



HEALTH AND SAFETY
AUTHORITY



Summary of Workplace
Injury, Illness and Fatality
Statistics 2006-2007

2007

Working to create a
National Culture of
Excellence in Workplace
Safety, Health and
Welfare for Ireland

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1. Introduction

1.1 Introduction to the Summary of Statistics 2006–2007

The purpose of the Authority's annual Summary of Statistics is to make information about reported incidents accessible to a wide readership, by summarising data in tables and graphs and providing basic interpretations.

Each year the content of the Summary is revised in response to feedback from users. This year additional information showing the breakdown of fatal and non-fatal injuries by gender is included. Comparison with injury and fatality rates in other European Member States (dealt with as a Special Topic in the Summary of Statistics 2005–2006) is included in the main text of the report this year.

There are two Special Topics in this Summary. The first presents a summary of occupational disease data collected through the THOR Ireland network (The Health and Occupation Reporting network). This network has been administered by the School of Medicine at the University of Manchester since 2005, and has been funded by the Authority since the beginning of 2007. The THOR system facilitates voluntary reporting of occupational diseases by dermatologists, respiratory physicians and occupational physicians. The Topic includes an account of the development of THOR Ireland, together with results from the period 2005 to 2007 and outline plans for the future growth of the network. The Authority is concerned that the current lack of occupational disease data limits preventive potential as there is very little evidence on which to base occupational health interventions and campaigns. Another driver in this area is the proposed European Commission regulation to make it a legal requirement for Member States to report occupational disease data to the Commission on an annual basis – the various interested agencies in Ireland must develop an approach to meet these legal obligations.

The second Special Topic presents information on an impact assessment study that was commissioned by the Authority in 2007 to evaluate the impact of the work at height campaign over the last decade. The results indicate that the Authority's cumulative efforts contributed to a reduction in the fall-from-height accident rate. The report also estimates that significant economic benefits have accrued due to the improved performance in relation to working at height. The research demonstrates the importance of maintaining high-quality databases so that progress may be monitored and successful actions may be replicated.

Users of the Authority's statistical outputs can expect to see significant changes in the presentation of data for 2008 onwards due to the revision of the NACE classification system (for classifying the economic activity of the employer), which has been updated to reflect developments in economic activity. Regulation (EC) No. 973/2007 made it a legal requirement for all Member States to implement the new NACE codes from 1 January 2008. The top-level changes are presented in Table 1.1 below.



Figure 1.1: Comparison of NACE Rev.1 and NACE Rev.2 classification

	NACE Revision 1		NACE Revision 2
A	Agriculture, hunting and forestry	A	Agriculture, forestry and fishing
B	Fishing		Removed
C	Mining and quarrying	B	Mining and quarrying
D	Manufacturing	C	Manufacturing
E	Electricity, gas and water supply	D	Electricity, gas, steam and air conditioning supply
	New	E	Water supply; sewerage, waste management and remediation activities
F	Construction	F	Construction
G	Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household services	G	Wholesale and retail trade; repair of motor vehicles and motorcycles
H	Hotels and restaurants	I	Accommodation and food service activities
I	Transport, storage and communication	H	Transportation and storage
	New	J	Information and communication
J	Financial intermediation	K	Financial and insurance activities
K	Real estate, renting and business activities	L	Real estate activities
	New	M	Professional, scientific and technical activities
	New	N	Administrative and support service activities
L	Public administration and defence; compulsory social security	O	Public administration and defence; compulsory social security
M	Education	P	Education
N	Health and social work	Q	Human health and social work activities
	New	R	Arts, entertainment and recreation
O	Other community, social and personal service activities	S	Other service activities

The Authority's reporting systems and databases were adapted on 1 January 2008, with the result that data for reference year 2008 will be recorded and presented using the NACE Rev.2 codes. The fatality statistics for 2008 on the Authority's website are already presented under the revised classification. Further details of the revision will be provided in the Summary of Statistics 2007–2008.



1.2 Overview of Statistical Trends

Summary of non-fatal injury and illness data

Estimates of work-related injury from the Central Statistics Office (CSO) indicate little change in the annual injury rate since 2003. The rate of injuries causing 4+ days lost from work has consistently been between 11 and 12 cases per 1000 workers for the past four years.

The rate of work-related illness is increasing, according to CSO estimates. The rate of illness causing 4+ days lost from work has risen from 10 cases per 1000 in 2003 to 13 cases per 1000 workers in 2006. Data from the CSO also suggests that illness rather than injury now causes more days' absence from work.

The upward trend in the number of days lost due to work-related injury and illness continued: over 1.7 million days were lost in 2006 compared to 1.5 million in 2005.

The breakdown of injury and illness estimates across economic sectors, gender and age categories should be interpreted with caution as rates may be based on small cell counts. The statistics below therefore indicate general trends and orders of magnitude, rather than definitive figures.

The comparison across economic sectors of 4+ day injury rates reveals that the Construction and the Health and Social Work sectors continue to have high injury rates. However, there is a downward trend in the 4+ day injury rate in Construction, which has been decreasing since 2003.

The comparison across economic sectors of estimates for illnesses causing 4+ days lost reveals that, similar to 2005, the Agriculture/Fishing sector had the highest illness rate. Illness rates were also high in the Public Administration and Defence and Health and Social Work sectors.

Male workers continue to experience higher rates of injury and illness than female workers. The female injury rate has decreased slightly since 2002 while male injury rates have increased in the same period. Both male and female illness rates have increased since 2002.

Of the injuries reported to the Authority in 2007, approximately 14% involved non-Irish national workers. Recent figures from the CSO indicate that non-Irish national workers now represent 15% of the Irish workforce.

Eurostat (Statistical Agency of the European Commission) data for 2005 shows that the non-fatal injury rate in Ireland was below the EU15 average (approximately 1000 injuries per 100,000 Irish workers compared to approximately 3000 injuries per 100,000 EU15 workers). Ireland had the second lowest non-fatal injury rate in the EU15 in 2005.



Summary of fatal injury data

The number of work-related fatalities in 2007 was 67 (including 59 worker fatalities), compared to 51 fatalities in 2006. The Construction sector had the highest number of fatalities (18 compared to 13 fatalities in 2006), followed by Fishing (12 compared to 2 fatalities in 2006) and Agriculture (11 compared to 18 fatalities in 2006).

The overall worker fatality rate in 2007 was 2.8 fatalities per 100,000 workers. This represented an increase on the 2006 rate of 2.2 per 100,000 workers. However, the 2007 rate remains in line with the overall downward trend in the fatality rate since 2002.

The combined Agriculture/Fishing sector had the highest fatality rate in 2007 (17.7 per 100,000 workers). Even if the Fishing fatalities are omitted from this calculation, the Agriculture sector still had the highest fatality rate at 8.3 fatalities per 100,000 workers. Due to the exceptionally high number of Fishing fatalities in 2007, the fatality rate is 120 fatalities per 100,000 workers in the Fishing sector (based on an estimated working population of 10,000).

The fatality rate in the Construction sector increased to 5 fatalities per 100,000 workers in 2007, compared to a rate of 4.3 in 2006. However, the fatality rate in the Construction sector shows an overall reduction since 2002.

Of the 59 worker fatalities in 2007, 8 were non-Irish national workers – 5 in the Fishing sector, 2 in the Manufacturing sector and 1 in the Transport, Storage and Communication sector. The fatality rates for Irish and non-Irish national workers were similar in 2007 (2.4 fatalities per 100,000 non-Irish national workers and 2.8 fatalities per 100,000 Irish workers).

Data from Eurostat for 2005 indicates that the Irish fatality rate was higher than the average rate for the EU15 (approximately 3 fatalities per 100,000 Irish workers compared to approximately 2 fatalities per 100,000 EU15 workers).



1.3 Sources of Information

A range of data sources is used to compile the Authority's Summary of Statistics. The source for any graph or table in this report is indicated in brackets after the title.

Health and Safety Authority (HSA)

Employers are legally required to report incidents to the Authority when injuries cause four or more days' absence (4+ days) from work. Injuries may be reported to the Authority by telephone, fax, post or online (through the HSA website).

Comparison of the Authority's database of work-related injuries with CSO estimates suggests that under-reporting is a problem in some sectors. For this reason, injury rates are based on data from the CSO. However, the almost 8000 occupational injury reports in the Authority's database for 2007 are a valuable source of information on the characteristics of the accident victim, the nature of the incident and the working environment.

The data items collected through the Authority's incident report form (IR1) are determined by the European Statistics on Accidents at Work (ESAW) methodology. The required fields are:

- Unique case identifier
- Economic activity of employer
- Occupation of the victim
- Sex of the victim
- Type of injury
- Part of body injured
- Geographical location
- Date of the accident
- Time of the accident
- Size of enterprise
- Nationality
- Employment status
- Days lost
- Working environment
- Deviation/accident trigger
- Material agent of the deviation
- Contact – mode of injury

The Authority has responsibility for maintaining the official database of workplace fatalities and this database is used to calculate the annual worker fatality rate. The same data fields are collected for fatal injuries.

Table 1.2 shows the number and percentage of accident reports from each economic sector in 2007. Reporting levels vary across sectors – from only 10 accident reports from the Fishing sector to 1660 reports from the Construction sector. The Construction and Manufacturing sectors each account for approximately 20% of all reports each year.



Figure 1.2 Injuries reported to the HSA by economic sector 2007 (HSA)

2007		
ECONOMIC SECTOR	Number Reports	% Reports
Agriculture, hunting, forestry	100	1.3
Fishing	10	0.1
Mining and quarrying	71	0.9
Manufacturing	1609	20.6
Electricity, gas, water supply	27	0.3
Construction	1660	21.2
Wholesale and retail trade	778	9.9
Hotels and restaurants	125	1.6
Transport, storage, communication	987	12.6
Financial intermediation	156	2.0
Real estate, renting, business activities	238	3.0
Public administration, defence, social security	903	11.5
Education	73	0.9
Health and social work	877	11.2
Other	213	2.7
Total	7827	100.0

Central Statistics Office (CSO)

The Central Statistics Office (CSO) estimates the number of workers that suffered a work-related injury or illness each year. This estimate is based on the Accident and Illness module of the Quarterly National Household Survey (QNHS), administered in the first quarter of each year. The data relating to the number and rate of 4+ days lost injury and illness is an important indicator for the Authority as it represents the subset of accidents that employers are legally required to report.

The CSO surveys 3,000 households each week, giving a total sample of 39,000 households per quarter. The reference period for the CSO data in this Summary of Statistics is the twelve months prior to interview, and in the case of the 2006 estimates is based on the survey conducted during December 2006 to February 2007.

In the Accidents and Illness module, CSO field workers ask people aged 15 or over to indicate if they had suffered an injury incurred at work or an illness that the respondent believed had been caused or made worse by their work in the past 12 months. The questions from the module are reproduced below:

- Have you worked in the past 12 months?
- How many, if any, injuries did you incur at work (excluding commuting) in the past 12 months?
- Now thinking about the time(s) when you were in employment over the last 12 months, how many days were you absent from your job as a result of your most recent injury at work?
- From the list below, please select the category that best describes your most recent injury at work:
 1. Wound or superficial injury
 2. Bone fracture
 3. Dislocation, sprain or strain
 4. Amputation
 5. Concussion or internal injury
 6. Burn, scald or frostbite



7. Poisoning or infection
8. Suffocation (asphyxiation)
9. Other type of injury
10. Not applicable

- Have you ever worked?
- How many, if any, illnesses or disabilities have you experienced during the past 12 months, that you believe were caused or made worse by your work (either the work that you are doing at the moment or work that you have done in the past)?
- Now thinking about the time(s) when you were in employment in the last 12 months, how many days were you absent from your job as a result of your most recent work-related illness?
- What was your most recent work-related illness?
 1. Bone, joint or muscle problem
 2. Breathing or lung problem
 3. Skin problem
 4. Hearing problem
 5. Stress, depression or anxiety
 6. Headache and/or eyestrain
 7. Heart disease or attack, or other problems in the circulatory system
 8. Disease (virus, bacteria, cancer or another type of disease)
 9. Other types of complaint
 10. Not applicable

Changes in survey methods since 1998 mean that the results of all QNHS surveys cannot be directly compared. However, the survey carried out in Q1 2007 is comparable to those carried out in 2003 to 2006.

As the QNHS is a sample survey involving self reporting of work related accidents and illnesses the results are subject to sampling and other survey errors. Specifically estimates and changes over time of a lower magnitude can be taken to have lower precision.

The CSO are planning some minor amendments to these questions for 2008 to improve the accuracy of the data collected. The CSO will also publish accidents and illnesses results based on the QNHS during 2008.

Department of Social and Family Affairs (DSFA)

Data provided by the Occupational Injury Benefits (OIB) division of the Department of Social and Family Affairs (DSFA) is based on claims made by insured persons who are injured in the course of their work. The injury must last at least four days, and a medical certificate and claim form must be sent within 21 days of the injury.

The number of claims is likely to be less than the number of work-related injuries because not all workers are covered by social insurance, and not all injuries result in claims. The OIB dataset therefore includes a lower number of work injuries than the QNHS, but the figures are a useful trend indicator because the criteria for benefit payment have not changed over time.



1.4 Technical Notes

Classification of injuries

The Authority uses standard international classifications for its incident database and 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 NACE classification system has been revised and NACE Rev.2 has been operational since 1 January 2008. The full revised classification is available to download from the Eurostat website:
<http://circa.europa.eu/irc/dsis/nacepacon/info/data/en/index.htm>
- **Occupation: ISCO** (International Standard Classification of Occupations), maintained by ILO (International Labour Organization).

The ISCO codes are available to download from the Eurostat website:
http://europa.eu.int/comm/eurostat/ramon/index.cfm?TargetUrl=DSP_PUB_WELC
- **European Statistics on Accidents at Work (ESAW)** – variables, definitions and classifications relating to the victim, the incident and the circumstances of the incident, maintained by Eurostat.

The ESAW methodology is available to download from the Eurostat website:
http://europa.eu.int/comm/employment_social/publications/2002/ke4202569_en.htm

Calculation of injury and fatality rates

Injury and illness rates are calculated per 1000 workers.

Fatality rates are calculated per 100,000 workers.

Risk alerts

- Risk alert boxes appear at the end of each section in the report. Their function is to highlight significant results or trends that emerge from the data.

2. Non-Fatal Injury & Illness Statistics

2.1 General Injury and Illness Statistics

This part of the Summary presents the CSO estimates of work-related injury and illness for 2006, based on the Accident and Illness module of the Quarterly National Household Survey (QNHS) in the first quarter (Q1) of 2007. As the QNHS is a sample survey involving self-reporting of work related injury and illness the results are subject to sampling and other survey errors. Therefore, the breakdown of injury and illness estimates across economic sector, gender, age and region categories should be interpreted with caution as rates based on small cell counts can be taken to have lower precision.

Data from other sources is presented where available, including data from the HSA database of reported injuries, the OIB claims database and Eurostat.

Figures 2.1 and 2.2 provide the context for the injury and illness trends – they show the numbers working in each economic sector from 2001 to 2007. The total number in employment grew to over 2.1 million in 2007, representing an increase of 72,800 since 2006. The Wholesale and Retail Trade sector had the largest workforce in 2007 (over 310,000 workers), followed by the Financial and Business Services and the Production Industries sectors.

The Wholesale and Retail Trade sector had the greatest increase since 2006, with an additional 23,300 workers. The Financial and Business Services and the Hotels and Restaurants sectors also saw significant growth in the size of their workforces. The number of workers decreased in the Construction sector (-2600 workers) and in the Production Industries (-1400 workers) since 2006.

Figure 2.1: Numbers employed in each economic sector 2001–2007* (CSO)

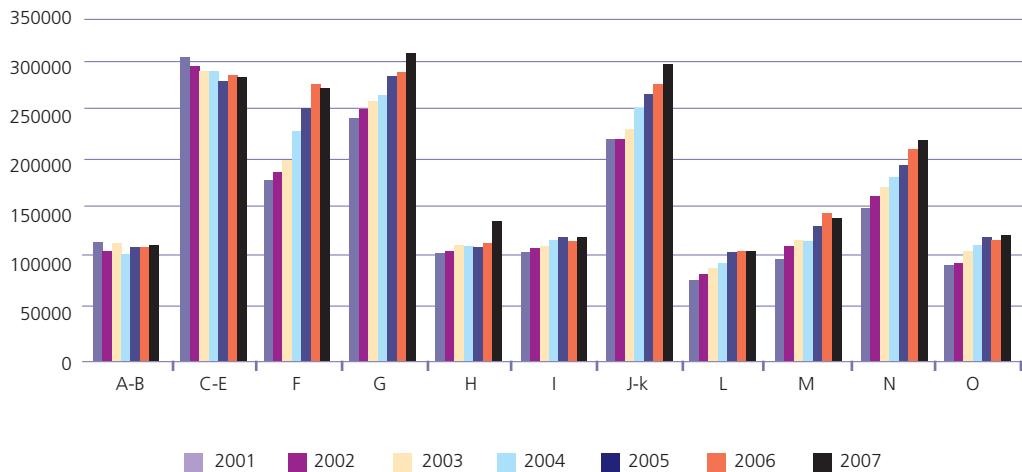
Number employed							
Economic Sector	2001	2002	2003	2004	2005	2006	2007
A–B Agriculture, forestry, fishing	121700	114300	118900	112500	115500	115800	118700
C–E Other production industries	310400	303200	297400	297300	285000	292100	290700
F Construction	183200	188500	202300	233100	253800	281600	279000
G Wholesale and retail trade	249100	252300	263400	267600	286100	288300	311600
H Hotels and restaurants	108700	110500	113100	112300	113100	116600	132300
I Transport, storage, communication	108900	110900	113400	115700	120500	117200	120800
J–K Financial and business services	226400	226600	234400	252900	269200	278000	297100
L Public administration and defence; social security	82000	88600	89900	96400	103100	105100	105000
M Education	106600	115000	119400	119800	132800	139600	139100
N Health and social work	153400	165700	177200	185500	196300	210200	221300
O Other	94900	96300	106400	115400	122800	121600	123300
Total	1745500	1772000	1835900	1908300	1998100	2066100	2138900

* Data based on CSO Statistical Release, 8 March 2008.

Note: Sectors A–B, C–E and J–K are combined in some figures because estimates of the working population in these sectors are combined by the CSO.



Figure 2.2: Numbers employed in each economic sector 2001–2007 (CSO)



Sector key

A – Agriculture, hunting and forestry, **B** – Fishing, **C** – Mining and Quarrying, **D** – Manufacturing, **E** – Electricity/gas/water, **F** – Construction, **G** – Wholesale/Retail trade; repair of vehicles, personal and household goods, **H** – Hotels/Restaurants, **I** – Transport, Storage, Communication, **J** – Financial Intermediation, **K** – Real Estate, Renting, Business, **L** – Public Admin/Defence, **M** – Education, **N** – Health/Social Work, **O** – Community/Social/Personal Services

Figure 2.3 provides a high-level summary of the CSO estimates of work-related injury and illness for 2001 to 2006, together with information on the number of days lost from work due to injury and illness.

Figure 2.4 shows that the 4+ day injury rate has been very consistent since 2003 and that there is a gradual upward trend in the illness rate over the same period.

The CSO estimates that the number of days lost due to occupational injury and illness was 1.7 million in 2006 (1.5 million in 2005). Work-related illness caused more days to be lost than work-related injury: 973,000 days lost due to illness compared to 758,600 days lost due to injury. The CSO warns that the ‘days lost’ data should be interpreted with care as respondents may have reported ‘potential’ days lost.

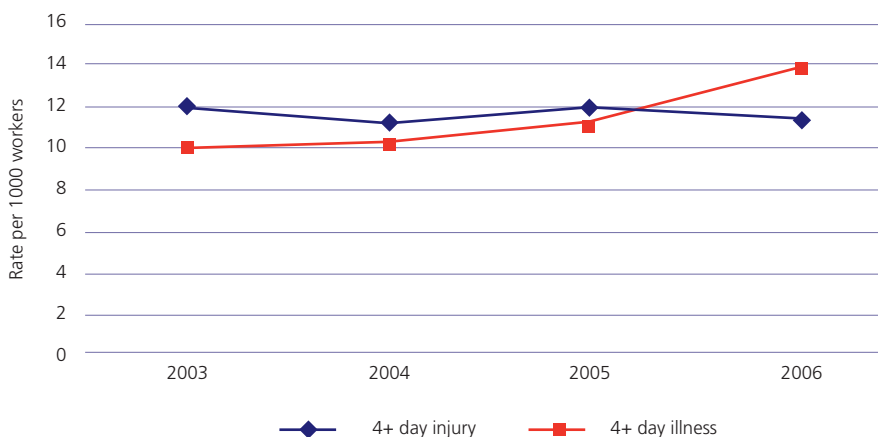


Figure 2.3: Number and rate of people suffering injury and illness 2001–2006 (CSO)

	2001		2002		2003		2004		2005		2006	
	Number	Rate per 1000	Number	Rate per 1000	Number	Rate per 1000	Number	Rate per 1000	Number	Rate per 1000	Number	Rate per 1000
Total in employment	1745500		1783600		1835900		1908300		1998100		2074900	
Injury												
Total suffering injury	51800	29.7	48400	27.1	56000	30.5	53100	27.8	57800	28.9	58200	28.0
0 days' absence	16400	9.4	15400	8.6	21700	11.8	20000	10.5	20100	10.1	22000	10.6
1–3 days' absence	9300	5.3	8200	4.6	12000	6.5	11100	5.8	13700	6.9	12100	5.8
4+ days' absence	26200	15.0	24800	13.9	22400	12.2	21600	11.3	23900	12.0	24100	11.6
Days lost due to injury			919400		762800.0		579500		723700		758600	
Illness												
Total suffering illness	33000	18.9	45500	25.5	48000	26.1	58700	30.8	63900	32.0	71300	34.4
0 days' absence	15600	8.9	16000	9.0	21300	11.6	28000	14.7	31800	15.9	34100	16.4
1–3 days' absence	2400	1.4	5700	3.2	8200	4.5	11100	5.8	9200	4.6	9400	4.5
4+ days' absence	15000	8.6	23900	13.4	18500	10.1	19600	10.3	22900	11.5	27900	13.4
Days lost due to illness			862700		570300		822300		824300		973000	
Injury and Illness												
Total injury or illness	84800	48.6	93900	52.6	103900	56.6	111700	58.5	121800	61.0	129500	62.4
Total (4+ days' absence)	41200	23.6	48700	27.3	40900	22.3	41200	21.6	46800	23.4	52000	25.1
Total days lost	1441000		1782100		1333100		1401800		1548000		1731600	

Source CSO, QNHS: QNHS estimates are subject to sampling and other survey errors. Estimates and changes over time of a lower magnitude can be taken to have lower precision and should be interpreted with caution.

