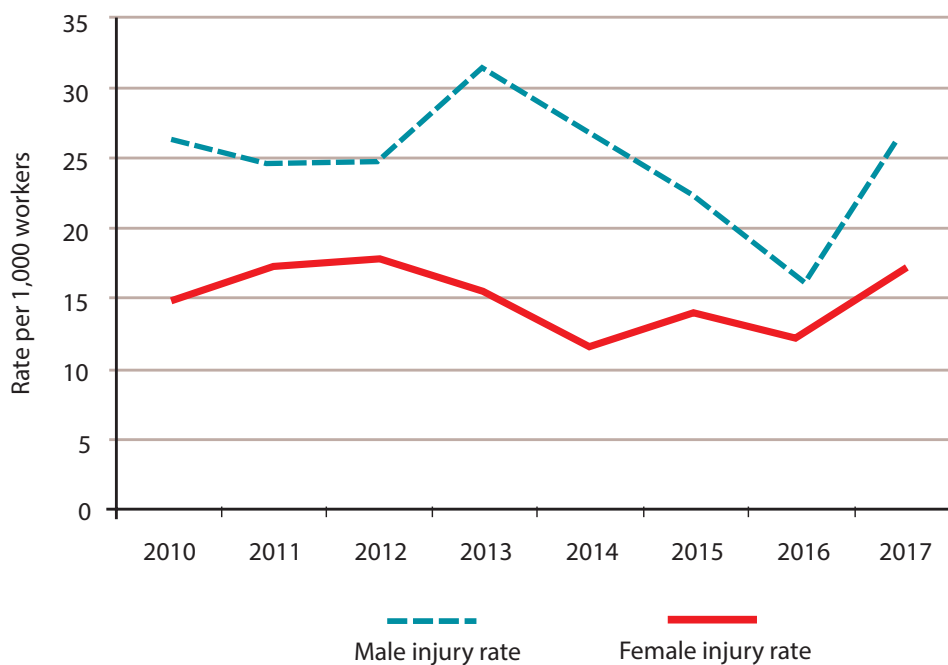
Note that it is likely that increases in injury and illness rates in 2017 are largely due to the switch from collecting data as part of the QNHS to the LFS.

¹³ Industry represents an amalgamation of the NACE economic sectors B – Mining and Quarrying, C – Manufacturing, D – Electricity, Gas, Steam and Air-Conditioning Supply, and E – Water Supply, Sewerage, Waste Management and Remediation Activities.

The injury rates for male workers increased from 16.3 per 1,000 in 2016 to 27.1 per 1,000 in 2017 and the rate for female workers increased from 12.2 per 1,000 to 17.2 over the same period (Figure 2.16). The rate of injury for male workers has fallen since 2013, when it was 31.3 per 1,000 workers, but the rate for female workers has risen from 15.5 per 1,000 workers over the same period.

However, increases in rates from 2016 to 2017 may have been affected by changes in methodology as the CSO moved from the old QNHS to the updated LFS. Caution should be taken in interpreting this year-to-year change.

Figure 2.16: Rate of total injury (0+ days) per 1,000 workers by gender, 2010–2017 (CSO)



Note that it is likely that increases in injury and illness rates in 2017 are largely due to the switch from collecting data as part of the QNHS to the LFS.

The single most common type of injury for both male and female workers who reported non-fatal accidents in 2017 to the Labour Force Survey was dislocation, sprain or strain, which had a rate of nine per 1,000 male workers and 6.8 per 1,000 female workers respectively (Figure 2.17).¹⁴

Men had higher rates than women for each of the injury types. This was most notable for wounds and superficial injuries, which affected 7.8 men per 1,000 workers compared with four women per 1,000 workers, and bone fractures, which affected 4.1 men per 1,000 compared with two women per 1,000.

Figure 2.17: Injury type by gender, 2017 (CSO, LFS)

| | Male | | Female | | Total | |
|--|---------------|-------------|---------------|-------------|---------------|-------------|
| | Number | Rate | Number | Rate | Number | Rate |
| Wound or superficial injury | 9,200 | 7.8 | 4,000 | 4.0 | 13,200 | 6.0 |
| Bone fracture | 4,900 | 4.1 | 2,000 | 2.0 | 6,900 | 3.1 |
| Dislocation, sprain or strain | 10,700 | 9.0 | 6,900 | 6.8 | 17,600 | 8.0 |
| Amputation, concussion or internal injury, burn, scald or frostbite | 2,600 | 2.2 | 1,600 | 1.6 | 4,200 | 1.9 |
| Poisoning or infection, suffocation (asphyxiation), other type of injury not specified | 4,800 | 4.0 | 2,800 | 2.8 | 7,600 | 3.5 |
| Total | 32,200 | 27.1 | 17,300 | 17.2 | 49,500 | 22.6 |

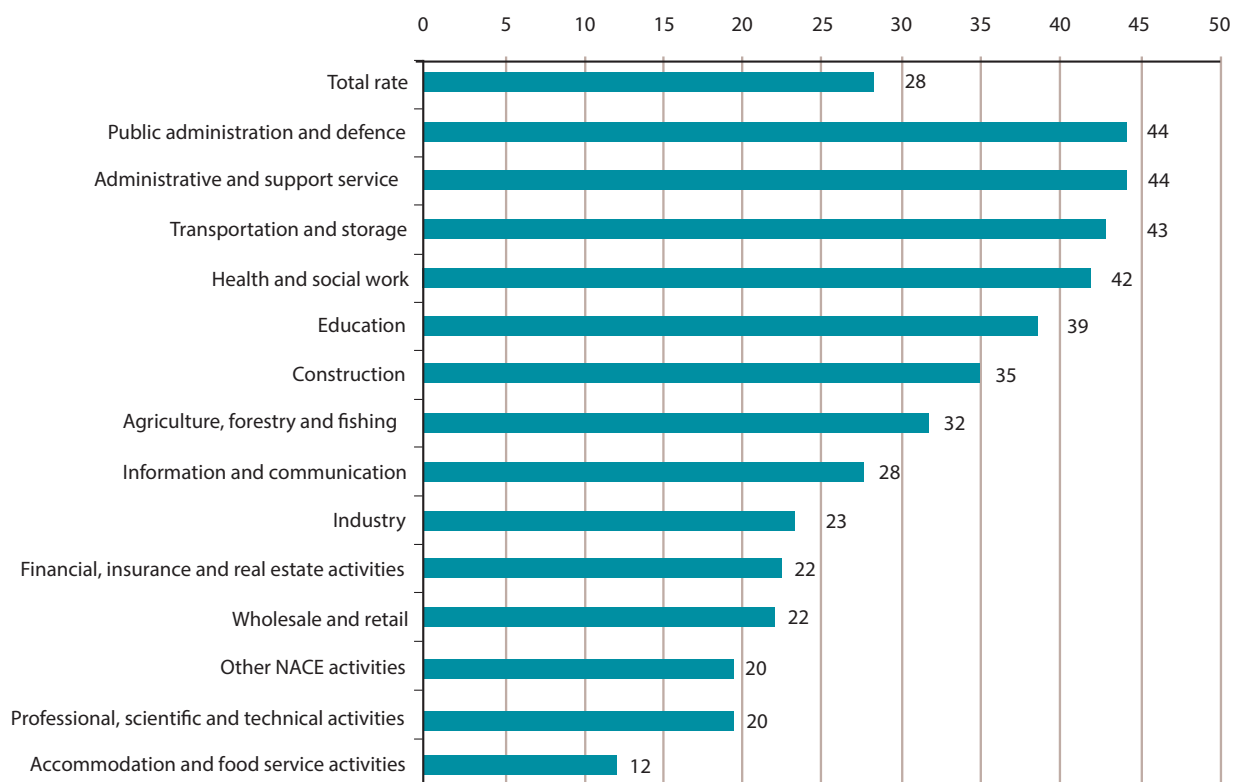


¹⁴ Injury types cannot be broken down to more precise categories due to the low sample cell counts for the injury groups.

Sectors with the highest overall illness rates in 2017 included Public Administration and Defence and Administrative and Support Services (both 44 per 1,000 workers). Other sectors with high rates of illness included Transportation and Storage (43 per 1,000) and Health and Social Work (42 per 1,000) (Figure 2.18). The sector with the lowest rate of illness was Accommodation and Food Service Activities (12 per 1,000).

These differences may be affected by the age profile of workers in various economic sectors, as older workers are more likely to suffer work-related illnesses. In the sector with the lowest rates of illness, Accommodation and Food Service Activities, only 15% of workers were aged 50 years or more in 2017; in the sector with the second lowest rates of illness, Professional, Scientific and Technical Activities, 26% of the workers were aged 50 years or more. By contrast, 36% of workers in Public Administration and Defence, and 40% of workers in Transportation and Storage, were aged 50 years or more (Eurostat, 2019b). However, the sector with the largest proportion of workers of 50 years or more was Agriculture, Forestry and Fishing, where 55% of workers were aged 50 years or more, which had only the seventh highest rate of work-related illness.¹⁵

Figure 2.18: Rate of illness (any days lost) per 1,000 workers by economic sector, 2017 (CSO)



¹⁵ Agricultural activity may be underestimated in the Labour Force Survey, because workers primarily engaged in other economic sectors, such as Transport or Construction, can also run farms part-time. Accidents or illnesses to such part-time farmers are counted in the LFS in the victim's primary economic activity. The CSO's Census of Agriculture, which was last undertaken in 2010, gives a higher estimate of numbers employed in farming, compared with the LFS.

See: https://www.cso.ie/px/pxeirestat/Database/eirestat/Farm%20Labour/Farm%20Labour_statbank.asp?SP=Farm%20Labour&Planguage=0.

