



HEALTH AND SAFETY
AUTHORITY



Summary of Injury, Illness
and Fatality Statistics
2005-2006

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

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1. Introduction

1.1 Development of Statistics Summary 2005-2006

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

Each year the content of the summary is revised in response to feedback from users. This year, additional information from the Authority's own database has been included, as follows:

- Data for days lost from work due to reported incidents
- Data on the nationality of victims of fatal and non-fatal incidents (data on non-Irish nationals was presented as a special topic in Statistics Summary 2004-2005)

Additional data from external sources has also been incorporated, as follows:

- The Occupational Injury Benefits (OIB) division of the Department of Social and Family Affairs has supplied the number of claims admitted in 2006, together with details of the types of injury and the occupations of victims. The OIB data is compared with equivalent statistics from the Authority and the Central Statistics Office (CSO).
- In response to a request from the Board of the Authority, European comparator data is presented as a special topic in this report. It is intended that comparisons of the Irish performance against the EU average and that of other EU states will be included as a regular feature in future statistics summaries.

From the detailed statistics summaries produced in 2004, 2005 and 2006, it is now apparent that several risk alerts appear year after year. Examples of recurring risks include:

- The construction sector consistently has the highest rate of injuries causing more than three days' absence from work.
- The hotel and restaurant sector suffers a high proportion of injuries to non-Irish national workers.
- The health and social-work and the public-administration sectors suffer a high proportion of violent incidents.
- Manual handling triggers one-third of all reported incidents.
- Over 20% of all reported incidents result in back injuries.
- Elderly agricultural workers suffer a high fatality rate.
- Organisations with fewer than 50 employees show a low level of compliance with reporting requirements.

Now that an evidence base has been established for these key risks, it is proposed that future statistical publications should focus on specific themes. For example, a future publication might focus on violent incidents in the workplace and drill down into the data to establish which sectors, occupations and gender and age groups are most at risk and in what circumstances. A brief summary of headline statistics on fatality, injury and illness trends within economic sectors will continue to be produced each year. Full statistics summaries could be produced at regular intervals so that progress may be monitored against the full range of indicators.

The series of statistics summaries to date also highlight significant gaps in the data. When we triangulate the Authority's database of reported incidents with the CSO estimates and the OIB data, it is evident that certain groups are failing to comply with reporting requirements. In particular, the agricultural/fishing sector, self-employed workers and smaller organisations submit fewer reports. Failure to report creates a knowledge gap so that the Authority has limited information on which to base targeted initiatives. The Authority will focus on reporting compliance as a key theme throughout 2007.



1.2 Overview of Results

Injury and illness trends

Estimates of the number and rate of injuries and illnesses are based on the Accidents and Illness module of the Quarterly National Household Survey (QNHS), conducted by the Central Statistics Office (CSO).

Comparison with CSO estimates from previous years indicates that rates of injury and illness are very stable over recent years:

- Rates of injury (regardless of days lost) have been approximately 30 per 1,000 workers since 2001.
- Rates of injury causing more than three days' absence have been around 12 per 1,000 workers since 2002.
- Illness rates show an overall increase since 2001. The rate of total illness in 2004 and 2005 was 31-32 per 1,000 workers, while the rate of illnesses causing more than three days' absence was 12 per 1,000 workers in 2004 and 2005.

Within sectors, rates of injury causing more than three days' absence are highest in construction and public administration. Since 2002, construction has consistently had the highest rate of injuries causing more than three days' absence, although the rate has been gradually decreasing. The rate of illness causing more than three days' absence is highest in agriculture, transport and construction.

The CSO estimates that over 1.6 million work days were lost in 2005 due to occupational injury and illness.

The number of OIB claims admitted in 2006 is the highest on record. However, the rate of OIB claims is stabilising after a reduction in the rate over several years (*Health and Safety Review, 2007*).

Victim data

THE top five occupations for workplace injuries in 2006 are the same as the top five in 2005. Most reported incidents (30%) involve 'labourers – mining, construction, manufacturing and transport'. The occupation data from OIB supports this result: the two occupations that suffer most frequent injuries are 'road transport worker' and 'construction trade'. Other occupational categories which appear on both lists include mobile-plant operators, salespersons, protective-service officers and health professionals.

The employment-status data reveals that 97% of the victims of reported injuries are employees. Only 72 of the injuries reported in 2006 involved self-employed workers (less than 1% of all reported injuries). Just 3% of the injuries in the construction sector involved self-employed workers; the agriculture sector reported no injuries to self-employed workers.