Figure 2.4: Rate of injury and illness causing 4+ days' lost 2003–2006 (CSO)



Source CSO, QNHS: QNHS estimates are subject to sampling and other survey errors. Estimates and changes over time of a lower magnitude can be taken to have lower precision and should be interpreted with caution.

Figures 2.5, 2.6 and 2.7 present CSO injury estimates by economic sector. The rate of 4+ day injuries in 2006 is highest in the Transport, Storage and Communication sector, followed by the Construction and the Health and Social Work sectors (see Figure 2.6).

The 4+ day injury rate in Construction has been decreasing since 2003 according to the CSO figures and this trend continued with the reduction from 22.5 injuries in 2005 to 20.2 injuries in 2006 per 1000 workers in the Construction sector (see Figure 2.7).



Figure 2.5: Number and rate of total injuries by economic sector 2003–2006 (CSO)

ECONOMIC SECTOR	Number injuries 2003	Rate per 1000 2003	Number injuries 2004	Rate per 1000 2004	Number injuries 2005	Rate per 1000 2005	Number injuries 2006	Rate per 1000 2006
Agriculture, hunting and forestry / Fishing	4500	37.8	5400	48.0	6900	59.7	4200	36.1
Mining and quarrying / Manufacturing / Electricity,	10900	36.7	6500	21.9	8600	30.2	8600	29.6
Construction	11700	57.8	11000	47.2	10400	41.0	13800	48.9
Wholesale & retail trade; repair of goods	5600	21.3	5800	21.7	7000	24.5	3800	13.0
Hotels and restaurants	3800	33.6	4600	41.0	4300	38.0	3800	31.6
Transport, storage and communication	3100	27.3	4000	34.6	2700	22.4	4700	38.1
Financial intermediation / Real estate, renting, bus	3500	14.9	3000	11.9	1900	7.1	2300	8.4
Public Administration; Defence	2700	30.0	2900	30.1	3800	36.9	2800	26.5
Education	1900	15.9	1900	15.9	2300	17.3	1400	9.9
Health and social work	6000	33.9	5200	28.0	5500	28.0	10000	47.1
Other community, social and personal services	2400	22.6	2600	22.5	4400	35.8	3000	25.3
Total	56100	30.6	52900	27.7	57800	28.9	58400	28.1

Source CSO, QNHS: QNHS estimates are subject to sampling and other survey errors. Estimates and changes over time of a lower magnitude can be taken to have lower precision and should be interpreted with caution.

Figure 2.6: Number and rate of 4+ day injuries by economic sector 2003–2006 (CSO)

ECONOMIC SECTOR	Number injuries 2003	Rate per 1000 2003	Number injuries 2004	Rate per 1000 2004	Number injuries 2005	Rate per 1000 2005	Number injuries 2006	Rate per 1000 2006
Agriculture, hunting and forestry / Fishing	1500	12.6	2100	18.7	1900	16.5	1100	9.5
Mining quarrying / Manufacturing / Electricity, gas, water	5600	18.8	3200	10.8	4500	15.8	4700	16.2
Construction	5400	26.7	5300	22.7	5700	22.5	5700	20.2
Wholesale & retail trade; repair of goods	2700	10.3	2100	7.8	2300	8.0	1200	4.1
Hotels and restaurants	1200	10.6	700	6.2	1800	15.9	400	3.3
Transport, storage and communication	1300	11.5	2200	19.0	1000	8.3	3700	30.0
Financial intermediation / Real estate, renting, business	600	2.6	800	3.2	600	2.2	200	0.7
Public Administration; Defence	1300	14.5	1300	13.5	1900	18.4	1600	15.2
Education	500	4.2	400	3.3	600	4.5	300	2.1
Health and social work	1900	10.7	2900	15.6	2700	13.8	3900	18.4
Other community, social and personal services	400	3.8	600	5.2	1000	8.1	1300	11.0
Total	22400	12.2	21600	11.3	23900	12.0	24100	11.6

Source CSO, QNHS: QNHS estimates are subject to sampling and other survey errors. Estimates and changes over time of a lower magnitude can be taken to have lower precision and should be interpreted with caution.



Figure 2.7: Rate of 4+ day injuries in Construction compared to all sectors 2002–2006 (CSO)



Source CSO, QNHS: QNHS estimates are subject to sampling and other survey errors. Estimates and changes over time of a lower magnitude can be taken to have lower precision and should be interpreted with caution.

Figures 2.8 and 2.9 present the CSO estimates of total illnesses and 4+ day illnesses for each economic sector in 2006. The figures indicate that both the overall rate of illnesses and the rate of 4+ day illnesses increased steadily from 2003 to 2006.

In 2006 the highest rate of 4+ days lost to illness was recorded in the Agriculture/Fishing sector (25.8 illnesses per 1000 workers), followed by the Public Administration and Defence (21.8), Health and Social Work (20.7) and Education (20.4) sectors. The rates in these sectors have risen since 2005.

Figure 2.8: Number and rate of total illnesses by economic sector 2003–2006 (CSO)

ECONOMIC SECTOR	Number Illness 2003	Rate per 1000 2003	Number Illness 2004	Rate per 1000 2004	Number Illness 2005	Rate per 1000 2005	Number Illness 2006	Rate per 1000 2006
Agriculture, hunting and forestry / Fishing	5100	42.9	7000	62.2	7600	65.8	8600	73.9
Mining and quarrying / Manufacturing / Electricity, gas, water	6500	21.9	7700	25.9	7300	25.6	8900	30.6
Construction	6600	32.6	7200	30.9	7500	29.6	9100	32.3
Wholesale & retail trade; repair of goods	3800	14.4	5400	20.2	7200	25.2	4500	15.4
Hotels and restaurants	2300	20.3	1900	16.9	2000	17.7	1400	11.7
Transport, storage and communication	3800	33.5	5500	47.5	5500	45.6	3100	25.1
Financial intermediation / Real estate, renting, business	5400	23.0	5600	22.1	7200	26.7	7800	28.6
Public Administration; Defence	2700	30.0	2800	29.0	3800	36.9	4700	44.5
Education	3000	25.1	4000	33.4	6000	45.2	7700	54.2
Health and social work	5200	29.3	9500	51.2	7600	38.7	12800	60.3
Other community, social and personal services	3700	34.8	2100	18.2	2300	18.7	2800	23.6
Total	48100	26.2	58700	30.8	63900	32.0	71400	34.4

Source CSO, QNHS: QNHS estimates are subject to sampling and other survey errors. Estimates and changes over time of a lower magnitude can be taken to have lower precision and should be interpreted with caution.



Figure 2.9: Number and rate of 4+ day illnesses by economic sector 2003–2006 (CSO)

ECONOMIC SECTOR	Number Illness 2003	Rate per 1000 2003	Number Illness 2004	Rate per 1000 2004	Number Illness 2005	Rate per 1000 2005	Number Illness 2006	Rate per 1000 2006
Agriculture, hunting and forestry / Fishing	1400	11.8	1500	13.3	2400	20.8	3000	25.8
Mining and quarrying / Manufacturing / Electricity, gas, water	3400	11.4	3400	11.4	1700	6.0	3200	11.0
Construction	2700	13.3	1900	8.2	3800	15.0	4600	16.3
Wholesale & retail trade; repair of goods	2200	8.4	900	3.4	3100	10.8	2100	7.2
Hotels and restaurants	600	5.3	900	8.0	1200	10.6	600	5.0
Transport, storage and communication	1300	11.5	2600	22.5	2200	18.3	700	5.7
Financial intermediation / Real estate, renting, business	1500	6.4	1800	7.1	2300	8.5	3400	12.5
Public Administration; Defence	1100	12.2	1100	11.4	1200	11.6	2300	21.8
Education	1100	9.2	1000	8.3	1700	12.8	2900	20.4
Health and social work	2000	11.3	4000	21.6	2800	14.3	4400	20.7
Other community, social and personal services	1200	11.3	400	3.5	600	4.9	700	5.9
Total	18500	10.1	19500	10.2	22900	11.5	27900	13.4

Source CSO, QNHS: QNHS estimates are subject to sampling and other survey errors. Estimates and changes over time of a lower magnitude can be taken to have lower precision and should be interpreted with caution.

Other data sources provide a broader perspective on the trends in the CSO data. For example, the Occupational Injury Benefit (OIB) division of the Department of Social and Family Affairs admitted 13,803 claims in 2007 (see Figure 2.10). These figures relate only to injuries causing 4+ days’ absence from work and can be compared to the number of injuries reported to the Authority (approximately 7500 injuries) and to CSO estimates for injuries causing 4+ days’ absence (approximately 24,100 injuries). The number of OIB claims received and admitted is likely to be less than the total number of work-related injuries because not all sections of the working population are eligible to claim (e.g. the self-employed and public servants), and not all injuries lead to claims.

The number and rate of OIB claims were examined in detail in the January/February issue of the *Health and Safety Review* (2008). The article reports that the number of claims admitted in 2007 was the highest ever and that the rate of OIB claims per 100,000 workers was also increasing – 658 claims per 100,000 workers compared to 610 in 2006 and 580 in 2005.

Over 500,000 days were lost from work in 2007 due to the occupational injuries which resulted in OIB claims. With an average of 36 days lost per claim (or over one month’s absence from work), many of these injuries had a significant impact on the individual and on the organisation.



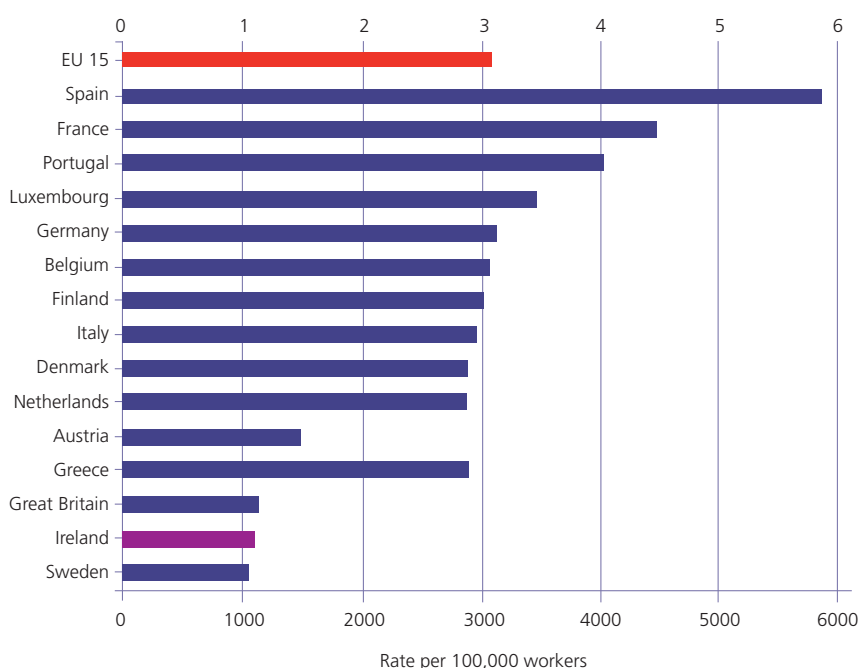
Figure 2.10: Number of OIB claims allowed 1992–2007 (DSFA)

Year	Claims Allowed	Days lost*	Average days lost per claim
1992	13100		
1993	11700		
1994	10300		
1995	9911		
1996	10293		
1997	11169		
1998	11686		
1999	11311		
2000	11995		
2001	12050		
2002	12280		
2003	11096		
2004	11705		
2005	11759		
2006	12416		
2007	13803	502178	36

* Days lost refers to working days and excludes Sundays for which OIB is not paid.

Information on work-related fatal injury rates in the wider European context is available from Eurostat. The most recent data comparing 4+ day injury rates across EU Member States is presented in Figure 2.11. Similar to 2004, Ireland’s non-fatal injury rate was significantly below the average for the EU15 in 2005 – only Sweden had a lower non-fatal injury rate. The EU15 average was just over 3000 non-fatal injuries per 100,000 workers, while the Irish rate was just over 1000 injuries per 100,000 workers.

Figure 2.11: Rate of 4+ day injuries in the EU 2005 (Eurostat)



Risk alerts

- **The work-related illness rate continues to rise**

The rate of illness causing 4+ days lost has risen steadily since 2003, according to CSO data. In real terms, the CSO figures indicate that the number of work-related illness cases causing 4+ days' lost from work has risen from 18,500 cases in 2003 to 27,900 cases in 2006.

The 4+ day illness rate was highest in the Agriculture/Fishing sector in 2006; this was also the case in 2005.

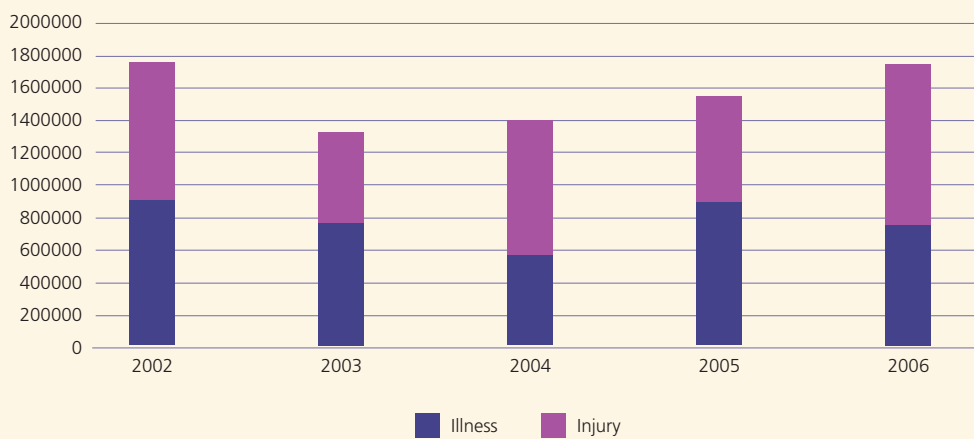
The Agriculture/Fishing, Public Administration/Defence and Health/Social Work sectors have all seen increases in their 4+ day illness rates since 2005.

Several sectors show a steady upward trend in illness rates since 2003 including Agriculture/Fishing and the Financial/Business Services sectors.

- **Days lost due to work-related injury and illness are increasing**

The number of days lost due to work-related injury and illness has been increasing steadily since 2003 (see Figure 2.12). Since 2004, illnesses have accounted for more days lost than injuries.

Figure 2.12: Number of days lost due to work-related injury and illness 2002–2006 (CSO)





- **Maintaining the downward trend in the Construction sector injury rate**

The rate of 4+ day injuries in the Construction sector has gradually decreased since 2003, from 26.7 to 20.2 injuries per 1000 workers in the sector.

This downward trend is mirrored in the Construction sector's fatality rate – from 11 fatalities per 100,000 workers in 2002 to 5 fatalities per 100,000 workers in 2007 (see section 3 of this Summary).

Research commissioned by the Authority in 2007 indicates that the rate of fall-from-height incidents in the Construction sector is also decreasing (see Special Topic 2 in this Summary).

However, circumstances in the Construction sector are changing rapidly. The slow-down in the sector is evident in the reduction in the size of the workforce in 2007 after years of growing employment in the sector. It is important that challenges in the economy do not compromise progress to date or deflect attention from ongoing efforts to reduce the injury rate in the sector.



2.2 Victim Statistics

This section presents statistics that describe the characteristics of the person who suffered the injury or illness. Variables include the person's gender, age, occupation and nationality.

The numbers of males and females employed in each sector are presented in Figure 2.13. There were over 300,000 more males than females in the workforce in 2006. The largest numbers of male workers were employed in the Construction and the Production Industries sectors. There were many more female than male workers in the Education and the Health and Social Work sectors. There were approximately equal numbers of males and females working in the Wholesale and Retail Trade and the Financial and Business Services sectors.

Despite the fact that there were fewer males employed in Health and Social Work, this sector had the highest male injury rate (66.9 injury cases recorded per 1000 male workers). The Health and Social Work sector also featured the highest female injury rate (43.1 cases per 1000 female workers).

The highest illness rate among female workers was also recorded in the Health and Social Work sector. The highest illness rates among males were in the Education, the Agriculture and Fishing and the Health and Social Work sectors. There were relatively low numbers of male workers employed in the Education and the Health and Social Work sectors so the data suggests that the roles occupied by males in these sectors may be particularly susceptible to work-related injury and illness.

Figure 2.13: Number and rate of injury/illness by economic sector and gender 2006 (CSO)

Economic sector	Number employed		Injury rate		Illness rate	
	Male	Female	Male	Female	Male	Female
A-B Agriculture, forestry, fishing	105700	10700	39.7	*	76.6	46.7
C-E Other production industries	207500	83400	36.1	13.2	29.6	32.4
F Construction	282,100	13200	50.9	15.2	33.1	15.2
G Wholesale and retail trade	146600	144700	19.1	6.2	15.0	15.9
H Hotels and restaurants	50400	69700	55.6	14.3	15.9	8.6
I Transport, storage, communication	93900	29500	50.1	*	23.4	30.5
J-K Financial and business services	134300	138400	9.7	7.2	34.3	23.8
L Public administration and defence; social security	52500	53000	40.0	13.2	59.0	30.2
M Education	38800	103200	5.2	11.6	105.7	33.9
N Health and social work	35900	176200	66.9	43.1	66.9	59.0
O Other	53400	65000	41.2	12.3	28.1	20.0
Total	1187900	887000	37.0	16.2	37.1	30.8

* Indicates insufficient data.

Source CSO, QNHS: QNHS estimates are subject to sampling and other survey errors. Estimates and changes over time of a lower magnitude can be taken to have lower precision and should be interpreted with caution.

Sector key

A – Agriculture, hunting and forestry, **B** – Fishing, **C** – Mining and Quarrying, **D** – Manufacturing, **E** – Electricity/gas/water, **F** – Construction, **G** – Wholesale/Retail trade; repair of vehicles, personal and household goods, **H** – Hotels/Restaurants, **I** – Transport, Storage, Communication, **J** – Financial Intermediation, **K** – Real Estate, Renting, Business, **L** – Public Admin/Defence, **M** – Education, **N** – Health/Social Work, **O** – Community/Social/Personal Services

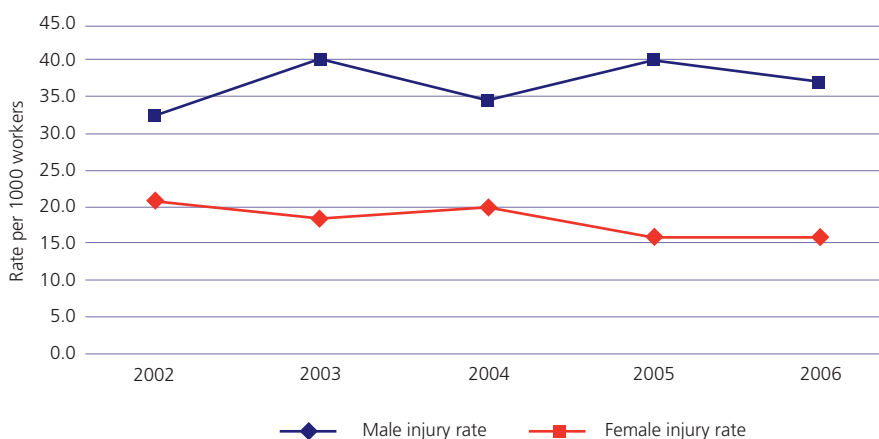
Sectors A–B, C–E and J–K are combined in some figures because estimates of the working population in these sectors are combined by the CSO.



Figures 2.14 and 2.15 (based on the rates of injury and illness causing any days lost) show clearly that male workers suffer considerably higher rates of work-related injury and illness than female workers and that this difference is consistent over time. The female injury rate shows a slight decrease since 2002 while there has been a general increase in the male injury rate.

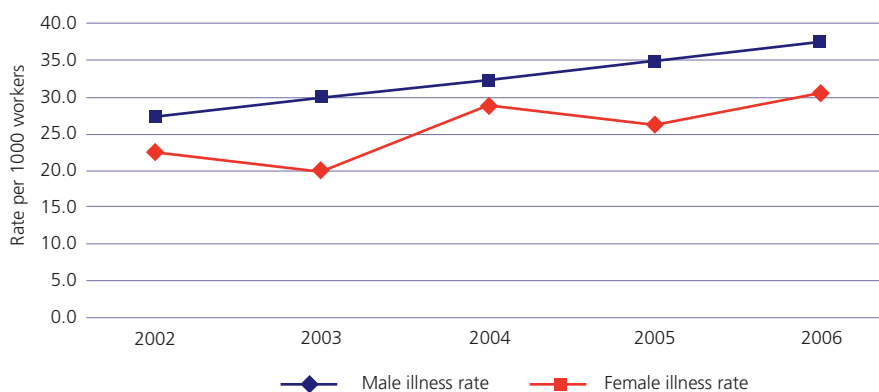
Figure 2.15 shows that although the male illness rate is higher, both male and female illness rates have been following an upward trend since 2002.

Figure 2.14: Rate of total injury (any days lost) by gender 2002–2006 (CSO)



Source CSO, QNHS: QNHS estimates are subject to sampling and other survey errors. Estimates and changes over time of a lower magnitude can be taken to have lower precision and should be interpreted with caution.