Sectors like Health and Social Work and Public Administration and Defence have shown consistently high rates of illness in recent years (Figure 2.19). From 2010 to 2017, Health and Social Work has been among the top five sectors for work-related illnesses in seven of the eight years, while Public Administration and Defence has been in the top five for six of the eight years. This suggests that certain economic sectors tend to have consistently higher illness rates over time, with the Health and Social Work sector a prominent example.

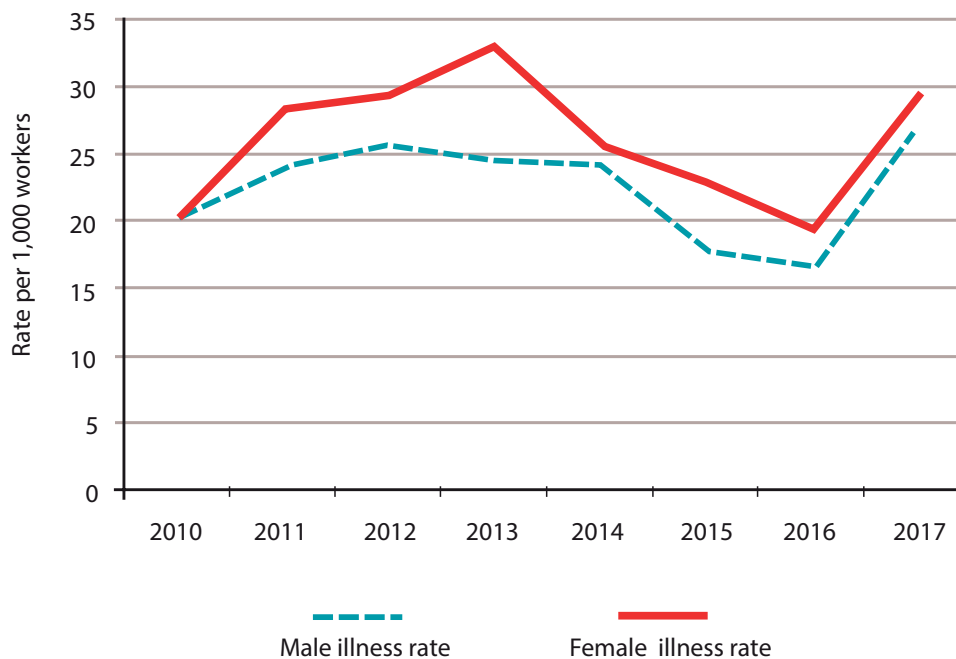
The age and gender profiles of economic sectors may affect these different rates of work-related illness. For example, women have higher rates of illness than men, and sectors with high rates of illness such as Health and Social Work and Education have higher numbers of female workers than male. Female workers had considerably higher rates of illness (43.5 per 1,000 workers) in Education in 2017 than male workers (24.2). However, the rate of work-related illness in Health and Social Work was higher for male workers (45.4) than female workers (40.5) (Figure 2.22).

Figure 2.19: Rank of selected sectors for 0+ day illnesses, 2010–2017 (CSO)

| Economic sector | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|-------------------------------------|------|------|------|------|------|------|------|-------------|
| Public administration and defence | 1st | 2nd | 9th | 8th | 3rd | 4th | 2nd | 1st (joint) |
| Administrative and support services | 5th | 3rd | 13th | 13th | 7th | 14th | 4th | 1st (joint) |
| Transport and storage | 2nd | 11th | 8th | 4th | 14th | 3rd | 8th | 3rd |
| Health and social work | 8th | 4th | 5th | 1st | 2nd | 1st | 1st | 4th |
| Education | 3rd | 5th | 3rd | 2nd | 6th | 11th | 6th | 5th |

Women have reported higher illness rates than men since 2011 (Figure 2.20). Rates of illness increased for women, from 19.3 per 1,000 workers in 2016 to 29.5 per 1,000 workers in 2017 (but due to changes in the survey method, comparisons between these years should be interpreted with caution). However this is lower than the 32.9 per 1,000 workers recorded in 2013. Rates increased for men from 16.5 per 1,000 workers in 2016 to 27.1 per 1,000 workers in 2017 (but due to changes in the survey method, comparisons between these years should be interpreted with caution).

Figure 2.20: Rate of total illness (0+ days) per 1,000 workers by gender, 2010–2017 (CSO)



Note that it is likely that increases in injury and illness rates in 2017 are largely due to the switch from collecting data as part of the QNHS to the LFS.

The most common illness reported by both male and female workers to the CSO in 2017 was bone, joint or muscle problems, at rates of 11 per 1,000 workers and 9.9 per 1,000 workers respectively (Figure 2.21).¹⁶ Female workers had higher rates of hearing problems, headache, eyestrain, heart/circulatory problems or disease, at seven per 1,000 workers, compared with 5.6 per 1,000 male workers; since 2008, women have had higher rates of this category of illness than men in six of the 10 years.

¹⁶ Illness types cannot be broken down to more precise categories because respondents to the CSO's Labour Force Survey special module on work-related accidents and illnesses are asked only about the broad type of illness, not which specific illness they suffered.

In 2017 women also had higher rates of stress, depression or anxiety than men, at 7.1 per 1,000 female workers compared with 4.8 per 1,000 male workers. Female workers have had higher rates of illness due to stress, depression or anxiety than male workers in all years since 2008.

Figure 2.21: Illness type by gender, 2017 (CSO, LFS)

| | Male | | Female | | Total | |
|---|---------------|-------------|---------------|-------------|---------------|-------------|
| | Number | Rate | Number | Rate | Number | Rate |
| Bone, joint or muscle problem | 13,000 | 11.0 | 10,000 | 9.9 | 23,000 | 10.5 |
| Breathing or lung problem | 2,000 | 1.7 | 2,100 | 2.1 | 4,000 | 1.8 |
| Hearing problem, headache, eyestrain, heart/ circulatory problem or disease | 6,600 | 5.6 | 7,100 | 7.0 | 13,700 | 6.2 |
| Stress, depression or anxiety | 5,700 | 4.8 | 7,200 | 7.1 | 12,800 | 5.8 |
| Skin problem, other types of complaint, not stated | 4,500 | 3.8 | 3,200 | 3.2 | 7,700 | 3.5 |
| Total | 32,200 | 27.1 | 29,800 | 29.6 | 62,000 | 28.3 |

Note: Totals may not sum as figures for those in employment are rounded to nearest decimal. Illness categories cannot be broken down further.

Figure 2.22 compares male and female workers' rates of injury and illness in 2017. For overall injuries (0+ days' absence), female workers had lower non-fatal injury rates than male workers. Injury rates were higher for women than men in four sectors, particularly Financial, Insurance and Real Estate Activities (11.5 per 1,000 female workers; 1.8 per 1,000 male workers) and Education (20.9 per 1,000 female workers; 12.1 per 1,000 male workers). However, men had higher rates of injury in the remaining 10 economic sectors, especially Industry (38 per 1,000 male workers; 11.1 per 1,000 female workers).

By contrast, female workers had higher illness rates than male workers. Women had higher illness rates for eight of the 14 economic sectors, particularly Public Administration and Defence (59.8 per 1,000 female workers; 38.8 per 1,000 male workers), and Education (43.5 per 1,000 female workers; 24.2 per 1,000 male workers). Men had higher illness rates in six sectors, most notably Administrative and Support Services (25.4 per 1,000 male workers; 13.2 per 1,000 female workers). Note, however, that as these data derive from responses to a household sample survey, some cells represent very low numbers of responses. Thus, considerable caution should be taken in drawing inferences from the data.

Figure 2.22: Number and rate of injury/illness (0+ days) per 1,000 workers by economic sector and gender, 2017 (CSO)

| Economic sector | Numbers employed (1,000s) | | Injury rate per 1000 workers | | Illness rate per 1000 workers | |
|--|---------------------------|------------------|------------------------------|-------------|-------------------------------|-------------|
| | Male | Female | Male | Female | Male | Female |
| Agriculture, forestry and fishing | 94,725 | 15,650 | 31.7 | 31.9 | 31.7 | 25.6 |
| Industry | 202,400 | 80,875 | 38.0 | 11.1 | 22.2 | 24.7 |
| Construction | 121,750 | 6,950 | 38.6 | 14.4 | 35.3 | 43.2 |
| Wholesale and retail trade | 149,625 | 153,125 | 20.7 | 14.4 | 24.7 | 18.9 |
| Transportation and storage | 76,300 | 17,100 | 30.1 | 35.1 | 43.3 | 46.8 |
| Accommodation and food services | 76,450 | 87,200 | 28.8 | 19.5 | 9.2 | 14.9 |
| Information and communication | 79,150 | 36,300 | 15.2 | 8.3 | 22.7 | 41.3 |
| Financial, insurance and real estate | 54,775 | 52,300 | 1.8 | 11.5 | 18.3 | 24.9 |
| Professional, scientific and technical | 75,875 | 57,150 | 14.5 | 12.2 | 22.4 | 17.5 |
| Administrative and support services | 55,175 | 37,950 | 34.4 | ~ | 25.4 | 13.2 |
| Public administration and defence | 48,950 | 48,525 | 34.7 | 10.3 | 38.8 | 59.8 |
| Education | 41,350 | 119,425 | 12.1 | 20.9 | 24.2 | 43.5 |
| Health and social work activities | 57,325 | 222,450 | 27.9 | 25.2 | 45.4 | 40.5 |
| Other NACE activities* | 48,400 | 69,250 | 18.6 | 13.0 | 22.7 | 17.3 |
| Total | 1,186,475 | 1,007,625 | 27.1 | 17.2 | 27.1 | 29.5 |

