

# Annual Review of Workplace Injuries, Illnesses and Fatalities 2020–2021



# Our Vision: Healthy, safe and productive lives and enterprises

### **Acknowledgements**

The Authority is grateful to the Central Statistics Office (CSO) for the provision of data on work related injuries and illnesses that was collected as part of the Labour Force Survey in Q1 2021. The Authority also thanks Shane Leavy for his assistance in the preparation of this report.

#### **Abbreviations**

Central Statistics Office
European Statistics on Accidents at Work
Health and Safety Authority
Labour Force Survey
Statistical Classification of Economic Activities in the European Community
Nomenclature of Territorial Units for Statistics

# **Contents**

FORE	WORD FROM THE CHIEF EXECUTIVE	4
EXEC	CUTIVE SUMMARY	6
	Non-Fatal Incidents	6
	HSA Non-Fatal Incident Data	6
	CSO's Module on Work-Related Injury and Illness	6
	Fatal Incidents	7
HSA Non-Fatal Incident Data CSO's Module on Work-Related Injury and Illness  Fatal Incidents  1. INTRODUCTION  Data Sources and Methodology  HSA Non-Fatal Incident Data CSO Module on Work-Related Injury and Illness in the Labour Force Survey HSA Fatal Incident Data CSO Labour Force Survey Working Population  2. NON-FATAL INJURY AND ILLNESS STATISTICS  Non-Fatal Injuries Reported to the HSA  Table 2.1: Injuries reported by economic sector, 2021 (HSA)  Table 2.2: Number of reported non-fatal injuries by employment status, 2021 (HSA)  Figure 2.1: Top five reported non-fatal triggers in Human Health and Social Work Activities, 2021 (HSA)  Figure 2.2a: Top three reported non-fatal triggers in Industry, 2021 (HSA)  Figure 2.2b: Top three reported non-fatal triggers in Wholesale and Retail Trade, 2021 (HSA)  Figure 2.2c: Top three reported non-fatal triggers in Oonstruction, 2021 (HSA)  Figure 2.2c: Top three reported non-fatal triggers in Public Administration and Defence,	8	
	Data Sources and Methodology	8
	HSA Non-Fatal Incident Data	8
	Non-Fatal Incidents  HSA Non-Fatal Incident Data CSO's Module on Work-Related Injury and Illness  Fatal Incidents  7  INTRODUCTION  Data Sources and Methodology  HSA Non-Fatal Incident Data CSO Module on Work-Related Injury and Illness in the Labour Force Survey  HSA Fatal Incident Data CSO Module on Work-Related Injury and Illness in the Labour Force Survey  HSA Fatal Incident Data CSO Labour Force Survey Working Population  NON-FATAL INJURY AND ILLNESS STATISTICS  10  Non-Fatal Injuries Reported to the HSA  Table 2.1: Injuries reported by economic sector, 2021 (HSA)  Table 2.2: Number of reported non-fatal injuries by employment status, 2021 (HSA)  Figure 2.1: Top five reported non-fatal triggers in Human Health and Social Work Activities, 2021 (HSA)  Figure 2.2b: Top three reported non-fatal triggers in Industry, 2021 (HSA)  Figure 2.2c: Top three reported non-fatal triggers in Wholesale and Retail Trade, 2021 (HSA)  Figure 2.2c: Top three reported non-fatal triggers in Public Administration and Defence, 2021 (HSA)  Figure 2.2c: Top three reported non-fatal triggers in Public Administration and Defence, 2021 (HSA)  Figure 2.2f: Top three reported non-fatal triggers in Transportation and Storage, 2021 (HSA)  Figure 2.2f: Top three reported non-fatal triggers in Transportation and Storage, 2021 (HSA)  Figure 2.2f: Top three reported non-fatal triggers in Transportation and Storage, 2021 (HSA)  Figure 2.2f: Top three reported non-fatal triggers in Transportation and Storage, 2021 (HSA)  Figure 2.2f: Top three reported non-fatal triggers in Transportation and Storage, 2021 (HSA)  Figure 2.2f: Top three reported non-fatal triggers in Transportation and Storage, 2021 (HSA)  Figure 2.2f: Top three reported non-fatal triggers in Transportation and Storage, 2021 (HSA)  Figure 2.2f: Top three reported non-fatal triggers in Transportation and Storage, 2021 (HSA)  Figure 2.2f: Top three reported non-fatal triggers in Fransportation and Storage, 2021 (HSA)  Figure 2.2f: Top three reported non-fatal triggers in Fransporta	9
		9
	CSO Labour Force Survey Working Population	9
Non-Fatal Incidents  HSA Non-Fatal Incident Data CSO's Module on Work-Related Injury and Illness Fatal Incidents  1. INTRODUCTION  Data Sources and Methodology HSA Non-Fatal Incident Data CSO Module on Work-Related Injury and Illness in the Labour Force Survey HSA Fatal Incident Data CSO Module on Work-Related Injury and Illness in the Labour Force Survey HSA Fatal Incident Data CSO Labour Force Survey Working Population  2. NON-FATAL INJURY AND ILLNESS STATISTICS  Non-Fatal Injuries Reported to the HSA Table 2.1: Injuries reported by economic sector, 2021 (HSA)  Figure 2.1: Top five reported non-fatal injuries by trigger, 2021 and five-year average 2017-2021 (HSA)  Figure 2.2a: Top three reported non-fatal triggers in Human Health and Social Work Activities, 2021 (HSA)  Figure 2.2b: Top three reported non-fatal triggers in Industry, 2021 (HSA)  Figure 2.2c: Top three reported non-fatal triggers in Wholesale and Retail Trade, 2021 (HSA)  Figure 2.2c: Top three reported non-fatal triggers in Public Administration and Defence, 2021 (HSA)  Figure 2.2: Top three reported non-fatal triggers in Public Administration and Defence, 2021 (HSA)  Figure 2.2: Top three reported non-fatal triggers in Transportation and Storage, 2021 (HSA)  Figure 2.3: Most injured body parts in workers and non-worker in 2021 (HSA)  Figure 2.4: Percentage of non-fatal injuries by absence from work, 2021 and five-year average 2017-2021 (HSA)  Figure 2.5: Top five working environments for worker and non-worker incidents in 2021 (HSA)  Figure 2.5: Top five working environments for worker and non-worker incidents in 2021 (HSA)  Figure 2.5: Top five working environments for worker and non-worker incidents in 2021 (HSA)  Figure 2.6: Days lost due to work-related illnesses and injuries in 2020 and five-year average		10
	Non-Fatal Injuries Reported to the HSA	10
	Table 2.1: Injuries reported by economic sector, 2021 (HSA)	11
	Table 2.2: Number of reported non-fatal injuries by employment status, 2021 (HSA)	12
		12
		13
	Figure 2.2b: Top three reported non-fatal triggers in Industry, 2021 (HSA)	13
	Figure 2.2c: Top three reported non-fatal triggers in Wholesale and Retail Trade, 2021 (HSA)	13
	Figure 2.2d: Top three reported non-fatal triggers in Construction, 2021 (HSA)	14
		14
	Figure 2.2f: Top three reported non-fatal triggers in Transportation and Storage, 2021 (HSA)	14
	Figure 2.3: Most injured body parts in workers and non-workers in 2021 (HSA)	15
		16
	Figure 2.5: Top five working environments for worker and non-worker incidents in 2021 (HSA)	16
		17

CS	SO Module on Work-Related Injury and Illness in the Labour Force Survey Results	17
	Figure 2.7: Rate of 4+ day work-related injuries per 1,000 workers by NACE economic sector in 2020 and five-year average 2016–2020 (CSO)	18
	Figure 2.8a: Rate of 4+ day work-related injuries per 1,000 workers in Human Health and Social Work Activities, 2006 to 2020 (CSO)	19
	Figure 2.8b: Rate of 4+ day work-related injuries per 1,000 workers in Construction, 2006 to 2020 (CSO)	20
	Figure 2.8c: Rate of 4+ day work-related injuries per 1,000 workers in Agriculture, Forestry and Fishing, 2006 to 2020 (CSO)	20
	Figure 2.8d: Rate of 4+ day work-related injuries per 1,000 workers in Transportation and Storage, 2006 to 2020 (CSO)	21
	Figure 2.8e: Rate of 4+ day work-related injuries per 1,000 workers in Industry, 2006 to 2020 (CSO)	21
	Figure 2.8f: Rate of 4+ day work-related injuries per 1,000 workers in Wholesale and Retail Trade, 2006 to 2020 (CSO)	22
	Figure 2.9: Rate of 4+ day work-related injuries per 1,000 workers by gender in 2020 and five-year average 2016–2020 (CSO)	22
	Figure 2.10: Rate of 0+ day work-related injuries per 1,000 workers by gender and injury type in 2020 (CSO)	23
	Figure 2.11: Rate of 4+ day work-related illnesses per 1,000 workers by NACE economic sector in 2020 and five-year average 2016–2020 (CSO)	24
	Figure 2.12: Rate of 4+ day work-related illnesses per 1,000 workers by gender in 2020 and five-year average 2016–2020 (CSO)	25
	Figure 2.13: Rate of 0+ day work-related illnesses per 1,000 workers by gender and illness type in 2020 (CSO)	25
	Figure 2.14: Rate of 0+ day work-related injuries and illnesses per 1,000 workers by age group in 2020 (CSO)	26
	Figure 2.15: Rate of 0+ day work-related injuries and illnesses per 1,000 workers by occupation of victim in 2020 (CSO)	26
	Table 2.3: Rate of 0+ day work-related injuries and illnesses per 1,000 workers by NUTS region in 2020 (CSO)	27
3. FATAL	INJURY STATISTICS	28
	Figure 3.1: Rate of fatal work-related incidents per 100,000 workers, 1998–2021	28
	Figure 3.2: Number of fatal work-related incidents to workers and non-workers by NACE economic sector 2021 (HSA)	29
	Figure 3.3: Percentage of fatal work-related incidents by employment status of victim, 2021 (HSA)	29
	Figure 3.4: Number of fatal work-related incidents by employment status of victim and NACE economic sector, 2021 (HSA)	30
	Figure 3.5a: Rate of fatal work-related incidents per 100,000 workers in Agriculture, Forestry and Fishing, 1998–2021 (HSA)	30
	Figure 3.5b: Rate of fatal work-related incidents per 100,000 workers in Construction, 1998–2021 (HSA)	31

	Figure 3.5c: Rate of fatal work-related incidents per 100,000 workers in Transportation and Storage, 1998–2021 (HSA)	31
	Figure 3.5d: Rate of fatal work-related incidents per 100,000 workers in Industry (NACE B-E), 1998–2021 (HSA)	32
	Figure 3.6: Number of fatal work-related incidents by gender and age band, 2021 (HSA)	32
	Figure 3.7: Number of fatal work-related incidents to workers and non-workers by age band, 2021 (HSA)	33
	Figure 3.8: Number of fatal work-related incidents in key NACE economic sectors involving victims aged under 65 years and 65 years or more, 2021 (HSA)	33
	Figure 3.9: Number of fatal incidents occurring to victims aged 65 years or more each year, 1990–2021 (HSA)	34
	Figure 3.10: Number of fatal incidents by NACE economic sector and nationality, 2021 (HSA)	34
	Figure 3.11: Top five triggers involved in fatal incidents, 2021 (HSA)	35
	Figure 3.12: Top five modes of injury involved in fatal incidents, 2021 (HSA)	35
	Figure 3.13: Vehicles involved in fatal incidents, 2021 (HSA)	36
4. APPEN	IDIX	37
	Table 4.1: Number and percentage of non-fatal incidents by trigger in selected economic sectors, 2021 (HSA)	37
	Table 4.2: Number and rate of people suffering injury and illness, 2015–2020 (CSO)	38
	Table 4.3: Number of reported fatal incidents to workers and non-workers by NACE economic sector, 2012–2021 (HSA)	39
	Table 4.4: Number and rate of reported fatal incidents by NACE economic sector and employment status of victim, 2021 (HSA)	40
	Table 4.5: Number of reported fatal incidents by NACE economic sector and age band of victim, 2021 (HSA)	40
	Table 4.6: Reported worker fatal incident rates per 100,000 workers by nationality, 2014–2021 (HSA)	41
	Table 4.7: Number of reported fatal incidents by NACE economic sector and trigger, 2021 (HSA)	41
	Table 4.8: Number of reported fatal incidents by NACE economic sector and mode of injury, 2021 (HSA)	42
	Table 4.9: Rate of reported fatal incidents per 100,000 workers by NUTS region 2014–2021 (HSA)	42
	Figure 4.10: Rate of reported fatal incidents per 100,000 workers by NUTS region in 2021 and five-year average 2017–2021 (HSA)	43
REFEREN	CES	44

# Foreword from the **Chief Executive**

Welcome to the 2020-2021 Annual Review of Workplace Injuries, Illnesses and Fatalities. Each year the findings of this report give us a clear understanding of the causes and characteristics of injuries, illnesses, and fatalities that occur in workplaces across Ireland. This data is important as it acts as the foundation on which we review current and future programmes, initiatives, and supports, so that we can better deliver on our vision of healthy, safe and productive lives and enterprises.