Figure 2.15: Rate of total illness (any days lost) by gender 2002–2006 (CSO)

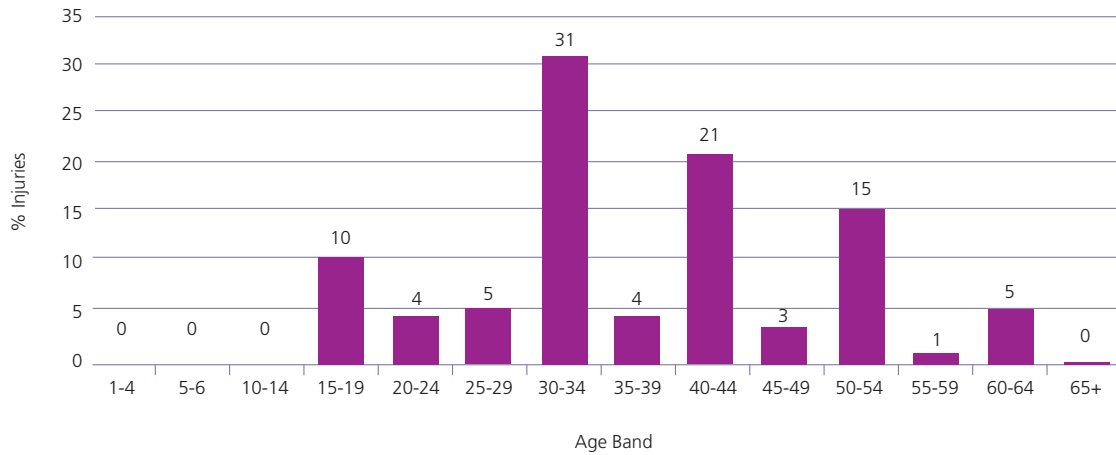


Source CSO, QNHS: QNHS estimates are subject to sampling and other survey errors. Estimates and changes over time of a lower magnitude can be taken to have lower precision and should be interpreted with caution.

Figure 2.16 presents the distribution across age bands of incidents reported to the Authority in 2007. The 2007 figures follow a very similar pattern to the data for 2006, with over one-third of all accidents involving workers in their thirties.



Figure 2.16: Distribution of non-fatal injury by age band 2007 (HSA)



Over 700 of the reported injuries involved workers aged 15 to 19 years. The breakdown by age band and economic sector in Figure 2.17 shows that the accidents involving 15 to 19 year olds occurred across a range of sectors, including Hotels and Restaurants (20% of all accidents reported from the sector), Agriculture (18% of injuries reported from the sector) and Wholesale and Retail Trade (17% of all injuries reported from the sector).

The data also indicates that workers in their twenties suffered a high proportion of the injuries reported from the Public Administration and Defence sector (22.8% of all injuries reported from the sector) and the Construction sector (14.2% of all injuries reported from the sector).

Figure 2.17: Distribution of non-fatal injuries by age and economic sector 2007 (HSA)

AGE BAND	ECONOMIC SECTOR															Total %	Number in age band
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O		
1-4	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	3
5-9	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
10-14	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
15-19	18.3	0.0	14.5	9.3	3.8	11.7	17.0	20.3	11.2	10.5	13.2	2.9	4.5	4.8	12.1	10.1	730
20-24	4.3	0.0	0.0	2.6	0.0	6.4	4.0	4.9	1.2	1.3	3.5	8.2	0.0	1.9	1.5	3.9	281
25-29	3.2	0.0	1.4	3.0	0.0	7.8	3.8	2.4	2.3	1.3	3.1	14.6	3.0	2.1	3.0	5.2	375
30-34	28.0	33.3	27.5	34.0	15.4	31.7	35.5	41.5	27.7	34.0	38.8	24.5	16.7	28.1	29.6	31.0	2244
35-39	2.2	0.0	2.9	2.7	0.0	5.0	1.6	0.8	4.1	0.0	3.5	7.4	3.0	5.5	3.0	4.0	290
40-44	17.2	16.7	17.4	24.8	34.6	19.0	20.7	20.3	25.6	17.0	19.4	16.7	15.2	19.4	22.1	21.1	1528
45-49	0.0	0.0	7.2	2.1	0.0	2.9	1.8	0.0	2.9	1.3	1.3	5.6	6.1	5.1	1.5	3.0	219
50-54	14.0	50.0	23.2	16.3	23.1	10.1	10.9	5.7	18.4	22.2	11.0	14.3	24.2	21.4	19.6	15.1	1094
55-59	1.1	0.0	2.9	0.8	11.5	1.4	0.7	0.8	1.0	0.0	0.9	1.7	7.6	2.7	1.5	1.4	99
60-64	11.8	0.0	2.9	4.2	11.5	3.7	3.3	3.3	5.6	12.4	4.4	4.2	18.2	8.8	6.0	5.1	370
65+	0.0	0.0	0.0	0.1	0.0	0.3	0.3	0.0	0.0	0.0	0.9	0.0	1.5	0.1	0.0	0.2	12
Total %	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Number in sector	93	6	69	1556	26	1506	707	123	927	153	227	840	66	751	199		7249

Sector key

A – Agriculture, hunting and forestry, **B** – Fishing, **C** – Mining and Quarrying, **D** – Manufacturing, **E** – Electricity/gas/water, **F** – Construction, **G** – Wholesale/Retail trade; repair of vehicles, personal and household goods, **H** – Hotels/Restaurants, **I** – Transport, Storage, Communication, **J** – Financial Intermediation, **K** – Real Estate, Renting, Business, **L** – Public Admin/Defence, **M** – Education, **N** – Health/Social Work, **O** – Community/Social/Personal Services



Figure 2.18 presents CSO injury estimates for 2006 across age bands. The highest injury rates were recorded in the 20–24 and 35–44 age bands. Figure 2.19 shows the CSO illness estimates by age band; the highest illness rates were recorded in the older age bands.

Figure 2.18: Rates of injury by age band 2002–2006 (CSO)						
Age range	Rate 2003	Rate 2004	Rate 2005	Total Employed 2006	Number 2006	Rate 2006
15-19	26.4	40.0	74.8	70400	1300	18.5
20-24	27.6	33.1	38.4	243900	9400	38.5
25-34	32.0	29.1	24	614500	15600	25.4
35-44	33.7	23.6	28.1	486800	18300	37.6
45-54	26.3	30.8	26.6	393300	8900	22.6
55-64	31.6	20.7	25.5	223600	4000	17.9
65+	31.3	14.0	16	42500	700	16.5
Total	30.5	27.8	29.1	2075000	58200	28.0

Source CSO, QNHS: QNHS estimates are subject to sampling and other survey errors. Estimates and changes over time of a lower magnitude can be taken to have lower precision and should be interpreted with caution.

Figure 2.19: Rates of illness by age band 2002–2006 (CSO)						
Age range	Rate 2003	Rate 2004	Rate 2005	Total Employed 2006	Number 2006	Rate 2006
15-19	14.7	14.8	29.3	70400	*	*
20-24	15.8	10.3	18.5	243900	3100	12.7
25-34	20.9	22.1	19.9	614500	19800	32.2
35-44	28.5	33.6	37.2	486800	17900	36.8
45-54	28.6	41.1	48.3	393300	17800	45.3
55-64	42.8	54.9	37.6	223600	9800	43.8
65+	51.3	47.8	45.5	42500	2900	68.2
Total	26.1	30.8	32.1	2075000	71300	34.4

* Insufficient data.

Source CSO, QNHS: QNHS estimates are subject to sampling and other survey errors. Estimates and changes over time of a lower magnitude can be taken to have lower precision and should be interpreted with caution.

Figures 2.20 to 2.23 present data on the occupations of injured parties from a range of sources. Figure 2.20 is based on the Authority’s database of reported accidents, Figure 2.21 is based on claims allowed by the Occupational Injury Benefits (OIB) division in the Department of Social and Family Affairs in 2007, and Figures 2.22 and 2.23 are based on CSO estimates from the Quarterly National Household Survey.

The Authority and the CSO use a prescribed list of occupations based on the ISCO classification system (see section 1.4), while the OIB use an extended list of occupations. It was noted in a previous Statistics Summary that the three sources correspond quite closely in terms of the occupational profile for work-related injury (see HSA, 2007b, p. 22). In general, labourers in transport and construction, drivers, machine operators, salespersons, police and nursing professionals feature across the data sources.



Figure 2.20: Reported non-fatal injuries by occupation 2007 (HSA)

OCCUPATION	%	Number Injuries
Labourers in mining, construction, manufacturing and transport (1)	34.5	2600
Drivers and mobile plant operators	7.6	572
Extraction and building trades workers	7.1	531
Police officers	5.0	376
Metal, machinery and related trades workers	4.6	350
Machine operators and assemblers	4.6	347
Personal and protective services workers	4.2	320
Nursing and midwifery professionals	4.0	298
Office clerks	3.7	275
Models, salespersons and demonstrators	3.1	234
All other occupations	21.6	1628
Total	100	7531

(1) Category includes sub-categories 'labourer in mining, construction, manufacturing, transport', 'transport labourers and freight handlers', 'building construction labourers', 'construction and maintenance labourers', 'manufacturing labourers'.

Figure 2.21: OIB claims by occupation 2007 (DFSA)

OCCUPATION	Number
Road transport worker	1132
Construction trade	818
Sales assistant and checkout operator	710
Plant and machine operative	670
Protection service officer	552
Health and related occupation	469
Catering occupation	420
Other: sales and services	403
Health professional	393
Other: mining/manufacturing	336
Health associate professional	324
Woodworking trade	322
Metal machining, fitting and instrument-making trade	315
Store and dispatch clerk, storekeeper	311
Administrative/clerical officer in civil service/local government	290
Other: construction	260
Metal forming, welding and related trade	236
Other: communication	230
Electrical/electronic trade	221
Food preparation trade	213
Vehicle trades	205
Other occupations	4973
Total	13803

The CSO provides occupational information for both injury and illness estimates (Figures 2.22 and 2.23). The highest injury rates were recorded among craft and related workers (46.3 injuries per 1000), plant and machine operatives (42.4 injuries per 1000) and personal and protective service workers (39.4 injuries per 1000). The highest illness rates were experienced by associate professional and technical workers (65.4 cases per 1000) and managers and administrators (48.7 cases per 1000). Figure 2.23 shows that illness rates in these occupations have increased since 2002.



Figure 2.22: Injury rate by occupation 2002–2006 (CSO)

OCCUPATION	Rate 2002	Rate 2003	Rate 2004	Rate 2005	Employed 2006	Number 2006	Rate 2006
Managers and administrators	20.0	24.0	26.0	25.9	318500	8600	27.0
Professional	13.0	23.0	10.0	13.6	243600	3400	14.0
Associate professional and technical	23.0	24.0	28.0	23.4	180300	6400	35.5
Clerical and secretarial	11.0	17.0	11.0	8.1	252600	2700	10.7
Craft and related	48.0	56.0	52.0	50.0	297900	13800	46.3
Personal and protective service	41.0	36.0	43.0	47.7	230900	9100	39.4
Sales	20.0	22.0	18.0	24.4	180700	1700	9.4
Plant and machine operatives	41.0	42.0	21.0	34.6	172000	7300	42.4
Other	29.0	30.0	37.0	32.1	198400	5300	26.7
Total persons	27.0	30.0	28.0	28.9	2074900	58300	28.1

Source CSO, QNHS: QNHS estimates are subject to sampling and other survey errors. Estimates and changes over time of a lower magnitude can be taken to have lower precision and should be interpreted with caution.

Figure 2.23: Illness rate by occupation 2002–2006 (CSO)

OCCUPATION	Rate 2002	Rate 2003	Rate 2004	Rate 2005	Employed 2006	Number 2006	Rate 2006
Managers and Administrators	30.0	32.0	38.0	37.9	318500	15500	48.7
Professional	20.0	21.0	27.0	32.6	243600	8800	36.1
Associate Professional and Technical	26.0	34.0	48.0	38.2	180300	11800	65.4
Clerical and Secretarial	18.0	16.0	18.0	17.1	252600	4900	19.4
Craft and Related	26.0	32.0	30.0	29.9	297900	9700	32.6
Personal and Protective Service	29.0	29.0	31.0	30.9	230900	8100	35.1
Sales	23.0	15.0	23.0	26.6	180700	2200	12.2
Plant and Machine Operatives	28.0	31.0	34.0	45.8	172000	4900	28.5
Other	28.0	22.0	31.0	32.1	198400	5400	27.2
Total Persons	26.0	26.0	31.0	32.0	2074900	71300	34.4

Source CSO, QNHS: QNHS estimates are subject to sampling and other survey errors. Estimates and changes over time of a lower magnitude can be taken to have lower precision and should be interpreted with caution.

The employment status of the victims of reported incidents is presented in Figure 2.24. Similar to the results in 2005 and 2006, 97% of injuries reported to the Authority in 2007 involved employees.



Figure 2.24: Distribution of reported non-fatal incidents by economic sector and employment status 2007 (HSA)

EMPLOYMENT STATUS	ECONOMIC SECTOR															Total %	Total Number
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O		
Employee	97.0	100.0	98.6	98.7	100.0	94.4	94.9	97.6	99.7	96.1	98.7	99.6	92.8	98.1	96.2	97.4	7498
Family worker	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0	3
Member of public	1.0	0.0	0.0	0.0	0.0	0.4	1.8	0.8	0.0	0.6	0.0	0.1	1.4	0.1	0.5	0.3	26
Non-worker	1.0	0.0	1.4	0.3	0.0	0.2	1.9	0.0	0.1	3.2	0.0	0.0	0.0	0.6	1.0	0.5	37
Self-employed	1.0	0.0	0.0	0.4	0.0	3.2	0.7	0.0	0.0	0.0	0.9	0.0	0.0	0.1	0.0	0.9	67
Trainee	0.0	0.0	0.0	0.6	0.0	1.8	0.7	1.6	0.1	0.0	0.4	0.3	5.8	1.0	2.4	0.9	69
Total %	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Number in sector	100	10	71	1597	26	1637	740	124	976	155	231	896	69	859	209		7700

Sector key

A – Agriculture, hunting and forestry, **B** – Fishing, **C** – Mining and Quarrying, **D** – Manufacturing, **E** – Electricity/gas/water, **F** – Construction, **G** – Wholesale/Retail trade; repair of vehicles, personal and household goods, **H** – Hotels/Restaurants, **I** – Transport, Storage, Communication, **J** – Financial Intermediation, **K** – Real Estate, Renting, Business, **L** – Public Admin/Defence, **M** – Education, **N** – Health/Social Work, **O** – Community/Social/Personal Services

The Authority's data on the nationality of injured workers (Figure 2.25) shows that over 14% of all reported injuries involved non-Irish national workers, compared to 11.5% in 2006 and 9% in 2005. This equates to an increase in the number of reports from over 700 in 2005 to over 800 in 2006 to over 1000 in 2007.

The breakdown by economic sector in Figure 2.26 shows that the Hotel and Restaurants, the Agriculture and the Health and Social Work sectors each reported a relatively high proportion of injuries involving 'non-EU' workers in 2007. The Hotel and Restaurant sector had the highest percentage of injuries to 'other EU' workers (27.9% of all injuries reported from the sector).

Figure 2.25: Distribution of non-fatal injuries by nationality 2007 (HSA)

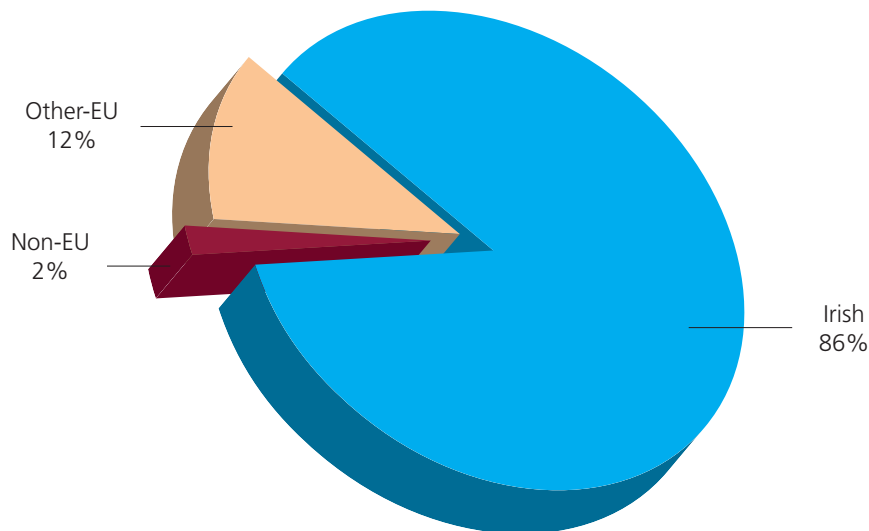




Figure 2.26: Distribution of non-fatal injuries by sector and nationality 2007 (HSA)

NATIONALITY	ECONOMIC SECTOR																Total %	Total Number
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O			
Irish	73.7	77.8	75.4	82.7	100.0	78.7	88.3	63.9	88.6	96.1	78.4	97.1	97.1	90.6	88.5	85.7	6563	
Non-EU	7.1	0.0	1.4	1.8	0.0	2.1	1.8	8.2	2.1	0.0	3.4	1.1	0.0	6.0	0.0	2.4	183	
Other EU	19.2	22.2	23.2	15.6	0.0	19.2	9.9	27.9	9.3	3.9	18.1	1.8	2.9	3.4	11.5	11.9	913	
Total %	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100		
Total number	99	9	69	1591	25	1622	738	122	981	153	232	890	70	850	208		7659	

Sector key

A – Agriculture, hunting and forestry, **B** – Fishing, **C** – Mining and Quarrying, **D** – Manufacturing, **E** – Electricity/gas/water, **F** – Construction, **G** – Wholesale/Retail trade; repair of vehicles, personal and household goods, **H** – Hotels/Restaurants, **I** – Transport, Storage, Communication, **J** – Financial Intermediation, **K** – Real Estate, Renting, Business, **L** – Public Admin/Defence, **M** – Education, **N** – Health/Social Work, **O** – Community/Social/Personal Services

Recent data from the CSO (2008) estimates that 334,700 non-Irish nationals were employed in Ireland in the fourth quarter (Q4) of 2007 (or over 15% of the total workforce) (see Figure 2.27). The numbers of non-Irish national workers has increased in every sector since 2006. The percentage of non-Irish national workers in the Hotel and Restaurant sector was particularly high in 2007 at 37% (compared to 28% in 2006). The proportion of non-Irish national workers was also high in the Production Industries, Construction and the Wholesale and Retail Trade sectors – non-Irish national workers represented 17% of the workforce in each of these sectors. The Agriculture/Fishing, the Public Administration and Defence and the Education sectors employed relatively few non-Irish national workers by comparison.

Figure 2.27: Workers by nationality and economic sector 2007 (CSO)

ECONOMIC SECTOR	Workers at Q4, 2007		
	Irish	Non-Irish	% non-Irish
Agriculture, hunting and forestry / fishing	111200	7400	0.6
Mining and quarrying / manufacturing / electricity, gas, water	239300	51400	17.7
Construction	231000	48000	17.2
Wholesale and retail trade; repair of goods	257600	54000	17.3
Hotels and restaurants	83000	49300	37.3
Transport, storage and communication	104800	16000	13.2
Financial intermediation / real estate, renting, business	251100	46000	15.5
Public administration and defence	102900	2100	2.0
Education	129800	9300	6.7
Health and social work	189500	31800	14.4
Other community, social and personal services	103900	19300	15.7
Total	1804200	334700	15.6



Risk alerts

- **Increase in injuries to workers aged 15 to 19 years old**

The number of reports of injuries to 15 to 19 year olds submitted to the Authority has increased, with 182 injuries reported in 2005, 330 in 2006 and 730 in 2007. This represents 10% of all reported injuries for 2007. Figures from the CSO suggest that workers in the 15–19 age band represent approximately 4% of those in employment (with seasonal variations).

The sectors with the highest number of reported injuries to 15 to 19 year olds were Construction, Manufacturing, Wholesale and Retail Trade, and Transport, Storage and Communication. In terms of the highest proportion of injuries in this age band, up to 20% of the injuries reported from the Hotel and Restaurant, 18% from Agriculture and 17% from the Wholesale and Retail Trade sectors in 2007 involved workers in the 15–19 age group.

The increase is not attributable to an overall increase in the reporting rate from these sectors. The CSO rates of injury for this age group do not show any discernible trend but the CSO warns that their figures are based on small numbers. The number of reports in this age band will be examined again in the 2008 data.



2.3 Incident Statistics

This section presents details of the circumstances of reported incidents. The statistics describe the accident sequence: the accident trigger, type of injury, body part injured and absence from work.

Data from the HSA database on the accident trigger in 2007 shows that manual handling continues to trigger approximately one-third of all reported incidents (see Figure 2.28). This category includes injuries due to lifting and carrying, pushing and pulling, and twisting and turning of the body. The proportion of accidents due to manual handling in 2007 was particularly high in the Wholesale and Retail Trade (44%) and Health and Social Work (40%) sectors.

Similar to previous years, the second most frequently reported accident trigger was 'slips, trips, falls'. This type of incident was more common than manual handling in the Education sector, and was highest in the Financial Intermediation sector. Together, manual handling and slips, trips and falls triggered over 50% of all the reported accidents in 2007 (see Figure 2.29).

Other notable findings include:

- The Construction sector had a higher proportion of fall-from-height incidents than most other sectors – 11.4% of all incidents reported from the sector.
- 28.3% of all incidents reported from the Agriculture sector were triggered by the loss of control of an animal.
- High numbers of incidents triggered by shock, fright and/or the violence of others continue to be reported from the Public Administration and Defence sector (22% of all reported incidents) and the Health and Social Work sector (14% of all reported incidents).