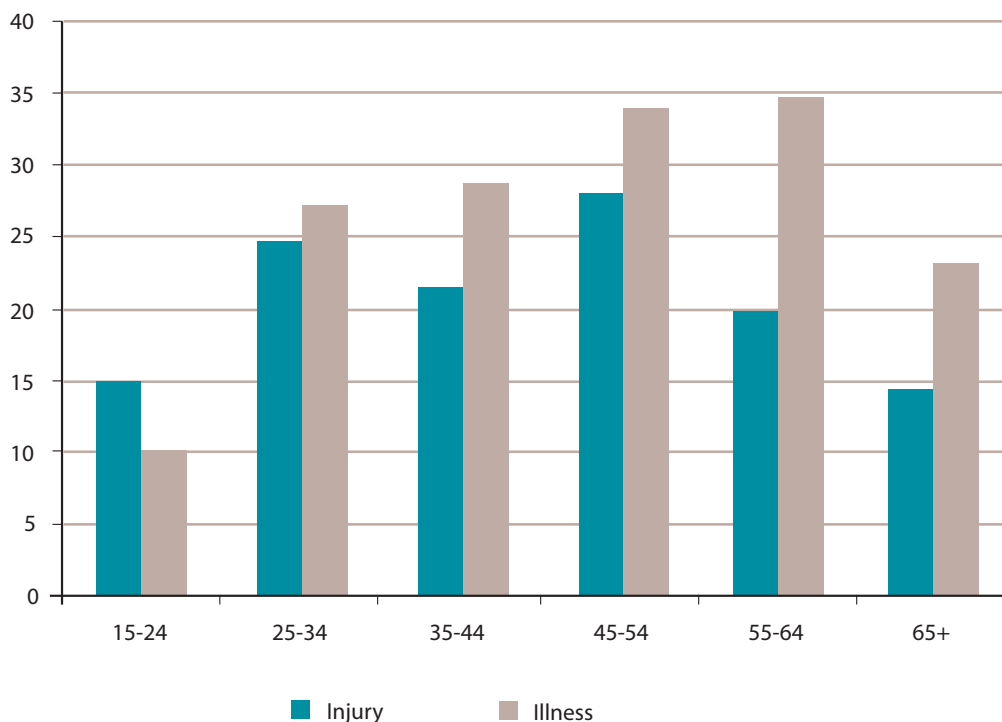
Notes: ~ indicates that there are too few cases to report the rate with confidence (i.e. not that the rate is zero).

*Other NACE activities: R – Arts, Entertainment and Recreation; S – Other Service Activities; T – Activities of Households as Employers; U – Activities of Extra Territorial Organisations and Bodies.

Figure 2.23 compares rates of injuries and illnesses by age group. Continuing the trend from previous years, in 2017 older workers had higher work-related illness rates than younger workers. The rate for workers aged between 55 and 64 years was 34.8 per 1,000, compared with just 10.2 per 1,000 for those aged 15 to 24 years and 27.1 for those aged 25 to 34 years. In keeping with previous years, the rate is lower again for the oldest age group featuring those over 65 years (23.2 per 1,000 workers), possibly because older workers with an illness withdraw from the workplace. In 2017, there were 70,100 workers aged 65 years or more, just 22% of the number of workers in the 55-64 years group (320,600) which may suggest that older workers in ill health are withdrawing from the workplace.¹⁷

While illnesses disproportionately affected older workers, the injury rate was highest for the 45-54 years group and was lower for both younger and older workers. Age groups reporting the most injuries have tended to change from year to year, with older groups reporting higher rates in 2015 and 2016, and younger and middle-aged groups reporting higher rates in 2014.

Figure 2.23: Rates of total injury and total illness (0+ days) per 1,000 workers by age band, 2017 (CSO)



¹⁷ Further information on the ageing workforce is available in "The Ageing Workforce in Ireland: Working Conditions, Health and Extending Working Lives":

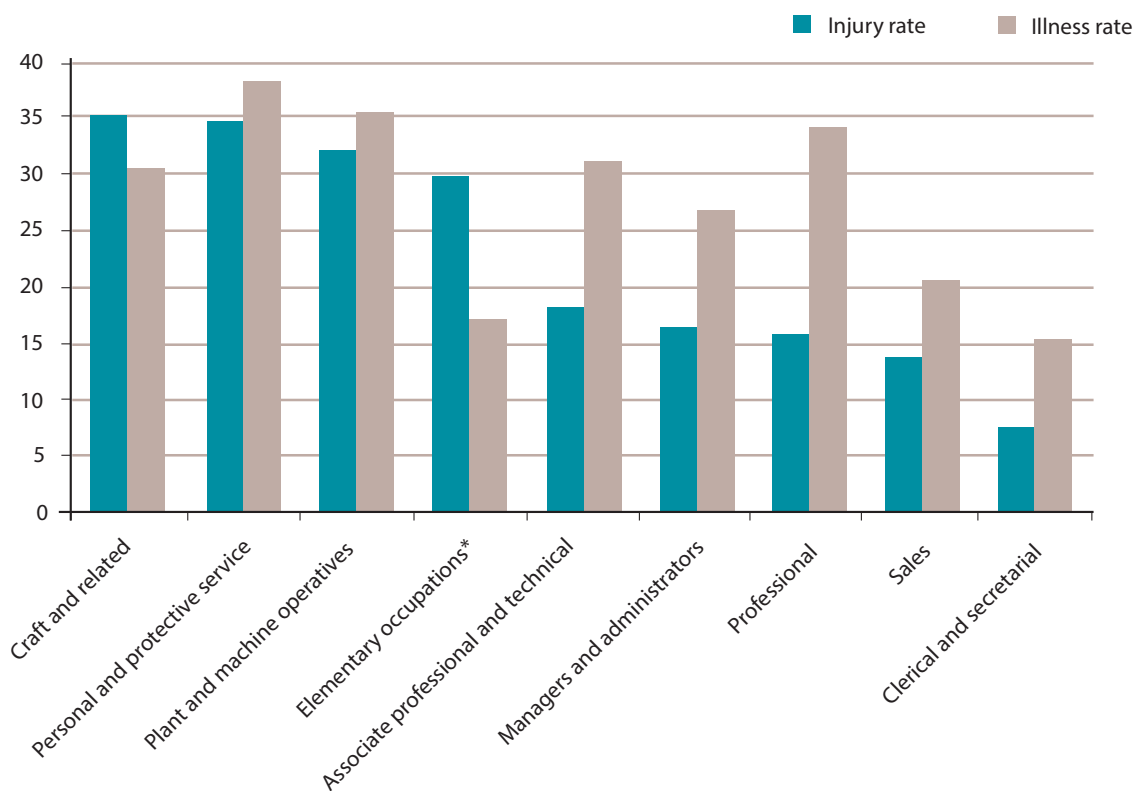
https://www.hsa.ie/eng/publications_and_forms/publications/corporate/esri_report_2019.pdf

Figure 2.24 shows the different rates of injuries and illnesses in various occupations. The highest rates of all injuries occurred to craft and related workers (which includes house builders, handicraft workers, electricians, carpenters and food processing occupations), at 35.4 per 1,000 workers. Other occupations with high rates of injury include personal and protective service workers¹⁸ (35.1 per 1,000 workers), plant and machine operatives (32.2 per 1,000 workers) and elementary occupations (30 per 1,000 workers).

Several of these occupations also had high rates of illness. Personal and protective service workers had a work-related illness rate of 38.4 per 1,000 workers, while plant and machine operatives had a rate of 35.8 per 1,000 workers. Professional workers had a relatively low rate of injury (15.8 per 1,000 workers), but a higher rate of illness (34.3 per 1,000 workers).

The lowest rates of injury (7.6 per 1,000) and illness (15.6 per 1,000) were both recorded for clerical and secretarial workers.

Figure 2.24: Rates of total injury and total illness (0 + days) per 1,000 workers by occupation, 2017 (CSO)



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

<https://www.ons.gov.uk/methodology/classificationsandstandards/standardoccupationalclassificationsoc/soc2010>

¹⁸ Personal and protective service workers include workers involved in caring, cleaning and leisure occupations, such as childminders, home carers, air travel assistants, hairdressers and house cleaners.

With regard to location, rates of injury were highest in the Midlands and Mid-West regions, both with rates of 33.5 per 1,000 workers, and lowest in the Border region at 11.8 per 1,000 workers (Figure 2.25).

Illness rates were highest in the South-East (35.8 per 1,000) and Mid-West (34.9 per 1,000) regions. Rates of illness were lowest in the Border region (13.4 per 1,000 workers).

Figure 2.25: Number and rate of people suffering injury (0+ days) and illness (0+ days) by region, 2017 (CSO)

| Region | Total employed | Injury (0+ days) | | Illness (0+ days) | |
|------------|------------------|------------------|----------------|-------------------|----------------|
| | | Number | Rate per 1,000 | Number | Rate per 1,000 |
| Border | 178,550 | 2,100 | 11.8 | 2,400 | 13.4 |
| Midlands | 119,300 | 4,000 | 33.5 | 3,800 | 31.9 |
| West | 200,525 | 3,600 | 18.0 | 4,200 | 20.9 |
| Dublin | 659,300 | 11,800 | 17.9 | 20,600 | 31.2 |
| Mid-East | 319,550 | 8,200 | 25.7 | 9,300 | 29.1 |
| Mid-West | 214,875 | 7,200 | 33.5 | 7,500 | 34.9 |
| South-East | 184,425 | 4,500 | 24.4 | 6,600 | 35.8 |
| South-West | 317,600 | 8,100 | 25.5 | 7,600 | 23.9 |
| All | 2,194,150 | 49,500 | 22.6 | 62,000 | 28.3 |

Notes: The employment figures that are used to calculate the employment rates come from the LFS, which is a household survey. Thus, they refer to the region where people reside rather than where they work. Totals may not sum as figures for those in employment are rounded to nearest decimal.