This report combines data from two sources: incidents reported directly to the HSA throughout 2021, and Central Statistics Office (CSO) data from 2020 on days lost to work-related injuries and illnesses. Combining these allows us to track not only the immediate impacts of incidents on workers, but also the impact it has on colleagues and the operation of the business itself.

It goes without saying that both 2020 and 2021 are outliers in our recent history. The stop-start nature of restrictions and lockdowns, the rise of remote working and online shopping, and unfortunately an unprecedented number of business closures makes year-on-year comparisons difficult.

Despite this upheaval (and regular suspension) of the normal course of work and life, the numbers of non-fatal incidents have remained high. There were 8,279 non-fatal incidents reported in 2021, which is an 8% increase on the previous year. While it is likely the increase is due in part to revived economic activity in 2021 following the removal of COVID-19 public health measures imposed the previous year, the number is still considerable. On a positive note, the 2021 figure represented a 12% decrease from 2019.

While physical injury is a devastating outcome of many of these workplace incidents, it is also striking the effect that these incidents have on days of work lost, which impacts on team workloads and normal business operations. For 2020, respondents reported 597,000 days lost due to work related injuries (as compared with the five year average of 613,962). This not only impacts the day-to-day business activity, but also puts additional pressure on the remaining staff, which in turn can increase stress and overwork.

The non-injury health and safety issues, categorised as 'illnesses' in the report, bring with them other significant impacts. The most common work-related illnesses are bone, joint or muscle problems; followed by stress, depression or anxiety. An astounding 1,053,000 days were lost due to work-related illness in 2020, up from the five-year average of 901,940.

Notably, for 2020, male workers accounted for more work-related injuries leading to four or more days of absence from work (5.2 per 1,000 workers) than female workers (4.7 per 1,000 workers), while female workers accounted for higher rates of illness (14.5 per 1,000 workers) than male workers (12.3 per 1,000 workers). Both of these statistics are in keeping with the five-year average for 2016-2020.

A clear correlation can be deduced here - that is. that physical injuries are higher in males as they are more commonly employed in those industries that also record the highest injuries (e.g. Construction), while the same is true of females in industries with the highest rate of illnesses (e.g. Human Health & Social Work). But instead of accepting these as simple cause-and-effect, these relationships should instead help raise awareness of where vulnerabilities lie so that proactive safety management systems can focus on and address these particular areas.

The disparity of how workplace incidents affect men and women differently is also evident in the most dispiriting statistic reported in this annual review: that 38 fatal work-related incidents occurred in Ireland in 2021. These 38 people – all but one of which was male – were fathers, sons, uncles, brothers, friends. Each died as a result of an entirely preventable incident.

This is the lowest number of fatal incidents recorded in any year since the foundation of the Authority in 1989, and while this may sound like a positive development, it cannot be repeated too often that one death is one too many.

Though the 38 fatal incidents occurred across all age categories, nine occurred to victims aged 65 years or more. This age group was particularly prominent in Agriculture, Forestry and Fishing, where five fatal incidents occurred to victims aged 65 years or more.



**Dr Sharon McGuinness** *Chief Executive Officer* 

Indeed, the proportion of fatal incidents involving older victims aged 65 years or more across all sectors has increased from 7% in 1990 (the first full year for which the Authority holds data), to 24% in 2021.

Bearing in mind that more fatal incidents occurred to self-employed people than employees in seven of the ten years from 2012 to 2021, it is clear that there is a continuing and worrying trend of injuries and fatalities in older, self-employed men involved in manual work. While this can be attributable to an ageing workforce in these areas, anecdotal evidence points to perceptions by this cohort that health and safety is 'not necessary' in their circumstance, that it is 'unnecessary paperwork' that is only applicable to large organisations, and that they 'know what they're doing'.

This is an opportune point to reiterate the role of the HSA and its importance to all workplaces, from one-person farms to multinationals with thousands of employees. Health and safety is not an optional extra, it is an obligation – morally, ethically, and legally. The HSA exists to assist and support all employers and employees in achieving the safest workplaces feasible, so that illnesses, injuries, and fatalities are brought as close to zero as possible.

The HSA has a wealth of materials and supports online that make it easy to understand the basics and check your obligations. For example our dedicated microsite BeSMART.ie is a free online tool that lets you generate your own workplace risk assessments and safety statement, helping small businesses stay on top of their obligations easily.

Finally, in any discussion of workplace incidents, what must not be overlooked is the cost paid by non-workers in the event of health and safety failures. In 2021, four people were killed, and another 256 injured, as a result of incidents in workplaces. These people have all paid a price – in some cases the highest price – for eventualities they bear no responsibility for.

As the country and the world opens up again in 2022 post COVID-19, we must not allow the 'return to normality' to also mean an increase in health and safety incidents. It is a responsibility of all of us to ensure that all workplaces, both big and small, have the appropriate measures and checks in place to ensure safe and healthy environments for both business and employees to thrive. In addition to the human cost, workplace incidents also cost businesses money in lost time, lost skills, insurance premium hikes, legal proceedings, damaged reputation, and much more.

I hope you glean as much as we did from this report, the development of which would not have been possible without the assistance of our partners in industry, the CSO, the Department of Enterprise, Trade & Employment, and the Authority's Board.

**Dr Sharon McGuinness** 

Chief Executive Officer

24 October 2022



# **Executive Summary**

#### **Non-Fatal Incidents**

#### **HSA Non-Fatal Incident Data**

In 2021 there was an increase in the number of non-fatal incidents reported to the Health and Safety Authority in comparison with 2020. It is likely that this increase is due in part to revived economic activity in 2021 after the public health measures imposed the previous year as a result of the COVID-19 pandemic. However, the 8,279 non-fatal incidents that were reported in 2021, while 8% higher than 2020, represented a 12% decrease from 2019. This suggests that imposed business closures and changes in behaviour due to the COVID-19 pandemic may have continued to affect work-related health and safety in 2021.

An increase in non-fatal incidents was reported in 12 of the 19 economic sectors in 2021 as compared with 2020. The biggest increase was in Manufacturing, which reported 1,632 non-fatal incidents in 2021, compared with 1,346 non-fatal incidents in 2020.

The number of non-fatal incidents reported in Accommodation and Food Service Activities continued to decline, falling to 92 in 2021, compared with 110 in 2020 and 254 in 2019. It is likely that this is largely due to continued COVID-19 related restrictions in 2021, which particularly affected this sector.

Manual handling and falls were the most common triggers in 2021, as they have been in all years since 2017. The part of the body affected in the greatest number of non-fatal incidents to workers was the back. Back injuries were reported in 21% of worker incidents, but only in 5% of non-worker incidents. This is because more workers were involved in manual handling injuries caused by lifting or moving heavy objects than non-workers. For non-workers, the part of the body injured most frequently was the head (23%). These head injuries most often followed slips or falls.

The most common working environment for non-fatal work-related incidents was industrial or maintenance areas for workers (29%) and shop or service areas for non-workers (58%).

# **CSO's Module on Work-Related Injury**

The latest data available from the CSO's module on work-related injury and illness pertains to 2020.

The number of days lost to work-related non-fatal injuries fell by 3% to 597,000 in 2020, when compared with the five-year average for 2016-2020 (613,962); while the number of days lost to work-related illnesses rose by 17% from 901,940 (2016-2020 average) to 1,053,000 in 2020.

The three economic sectors with the highest rates of non-fatal injury leading to four or more days absence from work were Construction (15.5 per 1,000 workers) followed by Human Health and Social Work Activities (9.4 per 1,000 workers) and Industry (6.5 per 1,000 workers).<sup>1</sup>

Human Health and Social Work Activities and Construction are both identified as priority sectors in the Health and Safety Authority's Programme of Work for 2022.

In each of the five years from 2016 to 2020, Construction was amongst the top five sectors for incidents leading to four or more days of absence from work. For four of the five years since 2016, Human Health and Social Work Activities has been among the top five sectors for incidents that resulted in four or more days absence from work.

The three sectors with the lowest rates of non-fatal injury leading to four or more days absence from work in 2020 were Financial, Insurance and Real Estate Activities (1.6 per 1,000 workers), Accommodation and Food Service Activities (0.7 per 1,000 workers) and Information and Communication (no reported work-related injuries). It is likely that the low rate of injuries reported in the Accommodation and Food Service Activities sector in 2020 relates to the business closures that were imposed as a result of the COVID-19 pandemic.

In 2020, there were 5.2 non-fatal injuries leading to four or more days absence from work for every 1,000 male workers, compared with 4.7 per 1,000 female workers. This is in keeping with recent years, with male workers experiencing higher injury rates than female workers in four of the five years since 2016.

The most common kinds of injury for both males and females were wounds or superficial injuries (6.2 per 1,000 workers) and dislocation, sprain or strain (6.1 per 1,000 workers).

Female workers had higher rates of work-related illnesses than male workers. In 2020 the rate of work-related illness for female workers was 14.5 per 1,000 workers, compared with 12.3 per 1,000 workers for male workers. Female workers have had higher rates of illness in four of the five years since 2016.

The most common work-related illnesses are bone, joint or muscle problems; followed by stress, depression or anxiety.

The Mid-East region of Kildare, Meath, Wicklow and Louth had the highest rates of work-related injuries (29.7 per 1,000 workers), while the South-East region of Carlow, Kilkenny, Wexford and Waterford had the highest rates of work-related illnesses (34.8 per 1,000 workers).

#### **Fatal Incidents**

There were 38 work-related fatal incidents in 2021. This is the lowest number of fatal incidents of any year since the foundation of the Authority in 1989. The previous lowest number of fatal incidents occurred in 2018 (with 39 fatal incidents occurring that year).