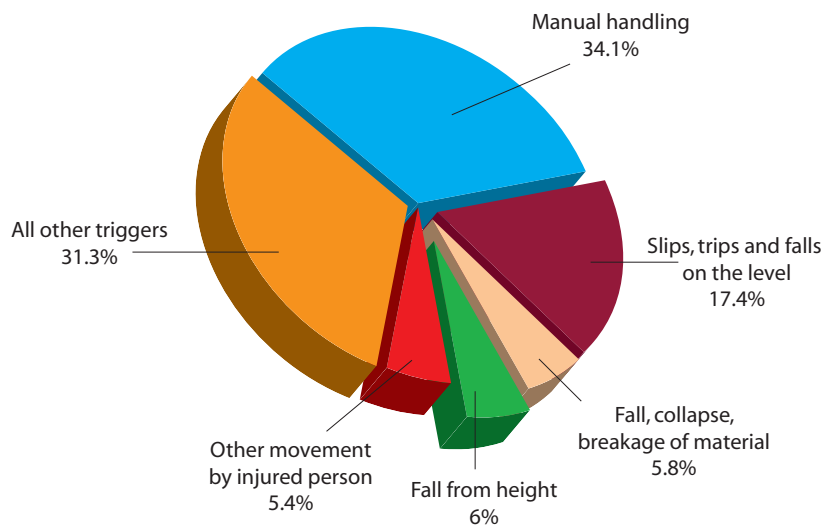
Figure 2.28: Percentage of reported non-fatal injuries by accident trigger and economic sector 2007 (HSA)

ACCIDENT TRIGGER	ECONOMIC SECTOR															Total %	Total Number
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O		
Manual handling	20.2	40.0	26.8	38.9	26.9	26.8	44.2	36.3	36.6	34.2	28.4	25.7	20.8	40.4	35.7	34.1	2646
Slips, trips and falls on the level	18.2	10.0	14.1	13.2	23.1	18.2	16.1	21.8	17.7	31.6	20.8	14.7	25.0	22.9	16.0	17.4	1349
Fall, collapse, breakage of material	3.0	0.0	9.9	5.0	7.7	10.8	8.4	10.5	3.6	1.9	5.1	2.2	6.9	3.3	5.2	6.0	462
Fall from height	2.0	10.0	8.5	4.2	19.2	11.4	6.6	2.4	4.4	5.2	5.5	3.1	6.9	1.6	6.1	5.8	447
Other movement of injured person	4.0	20.0	9.9	5.1	7.7	7.2	2.7	5.6	6.4	5.8	8.1	3.8	5.6	4.2	5.2	5.4	419
Shock, fright, violence of others	1.0	0.0	0.0	0.0	0.0	0.2	0.6	0.0	2.0	5.8	0.8	21.5	9.7	13.7	3.8	4.7	367
Loss of control of: hand tool	2.0	0.0	8.5	6.6	0.0	6.1	4.3	5.6	1.2	0.6	2.5	1.0	2.8	0.7	3.8	3.8	298
Loss of control of: object person was working on	3.0	0.0	8.5	6.5	0.0	5.2	2.8	1.6	1.9	1.3	4.2	1.2	4.2	1.0	3.8	3.6	283
Loss of control of: machine	3.0	10.0	2.8	5.2	0.0	2.7	3.4	0.8	0.7	0.6	2.1	0.6	1.4	0.7	2.3	2.5	191
Loss of control of: road traffic transport	0.0	0.0	0.0	0.4	3.8	0.9	0.4	0.0	5.5	3.2	1.3	8.7	1.4	1.2	2.3	2.3	182
Loss of control of: transport / handling equipment	1.0	0.0	1.4	1.8	0.0	1.2	3.0	0.8	2.6	0.0	3.4	0.7	0.0	0.2	0.9	1.5	118
Overflow, leakage, emission: liquid	0.0	10.0	0.0	2.5	0.0	0.9	1.0	3.2	0.6	0.6	1.3	0.4	0.0	0.8	1.4	1.2	92
Loss of control of: other	3.0	0.0	0.0	1.4	0.0	0.4	0.6	1.6	0.9	0.0	1.3	1.3	0.0	0.9	0.9	0.9	73
Overflow, leakage, emission: other	0.0	0.0	0.0	0.7	3.8	0.5	0.3	1.6	1.3	0.0	0.4	0.2	2.8	0.0	0.9	0.6	44
Person entered inappropriate area	2.0	0.0	1.4	1.3	0.0	0.4	0.4	0.8	0.3	1.3	1.3	0.2	0.0	0.1	0.9	0.6	48
Loss of control of: animal	28.3	0.0	0.0	0.1	0.0	0.1	0.1	0.8	0.7	0.0	0.4	0.4	0.0	0.0	0.0	0.6	45
Overflow, leakage, emission: smoke / dust	0.0	0.0	0.0	0.4	0.0	0.2	0.1	0.0	0.6	0.0	1.3	0.1	0.0	0.1	0.5	0.3	23
Overflow, leakage, emission: solid material	1.0	0.0	1.4	0.6	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.2	15
Electric failure	1.0	0.0	0.0	0.1	3.8	0.2	0.0	1.6	0.1	0.0	0.4	0.6	0.0	0.1	0.0	0.2	16
Explosion	0.0	0.0	0.0	0.3	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.5	0.1	8
Fire	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.5	0.1	7
Overflow, leakage, emission: gas	0.0	0.0	0.0	0.1	0.0	0.2	0.3	0.0	0.1	0.0	0.4	0.1	0.0	0.0	0.0	0.1	10
Other	7.1	0.0	7.0	5.6	3.8	5.9	4.7	4.8	12.6	7.7	11.0	13.1	11.1	7.7	9.4	7.9	614
Total %	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Number in sector	99	10	71	1593	26	1646	772	124	983	155	236	896	72	861	213		7757

Sector key

A – Agriculture, hunting and forestry, **B** – Fishing, **C** – Mining and Quarrying, **D** – Manufacturing, **E** – Electricity/gas/water, **F** – Construction, **G** – Wholesale/Retail trade; repair of vehicles, personal and household goods, **H** – Hotels/Restaurants, **I** – Transport, Storage, Communication, **J** – Financial Intermediation, **K** – Real Estate, Renting, Business, **L** – Public Admin/Defence, **M** – Education, **N** – Health/Social Work, **O** – Community/Social/Personal Services

Figure 2.29: Top five accident triggers of non-fatal accidents, all sectors 2007 (HSA)





The CSO provides data on the type of injury and illness reported by respondents in the Quarterly National Household Survey (see Figures 2.30 and 2.31). The 2006 rates of the different injury types shown in Figure 2.30 are very similar to the rates in 2005. 'Wound, superficial injury' was the most common injury type, at a rate of 10.6 per 1000 workers (in 2005 the rate was 10.7 per 1000 workers), followed by 'sprain, strain' at 8.8 injuries per 1000 workers (8.9 per 1000 workers in 2005). Male workers had higher rates of all injury types.

In terms of illness types, the rate of bone, joint or muscle cases was higher than any other category in 2006 (and in 2004 and 2005). Stress, depression and anxiety made up the second most common illness type recorded by the CSO and Figure 31 shows that female workers had higher rates of this category of illness than male workers.

Figure 2.30: Injury type by gender 2006 (CSO)

INJURY TYPE	Male		Female		Total	
	Number 2006	Rate 2006	Number 2006	Rate 2006	Number 2006	Rate 2006
Wound, superficial injury	17100	14.4	4900	5.5	22000	10.6
Bone fracture	5800	4.9	1400	1.6	7200	3.5
Sprain, strain	13200	11.1	5100	5.7	18300	8.8
Amputation	500	0.4	*	*	500	0.2
Concussion, internal injury	1200	1.0	*	*	1200	0.6
Burn, scald, frostbite	2100	1.8	500	0.6	2600	1.3
Poisoning, infection	*	*	*	*	*	*
Suffocation	*	*	*	*	*	*
Other	2900	2.4	1700	1.9	4600	2.2
Not applicable	1200	1.0	800	0.9	2000	1.0
Total	44000	37.0	14400	16.2	58400	28.1

* Insufficient data.

Source CSO, QNHS: QNHS estimates are subject to sampling and other survey errors. Estimates and changes over time of a lower magnitude can be taken to have lower precision and should be interpreted with caution.

Figure 2.31: Illness type by gender 2006 (CSO)

INJURY TYPE	Male		Female		Total	
	Number 2006	Rate 2006	Number 2006	Rate 2006	Number 2006	Rate 2006
Bone, joint or muscle	26800	22.6	12400	14.0	39200	18.9
Breathing, lungs	2600	2.2	2300	2.6	4800	2.3
Skin	1400	1.2	400	0.5	1900	0.9
Hearing problem	600	0.5	0.0	600	0.3	
Stress, depression, anxiety	5100	4.3	6100	6.9	11200	5.4
Headache, eyestrain	1000	0.8	500	0.6	1500	0.7
Heart	1500	1.3	400	0.5	1900	0.9
Infectious disease	2200	1.9	1700	1.9	4000	1.9
Other	2500	2.1	2900	3.3	5400	2.6
Not stated	300	0.3	600	0.7	900	0.4
Total	44000	37.0	27300	30.8	71400	34.4

* Insufficient data.

Source CSO, QNHS: QNHS estimates are subject to sampling and other survey errors. Estimates and changes over time of a lower magnitude can be taken to have lower precision and should be interpreted with caution.



The HSA data for 'body part injured' is almost identical year on year. In 2007 the following body parts were most commonly injured (see Figure 2.32):

- 23% were back injuries (24% in 2006, 23% in 2005)
- 12% were finger injuries (11% in 2006, 12% in 2005)
- 8% were leg injuries (8% in 2006, 8% in 2005).

Figure 2.32: Reported most injured body part, all sectors 2007 (HSA)

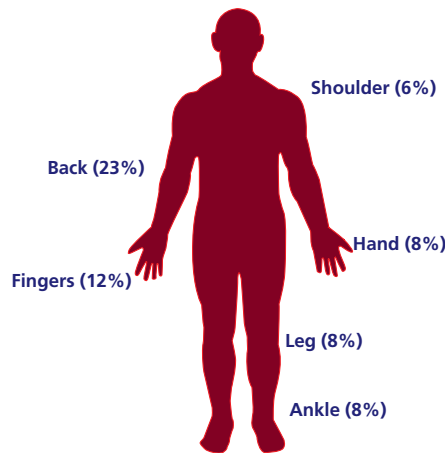


Figure 2.33: Percentage of reported non-fatal injuries by body part injured and economic sector 2007 (HSA)

BODY PART	ECONOMIC SECTOR															Total %	Number injuries
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O		
Back	11.0	10.0	15.7	30.8	29.5	17.4	29.0	24.0	23.0	10.0	25.6	19.4	22.4	27.8	26.5	22.9	1773
Finger(s)	10.0	20.0	5.7	3.8	10.1	14.5	7.0	16.0	19.2	7.1	9.5	5.6	13.5	6.3	10.5	11.7	909
Hand	11.0	10.0	8.6	7.7	3.4	8.1	6.8	11.2	10.6	12.9	12.3	8.6	10.5	5.4	8.1	8.4	653
Leg	11.0	30.0	11.4	11.5	8.7	10.9	5.2	9.6	5.4	12.9	4.7	11.1	8.9	9.5	6.5	8.3	644
Ankle	6.0	0.0	8.6	15.4	7.4	11.9	3.6	5.6	5.4	8.6	5.2	6.4	5.9	9.3	7.0	7.5	580
Shoulder	8.0	10.0	10.0	0.0	4.7	4.4	8.5	1.6	5.5	5.7	6.6	6.8	5.9	6.0	6.5	5.9	459
Arm	6.0	10.0	4.3	3.8	11.4	4.9	7.3	4.8	6.6	5.7	6.2	5.7	5.9	4.1	4.6	5.7	441
Foot	8.0	0.0	2.9	3.8	4.7	6.2	3.5	5.6	4.4	18.6	4.7	2.8	4.6	3.6	5.9	4.8	368
Wrist	2.0	0.0	5.7	3.8	4.0	4.2	3.8	2.4	4.6	2.9	5.7	4.4	4.2	2.7	4.3	4.1	315
Head	5.0	0.0	10.0	0.0	4.7	3.5	3.6	6.4	2.0	7.1	2.8	8.2	4.6	4.0	4.4	4.1	315
Neck	1.0	0.0	1.4	0.0	2.7	0.8	6.8	2.4	1.4	1.4	1.9	3.6	1.7	3.1	1.8	2.4	189
Chest	7.0	0.0	2.9	3.8	0.7	1.9	2.3	0.8	2.2	2.9	2.4	3.5	1.7	2.9	1.9	2.4	184
Eye(s)	3.0	10.0	1.4	0.0	0.0	3.0	0.9	2.4	3.4	2.9	1.9	2.1	3.4	1.5	1.8	2.3	182
Face	1.0	0.0	2.9	3.8	0.7	1.3	3.4	1.6	1.3	0.0	2.8	3.7	0.8	0.7	1.0	1.7	134
Pelvic area	2.0	0.0	1.4	0.0	0.7	0.8	1.7	0.8	0.9	0.0	0.9	0.7	0.0	1.2	1.2	1.0	77
Hip	0.0	0.0	1.4	0.0	1.3	0.7	1.2	0.8	0.9	0.0	0.5	1.4	0.8	0.8	2.2	1.0	80
Ear(s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.5	0.1	0.0	5.7	0.0	0.8	59
Multiple injuries	0.0	0.0	2.9	0.0	1.3	0.6	0.7	0.8	0.2	0.0	0.0	0.9	0.8	0.3	0.9	0.6	44
Serious	1.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.1	0.0	0.5	0.2	0.0	0.1	0.1	0.2	12
Serious multiple injuries	1.0	0.0	2.9	0.0	1.3	0.9	0.7	0.8	0.2	0.0	0.5	1.1	0.8	0.4	1.0	0.7	56
Toe(s)	2.0	0.0	0.0	0.0	0.0	0.6	0.1	2.4	0.6	0.0	0.9	0.3	0.4	0.7	2.6	0.8	59
Torso and	2.0	0.0	0.0	3.8	0.7	0.4	0.1	0.0	0.2	0.0	0.5	0.0	0.4	0.2	0.0	0.2	19
Whole body	0.0	0.0	0.0	0.0	0.0	0.4	0.3	0.0	0.0	0.0	0.5	0.3	0.4	0.0	0.0	0.2	15
Teeth	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.2	0.0	0.1	7
Other	3.0	0.0	2.9	7.7	1.3	2.9	3.0	0.8	1.8	1.4	3.3	3.6	2.5	3.3	2.2	2.7	208
Stress	0.0	0.0	0.0	0.0	2.0	0.0	0.8	0.0	0.1	0.0	0.0	0.3	0.4	0.4	0.1	0.3	21
Other	3.0	0.0	2.9	7.7	3.4	2.9	3.8	0.8	1.9	1.4	3.3	3.9	3.0	3.7	2.3	3.0	229
Total %	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Number in sector	100	10	70	26	149	1649	858	125	1602	70	211	888	237	977	775		7747

Sector key

A – Agriculture, hunting and forestry, **B** – Fishing, **C** – Mining and Quarrying, **D** – Manufacturing, **E** – Electricity/gas/water, **F** – Construction, **G** – Wholesale/Retail trade; repair of vehicles, personal and household goods, **H** – Hotels/Restaurants, **I** – Transport, Storage, Communication, **J** – Financial Intermediation, **K** – Real Estate, Renting, Business, **L** – Public Admin/Defence, **M** – Education, **N** – Health/Social Work, **O** – Community/Social/Personal Services



Figure 2.34 presents injury data supplied by the Occupational Injury Benefit (OIB) division of the Department of Social and Family Affairs (DSFA), based on its database of claims admitted in 2007. The OIB categories represent a combination of the 'injury type' and 'body part injured' fields used by the Authority.

The OIB database and the Authority database correspond in terms of the most commonly injured body parts – the OIB data also shows that back injuries are the most common (29%) followed by hand/finger injuries (12%). Leg injuries account for 8% of injuries reported to the Authority and 10% of injuries reported to the OIB.

Figure 2.34: OIB claims by injury type 2007 (DSFA)

INJURY TYPE	%	Number
Back, neck, rib, disc	3940	28.5
Hand, finger, wrist	1627	11.8
Fracture, break	1463	10.6
Leg, knee, ankle injury	1351	9.8
RTA, multiple injury	1138	8.2
Shoulder, elbow, arm injury	951	6.9
Bruise, cut, laceration	402	2.9
Limb injury	379	2.7
Foot, heel injury	361	2.6
Stress	256	1.9
Head injuries	202	1.5
Burns, scalds	176	1.3
Conjunctivitis, eye	143	1.0
Muscle spasm, strain	112	0.8
Ligament injury	101	0.7
Other illness/injury	1201	28.5
Total	13803	100

As shown in Figure 2.35 and Figure 2.36, 60% of all reported accidents in 2007 resulted in less than 14 days' absence from work – this was also the case in 2006. Many of the reported accidents had more severe consequences: 1287 (or 18%) of all reported injuries result in more than one month's absence from work.

The breakdown of absence by economic sector in Figure 2.36 suggests that the proportion of accidents which caused absences of at least six months' duration was higher in the Mining and Quarrying sector and the Education sector – however, these percentages are based on small cell counts.

Figure 2.35: Reported non-fatal injuries by absence from work 2007 (HSA)

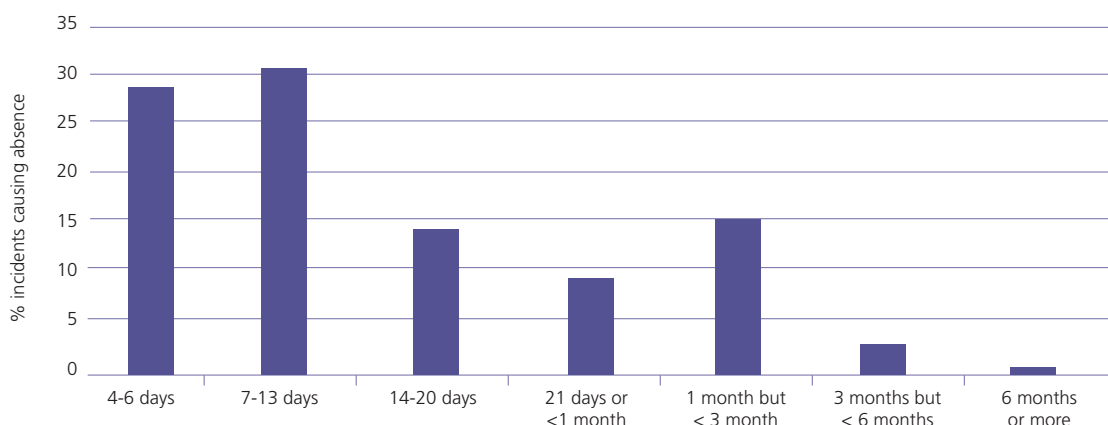


Figure 2.36: Reported injuries by absence from work and economic sector 2007 (HSA)

DAYS ABSENT	ECONOMIC SECTOR															Total	Total
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	%	injuries
4–6 days	19.6	44.4	29.5	35.5	26.1	27.6	31.0	28.6	25.6	35.1	30.2	22.6	32.3	23.7	35.7	28.8	2062
7–13 days	32.6	22.2	21.3	32.2	13.0	30.7	31.3	31.9	30.7	25.7	28.8	28.9	21.0	32.7	26.1	30.6	2194
14–20 days	17.4	11.1	11.5	11.5	13.0	13.4	14.4	19.3	16.0	12.8	16.5	16.2	4.8	15.8	13.1	14.1	1014
21 days or < 1 month	8.7	0.0	14.8	6.1	0.0	8.1	8.1	10.1	12.8	9.5	3.8	10.6	8.1	7.7	8.5	8.5	610
1 month but < 3 months	18.5	11.1	14.8	13.0	39.1	16.4	12.5	8.4	12.8	14.2	18.4	18.5	22.6	16.1	14.1	15.0	1075
3 months but < 6 months	3.3	11.1	1.6	1.3	4.3	3.1	2.2	1.7	1.6	2.7	2.4	2.2	6.5	2.9	2.0	2.3	162
6 months or more	0.0	0.0	6.6	0.4	4.3	0.7	0.4	0.0	0.4	0.0	0.0	1.0	4.8	1.2	0.5	0.7	50
Total %	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Number in sector	92	9	61	1511	23	1516	680	119	927	148	212	837	62	771	199		7167

Sector key

A – Agriculture, hunting and forestry, **B** – Fishing, **C** – Mining and Quarrying, **D** – Manufacturing, **E** – Electricity/gas/water, **F** – Construction, **G** – Wholesale/Retail trade; repair of vehicles, personal and household goods, **H** – Hotels/Restaurants, **I** – Transport, Storage, Communication, **J** – Financial Intermediation, **K** – Real Estate, Renting, Business, **L** – Public Admin/Defence, **M** – Education, **N** – Health/Social Work, **O** – Community/Social/Personal Services



2.4 Work Environment Statistics

This section describes the work environment in which reported non-fatal incidents took place. It presents details about the immediate work environment, the size of the employing organisation and the geographical region.

Figure 2.37 shows that ‘factory, industrial area, production area’ and ‘construction site, quarry’ continue to be the most common types of working environment in which injuries are sustained. Changes to the coding categories in 2007 increased the level of detail available so that more specific categories such as ‘motorways or roads’ and ‘storage area or loading bay’ feature in the table.