As of 2018, South Tipperary has been moved from the South-East into the Mid-West region, while Louth has moved from the Border to the Mid-East region.

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

Midlands: Laois, Longford, Offaly, Westmeath

West: Galway, Mayo, Roscommon

Dublin: Dublin

Mid-East: Kildare, Meath, Wicklow, Louth

Mid-West: Clare, Limerick, Tipperary

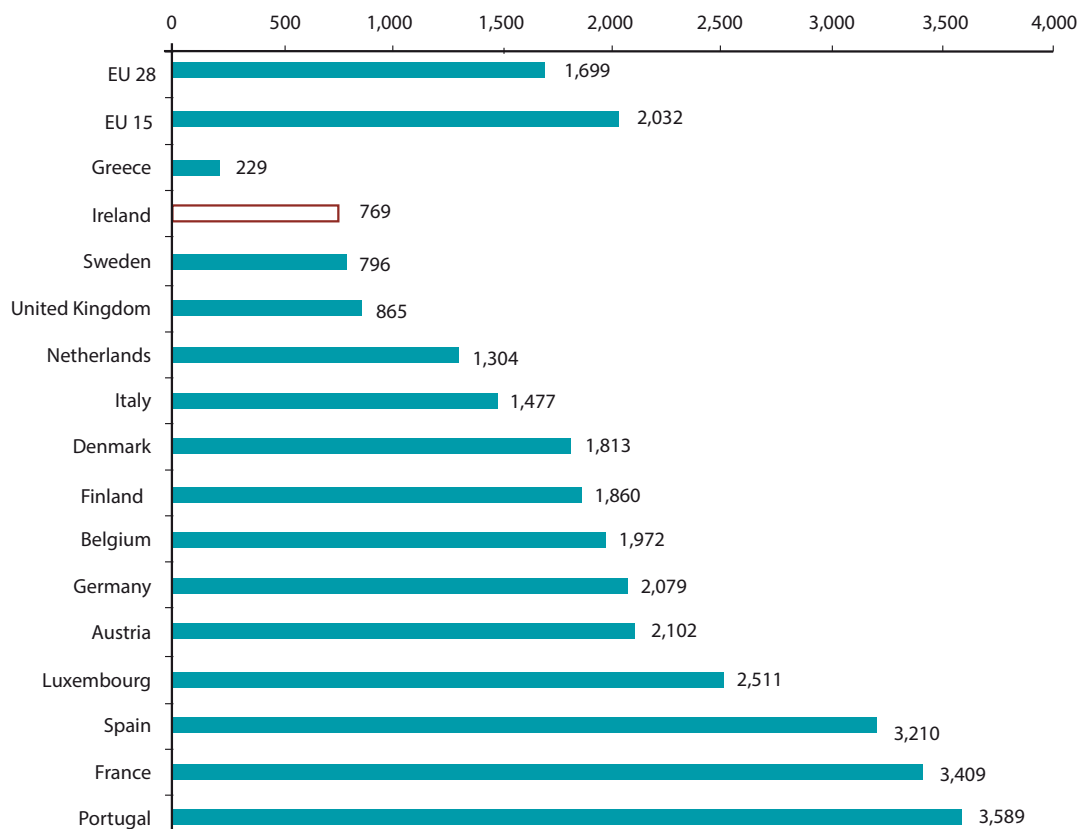
South-East: Carlow, Kilkenny, Waterford, Wexford

South-West: Cork, Kerry

International comparison

Rates of injuries per 1,000 workers in Ireland are compared with other countries in the EU15 in Figure 2.26. This shows that Ireland had the second-lowest rate of work-related injuries leading to four or more days lost in the EU15. However, the different member states collect information on work-related injuries in different ways, and these can affect the resulting data. As a consequence, such data should be interpreted with caution.

Figure 2.26: Rate of 4+ day injuries per 1,000 workers in the EU15 zone, 2016 (Eurostat)



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

Other European statistics on persons reporting an accident at work resulting in sick leave are based on the EU-LFS and are available from: <https://ec.europa.eu/eurostat/data/database#>



3

Fatal injury statistics

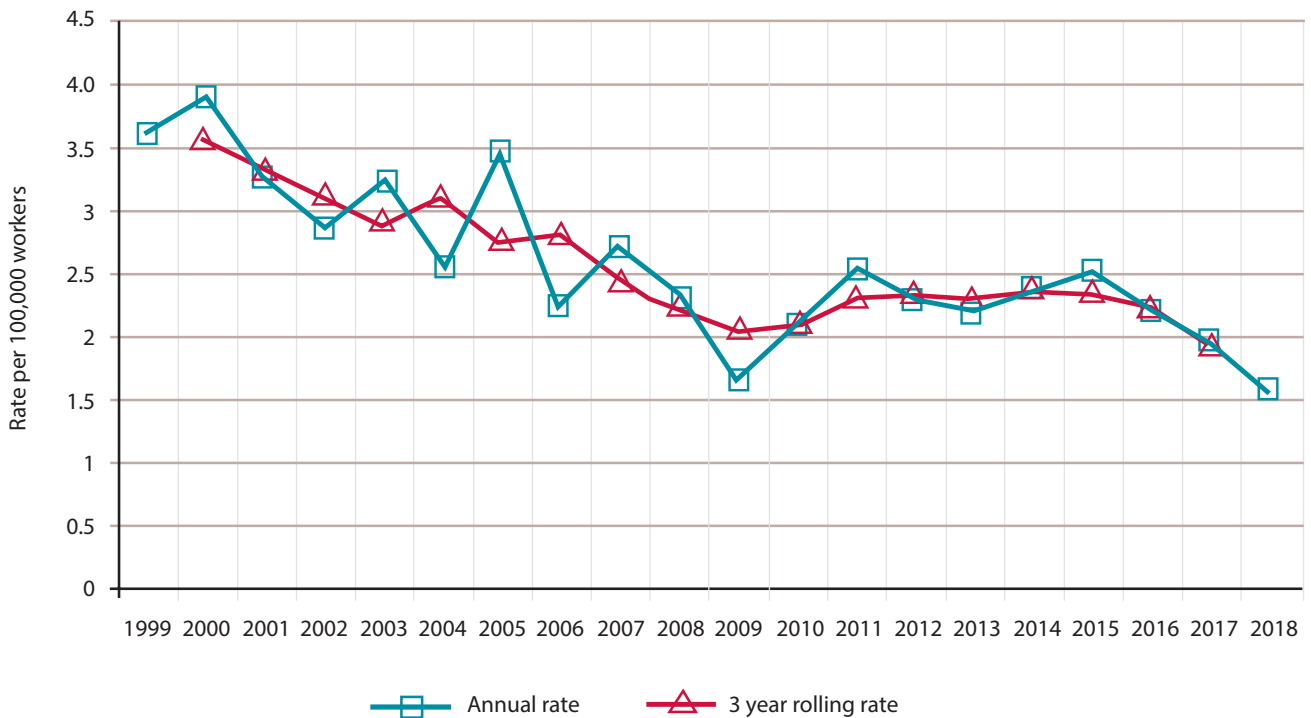
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In 2018 there were 39 work-related fatalities reported to the HSA. This is the lowest number of fatal accidents recorded since the formation of the HSA in 1989. The 2018 figure is down from 48 in 2017 and 56 in 2015.

Of the fatalities in 2018, 34 involved workers, with the remaining five involving members of the public, giving a worker fatality rate of 1.5 workers per 100,000, down from the 2017 rate of 2.0 per 100,000 workers and considerably lower than the 2000 rate of 3.9 per 100,000 (Figure 3.1). The three-year rolling fatality rate, which had remained relatively stable since 2009 following a downward trend between 1999 and 2009, shows renewed decline since 2015.

The number of fatal accidents in recent years has been consistently lower than the number in the late 2000s. The three years from 2005 to 2007 had an average of 64 fatal accidents, while no year since 2016 has had as many as 50 fatal accidents.