Of the 38 work-related fatal incidents in 2021, 11 (29%) occurred in Agriculture, Forestry and Fishing alone, while 10 (26%) occurred in Construction. For Agriculture, Forestry and Fishing, this follows a similar pattern to recent years, with almost half of all fatal incidents in the five-year period since 2017 occurring in this sector. However, the 11 fatal incidents in 2021 represented the lowest recorded number of fatal incidents in Agriculture, Forestry and Fishing (and was less than half that recorded in 2020).

Half of all fatal incidents in 2021 occurred to employees (19), with 13 fatalities occurring to self-employed people, four to non-workers and two to family workers. More fatal incidents occurred to self-employed people than employees in seven of the ten years from 2012 to 2021.

Fatal incidents happened to victims from all age groups, but the highest number involved people aged 65 years and over (Nine, 24%). Five of these victims aged 65 years and older were in Agriculture, Forestry and Fishing, with two in Construction and two in Transportation and Storage. The proportion of fatal incidents involving older victims aged 65 years or more has increased from 7% in 1990 (the first full year for which the Authority holds data), to 24% in 2021.

11 fatal incidents in 2021 were caused by falls from height (29%), 11 as a result of loss of control of means of transport (29%) while four occurred due to falling objects (11%).

All but one of the 38 victims of fatal incidents were male. The female victim was a non-worker.

Other NACE Activities comprises the NACE economic sectors R – Arts, Entertainment and Recreation, S – Other Service Activities, T – Activities of Households as Employers and U – Activities of Extraterritorial Organisations and Bodies.



# Introduction

The Health and Safety Authority's Annual Review of Workplace Injury, Illness and Fatality Statistics presents the most recently available data on work-related fatalities, injuries and illnesses in Ireland. There are three key sources of this data: 1) the Authority maintains a database of non-fatal incidents reported to it, 2) the Authority has a comprehensive register of all work-related incidents resulting in a fatality and 3) the Central Statistics Office (CSO) gathers data on work-related injury and illness as a module in its Labour Force Survey (LFS). However, there are limitations to this data. The HSA database of non-fatal incidents is limited due to under-reporting in certain sectors. The CSO data, on the other hand, is derived from a survey that contains less detailed information and for which the sample size is small.<sup>2</sup> As a result, the number of respondents reporting work-related injuries and illnesses in some economic sectors can be very low.

#### **Data Sources and Methodology**

#### **HSA Non-Fatal Incident Data**

HSA data on fatal and non-fatal incidents in this report pertains to 2021. The Authority collects data on incidents at work as part of its requirement to comply with the Framework Directive 89/391/EEC (1) on measures to encourage improvements in the safety and health of workers at work. The European Statistics on Accidents at Work (ESAW) methodology<sup>3</sup> specifies the information that is to be collected by the Authority. In addition, under the Safety, Health and Welfare at Work (General Application) Regulations 2016, all employers and self-employed persons are legally obliged to report the injury of an employee as a result of an incident while at work that causes workers to be absent from work for four or more days.

Work-related incidents to non-workers that lead to the victim being taken from the location of the incident for treatment in a medical facility must also be reported to the Authority. Incidents reported in this way include important details such as the trigger (i.e., the cause of the incident) and the type of injury.

However, it is likely that there is a degree of underreporting of work-related incidents in certain sectors, with smaller enterprises and self-employed people less likely to report incidents than larger enterprises. Nonetheless, HSA non-fatal data provides key insights about incidents occurring in Irish workplaces every year.

This year the sample size is 391 including direct and proxies.

Further information on ESAW methodology is available here: https://ec.europa.eu/eurostat/documents/3859598/5926181/KS-RA-12-102-EN.PDF.pdf/56cd35ba-1e8a-4af3-9f9a-b3c47611ff1c?t=1414782641000

Non-fatal incidents are sometimes reported to the Authority months after the incident occurred. This means that the number of incidents reported in this document is subject to change. For example, the number of non-fatal incidents for 2020 was reported as 7,417 in the 2019-2020 Annual Review of Workplace Injury, Illness and Fatality Statistics, but some late reporting of additional incidents has brought this to 8,279 at the time of this report.

# CSO Module on Work-Related Injury and Illness in the Labour Force Survey

Each year the CSO conducts a special module on work-related injuries and illnesses in the Labour Force Survey. Households are surveyed about work-related injuries or illnesses that occurred during the previous 12 months. The most recent survey was carried out in Q1 2021, hence, the data relates to 2020.

This CSO data mainly relates to injuries or illnesses leading to four or more days absence from work, described as 4+ day injuries or illnesses in this review. However, the CSO data also provides some information on injuries and illnesses that involved no loss of work. In this review, Figure 2.12, Figure 2.15, Figure 2.16, Figure 2.17 and Figure 2.18 involve this broader category, described as 0+ day injuries or illnesses.

The CSO survey includes less detailed information regarding the circumstances surrounding the incident than the HSA data on work-related incidents. Although the sample size for this particular module of the LFS is low, it is based on a representative sample of the population and, as such, it sheds light on the incidence of work-related injuries that may be underreported to the Authority. The survey also includes some important information about work-related illnesses.

It should be noted, that the number of respondents to the Labour Force Survey who suffered work-related injuries or illnesses can be very low in certain sectors, therefore results should be interpreted with caution.

#### **HSA Fatal Incident Data**

All fatal work-related incidents reported to the Authority are investigated by inspectors who compile detailed reports and are coded using European Statistics on Accidents at Work (ESAW) methodology.

On occasion, fatal incidents can be notified to the Authority some months after they occur. For example, the victim of an incident can suffer injuries that later lead to death, or a fatal incident may be determined to be work-related some time afterwards.

This means that the number of incidents reported here is subject to change. The number of fatal incidents for 2020 was reported as 53 in the 2019-2020 Annual Review of Workplace Injury, Illness and Fatality Statistics, but late reporting of an additional incident has brought this to 54 at the time of this report.

# CSO Labour Force Survey Working Population

To compare the prevalence of work-related incidents and illnesses in different economic sectors and in different years, rates of work-related incidents and illnesses are calculated as a proportion of workers. For non-fatal incidents and illnesses, the rates are calculated per 1,000 workers, while for fatal incidents the rates are calculated per 100,000 workers. This is because there are many more non-fatal incidents and illnesses than fatal. For example, in 2020 the rate of non-fatal incidents in Construction was 15.5 per 1,000 workers, while the rate of fatal incidents was 11.8 per 100,000 workers.

The CSO's Labour Force Survey gives the number of workers in the economy each quarter, therefore rates have been calculated using the average level of employment across the four quarters of the relevant year.

The methodology used in the Labour Force Survey was revised in 2021 in accordance with European Union regulations. While previous numbers employed were based on workers aged 15 years or over, the revised figures are based on workers aged 15-89 years.<sup>4</sup>

Some changes were also made to the Labour Force Survey questionnaire in 2021 due to the Integration European Social Statistics Framework Regulation, which harmonises the collection of social statistics in EU Member States and came into force on 01 January 2021. These included the addition and removal of some new questions, and changes in terms of response options or frequency.<sup>5</sup>

These changes have led to some small differences between figures reported in previous Annual Reviews of Workplace Injury, Illness and Fatality Statistics and those reported here. For example, the rate of fatal incidents in Agriculture, Forestry and Fishing for the year 2020 was 22.4 per 100,000 workers; the change in the number of workers reported in the Labour Force Survey brings this to 22.5 per 100,000 workers in this report.

<sup>4</sup> Commission Implementing Regulation (EU) 2019/2240: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R2240&from=GA.

<sup>5</sup> Implications of the Implementation of the Integration of European Social Statistics (IESS) Framework Regulation on Labour Market Statistics in Ireland in 2021: https://www.cso.ie/en/releasesandpublications/in/lfs/ implicationsoftheimplementationoftheintegrationofeuropeansocialstatisticsiessframeworkregulationonlabourmarket statisticsinirelandin2021/.



# **Non-Fatal Injury and** Illness Statistics

#### Non-Fatal Injuries Reported to the HSA

In 2021, 8,279 non-fatal injuries were reported to the Authority, an increase of 8% from the 7,652 reported in 2020. This may be due in part to revived economic activity in 2021 following the partial relaxation of COVID-19 restrictions.

Of the 8,279 non-fatal injuries reported in 2021, 97% related to workers. The highest number was reported in the NACE economic sector of Human Health and Social Work Activities, which accounted for over 22% of all incidents. For non-worker incidents, the highest number was reported in Wholesale and Retail Trade (118) representing 46% of all non-worker injuries.

In 2021, **8,279** non-fatal injuries were reported to the Authority,

an increase of 8% from the 7,652 reported in 2020.



Table 2.1:
Injuries reported by economic sector, 2021 (HSA)

	Workers		Non-workers		All	
	#	%	#	%	#	%
Q – Human Health and Social Work Activities	1,838	22.9	19	7.4	1,857	22.4
C - Manufacturing	1,623	20.2	9	3.5	1,632	19.7
G - Wholesale and Retail Trade	1,071	13.3	118	46.1	1,189	14.4
F - Construction	791	9.9	3	1.2	794	9.6
H - Transportation and Storage	705	8.8	38	14.8	743	9.0
0 - Public Administration and Defence	654	8.2	3	1.2	657	7.9
N – Admin and Support Service Activities	400	5.0	1	0.4	401	4.8
P - Education	186	2.3	41	16.0	227	2.7
A – Agriculture, Forestry and Fishing	132	1.6	2	0.8	134	1.6
S - Other Service Activities	104	1.3	1	0.4	105	1.3
E – Water, Sewerage and Waste Management	96	1.2	3	1.2	99	1.2
I – Accommodation and Food Service Activities	89	1.1	3	1.2	92	1.1
M - Professional, Scientific, and Technical	82	1.0	0	0.0	82	1.0
J - Information and Communications	70	0.9	2	0.8	72	0.9
D - Electricity, Gas, Steam and Air Con Supply	40	0.5	0	0.0	40	0.5
L - Real Estate Activities	37	0.5	1	0.4	38	0.5
K - Financial and Insurance Activities	36	0.4	6	2.3	42	0.5
B – Mining and Quarrying	36	0.4	1	0.4	37	0.4
R – Arts, Entertainment and Recreation	33	0.4	5	2.0	38	0.5
Total	8,023	100	256	100	8,279	100



Most victims of non-fatal injuries reported to the Authority were employees (95%).

It is likely that there is a degree of underreporting of incidents by self-employed people and small businesses. There were 256 incidents involving non-workers reported, representing 3% of all injuries.

**Table 2.2:** 

Number of reported non-fatal injuries by employment status, 2021 (HSA)

	#	%
Employee	7,844	94.7
Non-worker	256	3.1
Self-employed	104	1.3
Trainee	56	0.7
Family worker	9	0.1
Employment status unknown	10	0.1
Total	8,279	100.0

The trigger is the term used to describe the cause of an incident. Figure 2.1 shows the top five triggers of nonfatal incidents reported to the Authority in 2021, where a clear trigger was identified. The single most common trigger was manual handling leading to internal injury (2,656, 32%). Slipping or falling led to 2,007 injuries (24%); of these, 81% were falls on the same level while 19% were falls from height. Manual handling and falls together account for over half of all non-fatal injuries reported to the Authority in 2021.

Of the 931 non-fatal incidents involving the loss of control of objects, machines and vehicles, 33% involved the loss of control of vehicles, 23% involved the loss of control of hand-held tools and 19% involved the loss of control of machines.

Figure 2.1 also shows the average number of incidents over the five-year period 2017-2021 for the five most common triggers, with manual handling and falls the most common triggers in recent years.