Figure 2.37: Percentage of reported non-fatal injuries by work environment and economic sector 2007 (HSA)

WORK ENVIRONMENT	ECONOMIC SECTOR															Total %	Total Number
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O		
Factory, industrial areas, production area	17.0	30.0	23.9	83.7	18.5	11.9	28.9	0.0	16.2	7.1	32.4	6.5	2.7	0.3	23.9	27.8	2172
Construction site, quarry	3.0	0.0	39.4	3.6	7.4	67.9	0.6	0.8	0.5	1.9	20.6	1.6	0.0	0.1	3.8	16.7	1302
Healthcare establishment	0.0	0.0	0.0	0.4	0.0	1.3	0.4	0.8	0.0	0.0	4.2	2.7	5.5	72.3	0.9	9.0	706
Office, school, shop, restaurant other	2.0	0.0	0.0	1.7	7.4	2.4	27.0	46.4	3.5	48.7	16.8	8.6	49.3	2.1	8.0	8.2	639
Public area	1.0	0.0	1.4	0.6	3.7	2.5	1.2	1.6	22.6	11.5	4.6	15.7	1.4	2.6	6.1	6.3	495
Motorways or roads	0.0	0.0	1.4	0.4	7.4	0.9	0.4	0.0	6.0	1.3	2.1	11.8	0.0	0.6	5.2	2.8	216
Storage area or loading bay	2.0	0.0	0.0	2.4	3.7	0.6	11.1	0.0	6.4	3.8	1.7	0.6	1.4	0.0	2.3	2.8	221
Retail unit or shopping centre	0.0	0.0	0.0	0.3	0.0	0.3	21.1	0.0	0.5	1.9	1.3	0.1	0.0	0.1	0.5	2.4	188
Private home or related area	4.0	0.0	0.0	0.4	7.4	1.2	1.5	0.0	2.7	0.6	1.3	4.4	0.0	4.6	5.2	2.1	167
Other	71.0	70.0	33.8	6.4	44.4	10.9	7.8	50.4	41.5	23.1	15.1	48.2	39.7	17.3	44.1	21.9	1712
Total %	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Number in sector	100	10	71	1606	27	1658	778	125	987	156	238	899	73	877	213		7818

Sector key

A – Agriculture, hunting and forestry, **B** – Fishing, **C** – Mining and Quarrying, **D** – Manufacturing, **E** – Electricity/gas/water, **F** – Construction, **G** – Wholesale/Retail trade; repair of vehicles, personal and household goods, **H** – Hotels/Restaurants, **I** – Transport, Storage, Communication, **J** – Financial Intermediation, **K** – Real Estate, Renting, Business, **L** – Public Admin/Defence, **M** – Education, **N** – Health/Social Work, **O** – Community/Social/Personal Services

The Authority’s data on the size of the employing organisation is presented in Figures 2.38 and 2.39. Consistent with the results for 2004 to 2006, only 3% of injuries in the Authority’s database were reported by organisations with less than ten employees, while almost 50% of all incidents were reported by organisations with more than 500 employees. Only 15 incident reports were received from self-employed workers.



Figure 2.38: Percentage of reported non-fatal injuries by size of employing organisation 2007 (HSA)

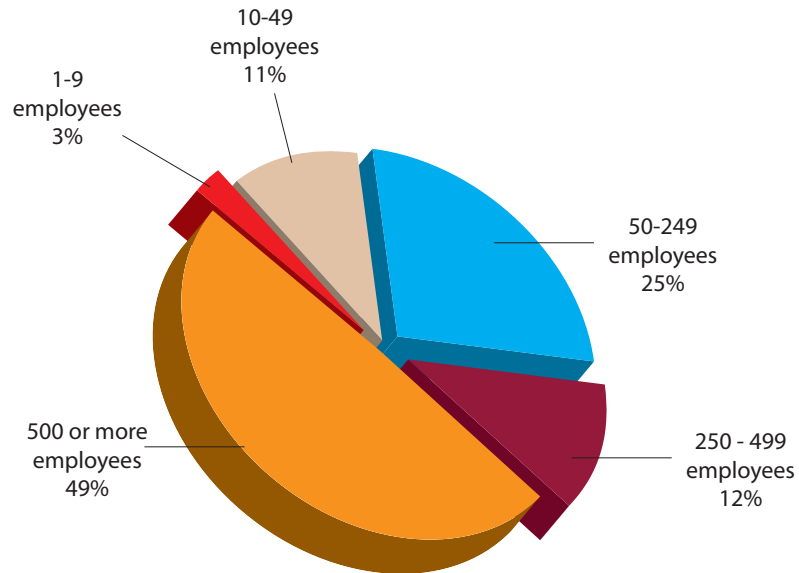


Figure 2.39: Percentage of reported non-fatal injuries by size of employing organisation by economic sector 2007 (HSA)

Number employed in organisation	ECONOMIC SECTOR															Total %	Total nationality
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O		
Self-employed	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.1	0.0	0.0	0.0	0.2	15
1-9 employees	11.2	12.5	0.0	1.4	8.0	10.5	1.0	0.0	0.8	2.0	4.4	0.5	3.1	0.5	4.8	3.3	244
10-49 employees	11.2	25.0	10.1	10.4	8.0	26.3	7.6	5.8	4.4	2.0	15.4	2.7	20.0	2.6	11.5	11.0	811
50-249 employees	55.1	50.0	53.6	38.1	24.0	38.7	20.7	34.7	12.0	2.0	30.3	6.9	12.3	9.0	24.5	25.1	1852
250-499 employees	6.7	0.0	5.8	21.4	4.0	10.5	5.3	9.1	5.0	3.4	17.1	8.6	16.9	12.2	17.8	11.7	864
500 or more employees	15.7	12.5	30.4	28.8	56.0	13.0	65.3	50.4	77.8	90.6	32.5	81.2	47.7	75.7	41.3	48.7	3598
Total %	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Number in sector	89	8	69	1553	25	1536	733	121	965	149	228	842	65	793	208		7384

Figure 2.40 shows the geographical location of incidents reported to the Authority. Dublin had the highest percentage of incidents (37%), followed by Cork (12%).



Figure 2.40: Number of reports by geographical location of incident 2007 (HSA)

Workplace Location	Number Reports	% Reports
Antrim	3	0.0
Carlow	93	1.2
Cavan	89	1.1
Clare	165	2.1
Cork	958	12.2
Donegal	86	1.1
Dublin	2913	37.2
Fermanagh	1	0.0
Galway	307	3.9
Kerry	184	2.4
Kildare	343	4.4
Kilkenny	126	1.6
Laois	64	0.8
Leitrim	28	0.4
Limerick	364	4.7
Longford	66	0.8
Louth	213	2.7
Mayo	163	2.1
Meath	227	2.9
Monaghan	79	1.0
Offaly	94	1.2
Roscommon	47	0.6
Sligo	110	1.4
Tipperary	295	3.8
Tyrone	1	0.0
UK	1	0.0
Waterford	303	3.9
Westmeath	168	2.1
Wexford	180	2.3
Wicklow	156	2.0
Total	7827	100

The regional breakdown of injury and illness estimates from the CSO is presented in *Figures 2.41 and 2.42*. The regions are different sizes so they cannot be compared directly but the data provides a general guide to injury and illness rates across the country.

Figures 2.41 and 2.42 show that the West region had the highest injury rate in 2006 (36.6 per 1000 workers), followed by the Midlands region (35.1 per 1000 workers). Illness rates were highest in the Dublin region (47.5 cases per 1000 workers), followed by the Midlands region (42.7 cases per 1000 workers).

Figure 2.41: Rate of illness and injury by region 2006 (CSO)

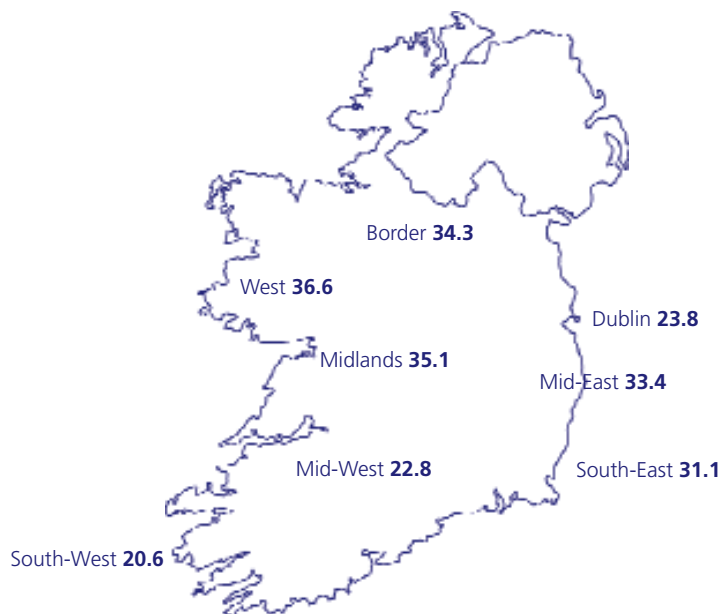
Region	Total employed	Injury		Illness	
		Number	Rate per 1000	Number	Rate per 1000
Border	212700	7300	34.3	7300	34.3
Midlands	119500	4200	35.1	5100	42.7
West	202300	7400	36.6	6600	32.6
Dublin	612200	14600	23.8	29100	47.5
Mid-East	236400	7900	33.4	8000	33.8
Mid-West	171300	3900	22.8	4700	27.4
South-East	218800	6800	31.1	5500	25.1
South-West	301700	6200	20.6	5000	16.6



Region	County
Border	Cavan, Donegal, Leitrim, Louth, Monaghan, Sligo
Dublin	Dublin
Mid-East	Kildare, Meath, Wicklow
Midland	Laois, Longford, Offaly, Westmeath
Mid-West	Clare, Limerick, Tipperary NR
South-East	Carlow, Kilkenny, Tipperary SR, Waterford, Wexford
South-West	Cork, Kerry
West	Galway, Mayo, Roscommon

Source CSO, QNHS: QNHS estimates are subject to sampling and other survey errors. Estimates and changes over time of a lower magnitude can be taken to have lower precision and should be interpreted with caution.

Figure 2.42: Rate of injury per 1000 workers by region 2006 (CSO)



3. Fatal Injury Statistics

Statistics for fatal injuries in the workplace in 2007 are presented in this part of the Summary. Details of each fatality are summarised in the Appendix.

Some of the statistics in this section are based on the number of worker fatalities only, while others are calculated using all work-related fatalities (including family workers aged under 15 years, non-workers, and members of the public). The basis of the calculation is indicated in each case. Note that worker fatality rates are calculated on the basis of the Quarterly National Household Survey data for numbers employed in each economic sector in Quarter 4, 2007 (CSO, 2008)

In addition to the workplace fatalities presented in this report, there are road traffic fatalities that were not reported to the Authority but which may have involved persons driving in the course of their work. Information on road traffic fatalities is available from the Road Safety Authority (<http://www.rsa.ie>).

There were 67 work-related fatalities in 2007, of which 59 were worker fatalities (see Figure 3.1). The Construction sector had the highest number of fatalities, with 18 work-related deaths in 2007 compared to 12 in 2006. The Fishing sector had 12 fatalities in 2007 compared to 2 in 2006. The Agriculture sector recorded 11 fatalities in 2007, which represents a significant decrease on the 18 fatalities recorded in the sector in 2006.

Figure 3.1: Number of fatalities by economic sector (worker and non-worker) 2007 (HSA)



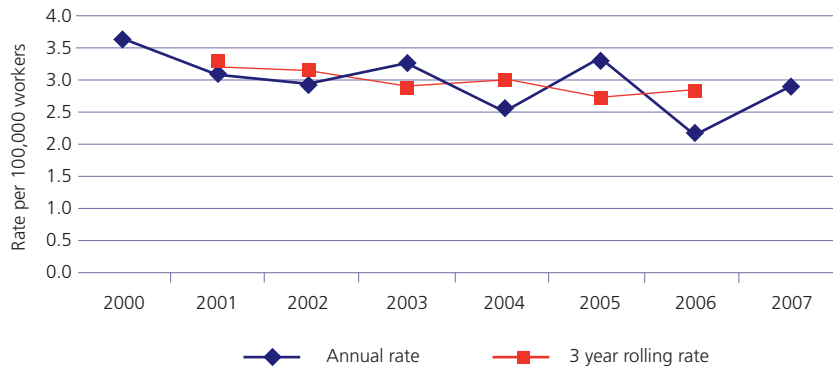
Sector key

A – Agriculture, hunting and forestry, **B** – Fishing, **C** – Mining and Quarrying, **D** – Manufacturing, **E** – Electricity/gas/water, **F** – Construction, **G** – Wholesale/Retail trade; repair of vehicles, personal and household goods, **H** – Hotels/Restaurants, **I** – Transport, Storage, Communication, **J** – Financial Intermediation, **K** – Real Estate, Renting, Business, **L** – Public Admin/Defence, **M** – Education, **N** – Health/Social Work, **O** – Community/Social/Personal Services

The fatality rate in 2007 was 2.8 per 100,000 workers. This figure represents an increase on the 2006 rate of 2.2 per 100,000 workers, which was the lowest fatality rate recorded from 2000 onwards. However, the three-year rolling rate illustrated in Figure 3.2 shows that the rate of 2.8 per 100,000 in 2007 maintained the general downward trend in the fatality rate since 2000.



Figure 3.2: Rate of worker fatalities 2000–2007 (HSA)



Note: The fatality rate is calculated using the numbers in employment aged over 15 at Q4 of the reference year as reported by the CSO.

Figure 3.3 shows the fatality rate in each economic sector in 2007. The rate of 17.7 per 100,000 workers for the combined Agriculture and Fishing sector was at least three times higher than the rate in any other sector. This very high rate was partly due to the exceptionally high number of worker fatalities in the Fishing sector in 2007. If the rate for each sector is calculated separately (based on an indicative figure of 10,000 employed in the Fishing sector), the individual rates were 8.3 fatalities per 100,000 in the Agriculture sector and 120 fatalities per 100,000 for the Fishing sector.

The Transport, Storage and Communication sector had the second highest rate at 5.8 fatalities per 100,000 workers. This represents an increase from 2.6 fatalities per 100,000 workers in 2006.

The Construction sector ranked third in relation to fatality rates at 5 per 100,000 workers in 2007. This figure is higher than the rate of 4.3 fatalities per 100,000 workers in 2006 (the lowest recorded rate for the sector) but maintains the general downward trend in the fatality rate.



Figure 3.3: Rate of worker fatalities by economic sector 2007 (HSA)

ECONOMIC SECTOR	Worker					Non-worker	Total
	Employee	Self-employed	Family worker 15+	Total	Rate per 100,000		
A-B	11	10	0	21	17.7	2	23
C-E	6	0	0	6	2.1	0	6
F	9	4	1	14	5.0	4	18
G	0	1	0	1	0.3	0	1
H	0	0	0	0	0.0	0	0
I	7	0	0	7	5.8	2	9
J-K	1	1	0	2	0.7	0	2
L	4	0	0	4	3.8	0	4
M	0	0	0	0	0.0	0	0
N	0	0	0	0	0.0	0	0
O	4	0	0	4	3.2	0	4
Total	42	16	1	59	2.8	8	67

Sector key

A – Agriculture, hunting and forestry, **B** – Fishing, **C** – Mining and Quarrying, **D** – Manufacturing, **E** – Electricity/gas/water, **F** – Construction, **G** – Wholesale/Retail trade; repair of vehicles, personal and household goods, **H** – Hotels/Restaurants, **I** – Transport, Storage, Communication, **J** – Financial Intermediation, **K** – Real Estate, Renting, Business, **L** – Public Admin/Defence, **M** – Education, **N** – Health/Social Work, **O** – Community/Social/Personal Services

Note: Sectors A-B, C-E and J-K are combined in some figures because estimates of the working population in these sectors are combined by the CSO.

Figures 3.4 and 3.5 provide further detail on the number and rate of fatalities in each economic sector from 2002 to 2007. Overall, Figure 3.4 shows that the Construction sector had the highest number of work-related fatalities – 111 fatalities or 30% of all 371 fatalities recorded since 2002, followed by the Agriculture sector – 94 fatalities or 25% of all recorded fatalities. These two sectors had the highest numbers of fatalities throughout the period.

The worker fatality rates (Figure 3.5) show a different pattern. Several of the sectors are combined by the CSO so that the rates must also be combined. In this case, the Agriculture/Fishing sector has consistently had the highest fatality rate and the rate has generally been rising since 2002. Construction has consistently had the second highest fatality rate, but this has generally been falling since 2002 to the extent that it was overtaken by the Transport, Storage and Communication sector fatality rate in 2007. See Figure 3.6 for a graphical presentation of the Agriculture/Fishing and Construction fatality rates compared to the average rate for all sectors.



Figure 3.4: Number of fatalities (worker and non-worker) by economic sector 2002–2007 (HSA)

ECONOMIC SECTOR	Number of fatalities (worker and non-worker)						Total in sector
	2002	2003	2004	2005	2006	2007	
A – Agriculture, hunting and forestry	14	20	13	18	18	11	94
B – Fishing	3	0	3	2	2	12	22
C – Mining and quarrying	3	1	0	6	2	2	14
D – Manufacturing	7	7	3	7	4	4	32
E – Electricity, gas, water	1	2	0	0	0	0	3
F – Construction	21	20	16	23	13	18	111
G – Wholesale and retail trade; repair of goods	1	4	4	8	3	1	21
H – Hotels and restaurants	0	0	0	0	0	0	0
I – Transport, storage and communication	7	9	6	5	4	9	40
J – Financial intermediation	0	0	1	0	0	0	1
K – Real estate, renting, business	0	0	0	1	2	2	5
L – Public administration and defence	3	1	0	2	1	4	11
M – Education	0	0	1	0	0	0	1
N – Health and social work	0	0	1	0	1	0	2
O – Other community, social and personal services	1	4	2	2	1	4	14
Total	61	68	50	74	51	67	371

Figure 3.5: Worker fatality rate by economic sector 2002–2007 (HSA)

ECONOMIC SECTOR	Rate of Worker Fatalities					
	2002	2003	2004	2005	2006	2007
Agriculture, hunting and forestry / Fishing	12.2	13.8	13.3	14.7	15.5	17.7
Mining and quarrying / Manufacturing / Electricity, gas, water	2.3	3.4	1	4.2	2.1	2.1
Construction	11.0	8	6.6	8.3	4.3	5.0
Wholesale & retail trade; repair of goods	0.0	1.6	1.5	1.8	0.7	0.3
Hotels and restaurants	0.0	0	0	0	0.0	0.0
Transport, storage and communication	5.3	7	5.2	4.2	2.6	5.8
Financial intermediation / Real estate, renting, business	0.0	0	0.4	0.4	0.7	0.7
Public Administration; Defence	3.4	1.1	0	2	1.0	3.8
Education	0.0	0	0.8	0	0.0	0.0
Health and social work	0.0	0	0.5	0	0.0	0.0
Other community, social and personal services	1.0	3.8	1.7	1.6	0.8	3.2
Total	3.0	3.3	2.5	3.3	2.2	2.8



Figure 3.6: Comparison of total fatality rate with fatality rate in the Agriculture/Fishing and Construction sectors 2000–2007 (HSA)

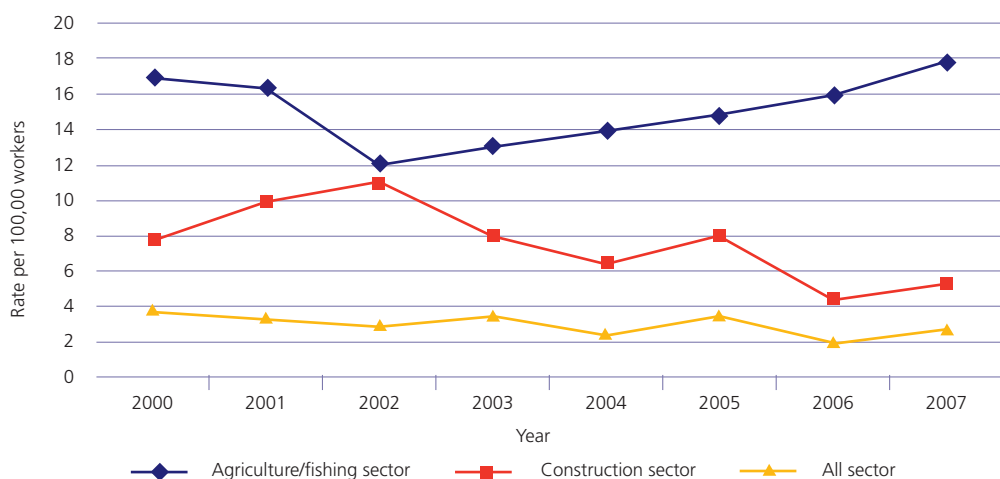
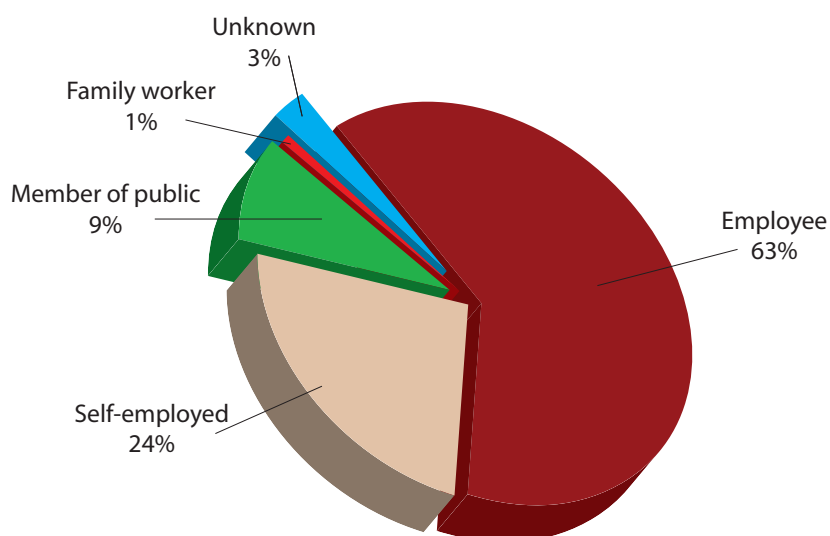


Figure 3.7 presents the percentage breakdown by employment status of the work-related fatal injury victims in 2007. Of the 59 worker fatalities in 2007:

- 42 were employees
- 16 were self-employed (including 10 in Agriculture/Fishing and 4 in Construction)
- 1 was a family worker (in Construction).