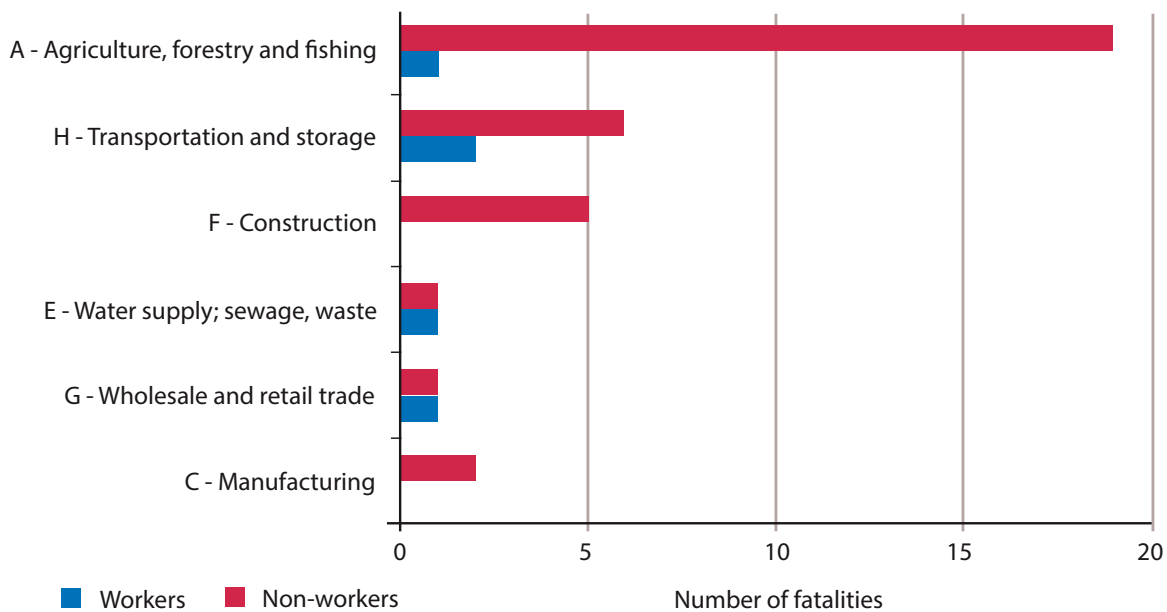
Figure 3.1: Rate of worker fatalities per 100,000 workers 1999–2018 (HSA)



3 Fatal injury statistics

The Agriculture, Forestry and Fishing sector was notable in accounting for more than half of all fatal accidents in both 2017 and 2018, when 19 workers and one additional non-worker suffered fatal accidents in that sector (Figure 3.2). The sector with the second highest number of fatal accidents was Transportation and Storage (six worker and two non-worker fatal accidents), followed by Construction (five worker fatal accidents).

Figure 3.2: Number of reported fatalities by economic sector (worker and non-worker), 2018 (HSA)



The high number of accidents in Agriculture, Forestry and Fishing is nevertheless a decrease since 2017, when 27 fatal accidents occurred in the sector (Figure 3.3). The 20 fatal accidents in Agriculture, Forestry and Fishing that occurred in 2018 is the lowest number of fatalities in that sector since 2009, when 12 workers and one non-worker suffered fatalities. However, over half of all fatal accidents in both 2017 and 2018 occurred in this sector.¹⁹

After Agriculture, Forestry and Fishing, the greatest number of fatal accidents between 2011 and 2018 occurred in Construction (63), Transportation and Storage (33) and Wholesale and Retail Trade (23). These four economic sectors contributed 82% of all fatal accidents during the period. This illustrates the broad concentration of fatal accidents within a small number of economic sectors.

However, smaller numbers of accidents did occur in most other sectors during the period. The only sectors with zero fatal accidents from 2011 to 2018 were Information and Communication, Financial and Insurance Activities, and Real Estate Activities.

¹⁹ Note that there are some difficulties in calculating rates of accidents for the Agriculture, Forestry and Fishing sector because Ireland has a large number of part-time farmers, who work primarily in other sectors. These individuals are counted by the Labour Force Survey as workers in their main economic activity and not in farming; however, when they suffer a fatal injury on the farm they are typically counted among farm fatalities. This means that the rate of fatal accidents in the Agriculture, Forestry and Fishing sector may be somewhat inflated. Nevertheless, the number of fatal accidents in this sector remains higher than other sectors.

Figure 3.3: Number of reported fatalities (worker and non-worker) by economic sector, 2011–2018 (HSA)

| Economic sector | Number of fatalities | | | | | | | | Total |
|---|----------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2011-2018 |
| A–Total agriculture, forestry and fishing | 27 | 28 | 21 | 33 | 24 | 26 | 27 | 20 | 206 |
| Agriculture | 22 | 20 | 16 | 32 | 18 | 21 | 25 | 15 | 169 |
| Forestry | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 4 |
| Fishing | 5 | 7 | 5 | 1 | 5 | 4 | 2 | 4 | 33 |
| B–Mining and quarrying | 1 | 1 | 2 | 0 | 2 | 1 | 0 | 0 | 7 |
| C–Manufacturing | 2 | 0 | 1 | 3 | 3 | 2 | 0 | 2 | 13 |
| D–Electricity, gas, steam and air conditioning supply | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 2 |
| E–Water supply, sewerage, waste management and remediation activities | 3 | 3 | 1 | 0 | 3 | 1 | 1 | 2 | 14 |
| F–Construction | 6 | 8 | 11 | 6 | 11 | 10 | 6 | 5 | 63 |
| G–Wholesale and retail trade | 2 | 3 | 3 | 5 | 3 | 2 | 3 | 2 | 23 |
| H–Transportation and storage | 7 | 2 | 4 | 3 | 3 | 1 | 5 | 8 | 33 |
| I–Accommodation and food services | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 |
| J–Information and communication | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| K–Financial and insurance activities | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| L–Real-estate activities | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| M–Professional, scientific and technical activities | 2 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 5 |
| N–Administrative and support-service activities | 0 | 1 | 0 | 2 | 0 | 2 | 0 | 0 | 5 |
| O–Public administration and defence | 1 | 0 | 0 | 0 | 4 | 1 | 5 | 0 | 11 |
| P–Education | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Q–Human-health and social-work activities | 1 | 1 | 0 | 0 | 2 | 1 | 0 | 0 | 5 |
| R–U–Other NACE activities | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 5 |
| Total | 54 | 48 | 47 | 55 | 56 | 48 | 48 | 39 | 395 |

*R – Arts, Entertainment and Recreation; S – Other Service Activities; T – Activities of Households as Employers; U – Activities of Extra Territorial Organisations and Bodies.

3 Fatal injury statistics

In 2018, of the 20 fatal accident victims in Agriculture, Forestry and Fishing, 10 were self-employed (Figure 3.4). By contrast, two of the five victims in Construction were self-employed, the one victim in Wholesale and Retail Trade was self-employed, and none of the victims in Transportation and Storage or Industry were self-employed.

These figures are likely to be affected by the pattern of employment in these sectors. In Agriculture, Forestry and Fishing, 69% of workers were self-employed in 2018, compared with 33% in Construction. Only 20% were self-employed in Transportation and Storage, 10% in Wholesale and Retail Trade, and 7% in Industry (CSO, 2019).

Figure 3.4: Rate of reported worker fatalities by economic sector, 2018 (HSA)

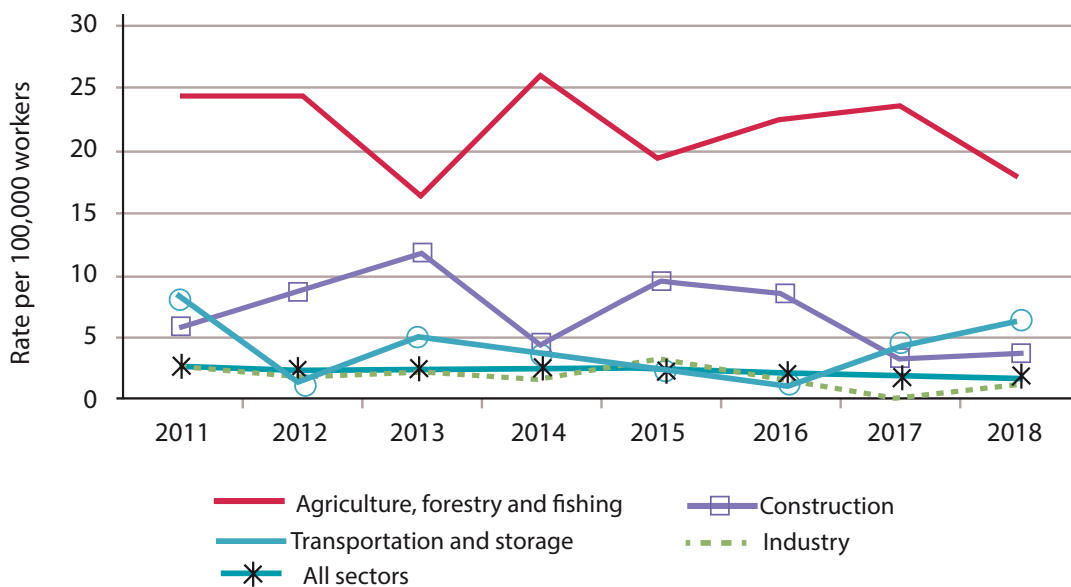
| Economic sector | Worker | | | | | | Non-Worker | |
|-----------------------------------|-----------|---------------|---------------|----------|-----------|------------------|------------|-----------|
| | Employee | Self-employed | Family worker | Trainee | Total | Rate per 100,000 | Non-Worker | Total |
| Agriculture, forestry and fishing | 5 | 10* | 3 | 1 | 19 | 17.7 | 1 | 20 |
| Industry (NACE B-E) | 3 | 0 | 0 | 0 | 3 | 1.1 | 1 | 4 |
| Construction | 3 | 2 | 0 | 0 | 5 | 3.5 | 0 | 5 |
| Wholesale and retail trade | 0 | 1 | 0 | 0 | 1 | 0.3 | 1 | 2 |
| Transportation and storage | 6 | 0 | 0 | 0 | 6 | 6.1 | 2 | 8 |
| Total persons | 17 | 13 | 3 | 1 | 34 | 1.5 | 5 | 39 |

Note: *nine in agriculture and one in fishing.

There were five worker fatalities in the Construction sector, giving a rate of 3.5 per 100,000 workers; this is up from the rate of 3.1 per 100,000 workers in 2017, but down from 8.4 and 9.2 in 2016 and 2015 respectively (Figure 3.5). This was caused in part by a decline in the number of fatal accidents due to falls, which led to four fatalities in Construction in 2015 and six in 2016, but just two and three fatalities in 2017 and 2018 respectively.