Figure 2.1: Top five reported non-fatal injuries by trigger, 2021 and five-year average 2017-2021 (HSA)



Figures 2.2a to 2.2f show the top three triggers for the six economic sectors reporting the highest number of non-fatal injuries to the Authority, where a clear trigger was identified.

Manual handling and slipping/falling triggers were among the top two triggers for each of the major economic sectors, with the exception of Public Administration and Defence, where aggression, shock and violence was the second most common trigger.

These incidents involved justice and public order activities, and often involved An Garda Síochána. Aggression, shock and violence was the third most common trigger in Human Health and Social Work Activities, where most incidents occurred in hospitals or other healthcare environments.

#### Figure 2.2a:

Top three reported non-fatal triggers in Human Health and Social Work Activities, 2021 (HSA)

## **Human Health and Social Work Activities**



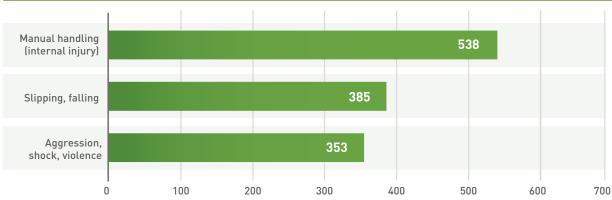


Figure 2.2b:

Top three reported non-fatal triggers in Industry<sup>6</sup>, 2021 (HSA)

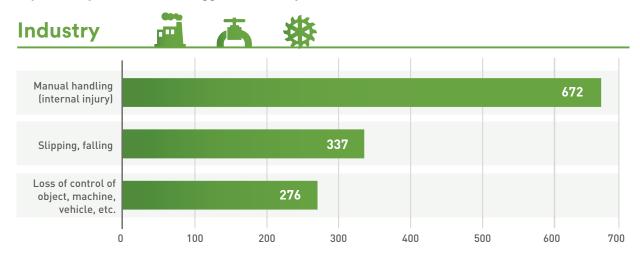


Figure 2.2c:

Top three reported non-fatal triggers in Wholesale and Retail Trade, 2021 (HSA)



<sup>6</sup> Industry represents a combination of four NACE economic sectors: B – Mining and quarrying, C – Manufacturing, D – Electricity, gas, steam and air conditioning supply, and E – Water supply and waste management.

#### Figure 2.2d:

Top three reported non-fatal triggers in Construction, 2021 (HSA)

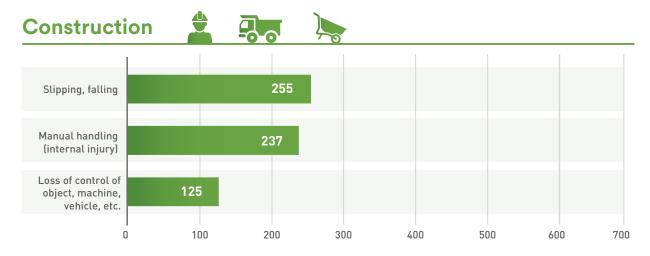


Figure 2.2e:

Top three reported non-fatal triggers in Public Administration and Defence, 2021 (HSA)

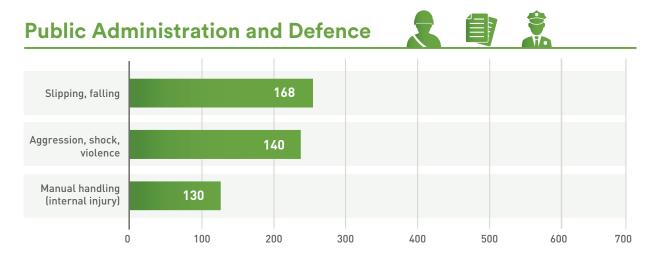


Figure 2.2f:

Top three reported non-fatal triggers in Transportation and Storage, 2021 (HSA)

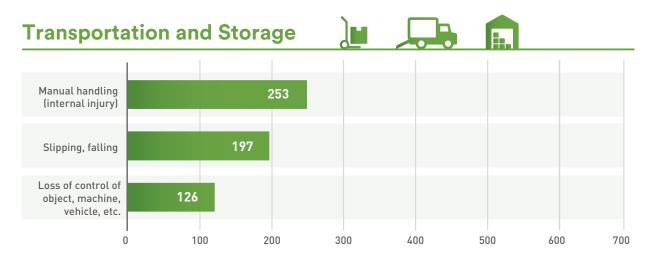
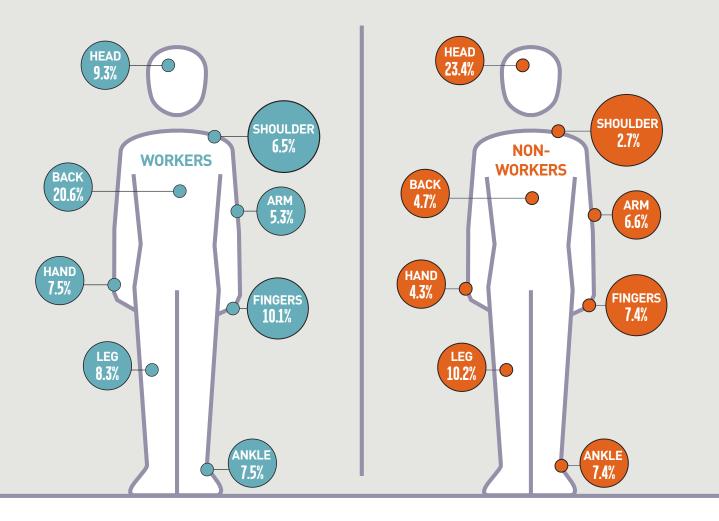


Figure 2.3:

Most injured body parts in workers and non-workers in 2021 (HSA)



The most injured body part for workers in 2021 was the back, associated with 21% of non-fatal incidents reported to the Authority. This is in keeping with recent years, with back injuries comprising 21% of all non-fatal injuries reported to the Authority between 2017 and 2021. Non-fatal back injuries were caused primarily by manual handling incidents.

The most injured body part for non-workers was the head (23%). The most common cause of head injuries in non-workers was falling or slipping, causing the victims to strike their heads.

Most non-fatal incidents reported to the Authority caused fewer than 14 days of work lost. In 2021, almost 60% of all reported non-fatal incidents led to 4-6 days (27%) or 7-13 days (32%) of lost work; this is in keeping with the average for 2017–2021 (Figure 2.4).<sup>7</sup>

<sup>7</sup> The five-year average for each category of days lost was generated by summing the number of days lost in each category for the period 2017-2021 and dividing them by the total number of non-fatal incidents for the same period.

Figure 2.4: Percentage of non-fatal injuries by absence from work, 2021 and five-year average 2017-2021 (HSA)

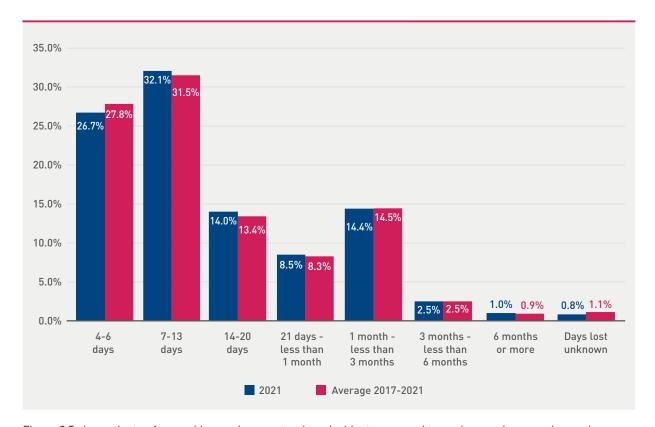
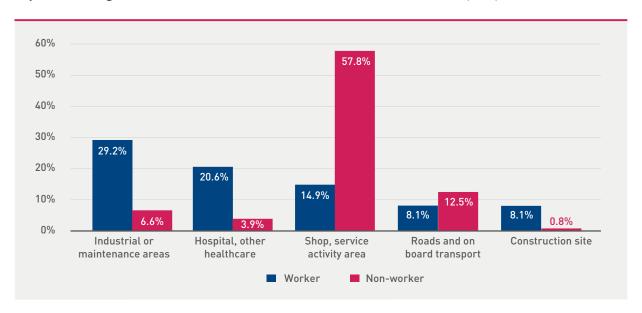


Figure 2.5 shows the top five working environments where incidents occurred to workers and non-workers, where an environment was specified. Among worker victims, 29% of reported non-fatal incidents occurred in industrial or maintenance areas, 21% occurred in hospitals or other healthcare areas and 15% occurred in shop or service activity areas. Most non-worker incidents occurred in shop or service activity areas (58%) or on roads and transport (13%).

Figure 2.5: Top five working environments for worker and non-worker incidents in 2021 (HSA)



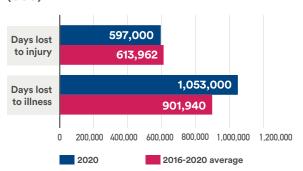
# **CSO Module on Work-Related Injury and Illness** in the Labour Force Survey Results

Each year the CSO undertakes a special module of the Labour Force Survey on work-related injuries and illnesses. The most recent data available for this survey relates to 2020. For 2020, respondents reported 597,000 days lost due to work-related injuries, (as compared with the five year average of 613,962), and 1,053,000 days lost due to work-related illness, up from the fiveyear average of 901,940.

For more details on this data, see Table 4.2 in the Appendix.

#### Figure 2.6:

Days lost due to work-related illnesses and injuries in 2020 and five-year average 2016-2020 (CSO)



In 2020, the NACE economic sector with the highest rate of work-related injuries leading to four or more days of absence from work was Construction (15.5 per 1,000 workers) followed by Human Health and Social Work Activities (9.4 per 1,000 workers) and Industry (6.5 per 1,000 workers).8

Figure 2.7 shows that a number of key economic sectors tend to have had higher rates of injuries in recent years, while sectors like Financial, Insurance and Real Estate Activities (2.0 per 1,000 workers in 2016-2020) and Information and Communication (1.0 per 1,000 workers in 2016-2020) have had broadly lower rates of injury in recent years.

One change is Accommodation and Food Service Activities (0.7 per 1,000 workers in 2020), which experienced a drop in non-fatal injuries from 5.2 per 1,000 workers for 2016-2020. It is likely that these figures were affected by restrictions imposed as a result of the COVID-19 pandemic in 2020.

No non-fatal injuries were reported in Information and Communication in 2020; this means that no respondents to the Labour Force Survey module working in that sector reported work-related injuries leading to four or more days absence from work.9

**NACE** economic sector with the highest rate of work-related injuries leading to

days of absence from work

15.5 Construction



**Human Health and Social Work Activities** 



6.5 Industry

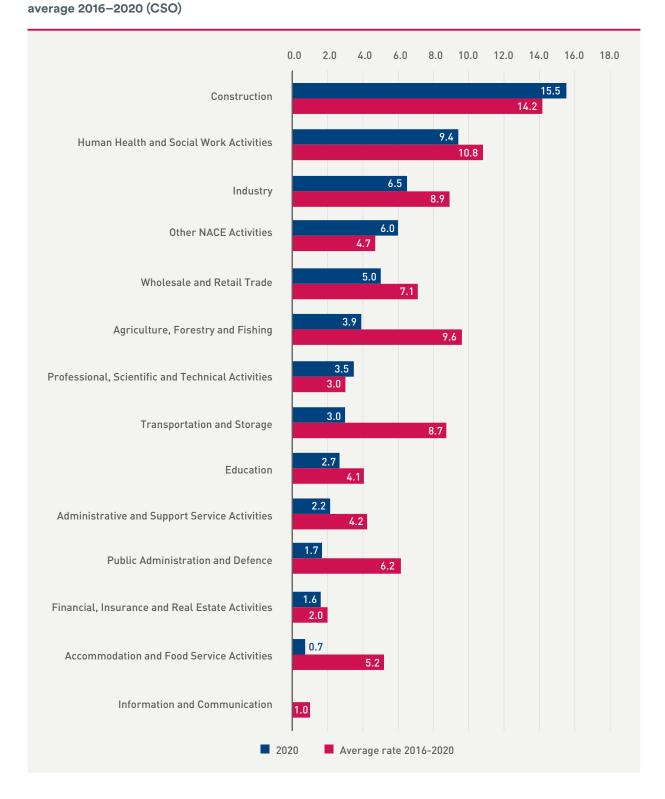


(No per 1,000 workers)

R-U Other NACE Activities is a combination of economic sectors: R - Arts, Entertainment and Recreation, S - Other Service Activities, T - Activities of Households as Employers and U - Activities of Extraterritorial Organisations and Bodies.