Figure 3.7: Percentage of fatal injuries by employment status 2007 (HSA)



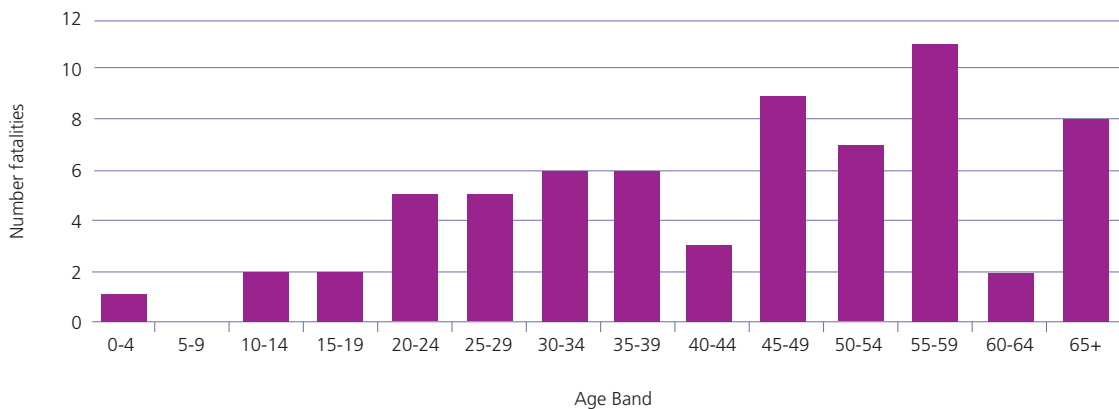
The age profile of the fatal incident victims in 2007 is presented in Figures 3.8 and 3.9. The largest numbers of fatal incident victims were in the 55–59 (11 fatalities) and 45–49 (9 fatalities) age bands. The fatalities in these age bands occurred across a range of sectors. Eight of the fatal incident victims in 2007 were aged 65 years or older, compared to 13 fatalities in this age band in 2006; 6 of these 8 fatalities were in the Agriculture sector.



Figure 3.8: Number of fatalities (worker and non-worker) by economic sector and age band 2007 (HSA)

Age	A	B	C	D	F	G	I	K	N	O	Total
0-4	0	0	0	0	1	0	0	0	0	0	1
5-9	0	0	0	0	0	0	0	0	0	0	0
10-14	1	0	0	0	1	0	0	0	0	0	2
15-19	0	2	0	0	0	0	0	0	0	0	2
20-24	0	0	0	2	1	0	2	0	0	0	5
25-29	0	2	0	0	2	0	0	0	1	0	5
30-34	0	3	0	0	2	0	1	0	0	0	6
35-39	0	2	0	0	1	1	1	1	0	0	6
40-44	0	0	1	0	2	0	0	0	0	0	3
45-49	0	2	1	0	0	0	2	0	3	1	9
50-54	1	1	0	2	1	0	1	0	0	1	7
55-59	3	0	0	0	4	0	2	0	0	2	11
60-64	0	0	0	0	1	0	0	1	0	0	2
65+	6	0	0	0	2	0	0	0	0	0	8
Total	11	12	2	4	18	1	9	2	4	4	67

Figure 3.9: Number of fatalities (worker and non-worker) by age band 2007 (HSA)



Figures 3.10, 3.11 and 3.12 relate to the nationality of the fatal incident victims. Figure 3.10 shows that a total of 8 non-Irish national workers suffered fatal injuries in 2007 (5 in the Fishing, 2 in the Manufacturing and 1 in the Transport, Storage and Communication sectors). Figure 3.11 shows that 14% of fatal injury victims were non-Irish national workers (compared to 17% in 2006). The fatality rates for Irish and non-Irish national workers are presented in Figure 3.12. There is no significant difference between the fatality rates for the two groups in 2007, whereas in 2005 and 2006 the fatality rates indicated that non-Irish nationals were at higher risk of suffering a fatal injury.



Figure 3.10: Number of worker fatalities by nationality and economic sector 2007 (HSA)

ECONOMIC SECTOR	Irish	Other EU	Non EU
A – Agriculture, hunting and forestry	9	0	0
B – Fishing	7	4	1
C – Mining and quarrying	2	0	0
D – Manufacturing	2	2	0
F – Construction	14	0	0
G – Wholesale and retail trade; repair of goods	1	0	0
I – Transport, storage and communication	6	1	0
K – Real estate, renting, business	2	0	0
L – Public administration and defence	4	0	0
O – Other community, social and personal services	4	0	0
Total	51	7	1

Figure 3.11: Percentage of worker fatalities by nationality 2007 (HSA)

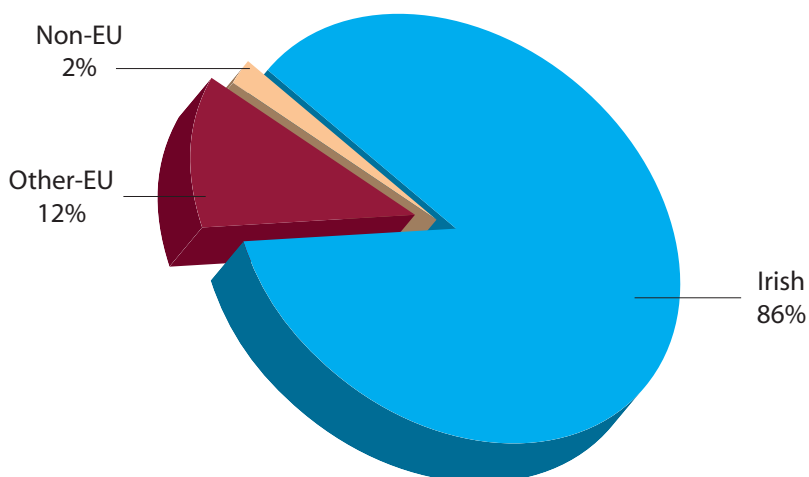


Figure 3.12: Worker fatality rates by nationality 2005–2007 (HSA)

	Irish workers	Non-Irish-national workers	All workers
Number worker fatalities 2007	51	8	59
Worker population 2007	1804200	334700	2138900
Rate of worker fatality 2007	2.8	2.4	2.8
Rate of worker fatality 2006	2.0	3.2	2.1
Rate of worker fatality 2005	3.0	5.6	3.3

The accident trigger for each fatal incident in 2007 is displayed in *Figure 3.13*. The greatest number (16) of the 67 accidents were triggered by a fall, collapse or breakage of material, (of which 6 were in the Construction sector), followed by falls from height (10 fatalities).



Figure 3.13: Number of fatalities (worker and non-worker) by accident trigger 2007 (HSA)

ACCIDENT TRIGGER	A	B	C	D	F	G	I	K	L	O	Total
Fall, collapse or breakage of material	3	0	1	0	6	1	5	0	0	0	16
Fall from height	2	2	1	0	3	0	1	0	0	1	10
Loss of control of: machine	0	0	0	1	1	0	0	0	0	0	2
Loss of control of: other transport or handling equipment	1	2	0	0	1	0	1	0	0	1	6
Loss of control of: road traffic transport	1	0	0	0	1	0	2	0	0	0	4
Loss of control of: animal	1	0	0	0	0	0	0	0	0	0	1
Person entered inappropriate area	0	0	0	1	2	0	0	0	0	1	4
Slips, trips, falls on the level	1	0	0	0	1	0	0	1	0	0	3
Fire	0	0	0	0	0	0	0	0	2	0	2
Explosion	0	0	0	1	0	0	0	1	0	0	2
Other	2	8	0	1	3	0	0	0	2	1	17
Total	11	12	2	4	18	1	9	2	4	4	67

Sector key

A – Agriculture, hunting and forestry, B – Fishing, C – Mining and Quarrying, D – Manufacturing, E – Electricity/gas/water, F – Construction, G – Wholesale/Retail trade; repair of vehicles, personal and household goods, H – Hotels/Restaurants, I – Transport, Storage, Communication, J – Financial Intermediation, K – Real Estate, Renting, Business, L – Public Admin/Defence, M – Education, N – Health/Social Work, O – Community/Social/Personal Services

Figure 3.14 provides a breakdown of fatal incidents by county for 2005 to 2007. 10 of the 67 fatalities in 2007 occurred in Waterford (8 of these were Fishing fatalities).

Data from Eurostat for reference year 2005 suggests that the Irish worker fatality rate was above the EU15 average at over 3 fatalities per 100,000 workers compared to the EU15 average of over 2 fatalities per 100,000 workers (see Figures 3.15 and 3.16). Ireland had the fourth highest fatality rate, with only Portugal, Austria and Spain having higher rates. Eurostat data for 2004 showed that the Irish worker fatality rate was slightly below the EU15 average (HSA, 2007b, p. 52).

Figure 3.14: Number fatalities (worker and non-worker) by county 2005–2007 (HSA)

County	Year		
	2005	2006	2007
Carlow	0	0	1
Cavan	4	1	1
Clare	3	6	1
Cork	9	11	3
Derry	0	0	1
Donegal	6	4	4
Dublin	9	5	9
Galway	3	1	2
Kerry	2	1	4
Kildare	6	1	2
Kilkenny	1	2	5
Laois	3	1	1
Leitrim	1	0	0
Limerick	1	2	4
Longford	1	2	0
Louth	4	0	5
Mayo	2	4	3
Meath	4	0	0
Monaghan	1	0	0
Offaly	1	2	0
Roscommon	0	1	0
Sligo	0	1	2
Tipperary	5	0	0
Waterford	1	0	10
Westmeath	2	2	2
Wexford	5	3	5
Wicklow	0	1	2
Total	74	51	67



Figure 3.15: Worker fatality rates in the EU 2005 (Eurostat)

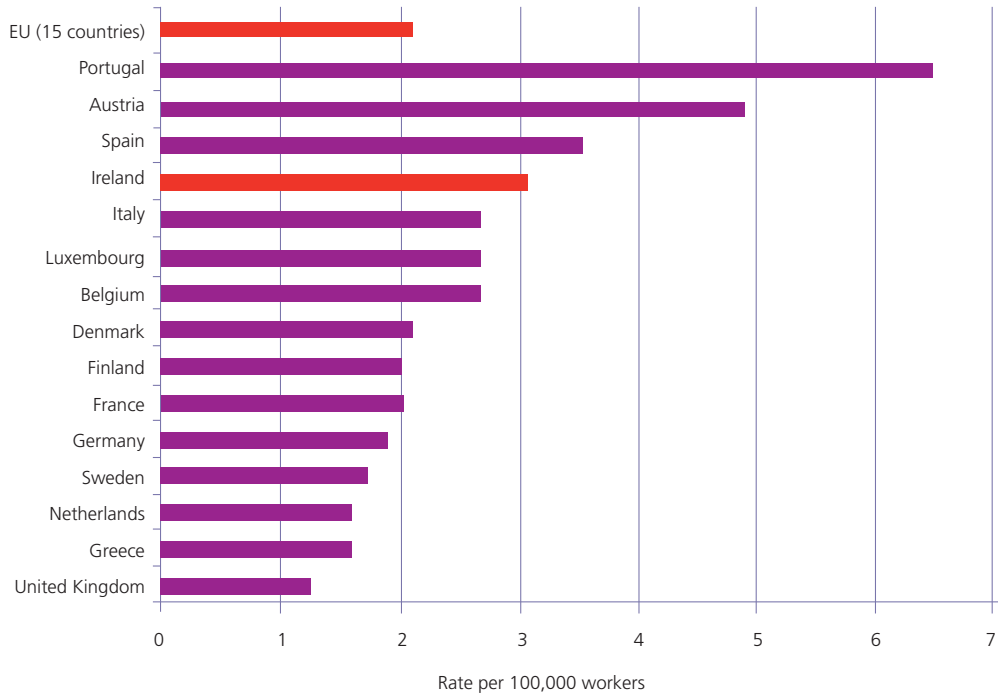
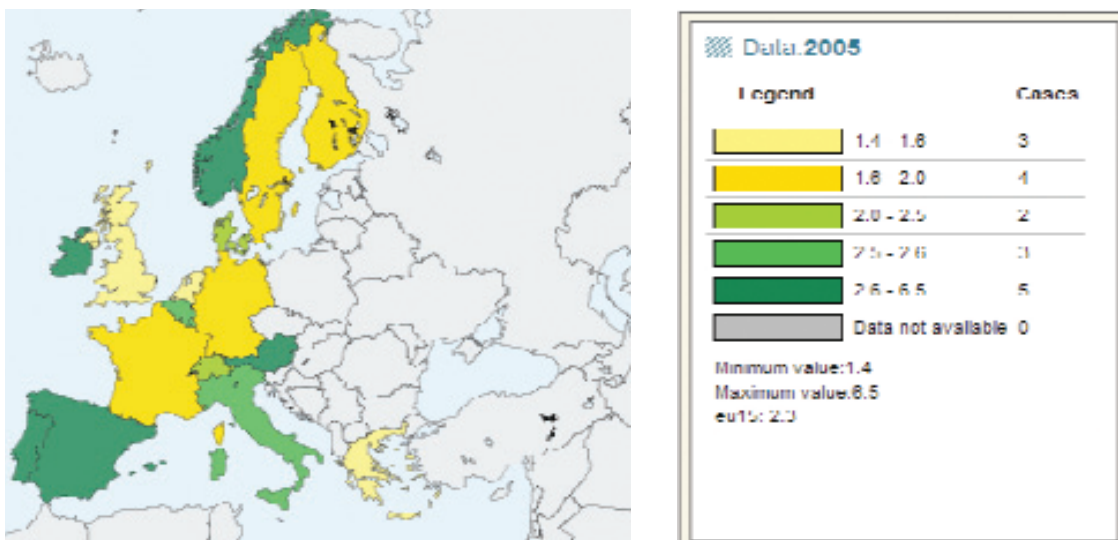


Figure 3.16: Map showing worker fatality rates in the EU 2005 (Eurostat)



Source: Eurostat website



Risk alerts

- **Increase in the number of fatalities**

The overall number of work-related fatalities in 2007 rose to 67 from 51 fatalities in 2006. The increase was driven by a higher number of fatalities in the following sectors in particular:

Fishing : 2 fatalities in 2006, 12 fatalities in 2007
Construction : 13 fatalities in 2006, 18 fatalities in 2007
Transport : 4 fatalities in 2006, 9 fatalities in 2007.

- **Increase in the rate of fatalities**

The overall rate of worker fatalities in 2007 rose to 2.8 fatalities per 100,000 workers from 2.2 fatalities in 2006. The increase was driven by the higher fatality rates in the Agriculture and Fishing, the Transport, Storage and Communication, and the Public Administration and Defence sectors in particular.

- **High number of Fishing fatalities**

Twelve workers in the Fishing sector suffered fatal injuries in 2007. This represents a dramatic increase – there were 3 fatalities in 2002, 0 in 2003, 3 in 2004, 2 in 2005 and 2 in 2006.

Only 10 non-fatal injuries were reported to the Authority by the Fishing sector in 2007, but the high fatality rate implies that there is significant under-reporting from the sector.

- **Irish fatality rate compared to other European Member States**

The most recent available data from Eurostat shows that Ireland had the fourth highest worker fatality rate in the EU15 in 2005. The Irish rate was considerably higher than the EU15 average (over 3 fatalities per 100,000 workers in Ireland compared to over 2 fatalities per 100,000 workers in the EU15). This is due to the very high number of fatalities in Ireland in 2005 (74 fatalities). It is anticipated that the Eurostat comparisons for 2006 and 2007 will show a reduced Irish fatality rate relative to the EU15 average given the reductions in the number and rate of fatalities in Ireland since 2005 (from 3.3 per 100,000 Irish workers in 2005 to 2.2 in 2006 and 2.8 in 2007).

The comparison in 2004 was more positive when the Irish fatality rate was slightly below the EU15 average (2.2 fatalities per 100,000 Irish workers compared to 2.5 fatalities per 100,000 EU15 workers). Only Sweden, Denmark and the UK had lower fatality rates in 2004.

4. Special Topic

4.1 THOR Ireland (The Health and Occupation Reporting) Network

Development of the THOR Ireland network

The THOR (The Health and Occupation Reporting) network is a voluntary occupational-disease reporting system for medical specialists. The network was developed in the UK and is administered by the Faculty of Medicine at the University of Manchester. In 2005 the THOR system was extended to include reporting from Irish specialists. THOR Ireland was administered on a favour basis by the University of Manchester in 2005 and 2006. The Health and Safety Authority funded the system in 2007 and will continue to do so in 2008.

Medical specialists are asked to report new cases of disease that have been caused or aggravated by work. Precise case criteria are not defined but guidance is provided, and reporters are not requested to carry out investigations beyond those required on clinical grounds. A range of variables is collected, including age, sex, diagnosis, economic activity of employer, suspected agent and occupation at the time of harmful exposure. Cases are entered by specialists through an online reporting system. The data is collated and processed by staff at the School of Medicine in the University of Manchester, and provided to the Health and Safety Authority and other interested parties on a regular basis.

There are different schemes for different occupational diseases within the THOR network. THOR Ireland currently includes three schemes:

- EPIDERM – reporting by dermatologists
- SWORD – reporting by respiratory physicians
- OPRA – reporting by occupational physicians (since 2007 only)

There are 12 consultant respiratory physicians registered for the SWORD scheme, 14 consultant dermatologists registered for EPIDERM, and 18 occupational physicians registered to report to the OPRA scheme since its introduction on 1 January 2007.

It is anticipated that the number of participating specialists and the number of case reports will increase as the network becomes known to Irish specialists, similar to the trend in the UK where participation rates in EPIDERM and SWORD are high (ranging from 86% to 98% in 2002/2003). THOR Ireland already has enthusiastic sponsors and strong networks of dermatologists, respiratory specialists and occupational physicians established in Ireland. In 2007 the Royal College of Physicians of Ireland approved and promoted participation in the OPRA scheme among its members. A number of conference and seminar presentations of THOR Ireland data are planned with medical organisations in 2008 to encourage wider participation in the reporting schemes.

The Authority continues to support the central administration of THOR Ireland by the University of Manchester on the basis that there is an existing infrastructure in place with proven methods for collection and analysis of data by expert staff.

The primary benefit of the THOR network is the high quality of the data provided by the medical specialists, with diagnoses and occupational attributions being made by qualified experts. A disadvantage is that the dataset is partial as it only includes those cases that have come before the specialists participating in the scheme.



As the number of reports increases, the Authority intends to use the THOR data to inform preventive campaigns and interventions in the area of occupational health. It should also be possible to calculate national and sectoral incidence rates and to identify high-risk occupations – the University of Manchester has previously drawn valid conclusions from the THOR data for geographic populations such as Scotland and for specific industrial sectors. In time it may also be possible to compare THOR Ireland data with data from the THOR schemes in Northern Ireland (where 75 doctors report, including 9 dermatologists, 14 chest physicians and 19 occupational physicians) and in the rest of the UK.

THOR Ireland data may also be used to fulfil European-level data requirements in the future. Eurostat has proposed a regulation that will make it a legal requirement for all Member States to provide an annual data-file of recorded occupational injury and disease cases. Currently, Ireland does not provide disease data to Eurostat (injury data is reported annually by the Authority). The collection of disease data will require the co-operation of several Irish agencies but it is anticipated that the THOR Ireland data will be a valuable source for fulfilling this requirement when the Eurostat regulation comes into force.

Other sources of work-related illness or occupational disease data in Ireland are limited. The CSO collects illness data in the course of the Quarterly National Household Survey but the figures are based on self-reports and are not medically checked. The Occupational Injury Benefit division of the Department of Social and Family Affairs notifies the Authority of claims related to occupational disease cases but only approximately 50 cases per annum are notified in this way and details of the work-related aspects of the illness are limited. Ad hoc survey data on specific work-related illnesses such as musculoskeletal disorders is available from the European Agency for Safety and Health at Work. Overall, the lack of occupational disease data in Ireland makes the continuation of the THOR system and the identification of other relevant data sources a priority for the Authority.

It is intended to include a summary of THOR Ireland data in the Authority's Statistical Summary on an annual basis.

Summary of THOR Ireland data 2005–2007

280 cases of occupational disease were reported to the THOR Ireland system in the period 2005 to 2007 as follows:

- 2005: 94 cases (EPIDERM, SWORD)
- 2006: 75 cases (EPIDERM, SWORD)
- 2007: 111 cases (EPIDERM, SWORD, OPRA)

In terms of the specialist schemes, the reports break down as follows:

- EPIDERM: 180 cases
- SWORD: 35 cases
- OPRA: 65 cases (2007 only)

Of the 280 case reports received from Irish specialists, 128 (46%) were for males and 152 (54%) were for females (see Figure A.1 for breakdown by scheme and gender). The EPIDERM scheme has received most reports, with similar numbers of skin diseases reported for males and females. The SWORD scheme has



received the least reports (only 13% of all reports); there are significantly more reports of males experiencing respiratory illness than females. The OPRA scheme was introduced in 2007 and received a higher number of reports (65) than either EPIDERM or SWORD in 2007. 80% of the OPRA reports relate to female patients.

Figure A.1 also shows that the number of reports in the EPIDERM and SWORD schemes has been decreasing since 2005 (from 69 EPIDERM reports in 2005 to 43 reports in 2007 and from 25 SWORD reports in 2005 to only 3 reports in 2007). It is hoped that the introduction of the OPRA scheme and the efforts to raise the profile of THOR Ireland will assist in the recruitment of additional reporters and encourage full reporting.

Figure A.1: THOR scheme by gender 2005–2007

		2005	2006	2007	Total
EPIDERM	Male	36	28	22	86
	Female	33	40	21	94
SWORD	Male	21	5	3	29
	Female	4	2	0	6
OPRA	Male	–	–	13	13
	Female	–	–	52	52

The case reports are presented by age group in *Figure A.2*. The age profile is quite different for each scheme. *Figure A.3* shows that skin conditions are most commonly reported in the 16–24 and 25–34 age groups. *Figure A.4* shows that respiratory conditions are concentrated in the 45–54 and 55–64 age bands. *Figure A.5* shows that OPRA reports are most common for the 35–44 and 45–54 age groups, with no reports in the 65+ category (perhaps because retired workers are less likely to have direct access to occupational physicians).