Between 2011 and 2018 Agriculture, Forestry and Fishing had the highest number of fatal accidents in every year, while Construction was the second-highest in five of the eight years and Transportation and Storage was the second-highest in three of the eight years. This further illustrates that the majority of fatal accidents tends to be concentrated within a small number of sectors.

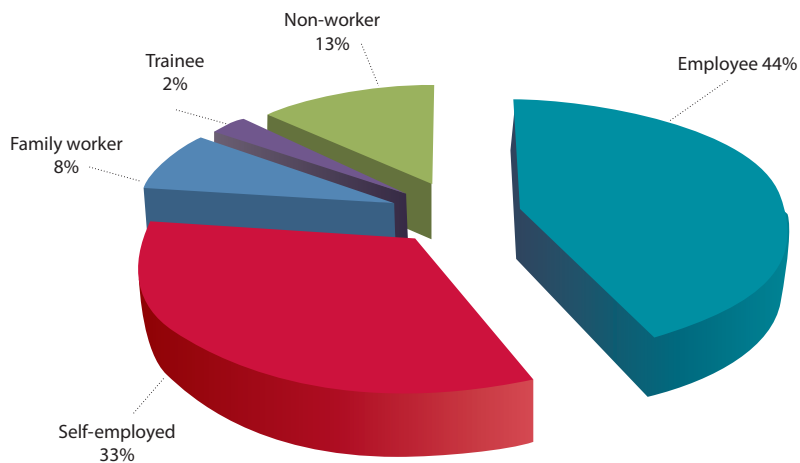
Figure 3.5: Comparison of fatality rates in selected sectors, 2011–2018 (HSA)



3 Fatal injury statistics

Most fatal accidents in 2018 occurred to employees (44%) and self-employed people (33%), while 8% of accidents occurred to family workers (typically unpaid children, spouses or older relatives) (Figure 3.6). All of the fatal accidents to family workers occurred in Agriculture, Forestry and Fishing; in 2018, these were older people living on active farms and only occasionally involved in unpaid labour.

Figure 3.6: Percentage of reported fatal injuries by employment status, 2018 (HSA)



Note: numbers are small for some groups (n=17 for employee; n= 13 for self-employed; n=3 for family worker; n=1 for trainee and n=5 for non-worker).

Older people were disproportionately likely to experience fatal accidents compared with other age groups. Figure 3.7 shows that half of the fatal accidents in the Agriculture, Forestry and Fishing sector happened to people in the 65+ age group, and across all sectors combined the highest number of accidents occurred in this group (31%). Indeed, 59% of all fatal accidents occurred to people aged 55 years or more. 2018 was the first year in which no child aged under 15 years suffered a fatal accident, which is a positive development. However, one person aged 15 years did suffer a fatal accident in that year.

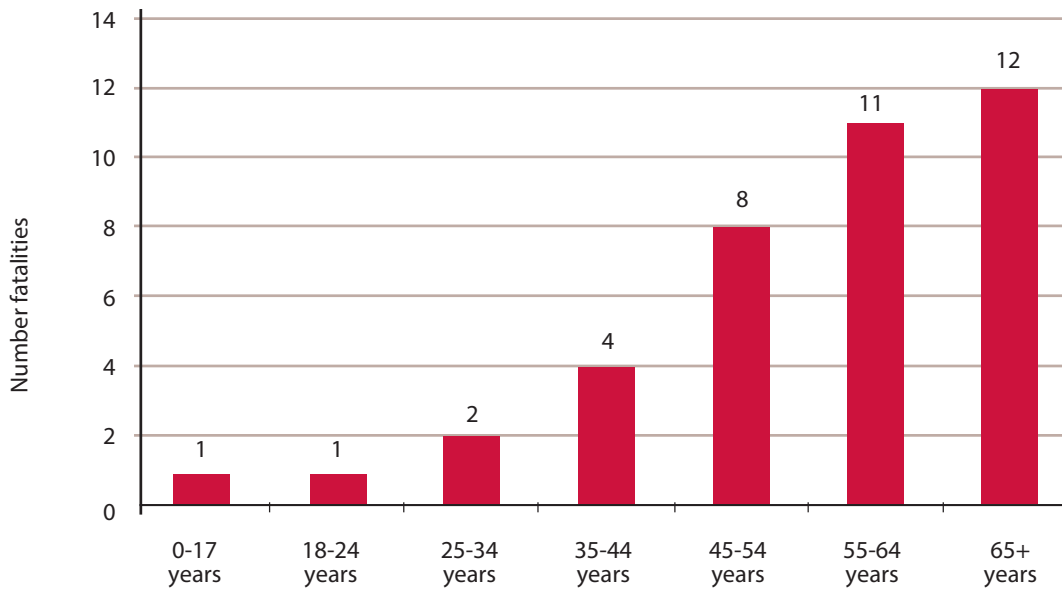
Figure 3.7: Number of reported fatalities (worker and non-worker) by economic sector and age band, 2018 (HSA)

| Economic sector | Age | | | | | | | Total |
|--|-----------|-----------|-----------|------------|------------|------------|------------|-------------|
| | 0-17 | 18-24 | 25-34 | 35-44 | 45-54 | 55-64 | 65+ | |
| Agriculture, Forestry and Fishing | 1 | 0 | 1 | 0 | 5 | 3 | 10 | 20 |
| Manufacturing | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 2 |
| Water supply; sewerage; waste management | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 2 |
| Construction | 0 | 0 | 1 | 1 | 0 | 2 | 1 | 5 |
| Wholesale and Retail Trade | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 2 |
| Transportation and Storage | 0 | 0 | 0 | 2 | 1 | 5 | 0 | 8 |
| Total | 3% | 3% | 5% | 10% | 21% | 28% | 31% | 100% |
| | 1 | 1 | 2 | 4 | 8 | 11 | 12 | 39 |

In general, the number of fatal accidents was higher in older age groups, rising from one each for the 0-17 years and 18-24 years groups up to 11 and 12 respectively for the 55-64 years and over 65 years groups (Figure 3.8). The average age of worker and non-worker victims has climbed from 36 in 1990 to 58 in 2018. This may partly reflect the ageing of the Irish population in general, but may also indicate changing risks to older workers. The Agricultural sector has particularly pronounced rates of fatal accidents and has also experienced an ageing of its workforce; 10 of the 15 fatal accidents in Agriculture in 2018 occurred to victims aged over 65 years.

3 Fatal injury statistics

Figure 3.8: Number of reported fatalities (worker and non-worker) by age band, 2018 (HSA)



Irish people comprised 25 (74%) of the 34 fatal accidents to workers in 2018 (Figure 3.9). One fatal accident each occurred to people from other EU countries in Manufacturing, Construction, Wholesale and Retail Trade, and Transportation and Storage. Five people from outside the EU suffered fatal accidents in Transportation and Storage (3) and Agriculture, Forestry and Fishing (2). Both non-Irish victims in the Agriculture, Forestry and Fishing sector were working in Fishing.

Figure 3.9: Number of reported worker fatalities by nationality and economic sector, 2018 (HSA)

| Economic sector | Irish | Other EU | Non-EU |
|---------------------------------------|-----------|----------|----------|
| A - Agriculture, forestry and fishing | 17 | 0 | 2 |
| C - Manufacturing | 1 | 1 | 0 |
| E - Water supply, sewerage, waste | 1 | 0 | 0 |
| F - Construction | 4 | 1 | 0 |
| G - Wholesale and retail | 0 | 1 | 0 |
| H - Transportation and storage | 2 | 1 | 3 |
| Total | 25 | 4 | 5 |

The fatality rate for non-Irish national workers was 2.5 per 100,000, compared to a rate for Irish workers of 1.3 per 100,000 in 2018. (Figure 3.10). Since 2011, Irish workers have had higher rates of fatal accidents in five years and non-Irish workers have had higher rates in three years. This suggests that there is no clear tendency for either group to have a higher risk of fatal accidents.

Figure 3.10: Reported worker fatality rates (per 100,000 workers) by nationality, 2011–2018 (HSA)

| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|----------------------------|------|------|------|------|------|------|------|------|
| Irish workers | 2.6 | 2.3 | 2.1 | 2.5 | 2.7 | 1.9 | 2.2 | 1.3 |
| Non-Irish national workers | 2.5 | 2.2 | 2.2 | 1.4 | 1.0 | 3.2 | 0.6 | 2.5 |
| All workers | 2.6 | 2.3 | 2.1 | 2.3 | 2.4 | 2.1 | 1.9 | 1.5 |

The most common trigger leading to a fatal accident in 2018 was 'fall from height', which accounted for 11 (28%) of fatalities (Figure 3.11a). This makes a change from 2017 and 2016, when the loss of control of vehicles or handling equipment was the most common deviation. In 2018 the loss of control of vehicles was the second most common trigger, involved in 10 (26%) of the fatal accidents.

Five fatal accidents involved the loss of control of animals, all cattle; in two of these cases the victims were attacked by cows that had become aggressive in the presence of new calves.

Four fatal accidents involved victims entering dangerous areas, especially the paths of moving vehicles.