Sample size for module (directs and proxies) was 391.

Figure 2.7: Rate of 4+ day work-related injuries per 1,000 workers by NACE economic sector in 2020 and five-year

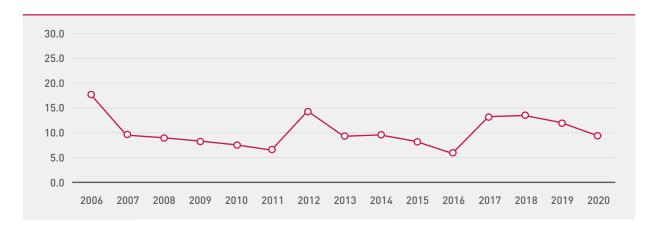




Figures 2.8a to 2.8f show the change in rates of work-related injuries causing four or more days of absence from work since 2006. There can be considerable fluctuation from year to year in some sectors. Note, comparisons between 2020 and 2019 should be interpreted with caution as the 2019 data was derived using the Eurostat special module<sup>10</sup> (which is conducted approx. every seven years) rather than the usual CSO module.

The rate of injuries in Human Health and Social Work Activities fell from 17.8 per 1,000 workers in 2006 to 9.4 per 1,000 workers in 2020.

Figure 2.8a: Rate of 4+ day work-related injuries per 1,000 workers in Human Health and Social Work Activities, 2006 to 2020 (CSO)



<sup>10</sup> The Eurostat module contained some different questions to the usual CSO module. In addition, respondents could only respond on behalf of themselves and not on behalf of others in the household, as is normally the case.



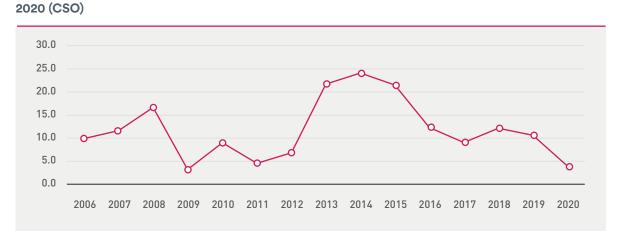
The rate of injuries fell in Construction from 24.4 per 1,000 workers in 2006 to 15.5 per 1,000 workers in 2020.

Figure 2.8b: Rate of 4+ day work-related injuries per 1,000 workers in Construction, 2006 to 2020 (CSO)



The rate of work-related injuries in Agriculture, Forestry and Fishing fell from 9.9 per 1,000 in 2006 to 3.9 per 1,000 workers in 2020.

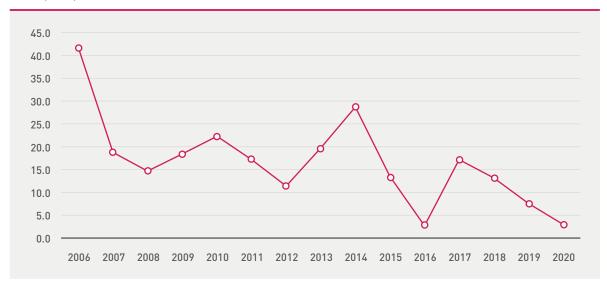
Figure 2.8c: Rate of 4+ day work-related injuries per 1,000 workers in Agriculture, Forestry and Fishing, 2006 to



The rate of work-related injuries in Transportation and Storage fell from 41.6 per 1,000 workers in 2006 to 3.0 per 1,000 workers in 2020.

Figure 2.8d:

Rate of 4+ day work-related injuries per 1,000 workers in Transportation and Storage, 2006 to 2020 (CSO)



The rate of work-related injuries in Industry fell from 15.7 per 1,000 workers in 2006 to 6.5 per 1,000 workers in 2020.

Figure 2.8e:

Rate of 4+ day work-related injuries per 1,000 workers in Industry, 2006 to 2020 (CSO)

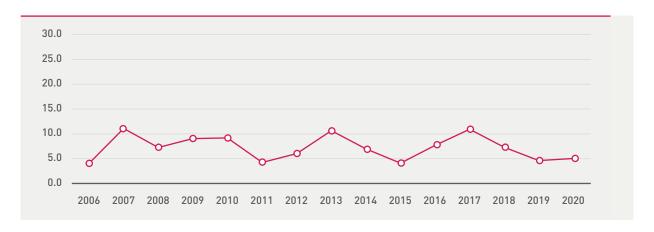


<sup>11</sup> Industry represents a combination of four NACE economic sectors: Mining and quarrying, Manufacturing, Electricity, Gas, Steam and Air Conditioning Supply, and Water Supply and Waste Management.

The rate of work-related injuries in Wholesale and Retail Trade rose from 4.1 per 1,000 workers in 2006 to 5.0 per 1,000 workers in 2020.

Figure 2.8f:

Rate of 4+ day work-related injuries per 1,000 workers in Wholesale and Retail Trade, 2006 to 2020 (CSO)



In 2020, male workers reported more work-related injuries leading to four or more days of absence from work (5.2 per 1,000 workers) than female workers (4.7 per 1,000 workers). This is in keeping with the five-year average for 2016-2020, in which male victims had higher rates of work-related injury.

Figure 2.9:

Rate of 4+ day work-related injuries per 1,000 workers by gender in 2020 and five-year average 2016-2020 (CSO)

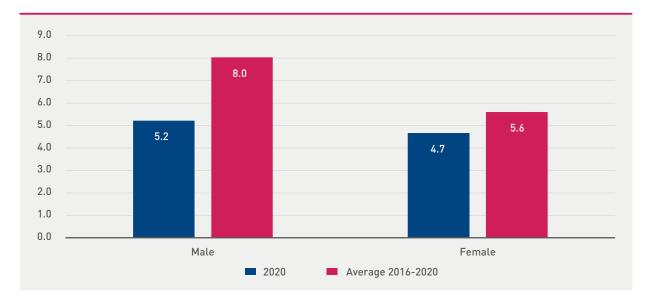
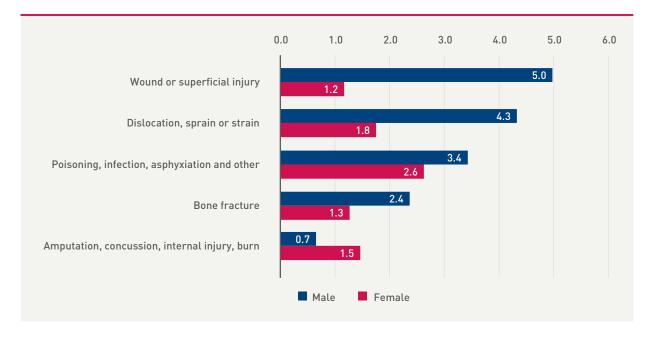




Figure 2.10 shows the kinds of injuries experienced by male and female workers. Male workers had higher rates of injury for each of the categories compared with female workers, with the exception of amputations, concussions, internal injuries and burns.

**Figure 2.10:** Rate of 0+ day work-related injuries per 1,000 workers by gender and injury type in 2020 (CSO)

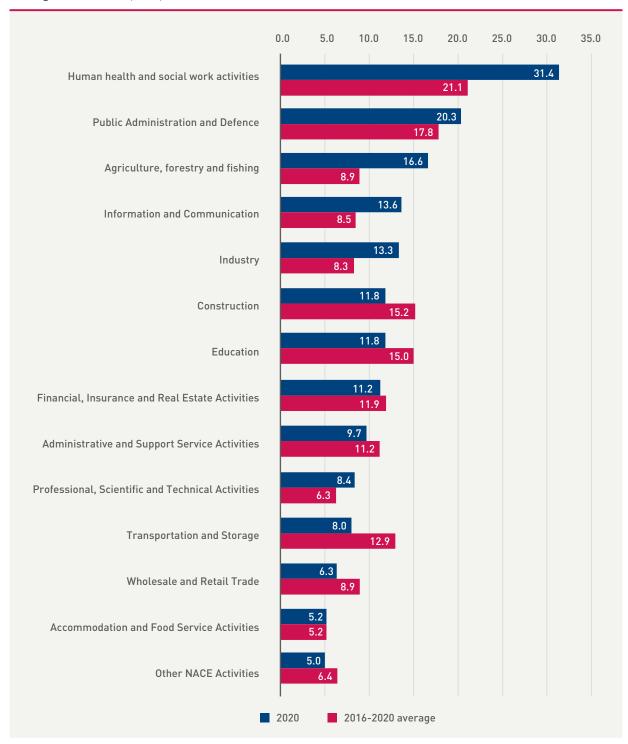


In 2020, the NACE economic sector with the highest rate of work-related illnesses leading to four or more days of absence from work was Human Health and Social Work Activities (31.4 per 1,000 workers), followed by Public Administration and Defence (20.3 per 1,000 workers) and Agriculture, Forestry and Fishing (16.6 per 1,000 workers).12

For other sectors, the rate of work-related illness was broadly in keeping with recent years. Human Health and Social Work Activities has been among the five sectors with the highest rates of work-related illness each year since 2016, while Public Administration and Defence has been among the five sectors with the highest rates of work-related illness in four of the five years between 2016 and 2020.

Figure 2.11:

Rate of 4+ day work-related illnesses per 1,000 workers by NACE economic sector in 2020 and five-year average 2016-2020 (CSO)

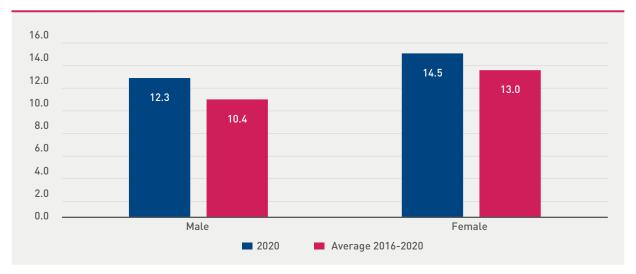


<sup>12</sup> R-U Other NACE Activities is a combination of economic sectors: R - Arts, Entertainment and Recreation, S - Other Service Activities, T – Activities of Households as Employers and U - Activities of Extraterritorial Organisations and Bodies.

In 2020, female workers had higher rates of illness (14.5 per 1,000 workers) than male workers (12.3 per 1,000 workers). This is in keeping with the five-year average for 2016–2020.