Figure A.2: THOR scheme by age group 2005–2007					
		2005	2006	2007	Total
EPIDERM*	16–24	16	11	12	39
	25–34	22	14	12	48
	35–44	8	17	7	32
	45–54	15	13	5	33
	55–64	6	9	3	18
	65+	2	3	0	5
SWORD	16–24	2	0	0	2
	25–34	2	0	1	3
	35–44	2	3	2	7
	45–54	8	2	0	10
	55–64	6	2	0	8
	65+	5	0	0	5
OPRA	16–24			3	3
	25–34			10	10
	35–44			20	20
	45–54			26	26
	55–64			6	6
	65+			0	0

*Note that age data is not available for a number of EPIDERM cases

Figure A.3: EPIDERM by age group 2005–2007

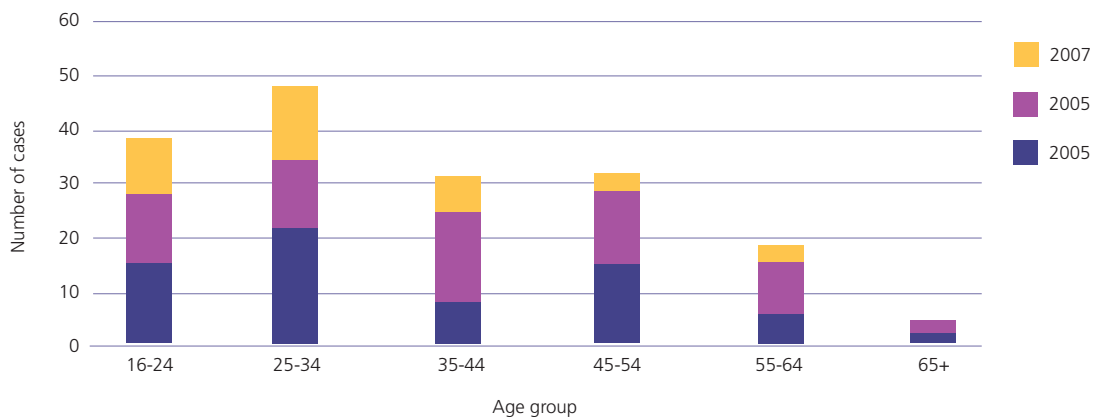




Figure A.4: SWORD by age group 2005–2007

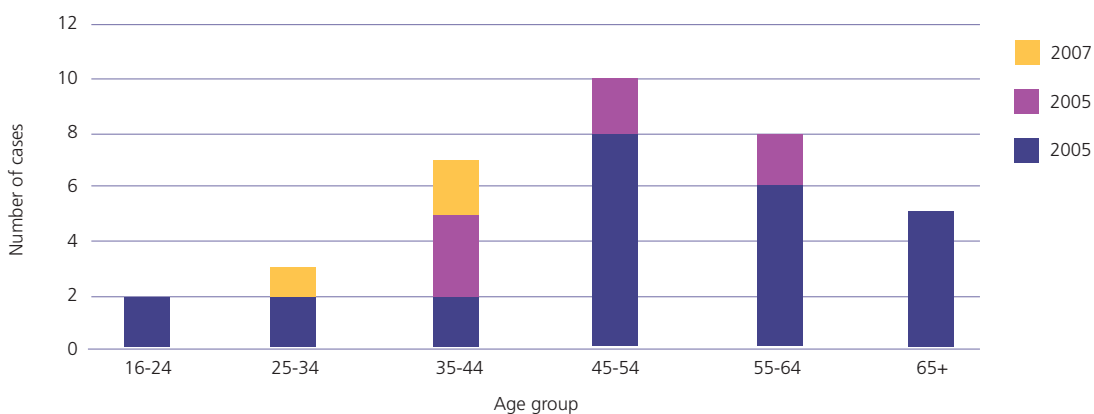


Figure A.5: OPRA by age group 2007

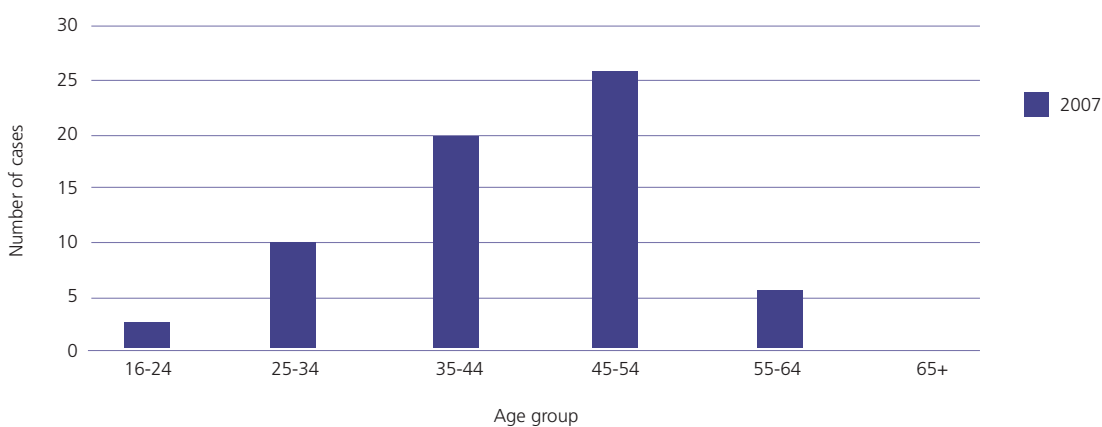


Figure A.6 shows the types of diagnoses within each reporting scheme. The majority of the skin diseases are categorised as contact dermatitis – all of the EPIDERM reports in 2006 and 2007 were in this category. The majority of respiratory cases were categorised as asthma. The OPRA scheme captured a wide range of diagnoses in 2007, including respiratory (3) and skin complaints (8), but the majority of cases reported in this scheme related to stress/mental distress cases (30) and musculoskeletal disorders (23).



Figure A.6: THOR scheme by diagnosis 2005–2007*

Scheme	Disease	2005	2006	2007
EPIDERM	Contact dermatitis	65	68	42
	Urticaria	2	0	0
	Infective	1	0	0
	Other	2	0	0
	Total	70	68	42
SWORD	Asthma	11	5	2
	Allergic	1	0	0
	Bronchitis	1	0	0
	Mesothelioma	3	0	0
	Lung cancer	0	1	0
	Pneumoconiosis	7	0	0
	NMPD	2	0	0
	Other	0	1	1
Total	25	7	3	
OPRA	Respiratory			3
	Skin			8
	Musculoskeletal			23
	Hearing loss			0
	Stress/mental illness			30
	Other diseases			0
Total			64	

*Note that totals in this table do not correspond to the total number of case reports as some cases had multiple diagnoses and others had none.

Analysis of the occupation and industry data gives an indication of the profile of the groups that are most at risk of specific occupational diseases. From the EPIDERM data we can infer that many of the contact dermatitis cases are being suffered by relatively young workers who work at skilled trades or in associate professional roles in the construction and healthcare industries (see Figures A.7 and A.8).

Figure A.7: EPIDERM by occupation 2005–2007

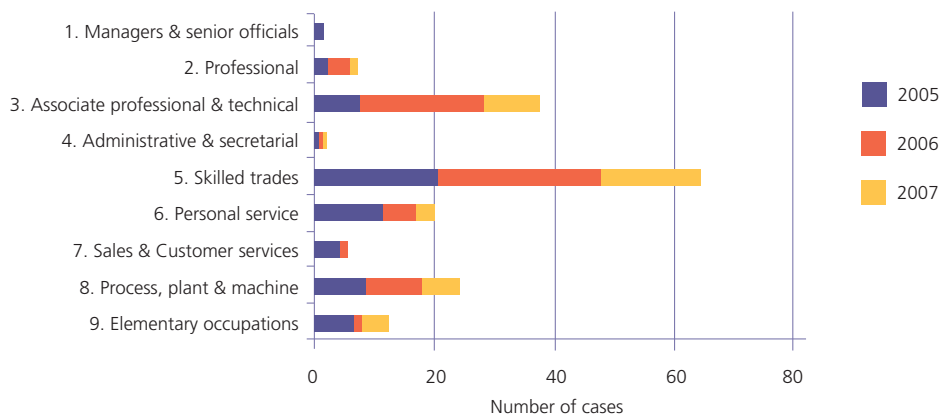
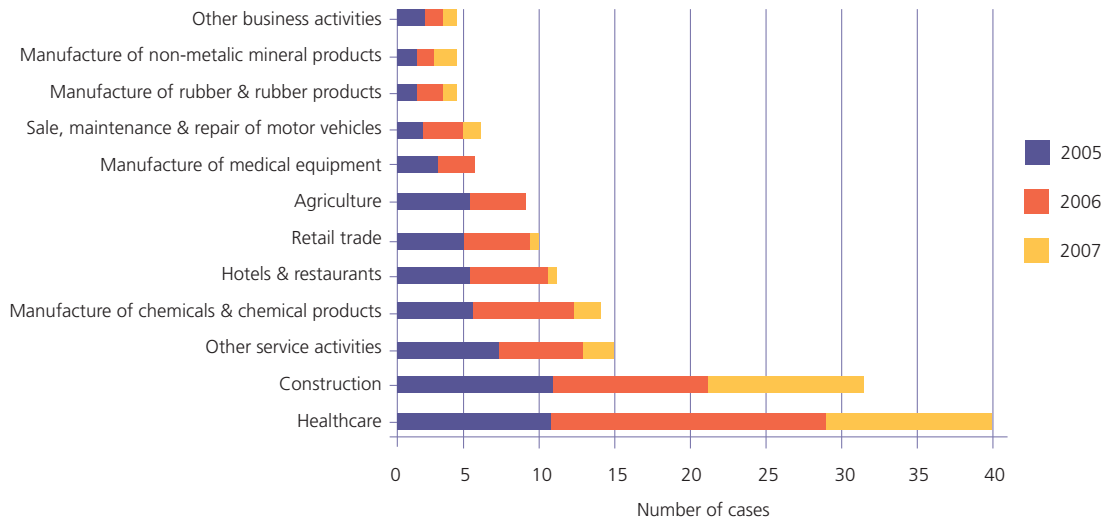




Figure A.8: EPIDERM by industry 2005–2007



Data from the SWORD scheme suggests that older or retired workers may suffer asthma or pneumoconiosis. These workers are likely to be working, or have worked, as process, plant or machine operatives or in skilled trades. Most of the SWORD cases were reported from the mining and quarrying and the manufacture of chemicals and chemical products industries (see *Figures A.9 and A.10*).

Figure A.9: SWORD by occupation 2005–2007

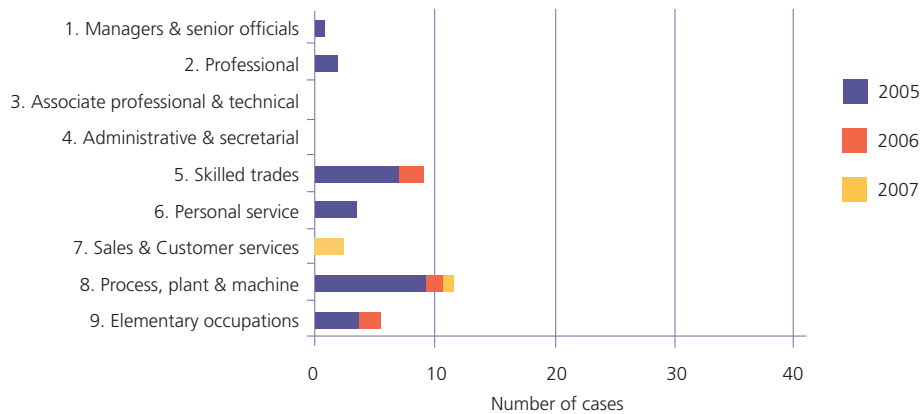


Figure A.10: SWORD by industry 2005–2007



The cases reported by occupational physicians to the OPRA scheme in 2007 suggest that workers in the 35–44 and 45–54 age groups are experiencing musculoskeletal disorders and work-related stress. Many of these workers are employed in associate professional and technical roles in the health and social care sector (see *Figures A.11 and A.12*).

Figure A.11: OPRA by occupation 2007

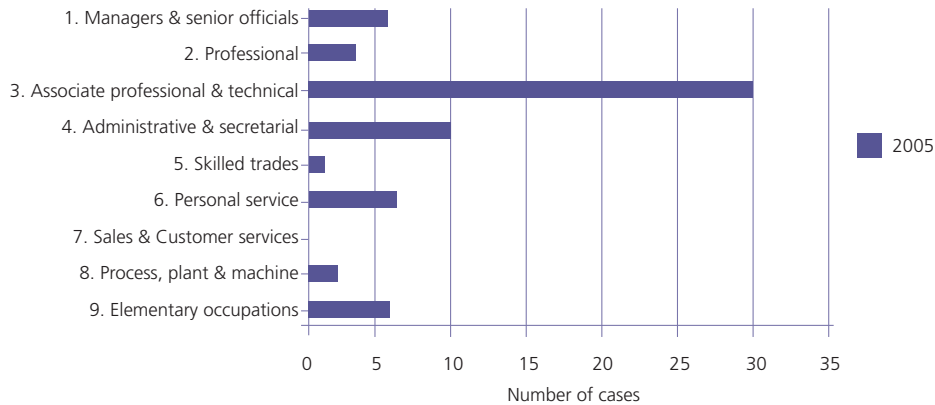
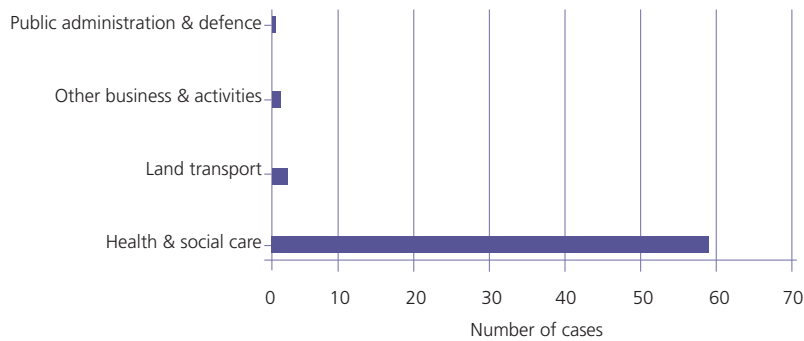


Figure A.12: OPRA by industry 2007





These initial profiles make intuitive sense in terms of the age groups, occupations and industries that face specific occupational health risks and the Authority is already directing significant resources towards musculoskeletal disorders and work-related stress. However, this is the first time that the Authority has medically validated data to support and inform its activities in the area of occupational health. Over time, and with increased reporting levels, the THOR Ireland database should offer a high-quality evidence base for the Occupational Health and Occupational Hygiene Units within the Authority, and other interested parties.



4.2. Using the Authority's Database: Impact Assessment of the HSA Working at Height Campaign in the Construction Sector

The data gathered by the Authority is critical for identifying priority sectors and hazards, informing the development of solutions and monitoring the Authority's success in improving health and safety performance. This Special Topic outlines how the Authority used its extensive databases to assess the impact of actions aimed at improving safety for those working at height (WAH) in the Construction sector.

A series of fatalities caused by scaffolding collapses on Dublin construction sites in the early 1990s, together with rapidly increasing construction activity, prompted the Authority to introduce a series of measures to address the risks associated with WAH, including:

- Safety, Health and Welfare at Work (Construction) Regulations 1995
- Dedicated safety campaign and publicity drive (1996)
- Formation of Construction Safety Partnership (1999)
- Scaffolding Code of Practice (1999)
- HSA recruitment of specialist construction inspectors (2000)
- Safety, Health and Welfare at Work (Construction) Regulations 2001
- Safe Pass and Construction Skills Certificate Scheme (2001)
- Dedicated Senior Labour Inspectorate Committee (SLIC) inspection campaigns (2003)
- Roofwork Code of Practice (2005)

The Authority believes that its targeted campaigns, guidance and enforcement activity over a decade have been effective, and that falls from height are causing fewer fatal and non-fatal injuries in the Construction sector.

In 2006 the Department of Enterprise, Trade and Employment published an assessment of the impact of the Safety, Health and Welfare at Work legislation. Although the report indicated an overall positive impact, it did not establish any direct or significant relationship between the implementation of the legislation and subsequent incident rates. The Authority was interested to learn if a relationship would emerge if the analysis focused on actions specifically related to WAH and the subsequent rate of fall-from-height incidents. In 2007 the Authority commissioned Horwath Consulting Ireland in association with Bomel Consultants (UK) to examine the evidence.

The consultants analysed anonymised databases of reported incidents, inspections and enforcement actions from 1993 to 2005 (i.e. the period before the Work at Height Regulations were launched in 2006), with a view to extracting any trends in WAH safety performance. The database of reported incidents from the Construction sector was key to this evaluation of the Authority's actions. The Construction sector consistently reports approximately 1500 injuries to the Authority each year (or nearly 20% of all reports); only the Manufacturing sector reports more accidents. There is still significant under-reporting of accidents, from smaller construction

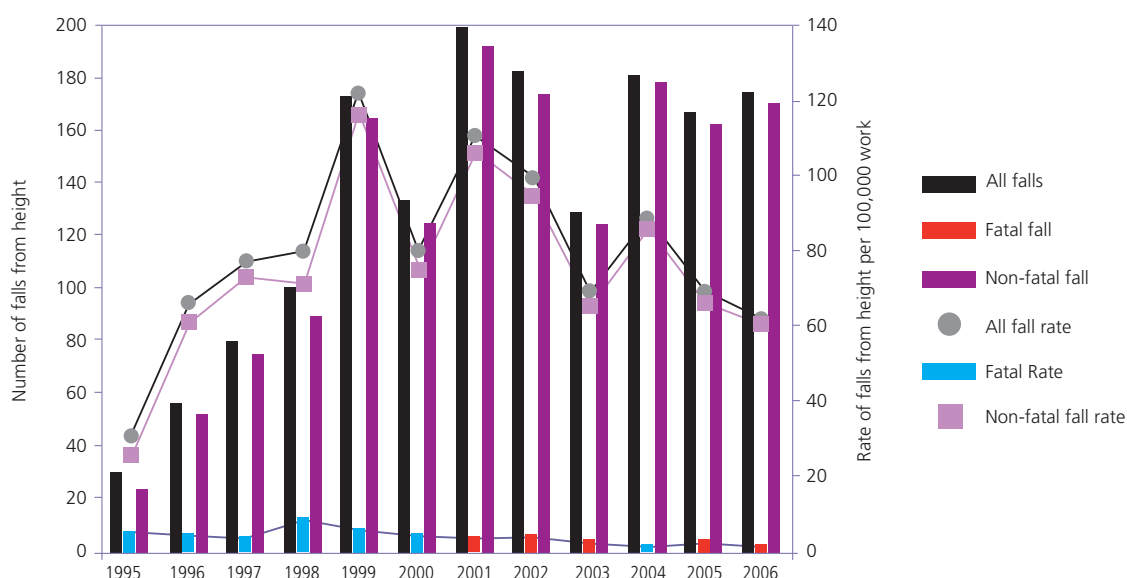


firms in particular, but the relatively large database of construction-related incidents allows the Authority to monitor progress in relation to specific risks in the sector.

The consultants reported the following key findings based on the accident and enforcement data:

- The rate of fall-related incidents increased between 1995 and 2000 from around 40 per 100,000 employees to 180 per 100,000 employees, but the rate has been decreasing since 2001 and was 60 per 100,000 employees in 2006 (see Figure B.1).

Figure B.1: Accidents involving falls from height reported to the HSA in the construction industry by number and rate per 100,000 workers (HSA, 2007a, p. 16)

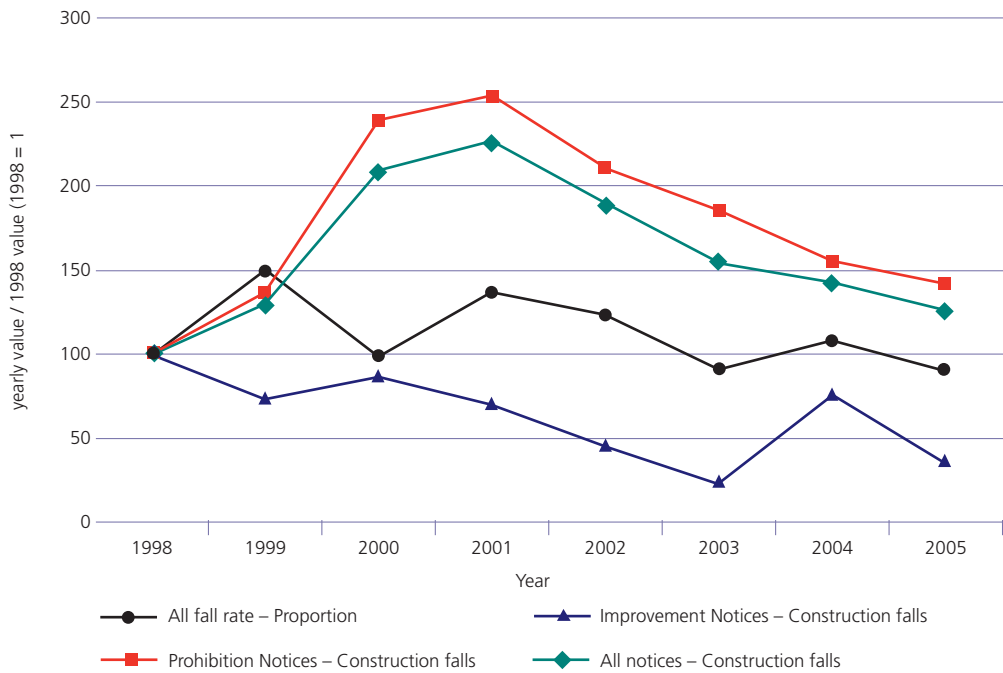


- There was a near linear increase in the rate of notices issued by the Authority relating to WAH contraventions in the Construction sector between 1998 and 2001, followed by a near linear decrease in the rate of notices issued since 2001 (see Figure B.2). Despite considerable year-on-year variation, the rate of falls from height has also exhibited a downward trend since 1999. The consultants suggest that the increase in WAH-related notices between 1998 and 2001:

“...contributed to raising awareness of working at height and thus reducing the rate of falls. With fewer unsafe practices observed on site that warranted the issue of prohibition notices to suspend work, it would not be unreasonable for the number of notices issued to decrease.” (HSA, 2007a, p. 46)



Figure B.2: The variation in the number of WAH-related notices issued by the HSA in the construction industry and rate of falls from height accidents in the construction industry reported to the HSA (1998 taken as the baseline) (HSA, 2007a, p. 46)



- In the period from 1995 to 2006, the consultants estimated that the Authority invested approximately €39 million on WAH-related activities in the Construction sector. The level of construction-related expenditure is plotted against the rate of fall-related accidents in Figure B.3. Figure B.4 shows the specific HSA initiatives plotted against the fall-related accident rate. The consultants estimate that this investment represents an increase in the number of lives saved and injuries prevented (see Figure B.5), and represents economic benefits in the order of €300 million.