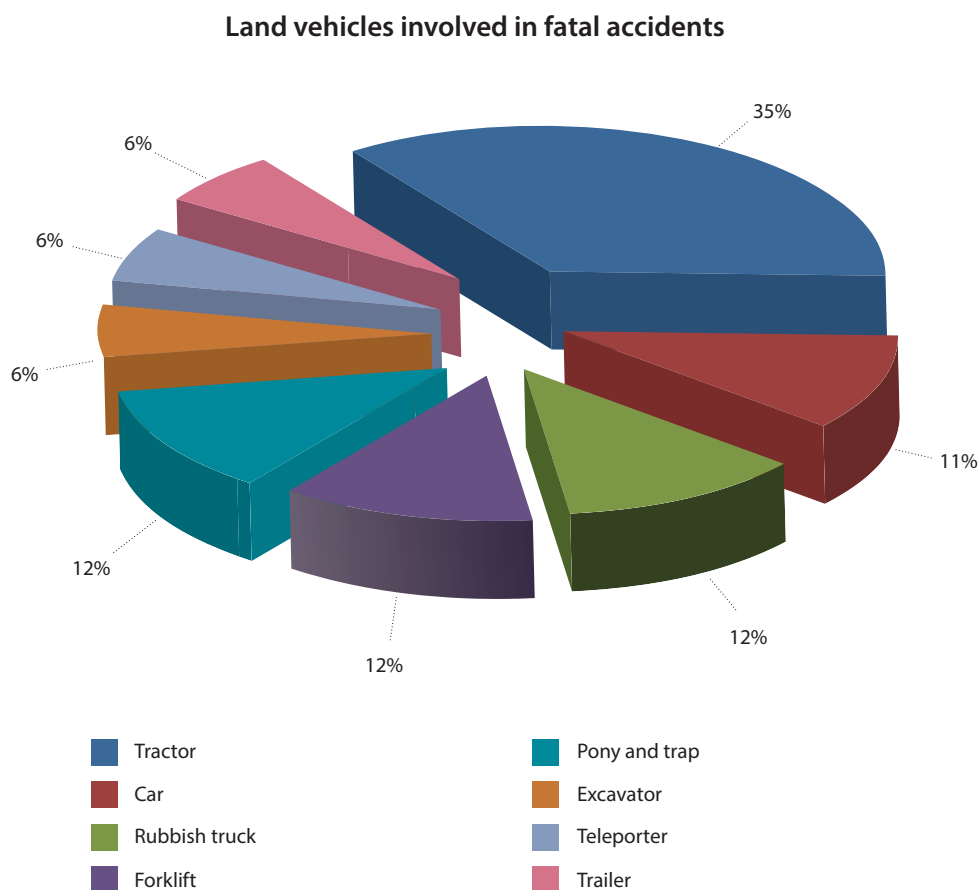
Figure 3.11a: Number of Fatalities (worker and non-worker) by accident trigger, 2018 (HSA)

| Accident trigger | Number | Percent |
|---|-----------|-------------|
| Fall from height | 11 | 28.2 |
| Loss of control of means of transport or handling equipment | 10 | 25.6 |
| Loss of control of animal | 5 | 12.8 |
| Person in inappropriate area | 4 | 10.3 |
| Fall, collapse of material from below | 4 | 10.3 |
| Fall, collapse of material from above | 3 | 7.7 |
| Accident trigger unknown | 1 | 2.6 |
| Fall, collapse of material on same level | 1 | 2.6 |
| Total | 39 | 100% |

3 Fatal injury statistics

Figure 3.11a shows that 10 fatal accidents were caused by losses of control of land vehicles. However, vehicles were also involved in accidents where victims entered dangerous areas, fell from vehicles, or were crushed by vehicles under maintenance. Altogether 17 fatal accidents involved vehicles (representing 44% of all fatal accidents) in 2018, illustrating the serious risks involved in working with vehicles. Figure 3.11b shows the kinds of vehicles involved in fatal accidents in 2018, with tractors being the most common, involved in six fatal accidents (35% of all fatalities involving vehicles).

Figure 3.11b: Land vehicles involved in fatal accidents, 2018 (HSA)



Of the 39 fatalities in 2018, eight (21%) occurred in the South-West region and seven (18%) occurred in both the Border and West regions (Figure 3.12). The lowest number of fatal accidents occurred in the South-East region (2, 5%).

Figure 3.12: Number of reported fatalities (worker and non-worker) by region, 2011–2018 (HSA)

| Region | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|--------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Border | 3 | 9 | 6 | 9 | 14 | 6 | 6 | 7 |
| Midlands | 4 | 5 | 4 | 2 | 1 | 3 | 4 | 4 |
| West | 6 | 7 | 7 | 6 | 8 | 4 | 9 | 7 |
| Dublin | 4 | 2 | 4 | 8 | 3 | 4 | 6 | 5 |
| Mid-East | 3 | 1 | 3 | 3 | 4 | 7 | 3 | 3 |
| Mid-West | 9 | 10 | 2 | 9 | 8 | 6 | 4 | 3 |
| South-East | 8 | 3 | 7 | 7 | 7 | 6 | 9 | 2 |
| South-West | 17 | 11 | 14 | 11 | 11 | 12 | 7 | 8 |
| Total | 54 | 48 | 47 | 55 | 56 | 48 | 48 | 39 |

In 2018 the NUTS 2013 regional classification was replaced by the updated NUTS 2016. South Tipperary was moved from the South-East into the Mid-West region, where it was merged with North Tipperary, while Louth was moved from the Border to the Mid-East region. All years have been updated to NUTS 2016 to aid comparison.

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

Midlands: Laois, Longford, Offaly, Westmeath

West: Galway, Mayo, Roscommon

Dublin: Dublin

Mid-East: Kildare, Meath, Wicklow, Louth

Mid-West: Clare, Limerick, Tipperary

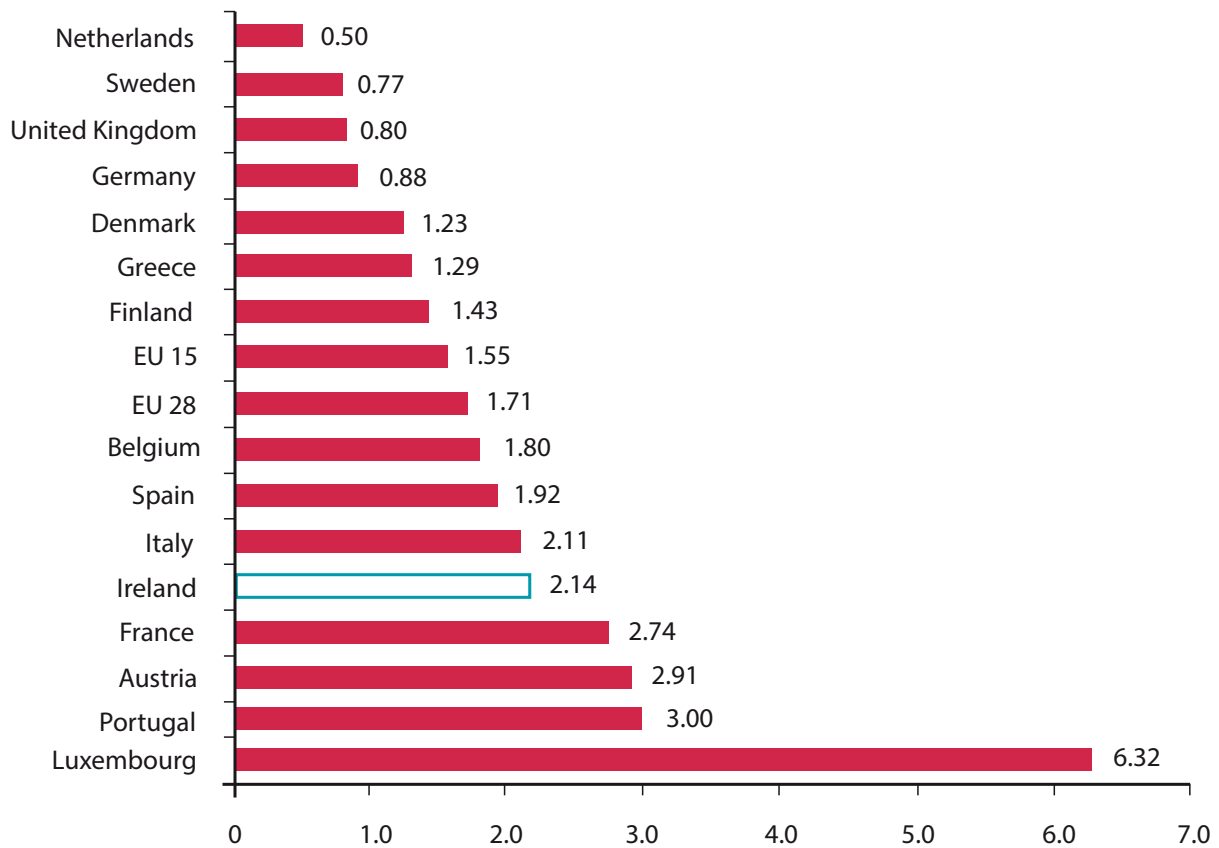
South-East: Carlow, Kilkenny, Waterford, Wexford

South-West: Cork, Kerry

3 Fatal injury statistics

Ireland had the fifth highest fatal accident rate per 100,000 workers in the EU15 in 2016 (Figure 3.13). Some EU member states do not report fatal accidents to self-employed people; for comparability, this table is based on fatal accidents to employees only. There are currently important differences in the kinds of fatal accidents reported to Eurostat by member states, so comparisons with other countries should be interpreted with caution.

Figure 3.13: Worker fatality rates per 100,000 workers in the EU15 Zone, 2016 (Eurostat)



Source: Eurostat (2019), Fatal accidents at work by economic activity.



4

CSO Employment data

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4 CSO Employment data

Figure 4.1 shows the number of people working in each economic sector. Comparing the number of accidents reported to the HSA in each sector with the number of people working in those sectors can reveal sectors that may be more susceptible to accidents. However, the Health and Social Work sector, for example, accounted for 19% of all non-fatal accidents notified to the HSA in 2018 (see Figure 2.2) but accounted for only 13% of all employment. It should be noted this may be due to better employer reporting systems rather than a higher underlying injury rate.