The number of injuries reported for non-Irish-national workers in 2006 rose to over 800 (over 10% of all reported injuries), from 700 in 2005. Some sectors report a very high number of injuries to non-Irish-national workers – for example, one-third of all the injuries reported from the hotel and restaurant sector.



Incident data

Other results from the SAFE database indicate that manual-handling incidents continue to cause most workplace injuries; 34% of all reported injuries were triggered by manual handling in 2006. 'Slip, trip and fall' incidents were the second most common type of incident in 2006, similar to 2004 and 2005.

Violent incidents also feature in the top five accident triggers: 'shock fright, violence of others' triggered 4% of all reported injuries in 2006. In terms of incident types, 4% were categorised as 'injured by person – violent'. The public administration/defence and health and social-work sectors reported particularly high percentages of this type of incident.

The most common type of injury in 2006 was 'physical stress or strain to the body' (41%), and the most frequently injured body part was the back (24%). The proportion of back injuries was high in all sectors, particularly the transport and health and social-work sectors. Data from the OIB also shows that 30% of claims related to back injury. 'Bruising, grazes, bites' were the second most common type of injury; the agriculture and wholesale/retail-trade sectors reported high percentages.

In this statistical summary, data on absence from work is presented for the first time. The figures indicate that 60% of the reported accidents resulted in fewer than 14 days' absence from work. However, 16% of the reported injuries caused more than one month's absence from work.

Incident environment data

THE data for the 'item associated' with each reported incident shows that the most common item was 'loads-handled by hand' (7%), followed by 'humans' (6%). Financial intermediation, real estate, renting and business, and public administration/defence reported relatively high proportions of incidents associated with 'vans, trucks'. Also, a high proportion of incidents in these sectors, compared to others, occurred in a 'transport-related area or road' working environment, suggesting that occupational road safety is an issue of concern in these sectors.

Similar to previous years, over half of all injuries were reported from organisations with over 500 employees, whereas only 3% of injuries were reported from micro-businesses (one to nine employees).

The data on work environment also suggests that smaller enterprises are failing to report accidents. Only 1% of reported incidents occurred in 'farm, fish farm, forest or park' environments, yet the CSO estimates that the agriculture/fishing sector has a higher rate of injuries than any other sector.

Fatal-injury data

FIFTY work-related fatalities were reported to the Authority in 2006. Of these, 44 were worker fatalities, representing a worker fatality rate of 2.1 per 100,000 workers (based on a working population of 2,066,100 reported by CSO for Q4, 2006). This represents a decrease of over 35% on the fatality rate in 2005 (3.3 per 100,000 workers) and is the lowest fatality rate in the period 2000 to 2006.



The reduction in the overall fatality rate is partly driven by the lower fatality rate in the construction sector in 2006 (3.9 fatalities per 100,000 workers, compared to 8.3 in 2005). However, the fatality rate in agriculture is alarmingly high – and continues to increase. The sector has a far higher fatality rate than any other sector, with 16 fatalities per 100,000 workers in 2006, compared to the rate of two fatalities per 100,000 workers in all sectors. Elderly workers in agriculture are at particular risk: nine of the 16 agricultural workers who died in 2006 were aged over 65.

Non-Irish-national workers continued to suffer a higher rate of fatal accidents in 2006, compared to Irish workers. While most of the non-Irish-national fatalities occurred in construction in 2005, they occurred across a range of economic sectors in 2006.

Eleven of the 50 work-related fatalities in 2006 occurred in Co Cork, six in Co Clare and four each in Co Donegal and Dublin.

The most common types of fatal incidents were 'falls from height' (10 fatalities) and 'fall, collapse, breakage of material' (nine). Four of the fatalities in the construction sector were caused by 'falls from height' and four by 'fall, collapse, breakage of material'. The fatal accidents in the agriculture sector were triggered by 'loss of control of animal' (four fatalities), 'loss of control of machinery' (four) and 'falls from height' (three).



1.3 Sources of Information for the Statistical Summary

Various sources are used to compile the statistical review of occupational injury and illness each year. The source used for any graph or table in this report is indicated in brackets after the title.