Figure 2.12:

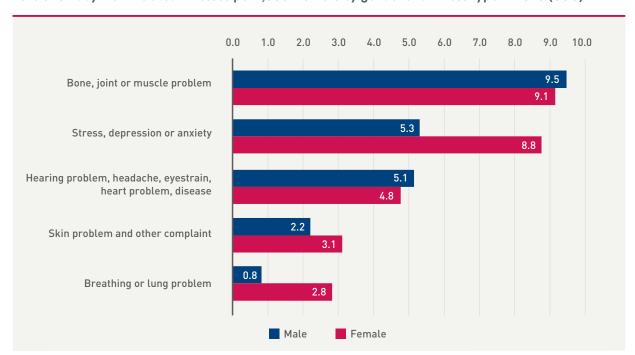
Rate of 4+ day work-related illnesses per 1,000 workers by gender in 2020 and five-year average 2016–2020 (CSO)



In 2020, female workers had higher rates of three of the five kinds of work-related illness, most notably stress, depression or anxiety (8.8 per 1,000 workers), compared with male workers (5.3 per 1,000 workers). Female workers also had noticeably higher rates of breathing or lung problems (2.8 per 1,000 workers), compared with male workers (0.8 per 1,000 workers).

Figure 2.13:

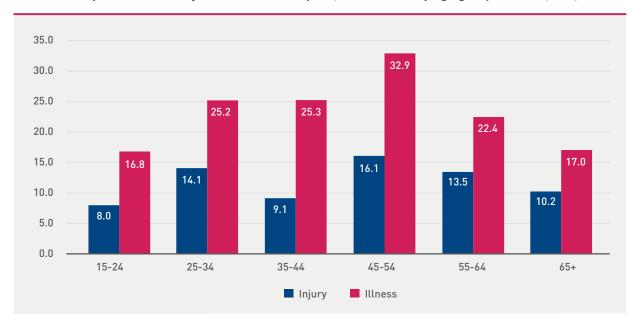
Rate of 0+ day work-related illnesses per 1,000 workers by gender and illness type in 2020 (CSO)



Rates of work-related injury were highest for the 45-54 years group (16.1 per 1,000 workers).

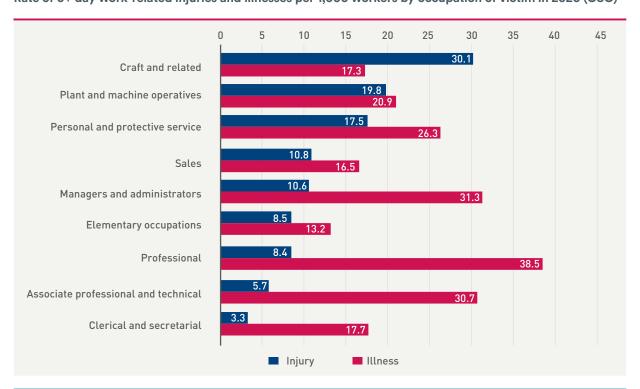
The highest rate of work-related illness also occurred to the 45-54 years group (32.9 per 1,000 workers).

**Figure 2.14:** Rate of 0+ day work-related injuries and illnesses per 1,000 workers by age group in 2020 (CSO)



The highest rate of injuries involved Craft and related workers (30.1 per 1,000 workers). The highest rate of illnesses involved professional workers (38.5 per 1,000 workers).13

Rate of 0+ day work-related injuries and illnesses per 1,000 workers by occupation of victim in 2020 (CSO)



<sup>13</sup> For more information see ONS Standard Occupational Classification 2010: https://www.ons.gov.uk/methodology/ classifications and standards/standard occupational classifications oc/soc 2010.



The highest rates of injury in 2020 were in the Mid-East region of Kildare, Meath, Wicklow and Louth (29.7 per 1,000 workers), while the lowest rates of injury were in the Border region of Donegal, Sligo, Leitrim, Monaghan and Cavan (6.5 per 1,000 workers).

The highest rates of illness in 2020 were in the South-East region of Carlow, Kilkenny, Wexford and Waterford (34.8 per 1,000 workers), while the lowest rates of illness were in the Midlands region of Laois, Longford, Offaly and Westmeath (12.0 per 1,000 workers).

**Table 2.3:** 

Rate of 0+ day work-related injuries and illnesses per 1,000 workers by NUTS region in 2020 (CSO)

	Injury `	Illness
Mid-East	29.7	26.4
Mid-West	29.1	23.8
Midlands	24.1	12.0
South-East	18.2	34.8
Dublin	17.9	32.7
South-West	16.6	17.5
West	13.5	16.3
Border	6.5	22.0



# **Fatal Injury Statistics**

## There were 38 fatal work-related incidents in Ireland in 2021.

Of these, 34 involved worker victims and four involved non-worker victims. This is the lowest number of fatal incidents recorded in any year since the foundation of the Authority in 1989. Figure 3.1 shows that the rate of fatal incidents to workers has fallen from 3.8 per 100,000 workers in 1998 (the first year for which CSO employment survey data is available) to 1.4 per 100,000 workers in 2021, which is the lowest rate on record.

Figure 3.1: Rate of fatal work-related incidents per 100,000 workers, 1998-2021



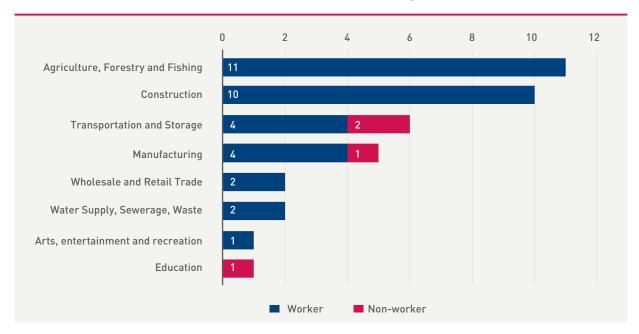


# The largest number of fatal incidents occurred in Agriculture, Forestry and Fishing

The largest number of fatal incidents occurred in Agriculture, Forestry and Fishing (11 workers), accounting for 29% of all fatal incidents in 2021. Ten fatal incidents occurred to workers in Construction. Fatal incidents occurred to four workers and two non-workers in Transportation and Storage, and four workers and one non-worker in Manufacturing.

Figure 3.2:

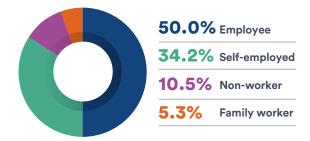
Number of fatal work-related incidents to workers and non-workers by NACE economic sector 2021 (HSA)



Of the 38 work-related fatal incident victims, 19 (50%) were employees, 13 were self-employed (34%), two were family workers (5%) and four were non-workers (11%).

Figure 3.3:

Percentage of fatal work-related incidents by employment status of victim, 2021 (HSA)

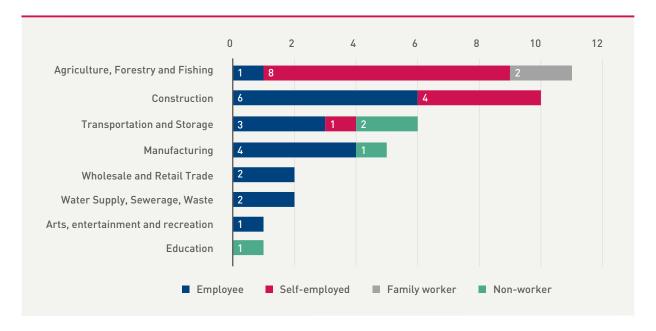


Almost three in every four work-related fatal incident victims in Agriculture, Forestry and Fishing were self-employed (eight, 73%). Four victims in Construction were self-employed (40%) and six were employees (60%). Altogether, work-related fatal incidents involved non-workers in three economic sectors.

For more details on fatal incidents by economic sector in each year from 2012 to 2021, see Figure 4.3 in the Appendix.

Figure 3.4:

Number of fatal work-related incidents by employment status of victim and NACE economic sector, 2021 (HSA)



Figures 3.5a to 3.5d show the trend of fatal incident rates per 100,000 workers in four key economic sectors since 1998.

While the rate of fatal incidents in Agriculture, Forestry and Fishing increased during the 2010s, the lowest rate of fatal incidents occurred in 2021 (10.3 per 100,000 workers).

Figure 3.5a: Rate of fatal work-related incidents per 100,000 workers in Agriculture, Forestry and Fishing,

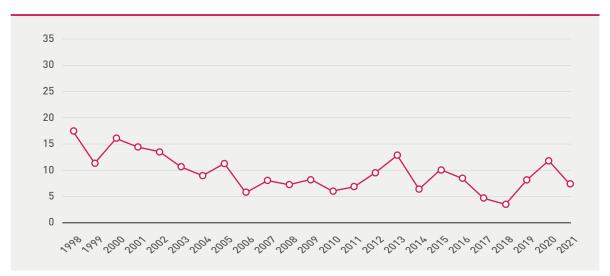




The rate of fatal incidents per 100,000 workers in Construction has fallen from 17.4 per 100,000 workers in 1998 to 7.2 per 100,000 workers in 2021.

Figure 3.5b:

Rate of fatal work-related incidents per 100,000 workers in Construction, 1998-2021 (HSA)



The rate of fatal incidents per 100,000 workers in Transportation and Storage has fluctuated over time, rising from 3.0 per 100,000 in 1998 to 5.9 per 100,000 in 2021.

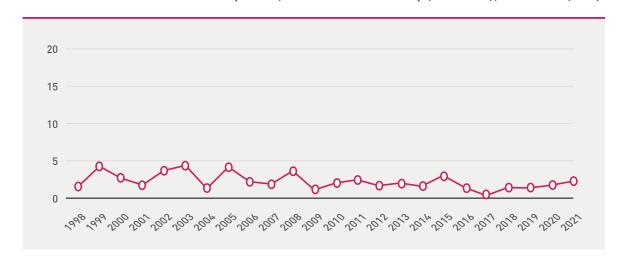
Figure 3.5c:

Rate of fatal work-related incidents per 100,000 workers in Transportation and Storage, 1998–2021 (HSA)



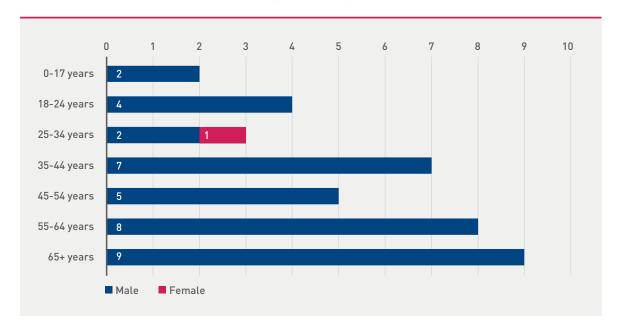
The rate of fatal incidents per 100,000 workers in Industry has remained broadly stable over time, from 1.6 per 100,000 workers in 1998 to 2.3 per 100,000 workers in 2021.

Figure 3.5d: Rate of fatal work-related incidents per 100,000 workers in Industry (NACE B-E), 1998-2021 (HSA)



Of 38 fatal incidents in 2021, 37 occurred to male victims and one occurred to a female victim. The female victim was a non-worker; this fatal incident occurred in the Transportation and Storage sector. Figure 3.6 shows the age bands and gender of victims. Just under one in two fatal incidents involved victims aged 55 years or more, with eight victims aged 55-64 years (21%) and nine victims aged 65 years or more (24%).

Figure 3.6: Number of fatal work-related incidents by gender and age band, 2021 (HSA)



Four fatal incidents occurred to non-workers in 2021; one of these was aged 18-24 years, one aged 25-34 years, one aged 45-54 years and one aged over 65 years.