Figure 4.1: Numbers employed in each economic sector, 2012–2018, four-quarter average (CSO statistical release QLF03, April 2019)¹

| Economic sector | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | |
|--|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------|
| | N | N | N | N | N | N | N | % |
| A – Agriculture, forestry and fishing | 109,275 | 111,850 | 108,050 | 109,450 | 112,325 | 110,375 | 107,325 | 5 |
| B-E – Industry ² | 240,200 | 247,675 | 249,775 | 262,675 | 275,650 | 283,250 | 279,850 | 12 |
| F – Construction | 83,600 | 85,925 | 93,775 | 108,775 | 118,600 | 128,700 | 143,375 | 6 |
| G – Wholesale and retail trade | 278,975 | 282,125 | 287,300 | 291,100 | 296,950 | 302,725 | 301,500 | 13 |
| H – Transportation and storage | 82,425 | 83,125 | 85,550 | 88,825 | 93,000 | 93,400 | 98,725 | 4 |
| I – Accommodation and food | 128,100 | 137,325 | 144,925 | 148,250 | 156,425 | 163,625 | 175,675 | 8 |
| J – Information and communication | 94,000 | 95,750 | 97,950 | 101,700 | 108,200 | 115,475 | 117,625 | 5 |
| K-L – Financial, Insurance and real estate | 102,925 | 102,150 | 104,250 | 105,750 | 108,350 | 107,075 | 106,025 | 5 |
| M – Professional, scientific and technical | 110,975 | 118,850 | 127,475 | 129,575 | 133,250 | 133,025 | 136,650 | 6 |
| N – Administrative and support services | 74,550 | 75,050 | 79,250 | 80,450 | 86,075 | 93,100 | 103,900 | 5 |
| O – Public administration and defence | 86,900 | 86,775 | 88,925 | 92,500 | 93,850 | 97,500 | 105,375 | 5 |
| P – Education | 140,125 | 141,700 | 146,525 | 149,325 | 151,500 | 160,775 | 170,750 | 8 |
| Q – Health and social work | 258,825 | 260,350 | 263,625 | 268,975 | 273,175 | 279,800 | 283,475 | 13 |
| R-U – Other NACE activities* | 106,500 | 107,425 | 108,125 | 113,575 | 118,300 | 117,575 | 119,425 | 5 |
| Not stated | 3,300 | ~ | 5250 | 7,367 | 6650 | 7725 | 7,875 | 0 |
| Total | 1,899,725 | 1,937,775 | 1,988,775 | 2,057,350 | 2,132,250 | 2,194,150 | 2,257,550 | 100 |

Note: ~Refers to instances where cases are too few to report. The total four-quarter averages include the 'not stated' figures.

¹ For the year 2012 the employment levels were calculated across the four quarters from Q3 2012 to Q2 2013, instead of the calendar annual four quarters, to harmonise with a Europe-wide survey.

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

*Other NACE activities: R – Arts, Entertainment and Recreation; S – Other Service Activities; T – Activities of Households as Employers; U – Activities of Extra Territorial Organisations and Bodies.

Figure 4.2 shows the number of Irish and non-Irish workers in each economic sector. Figures 2.4 and 3.10 explore non-fatal and fatal accidents by nationality; since rates of accidents vary considerably by economic sector, it is important to note the proportion of non-Irish workers involved in these sectors when considering the incidence of accidents by nationality.

Non-Irish workers comprised 16.2% of all workers in the economy in 2018. This ranged from 32.9% in the Accommodation and Food Service Activities sector to just 7.5% in Education. The numbers of non-Irish workers were too small to estimate in the Agriculture, Forestry and Fishing, Public Administration and Defence and Not Stated categories.

Figure 4.2: Workers by nationality and economic sector, 2018 (CSO statistical release QLF21, July 2019)

| Economic sector | Number of workers | | |
|---|-------------------|----------------|-------------|
| | Irish | Non-Irish | % non-Irish |
| A – Agriculture, forestry and fishing | 103,150 | ~ | ~ |
| B – E Industry | 223,100 | 56,750 | 20.3 |
| F – Construction | 125,050 | 18,350 | 12.8 |
| G – Wholesale and retail trade | 252,075 | 49,425 | 16.4 |
| H – Transportation and storage | 85,725 | 13,050 | 13.2 |
| I – Accommodation and food service activities | 117,775 | 57,875 | 32.9 |
| J-K – Information and communication | 82,900 | 34,700 | 29.5 |
| L – Financial, insurance and real estate activities | 93,850 | 12,150 | 11.5 |
| M – Professional, scientific and technical activities | 120,900 | 15,775 | 11.5 |
| N – Administrative and support service activities | 75,825 | 28,075 | 27.0 |
| O – Public administration and defence | 101,675 | ~ | ~ |
| P – Education | 157,950 | 12,750 | 7.5 |
| Q – Human health and social work activities | 245,775 | 37,700 | 13.3 |
| R-U – Other NACE activities* | 101,000 | 18,425 | 15.4 |
| Not stated | 5,975 | ~ | ~ |
| Total | 1,892,725 | 364,825 | 16.2 |

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

CSO statistical release QLF21 Person aged 15 years and over in Employment by Nationality, NACE Rev 2 Economic Sector and Quarter; extracted 16 July 2019.

*Other NACE activities: R – Arts, Entertainment and Recreation; S – Other Service Activities; T – Activities of Households as Employers; U – Activities of Extra Territorial Organisations and Bodies.

The 39 fatalities in 2018 was the lowest recorded since the foundation of the HSA in 1989, which is a positive development that is in keeping with relatively lower numbers of fatal accidents in recent years. This improvement has occurred during a period of economic recovery and increases in the numbers of people employed; consequently the rate of fatal accidents of 1.5 per 100,000 workers is down considerably from the 3.9 per 100,000 workers recorded in 2000. Of concern is the continuing high levels of fatalities associated with Agriculture, Forestry and Fishing, where 19 workers and one non-worker experienced fatal accidents. More than half of all work-related deaths occurred in this sector in both 2017 and 2018.

Rates of non-fatal accidents and illnesses reported in the CSO's Labour Force Survey showed less positive developments. After falling in 2016, the numbers suffering both injuries and illnesses rose in 2017. The rate suffering injury was 22.6 per 1,000 workers in 2017, up from 14.4 in 2016; this is closer to the injury rate of 24 per 1,000 workers recorded in 2013. Illness rates rose from 17.8 per 1,000 workers in 2016 to 28.3 in 2017, the same rate as that recorded in 2013. However, it should be noted that the increase in 2017 may have been affected by the change in 2017 from the QNHS to the new Labour Force Survey. Hence, caution should be exercised in interpreting the year-to-year changes between 2016 and 2017.

In response to these ongoing hazards, the HSA has undertaken a range of activities in regulation, education, accreditation and enforcement. In 2018, over 9,000 inspections and investigations were undertaken, leading to 15 prosecutions. The HSA customer contact centre gave advice and support in 16,000 inbound calls, and use of the HSA's BeSMART.ie online risk assessment tool rose to a total of 56,329 cumulative users. The HSA was also involved in other supports including the provision of online courses and participation in a number of national events. For more information on the HSA's activities in 2018, see the 2018 Annual Report.²⁰

²⁰ Annual Reports are available from the HSA's Corporate Publications page:
https://www.hsa.ie/eng/Publications_and_Forms/Publications/Corporate/



Appendix A

Updated fatal
statistics

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Appendix A – Updated fatal statistics

For various reasons, such as late reporting of fatalities or the outcome of an ongoing investigation, it is sometimes necessary to revise the number of fatal accidents previously reported in earlier publications. The table below details the most recent data available for the years 2011 to 2017, and for comparison purposes, includes the details published in last year's version of this report. The number of fatal accidents in both 2016 and 2017 have been increased due to late reporting of fatalities in those years.

| Number of reported fatalities (worker and non-worker) | | | | | | | |
|---|------|------|------|------|------|------|------|
| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| Previously Reported* | 54 | 48 | 47 | 55 | 56 | 46 | 47 |
| Updated Figures | 54 | 48 | 47 | 55 | 56 | 48 | 48 |

*As reported by the HSA in August 2018 in Summary of Workplace Injury, Illness and Fatality Statistics 2016-2017.

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

- **Economic activity:** NACE (Nomenclature statistique des activités économiques dans la Communauté Européenne: Statistical Classification of Economic Activities in the European Community), maintained by Eurostat (Statistical Agency of the European Commission). The full classification is available to download from the Eurostat website:
<http://ec.europa.eu/eurostat/en/web/products-manuals-and-guidelines/-/KS-RA-07-015>.
- **Occupation:** ISCO (International Standard Classification of Occupations), maintained by ILO (International Labour Organization). Further information on ISCO codes can be found on the ILO website:
<http://www.ilo.org/public/english/bureau/stat/isco/index.htm>.
- **Other information:** European Statistics on Accidents at Work (ESAW) provide information on variables, definitions and classifications relating to the victim, the incident and the circumstances of the incident. It is maintained by Eurostat:
<http://ec.europa.eu/eurostat/documents/3859598/5926181/KS-RA-12-102-EN.PDF/56cd35ba-1e8a-4af3-9f9a-b3c47611ff1c>.
- **Region:** NUTS (Nomenclature of Territorial Units for Statistics) 2016, a standard for referencing national sub-regions of the European Union. In Ireland these are: Border, Midlands, West, Dublin, Mid-East, Mid-West, South-East and South-West.

Appendix C – Classification of Economic Activities

NACE Rev 2 – Level 1 and 2

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

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

Appendix C – 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 |

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