Figure B.3: The variation in the HSA's expenditure in the construction industry and the rate of falls from height accidents in the construction industry reported to the HSA (1995 taken as the baseline) (HSA, 2007a, p. 47)

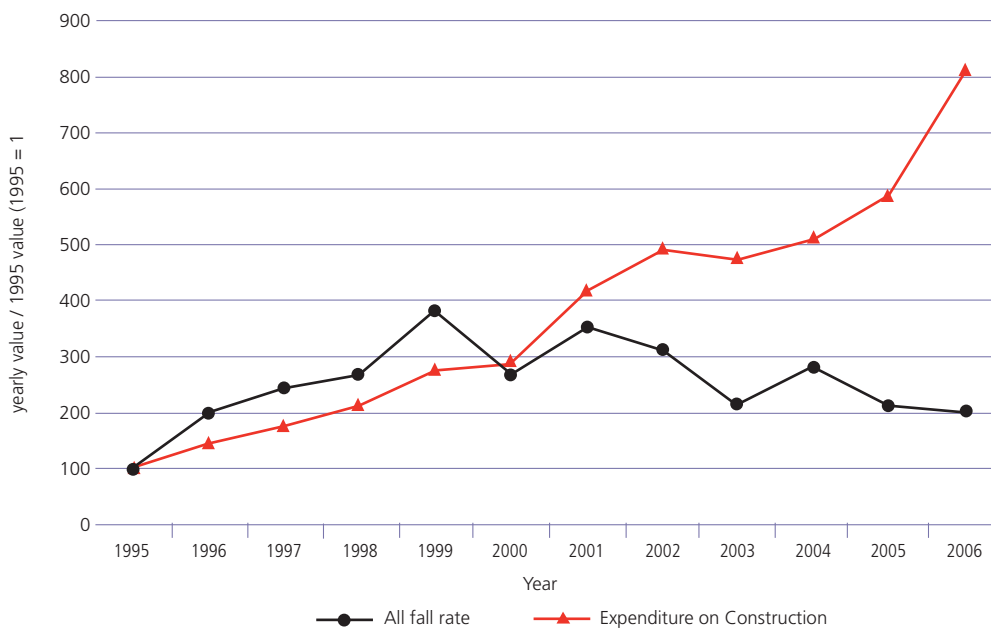


Figure B.4: The variation in the rate of falls from height accidents in the construction industry reported to the HSA (1995 taken as the baseline) and the influence of HSA initiatives (HSA, 2007a, p. 43)

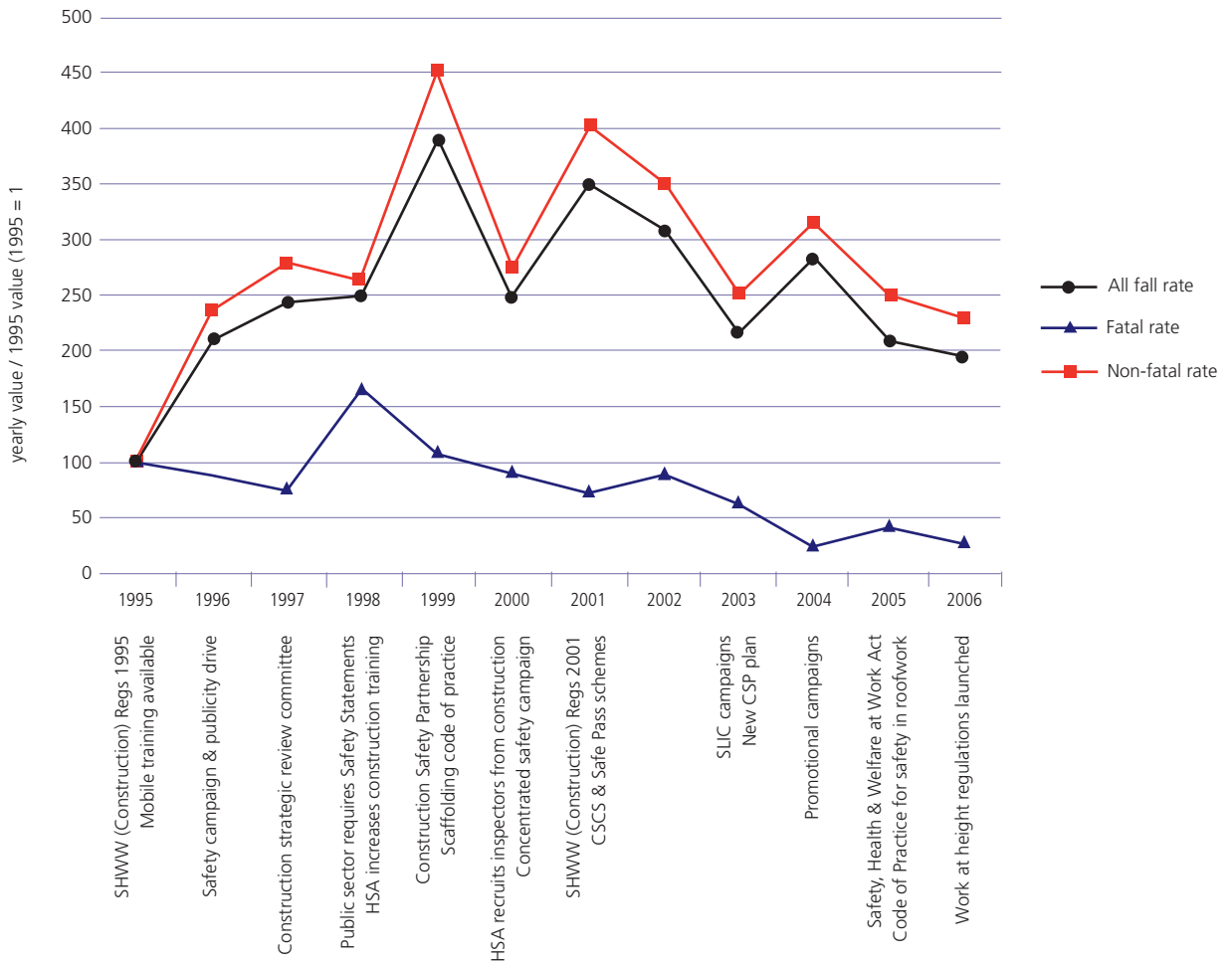
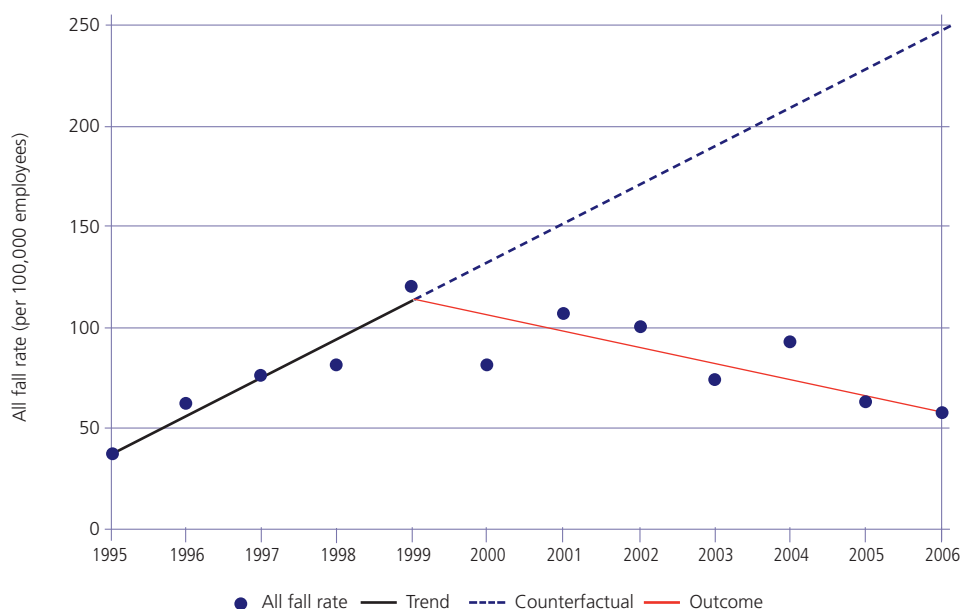




Figure B.5: The predicted trend in the rate of falls from height accidents in the construction industry without the influence of HSA initiatives (HSA, 2007a, p. 44)



The consultants acknowledge that the reasons for improved WAH practices in the construction industry are likely to be multi-faceted and cannot be attributed to specific interventions by single organisations. However, based on the strong correlations in the data, they propose that the cumulative effect of the HSA campaign has contributed to the reduction in WAH accidents. Specifically, they suggest that increased expenditure began to have an effect in 2000, which saw the beginning of the reduction in the fall-related accident rate.

Using the Authority's databases to assess the impact of the WAH campaign has the following benefits:

- Confirms that targeted resources had a positive impact in terms of lives saved and injuries prevented.
- Provides evidence that the Authority achieved value for money – significant economic benefits accrue from the improved WAH safety performance.
- Strengthens the case for additional resources.
- Identifies methods that have been successful and which may be replicated.

Throughout the public sector, organisations are increasingly required to evaluate their actions. But meaningful evaluations require good data. This WAH impact analysis was only possible because data sources on incidents, inspections and enforcement actions in the Construction sector were available. It is more problematic to identify risk factors and track changes in accident rates in sectors which under-report accidents to the Authority.

The full impact assessment report is available as part of the HSA Research Series on the Authority's website: www.hsa.ie.



Appendix Summary of Fatalities 2007

AGRICULTURE, HUNTING AND FORESTRY (11 FATALITIES)

DATE	ACCIDENT CIRCUMSTANCES	EMPLOYMENT STATUS	OCCUPATIONAL GROUP	WORK ENVIRONMENT	COUNTY	AGE
22-Feb-07	Hay bale fell from barn	Self-employed	Managers of small enterprises	Farm, fish farm, forest or park	Mayo	59
06-Mar-07	Wall collapse	Self-employed	Managers of small enterprises	Farm, fish farm, forest or park	Cork	66
24-Mar-07	Deceased collapsed near slurry tank	Self-employed	Managers of small enterprises	Farm, fish farm, forest or park	Donegal	69
28-Mar-07	Deceased found in slurry tank	Self-employed	Managers of small enterprises	Farm, fish farm, forest or park	Laos	58
14-Apr-07	Wall collapse	Employee	Agricultural, fishery and related labourers	Farm, fish farm, forest or park	Louth	58
16-Apr-07	Deceased pulled under back wheel of tractor	Self-employed	Managers of small enterprises	Farm, fish farm, forest or park	Kilkenny	81
03-May-07	Fall from trailer of silage bales	Non-worker	Not applicable	Farm, fish farm, forest or park	Cavan	10
06-Sep-07	Tractor and trailer turned over	Employee	Agricultural, fishery and related labourers	Motonways or roads	Waterford	54
24-Sep-07	Deceased found in slurry tank	Self-employed	Managers of small enterprises	Farm, fish farm, forest or park	Westmeath	77
02-Oct-07	Attacked by bull	Non-worker	Not applicable	Farm, fish farm, forest or park	Westmeath	73
20-Dec-07	Fall from wall of silage pit	Self-employed	Managers of small enterprises	Breeding area	Cork	75

FISHING (12 FATALITIES)

DATE	ACCIDENT CIRCUMSTANCES	EMPLOYMENT STATUS	OCCUPATIONAL GROUP	WORK ENVIRONMENT	COUNTY	AGE
10-Jan-07	Sinking of herring fishing boat in heavy seas	Employee	Agricultural, fishery and related labourers	On/over water (excl. construction)	Waterford	32
10-Jan-07	Sinking of herring fishing boat in heavy seas	Employee	Skilled agricultural and fishery workers	On/over water (excl. construction)	Waterford	47
10-Jan-07	Sinking of herring fishing boat in heavy seas	Employee	Skilled agricultural and fishery workers	On/over water (excl. construction)	Waterford	27
10-Jan-07	Sinking of herring fishing boat in heavy seas	Employee	Skilled agricultural and fishery workers	On/over water (excl. construction)	Waterford	53
10-Jan-07	Sinking of herring fishing boat in heavy seas	Employee	Skilled agricultural and fishery workers	On/over water (excl. construction)	Waterford	32
10-Jan-07	Trawler sank in heavy seas	Employee	Skilled agricultural and fishery workers	On/over water (excl. construction)	Waterford	30
10-Jan-07	Trawler sank in heavy seas	Self-employed	Skilled agricultural and fishery workers	On/over water (excl. construction)	Waterford	39
02-Jul-07	Lost overboard from fishing boat	Employee	Skilled agricultural and fishery workers	On/over water (excl. construction)	Mayo	19
04-Aug-07	Lost overboard from fishing boat	Self-employed	Managers of small enterprises	Sea-going vessel or platform	Waterford	38
17-Oct-07	Lost overboard from fishing boat	Employee	Skilled agricultural and fishery workers	Sea-going vessel or platform	Wexford	29
03-Dec-07	Fishing boat capsized	Employee	Skilled agricultural and fishery workers	Sea-going vessel or platform	Donegal	19
03-Dec-07	Fishing boat capsized	Self-employed	Managers of small enterprises	Sea-going vessel or platform	Donegal	46

NB: These descriptions of the accident circumstances are indicative only, as many of these fatalities are still under investigation.



MINING AND QUARRYING (2 FATALITIES)

DATE	ACCIDENT CIRCUMSTANCES	EMPLOYMENT STATUS	OCCUPATIONAL GROUP	WORK ENVIRONMENT	COUNTY	AGE
02-Feb-07	Stockpile collapse	Employee	Drivers and mobile plant operators	Construction site, quarry, mine	Kilkenny	48
16-Feb-07	Fall from fixed platform in quarry	Employee	Metal, machinery and related trades workers	Construction site, quarry, mine	Kilkenny	43

MANUFACTURING (4 FATALITIES)

DATE	ACCIDENT CIRCUMSTANCES	EMPLOYMENT STATUS	OCCUPATIONAL GROUP	WORK ENVIRONMENT	COUNTY	AGE
23-Apr-07	Contact with overhead power lines	Employee	Labourers in mining, construction, manufacturing and transport	Construction site, quarry, mine	Wexford	23
13-Jul-07	Deceased found in storage area	Employee	Drivers and mobile plant operators	Storage area or loading bay	Sligo	54
04-Oct-07	Explosion of boiler	Employee	Other craft and related trades workers	Factory, production area, workshop	Dublin	53
06-Oct-07	Crushed by machine	Employee	Machine operators and assemblers	Factory, production area, workshop	Louth	24

TRANSPORT, STORAGE AND COMMUNICATION (9 FATALITIES)

DATE	ACCIDENT CIRCUMSTANCES	EMPLOYMENT STATUS	OCCUPATIONAL GROUP	WORK ENVIRONMENT	COUNTY	AGE
07-Mar-07	Deceased's post van struck by truck	Employee	Office clerks	Public area (road, rail, carpark etc.)	Kerry	56
26-Mar-07	Struck by goods falling from container	Employee	Drivers and mobile plant operators	Public area (road, rail, carpark etc.)	Dublin	58
18-Apr-07	Fall from a roof	Employee	Corporate managers	Factory, industrial site or warehouse	Carlow	35
20-Apr-07	Struck by reversing vehicle	Employee	Drivers and mobile plant operators	On/over water (excl. construction)	Dublin	51
05-Jul-07	Road traffic accident while driving for work	Employee	Other associate professionals	Public area (road, rail, carpark etc.)	Limerick	24
19-Jul-07	Deceased's car hit by load falling from lorry	Member of public	Not applicable	Motorways or roads	Kilkenny	49
19-Jul-07	Deceased's car hit by lorry	Self-employed	Not applicable	Motorways or roads	Kilkenny	31
07-Aug-07	Anchor rope snapped and struck deceased	Employee	Physical and engineering science associate professionals	On/over water (excl. construction)	Dublin	24
10-Sep-07	Fall from trailer	Employee	Drivers and mobile plant operators	Motorways or roads	Wexford	48

NB: These descriptions of the accident circumstances are indicative only, as many of these fatalities are still under investigation.





CONSTRUCTION (18 FATALITIES)

DATE	ACCIDENT CIRCUMSTANCES	EMPLOYMENT STATUS	OCCUPATIONAL GROUP	WORK ENVIRONMENT	COUNTY	AGE
05-Jan-07	Struck by delivery truck	Non-worker	Not applicable	Construction site, quarry, mine	Waterford	2
08-Jan-07	Hit by excavator bucket	Employee	Building construction labourers	Construction site, quarry, mine	Donegal	57
18-Jan-07	Hit by falling scaffold board	Employee	Extraction and building trades workers	Construction site, quarry, mine	Dublin	28
05-Feb-07	Hit by excavator bucket	Employee	Drivers and mobile plant operators	Construction site, quarry, mine	Kerry	42
12-Feb-07	Hit by reversing excavator	Employee	Construction and maintenance labourers: roads, dams etc.	Public area (road, rail, carpark etc.)	Kerry	50
10-Apr-07	Electrocution – contact with exposed wire	Self-employed	Metal, machinery and related trades workers	On/over water (excl. construction)	Wexford	33
01-Mar-07	Roller machine fell into excavation	Employee	Extraction and building trades workers	Construction site, quarry, mine	Dublin	38
06-Mar-07	Wall collapse	Unknown	Labourers in mining, construction, manufacturing and transport	Construction site, quarry, mine	Louth	70
24-May-07	Dumper vehicle overturned	Employee	Building construction labourers	Construction site, quarry, mine	Kildare	31
27-Jun-07	Crushed by cement truck	Employee	Drivers and mobile plant operators	Construction site, quarry, mine	Louth	65
31-Jul-07	Fall from ladder	Self-employed	Extraction and building trades workers	Construction	Clare	55
02-Aug-07	Fall from roof	Unknown	Not applicable	Private home or related area	Mayo	58
30-Aug-07	Struck by tipper truck exiting site	Non-worker	Not applicable	Construction	Limerick	12
21-Sep-07	Excavation collapse	Self-employed	Extraction and building trades workers	Construction	Kerry	29
08-Oct-07	Tripped on kerb	Non-worker	Not applicable	Construction	Louth	60
13-Nov-07	Fall from a height	Non-worker	Not applicable	Construction	Cork	57
26-Nov-07	The deceased was found dead in a room he was painting	Self-employed	Extraction and building trades workers	Other - construction	Galway	43
10-Dec-07	Crushed by articulated dumper	Employee	Metal, machinery and related trades workers	Construction	Dublin	23

WHOLESALE AND RETAIL TRADE; REPAIR OF MOTOR VEHICLES AND HOUSEHOLD GOODS (1 FATALITY)

DATE	ACCIDENT CIRCUMSTANCES	EMPLOYMENT STATUS	OCCUPATIONAL GROUP	WORK ENVIRONMENT	COUNTY	AGE
24-Oct-07	Crushed by vehicle in vehicle inspection pit	Self-employed	Metal, machinery and related trades workers	Maintenance or repair area	Wexford	36

NB: These descriptions of the accident circumstances are indicative only, as many of these fatalities are still under investigation.



REAL ESTATE, BUSINESS AND RENTING ACTIVITIES (2 FATALITIES)

DATE	ACCIDENT CIRCUMSTANCES	EMPLOYMENT STATUS	OCCUPATIONAL GROUP	WORK ENVIRONMENT	COUNTY	AGE
03-Jan-07	Slipped from rock into water	Self-employed	Managers of small enterprises	On/over water (excl. construction)	Galway	38
02-May-07	Explosion of gas cylinder on road marking machine	Employee	Labourers in mining, construction, manufacturing and transport	Public area (road, rail, carpark etc.)	Sligo	60

PUBLIC ADMINISTRATION AND DEFENCE; COMPULSORY SOCIAL SECURITY (4 FATALITIES)

DATE	ACCIDENT CIRCUMSTANCES	EMPLOYMENT STATUS	OCCUPATIONAL GROUP	WORK ENVIRONMENT	COUNTY	AGE
25-Feb-07	Struck by vehicle while attending accident scene	Employee	Personal and protective services workers	Public area (road, rail, carpark etc.)	Limerick	47
25-Feb-07	Struck by vehicle while attending accident scene	Employee	Police officers	Public area (road, rail, carpark etc.)	Limerick	46
26-Sep-07	Died while fighting fire	Employee	Personal and protective services workers	Other	Wicklow	46
26-Sep-07	Died while fighting fire	Employee	Personal and protective services workers	Other	Wicklow	26

OTHER COMMUNITY, SOCIAL AND PERSONAL SERVICE ACTIVITIES (4 FATALITIES)

DATE	ACCIDENT CIRCUMSTANCES	EMPLOYMENT STATUS	OCCUPATIONAL GROUP	WORK ENVIRONMENT	COUNTY	AGE
03-Apr-07	Crushed between vehicles	Employee	Corporate managers	Public area (road, rail, carpark etc.)	Kildare	59
16-May-07	Fall from a height	Employee	Machine operators and assemblers	Other	Dublin	57
02-Oct-07	Experienced difficulties while diving	Employee	Skilled agricultural and fishery workers	Other	Derry	45
26-Nov-07	Crushed between vehicles	Employee	Drivers and mobile operators	Other	Dublin	50

NB: These descriptions of the accident circumstances are indicative only, as many of these fatalities are still under investigation.



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