Figure 3.7:

Number of fatal work-related incidents to workers and non-workers by age band, 2021 (HSA)



Of the 38 fatal incidents in 2021, nine (24%) occurred to victims aged 65 years or more. This age group was particularly prominent in Agriculture, Forestry and Fishing, where five (45%) fatal incidents occurred to victims aged 65 years or more. By comparison, in Construction two fatal incidents (20%) occurred to victims aged 65 years or more.

It is notable that the nine fatal incidents occurring to victims aged 65 years or more in 2021 represented a considerable decrease compared with 2020, when 19 fatal incidents occurred, or 2019, when 16 fatal incidents occurred involving this age group.

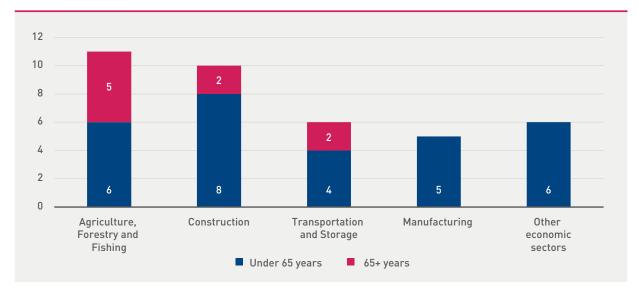
In Agriculture, Forestry and Fishing, the number of fatal incidents occurring to victims aged 65 years or more fell from 12 in 2020 to five in 2021.

For more details on the age of fatal incident victims in each economic sector, see Figure 4.5 in the Appendix.

Of the 38 fatal incidents in 2021, nine (24%) occurred to victims aged 65 years or more.

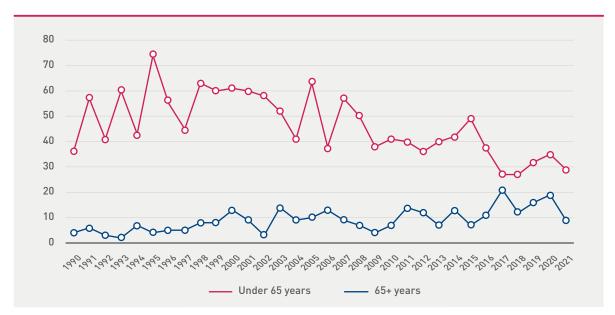
Figure 3.8:

Number of fatal work-related incidents in key NACE economic sectors involving victims aged under 65 years and 65 years or more, 2021 (HSA)



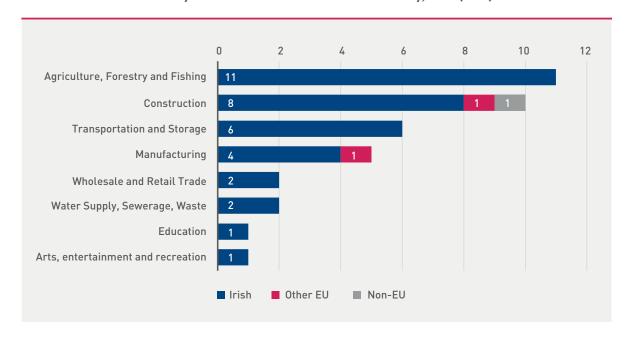
There has been a change in the average age of victims over time. Figure 3.9 shows the number of all fatal incidents occurring to victims aged 65 years or more each year since 1990.14 This shows an increase from four (7%) victims aged 65 years or more in 1990 to nine (24%) in 2020, while the number of fatal incidents to younger victims declined. It is likely that this is influenced by the ageing of the Irish workforce; the proportion of workers aged 55 years or over has increased from 10% in 1998 to 19% in 2021.15

Figure 3.9: Number of fatal incidents occurring to victims aged 65 years or more each year, 1990-2021 (HSA)



Of the 38 fatal incidents in 2021, two occurred to victims from other European Union countries and one occurred to a victim from outside the EU. The fatal incident rate to Irish workers was 1.6 per 100,000 workers, while the rate for other workers was 0.7 per 100,000 workers.

Figure 3.10: Number of fatal incidents by NACE economic sector and nationality, 2021 (HSA)



<sup>14</sup> Age of victim was unknown for a small number of fatal incidents, primarily in the early 1990s.

<sup>15</sup> Central Statistics Office, Labour Force Survey QLF18 - ILO Participation, Employment and Unemployment Characteristics: https:// data.cso.ie/table/QLF18.

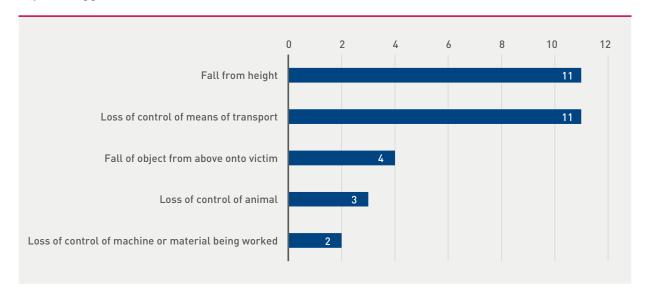


# The most common trigger associated with fatal incidents in 2021 was fall from height

The trigger is the abnormal event that causes an incident. The most common triggers associated with fatal incidents in 2021 were fall from height (11, 29%), loss of control of means of transport (11, 29%), and fall of object from above onto victim (Four, 11%). For details on triggers associated with fatal incidents in each NACE economic sector, see Figure 4.7 of the Appendix.

Figure 3.11:

#### Top five triggers involved in fatal incidents, 2021 (HSA)

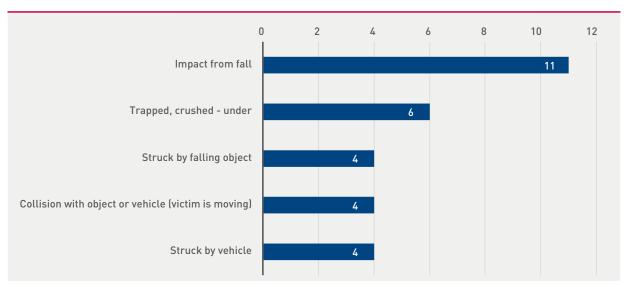


While trigger describes the cause of an incident, the mode of injury describes how the victim became injured. The most common modes of injury were impacts from falls (11, 29%) and trapping or crushing under an object (Six, 16%).

For details on modes of injury associated with fatal incidents in each NACE economic sector, see Figure 4.8 of the Appendix.

**Figure 3.12:** 

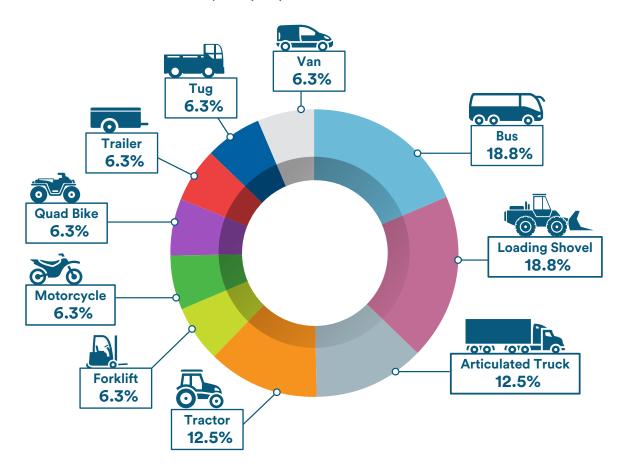
### Top five modes of injury involved in fatal incidents, 2021 (HSA)



In 2021, 16 of the 38 fatal incidents involved vehicles. 16 Figure 3.13 shows the vehicles involved in these incidents. Buses were involved in three fatal incidents (19% of all fatal incidents involving vehicles), and loading shovels were also involved in three fatal incidents. Articulated trucks and tractors were each involved in two fatal incidents, while forklifts, motorcycles, quad bikes, trailers, tugs and vans were each involved in one fatal incident.<sup>17</sup>

**Figure 3.13:** 

Vehicles involved in fatal incidents, 2021 (HSA)



<sup>16</sup> These include fatalities that occurred as a result of loss of control of vehicles and victims being struck or crushed by vehicles.

<sup>17</sup> For more information on work-related deaths involving vehicles, see A Review of Work-Related Deaths Involving Vehicles in Ireland 2010-2019, available: https://www.hsa.ie/eng/publications\_and\_forms/publications/work\_related\_vehicles/work-related-vehicles deaths-2010-2019-report.pdf



## **Appendix**

Table 4.1:

Number and percentage of non-fatal incidents by trigger in selected economic sectors, 2021 (HSA)

	Indu	stry	Constru	uction	Wholes Re	ale and		ortation torage	Public and De		Human and Soci Activ	al Work
	#	%	#	%	#	%	#	%	#	%	#	%
Manual handling (internal injury)	672	37.2	237	29.8	484	40.7	253	34.1	130	19.8	538	29.0
Slipping, falling	337	18.6	255	32.1	330	27.8	197	26.5	168	25.6	385	20.7
Other triggers	241	13.3	76	9.6	101	8.5	54	7.3	83	12.6	351	18.9
Loss of control of object, machine, vehicle, etc.	276	15.3	125	15.7	107	9.0	126	17.0	79	12.0	76	4.1
Aggression, shock, violence	15	0.8	9	1.1	13	1.1	25	3.4	140	21.3	353	19.0
Body movement leads to cut, bruise (external injury)	128	7.1	45	5.7	93	7.8	50	6.7	35	5.3	91	4.9
Breakage or collapse of object	68	3.8	33	4.2	43	3.6	28	3.8	16	2.4	37	2.0
Overflow of gas or liquid, splashing,	64	3.5	10	1.3	11	0.9	2	0.3	5	0.8	20	1.1
Electrical contact, explosions or fire	6	0.3	4	0.5	1	0.1	6	0.8	1	0.2	0	0.0
No information	1	0.1	0	0.0	6	0.5	2	0.3	0	0.0	6	0.3
Total	1,808	100.0	794	100.0	1,189	100.0	743	100.0	657	100.0	1,857	100.0

**Table 4.2:** 

### Number and rate of people suffering injury and illness, 2015–2020 (CSO)

	2015	15	2016		2017	2	2018		2019		2020	0
	#	Rate per 1,000										
Total in employment	2,055,650		2,130,950		2,191,375		2,252,450		2,331,025		2,253,025	
Injury												
Total suffering injury	37,440	18.2	30,800	14.5	49,500	22.6	46,300	20.6	27,200	11.7	27,800	12.3
0–3 days' absence	20,535	10.0	17,600	8.3	26,100	11.9	40,100	17.8	15,300	9.9	16,600	7.4
4+ days' absence	16,905	8.2	13,200	6.2	22,500	10.3	29,500	13.1	12,100	5.2	11,300	5.0
Days lost due to injury	810,899		481,612		884,400		620,800		486,000		597,000	
Illness												
Total suffering illness	41,247	20.1	37,900	17.8	62,000	28.3	61,000	27.1	44,600	19.1	57,300	25.4
0–3 days' absence	22,793	11.1	20,800	8.6	32,200	14.7	31,200	13.9	23,800	10.2	27,300	12.1
4+ days' absence	18,454	9.0	17,100	8.0	29,800	13.6	29,800	13.2	20,700	8.9	30,000	13.3
Days lost due to illness	912,595		746,701		1,104,700		822,300		783,000		1,053,000	
Injury and illness												
Total injury or illness	78,687	38.3	68,700	32.2	111,500	50.9	107,300	47.6	71,800	30.8	85,100	37.8
Total (4+ days' absence)	35,359	17.2	30,300	14.2	52,300	23.9	59,300	26.3	32,800	14.1	41,300	18.3
Total days lost	1,723,495		1,228,312		1,989,100		1,443,100		1,269,000		1,650,000	