Central Statistics Office (CSO)

The Central Statistics Office (CSO) provides an estimate of the number of people who suffered a work-related injury or illness. This estimate is based on a module of the Quarterly National Household Survey (QNHS), administered in the first quarter of each year. The CSO surveys 3,000 households each week, giving a total sample of 39,000 households per quarter. The injury and illness data rely on self-reporting and thus may be subject to sampling or other survey errors. Rather than showing definitive numbers, the numbers presented therefore indicate trends and broad orders of magnitude.

The CSO statistics in this summary are based on the survey conducted during December 2004 to February 2005. The data relating to the number and rate of >3 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.

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 2006 is comparable to those carried out in 2003 to 2005.

In the Accidents and Illness module of the 2006 QNHS, the CSO asked respondents 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 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?
- You indicated that you have not worked in the last 12 months. Have you been employed, but on long term leave during that time?
- 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.

The Central Statistics Office has proposed to include the six questions of the Accident and Illness module in the core Quarterly National Household Survey from 2008 onwards. This means that estimates of work-related injury and illness will be available to the Authority on a quarterly basis, allowing a more precise analysis of injury and illness trends.

Health and Safety Authority (HSA)

Employers and the Department of Social and Family Affairs forward information to the Authority when injuries result in more than three days' absence from work. Injuries may be reported to the Authority by telephone, fax, post or online (through our website). Comparison between the CSO estimates and the database of incidents reported to the Authority suggests that under-reporting is a problem in some sectors. All workplace fatalities are legally required to be reported to the Authority.

Due to under-reporting of injuries, the Authority does not use the database of reported accidents to estimate injury rates – instead, rates are based on data from the CSO. However, the Authority database (SAFE) has details of over 8,000 occupational injuries reported in 2006 and is thus a valuable source of information about characteristics of the accident victim, the type of incident, and the working environment.

Occupational Injury Benefit claims (OIB)

OIB statistics are based on payments by the Department of Social and Family Affairs to insured persons 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 smaller proportion 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. Following requests by the Authority in 2006, the OIB division has supplied additional data related to the occupation of the victim and the nature of the injury.



1.4 Technical Notes

1.4.1 Classification of injuries

The Authority uses standard international classifications for its statistics:

- **Economic activity classification – NACE** (Nomenclature statistique des activités économiques dans la Communauté européenne: Statistical Classification of Economic Activities in the European Community), maintained by Eurostat. The full NACE system is available to download (under 'Classifications', Abbreviation = NACE Rev.1.1) from the Eurostat website:
- **Occupation classification – ISCO** (International Standard Classification of Occupations), maintained by ILO (International Labour Organisation).
The ISCO codes are available to download (under 'Classifications', Abbreviation = ISCO 88 (COM) from the Eurostat website:
- **Incident and Environment Classification – ESAW** (European Statistics and Accidents at Work), maintained by Eurostat. Details of the variables and their classifications are available in the ESAW methodology.

1.4.2 Calculation of injury and fatality rates

- Injury and illness rates are calculated per 1,000 workers.
- Fatality rates are calculated per 100,000 workers.

1.4.3 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 section outlines the number and rates of injury and illness estimated by the CSO for 2005 – based on the Accident and Illness module conducted as part of the Quarterly National Household Survey in Q1, 2006.

Figure 1 presents the numbers and rates of injury and illness for 2001 to 2005, together with information on the number of days lost from work due to injury and illness.

Overall, the rates of injury and illness causing more than three days' absence from work have remained stable since 2001 (the trends are presented in Figure 2):

- The rate of workers suffering injuries causing more than three days' absence from work in 2005 is similar to the rate for previous years – the rate has been between 11 and 12 per 1,000 workers since 2002.
- The rate of illness causing more than three days' absence in 2005 was 12 per 1,000 workers, similar to the rate in 2004.
- The rate of injury and illness (combined) causing more than three days' absence from work was 23.4 per 1,000 workers in 2005. The rate has been between 22 and 24 per 1,000 workers since 2001.

The CSO estimates that occupational injury and illness resulted in more than 1.6 million days lost from work in 2005. This was over 250,000 more days lost than in 2003 ('days lost' data not available for 2004). The CSO warns that the 'days lost' data should be interpreted with care as respondents may have reported 'potential' days lost.