Table 4.3:

Number of reported fatal incidents to workers and non-workers by NACE economic sector, 2012–2021 (HSA)

				Nur	nber of fa	ital incide	ents				Total
Economic sector	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2012-2021
Agriculture, Forestry and Fishing	28	21	33	24	26	27	20	23	23	11	236
- Agriculture	20	16	32	18	21	25	15	20	20	10	197
- Forestry	1	0	0	1	1	0	1	0	0	1	5
- Fishing	7	5	1	5	4	2	4	3	3	0	34
Mining and Quarrying	1	2	0	2	1	0	0	0	0	0	6
Manufacturing	0	1	3	3	2	0	2	2	4	5	22
Electricity, Gas, etc.	0	1	1	0	0	0	0	0	0	0	2
Water, Sewerage, Waste	3	1	0	3	1	1	2	2	1	2	16
Construction	8	11	6	11	10	6	5	12	16	10	95
Wholesale and Retail Trade	3	3	5	3	2	3	2	1	4	2	28
Transportation and Storage	2	4	3	3	1	5	8	6	2	6	40
Accommodation and Food Service Activities	0	0	0	0	0	1	0	0	1	0	2
Information and Communication	0	0	0	0	0	0	0	1	0	0	1
Financial and Insurance Activities	0	0	0	0	0	0	0	0	0	0	0
Real Estate Activities	0	0	0	0	0	0	0	0	0	0	0
Professional, Scientific and Technical Activities	1	1	1	0	0	0	0	0	0	0	3
Administrative and Support Service Activities	1	0	2	0	2	0	0	1	0	0	6
Public Administration and Defence	0	0	0	4	1	5	0	0	1	0	11
Education	0	1	0	0	0	0	0	0	0	1	2
Human Health and Social Work Activities	1	0	0	2	1	0	0	0	0	0	4
Arts, Entertainment and Recreation	0	0	1	1	1	0	0	0	2	1	6
Other Service Activities	0	1	0	0	0	0	0	0	0	0	1
Total	48	47	55	56	48	48	39	48	54	38	481

**Table 4.4:** 

Number and rate of reported fatal incidents by NACE economic sector and employment status of victim, 2021 (HSA)

			Worker	•			Non-worker	Total
	Employee	Self- employed	Family worker	Trainee	Total	Worker rate per 100,000		
Agriculture, Forestry and Fishing	1	8	2	0	11	10.3	0	11
Industry (NACE B-E)	6	0	0	0	6	1.9	1	7
Construction	6	4	0	0	10	7.2	0	10
Transportation and Storage	3	1	0	0	4	3.9	2	6
Wholesale and Retail Trade	2	0	0	0	2	0.7	0	2
Other NACE activities (R to U)	1	0	0	0	1	1.0	0	1
Education	0	0	0	0	0	0.0	1	1
Total	19	13	2	0	34	1.4	4	38

**Table 4.5:** Number of reported fatal incidents by NACE economic sector and age band of victim, 2021 (HSA)

	0-17	18-24	25-34	35-44	45-54	55-64	65+	
	years	Total						
Agriculture, Forestry and Fishing	1	0	0	3	1	1	5	11
Construction	0	0	0	3	1	4	2	10
Transportation and Storage	0	1	1	0	1	1	2	6
Manufacturing	1	1	1	1	1	0	0	5
Water, Sewerage, Waste	0	1	0	0	0	1	0	2
Wholesale and Retail Trade	0	0	1	0	0	1	0	2
Education	0	0	0	0	1	0	0	1
Arts, Entertainment and Recreation	0	1	0	0	0	0	0	1
Total	5.3%	10.5%	7.9%	18.4%	13.2%	21.1%	23.7%	100.0%
	2	4	3	7	5	8	9	38

**Table 4.6:** 

Reported worker fatal incident rates per 100,000 workers by nationality, 2014-2021 (HSA)

	2014	2015	2016	2017	2018	2019	2020	2021
Irish	2.5	2.7	1.9	2.2	1.3	1.9	2.0	1.6
Non-Irish	1.4	1.0	3.2	0.6	2.5	1.3	0.8	0.7
All workers	2.3	2.4	2.1	1.9	1.5	1.8	1.8	1.4

**Table 4.7:** 

Number of reported fatal incidents by NACE economic sector and trigger, 2021 (HSA)

	Agriculture, Forestry and Fishing	Construction	Transportation and Storage	Manufacturing	Wholesale and Retail Trade	Water Supply, Sewerage, Waste	Arts, entertainment and recreation	Education	Total	% of total
Fall from height	2	7	1	1	0	0	0	0	11	29%
Loss of control of means of transport	3	2	3	1	1	1	0	0	11	29%
Fall of object from above onto victim	2	1	1	0	0	0	0	0	4	11%
Other trigger	0	0	1	1	0	1	0	0	3	8%
Loss of control of animal	2	0	0	0	0	0	1	0	3	8%
Loss of control of machine	0	0	0	1	0	0	0	1	2	5%
Body movement leading to external injury	0	0	0	1	0	0	0	0	1	3%
Breakage of material at joint	0	0	0	0	1	0	0	0	1	3%
Other loss of control	1	0	0	0	0	0	0	0	1	3%
Attack by animal	1	0	0	0	0	0	0	0	1	3%
Total	11	10	6	5	2	2	1	1	38	100%

**Table 4.8:** 

Number of reported fatal incidents by NACE economic sector and mode of injury, 2021 (HSA)

	Agriculture, Forestry and Fishing	Construction	Transportation and Storage	Manufacturing	Wholesale and Retail Trade	Water Supply, Sewerage, Waste	Arts, entertainment and recreation	Education	Total	% of total
Impact from fall	2	7	1	1	0	0	0	0	11	29%
Trapped, crushed - under	4	1	0	0	0	1	0	0	6	16%
Struck by falling object	2	0	2	0	0	0	0	0	4	11%
Collision with an object/ vehicle (victim is moving)	1	0	0	1	0	1	0	1	4	11%
Struck by vehicle	0	1	1	1	1	0	0	0	4	11%
Other modes of injury	0	0	1	1	1	0	0	0	3	8%
Trapped, crushed - between	0	1	1	0	0	0	0	0	2	5%
Blow, kick, head butt	1	0	0	0	0	0	1	0	2	5%
Limb or finger torn or cut off	0	0	0	1	0	0	0	0	1	3%
Other contact with sharp or rough material	1	0	0	0	0	0	0	0	1	3%
Total	11	10	6	5	2	2	1	1	38	100%

**Table 4.9:** Rate of reported fatal incidents per 100,000 workers by NUTS region 2014-2021 (HSA)<sup>18</sup>

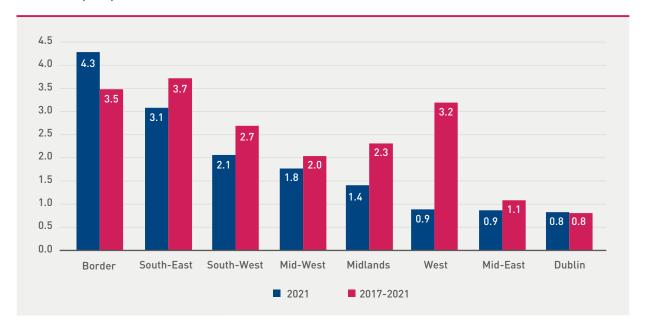
	2014	2015	2016	2017	2018	2019	2020	2021
Border	5.5	8.1	3.4	3.4	4.0	1.7	4.2	4.3
South-East	4.2	4.0	3.3	4.9	1.1	5.8	3.8	3.1
West	3.3	4.3	2.1	4.5	3.4	3.7	3.7	0.9
South-West	3.8	3.7	3.9	2.2	2.5	2.4	4.3	2.1
Mid-West	4.6	4.0	2.9	1.9	1.4	2.3	2.9	1.8
Midlands	1.9	0.9	2.7	3.4	3.2	1.5	2.3	1.4
Mid-East	1.0	1.3	2.3	0.9	0.9	1.5	1.2	0.9
Dublin	1.4	0.5	0.6	0.9	0.7	0.8	0.7	0.8

<sup>18</sup> NUTS - Nomenclature of Territorial Units for Statistics, the EU standard for referencing the subdivisions of countries.



Figure 4.10:

Rate of reported fatal incidents per 100,000 workers by NUTS region in 2021 and five-year average 2017–2021 (HSA)



### References

CSO (2021a) Persons aged 15-89 years in Employment by Sex, NACE Rev 2 Economic Sector, Quarter and Statistic [dataset] QLF03, Central Statistics Office, Ireland, available: https://data.cso.ie/table/QLF03 [accessed 4 April 2022].

CSO (2021b) QLF18: ILO Participation, Employment and Unemployment Characteristics by Age Group, Sex, Quarter and Statistic, Central Statistics Office, available: https://data.cso.ie/table/QLF18 [accessed 3 May <u>2022]</u>.

CSO (2021c) QLF07: Persons aged 15-89 years in Employment by Sex, NACE Rev 2 Economic Sector, Region and Quarter, Central Statistics Office, available: https://data.cso.ie/table/QLF07 [accessed 4 April 2022].

CSO (2021d) QES05: Persons aged 15 years and over in Employment (ILO) by Employment Status, Detailed Occupational Group and Quarter, Central Statistics Office, available: https://data.cso.ie/table/QES05 [accessed 4 April 2022].

CSO (2021e) QLF34: Persons aged 15 years and over in Employment (Thousand) by NACE Rev, Quarter and Nationality, Central Statistics Office, available: <a href="https://data.cso.ie/table/QLF34">https://data.cso.ie/table/QLF34</a> [accessed 4 April 2022].

Eurostat (2013) European Statistics on Accidents at Work (ESAW) methodology, 2013 Edition, Luxembourg: Eurostat.

Health and Safety Authority (2022) Programme of Work, 2022, Dublin: HSA, available: https://www.hsa.ie/ eng/publications\_and\_forms/publications/corporate/programme-of-work-2022.pdf.

Health and Safety Authority (2021) A Review of Work-Related Deaths Involving Vehicles in Ireland 2010-2019, Dublin: HSA, available: https://www.hsa.ie/eng/publications\_and\_forms/publications/work\_related\_ vehicles/work-related-vehicle-deaths-2010-2019-report.pdf.

ONS (2010) Standard Occupational Classification 2010: volume 1, Office for National Statistics. Palgrave Macmillan, available: <a href="https://www.ons.gov.uk/methodology/classificationsandstandards/">https://www.ons.gov.uk/methodology/classificationsandstandards/</a> standardoccupationalclassificationsoc/soc2010.

Pretalk, I., Russell, H. and Maître, B. (2019) The Ageing Workforce in Ireland; Working Conditions, Health and Extending Working Lives, Dublin: Economic and Social Research Institute, available: https://www.hsa. ie/eng/publications and forms/publications/corporate/esri report 2019.pdf.

### **Our Vision:**

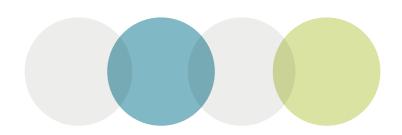
Healthy, safe and productive lives and enterprises



**Health and Safety Authority** 

Tel: 0818 289 389

www.hsa.ie



HSA Part No. HSA0516 ISBN 978-1-84496-290-7