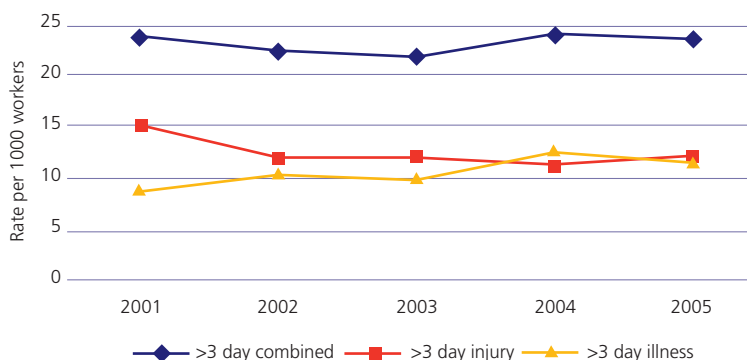
Figure 1: Number and rate of people suffering injury and illness 2001-2005 (CSO)

	2001		2002		2003		2004		2005	
	Number	Rate per 1000	Number	Rate per 1000	Number	Rate per 1000	Number	Rate per 1000	Number	Rate per 1000
Total in employment	1745500		1772000		1835900		1908300		1998100	
Injury										
Total suffering injury	51800	29.7	43100	24.3	54400	29.6	57500	30.1	57800	28.9
0 days absence	16400	9.4	15100	8.5	21000	11.4	22600	11.8	20100	10.1
1-3 days absence	9300	5.3	7200	4.1	11500	6.3	13200	6.9	13700	6.9
>3 days absence	26200	15.0	20900	11.8	21900	11.9	21800	11.4	23900	12.0
Illness										
Total suffering illness	33000	18.9	38100	21.5	46300	25.2	59800	31.3	63900	32.0
0 days absence	15600	8.9	15400	8.7	20500	11.2	No data	No data	31800	15.9
1-3 days absence	2400	1.4	4400	2.5	8000	4.4	No data	No data	9200	4.6
>3 days absence	15000	8.6	18400	10.4	17800	9.7	23700	12.4	22900	11.5
Injury and Illness										
Total injury or illness	84800	48.6	81200	45.8	100700	54.9	117300	61.5	121700	60.9
Total (> 3 days absence)	41200	23.6	39300	22	39700	21.6	45500	23.8	46800	23.4
Total days lost	1441000		1286100		1374813		No data		1638591	

Note: 'Days lost' data should be interpreted with care as respondents may have included 'potential' days lost. Data may be subject to sampling or other survey errors, which are greater in respect of smaller values or estimates of change.



Figure 2: Rate of injury, illness and combined injury and illness requiring >3 days' absence 2001-2005 (CSO)



Note: Data may be subject to sampling or other survey errors, which are greater in respect of smaller values or estimates of change.

Figure 3 shows the estimated number of workers in each economic sector from 2001 to 2005 – the same information is presented graphically in Figure 4.

Overall, the working population increased by 89,800 workers in 2005 compared to 2004 (the annual increase in 2004 was 72,400). Up to 2004, production industries (C-E) had the highest number of employees, but in 2005 the wholesale and retail trade sector had the largest workforce.

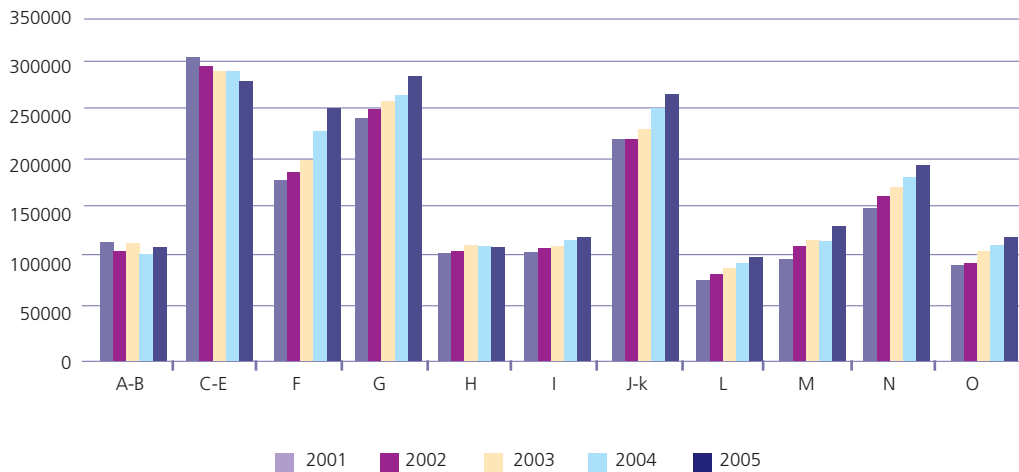
Figure 3: Numbers employed in each economic sector 2001-2005 (CSO)

Economic Sector	Number employed				
	2001	2002	2003	2004	2005
A-B Agriculture, Forestry, Fishing	121700	114300	118900	112500	115500
C-E Other Production Industries	310400	303200	297400	297300	285000
F Construction	183200	188500	202300	233100	253800
G Wholesale and Retail	249100	252300	263400	267600	286100
H Hotels and Restaurants	108700	110500	113100	112300	113100
I Transport, Storage, Communication	108900	110900	113400	115700	120500
J - K Financial and Other Services	226400	226600	234400	252900	269200
L Public Administration; Defence; Social Security	82000	88600	89900	96400	103100
M Education	106600	115000	119400	119800	132800
N Health	153400	165700	177200	185500	196300
O Other	94900	96300	106400	115400	122800
Total	1745500	1772000	1835900	1908300	1998100



Figure 4 shows how the numbers employed have increased in every economic sector since 2001, with the exception of agriculture/fishing and the production industries. The greatest increases since 2004 were in the construction sector (+20,700 workers), wholesale and retail trade (+18,500) and financial and business services (+16,300).

Figure 4: Numbers employed in each economic sector 2001-2005 (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 5 presents the breakdown of CSO estimates of total injuries and '>3 days lost' injuries by economic sector in 2005.

The rate of total injuries in 2005 is highest in agriculture/fishing (59.7 injuries per 1,000 workers) followed by construction (54.1 injuries) and hotels and restaurants (38 injuries).

Total injury rates have been gradually increasing since 2003 in agriculture/fishing (A-B), public administration (L), education (M) and 'other personal services' (O). Total injury rates have been decreasing in construction and business services (J-K).

The rate of injuries causing more than three days' absence from work is highest in construction (22.5 injuries per 1,000 construction workers), followed by public administration (18.4 injuries). Construction has consistently had the highest rate of injuries causing more than three days' absence in 2002-2005. However, the rate for 2005 represents a decrease since 2004 (25 injuries per 1,000 construction workers) and 2003 (26 injuries). The rate of >3 days' injury in public administration has generally been increasing since 2002 (from 11.3 injuries per 1,000 workers in 2002 to 18.4 in 2005).



Figure 5: Numbers and rates of injuries by economic sector 2005 (CSO)

Sector	Total Injuries				>3 day injuries				
	Number injuries 2005	Rate per 1000 2005	Rate per 1000 2004	Rate per 1000 2003	Number injuries 2005	Rate per 1000 2005	Rate per 1000 2004	Rate per 1000 2003	Rate per 1000 2002
A-B	6900	59.7	45.3	36.2	1900	16.5	17.5	12.6	17.5
C-E	8600	30.2	22.5	35.6	4500	15.8	11.3	18.5	13.2
F	10400	41.0	54.1	56.4	5700	22.5	25.0	26.2	22.3
G	7000	24.5	27.7	20.5	2300	8.0	7.3	10.3	9.1
H	4300	38.0	49.0	33.6	1800	15.9	6.1	9.7	12.7
I	2700	22.4	37.2	26.5	1000	8.3	18.2	11.5	15.3
J-K	1900	7.1	13.0	14.9	600	2.2	3.0	2.6	4.4
L	3800	36.9	29.0	28.9	1900	18.4	13.5	14.5	11.3
M	2300	17.3	16.7	15.1	600	4.5	3.4	4.2	2.6
N	5500	28.0	27.0	32.7	2700	13.8	15.3	10.7	13.3
O	4400	35.8	24.3	21.6	1000	8.1	5.4	3.8	10.4
Total	57800	28.9	30.1	29.6	23900	12.0	11.4	11.9	11.8

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 6 presents the CSO estimates of total illness and '>3 days lost' illness for each economic sector in 2005.

The rate of total illness in 2005 is highest in agriculture/fishing (65.8 illnesses per 1,000 workers) and transport (45.8). The total illness rate has been steadily increasing since 2003 in most sectors, including agriculture/fishing (A-B), production industries (C-E), wholesale and retail trade (G), business services (J-K), public administration (L) and education (M).

The highest rate of '>3 days lost' illness is in agriculture/fishing (20.8 illnesses per 1,000 workers), followed by transport (18.3) and construction (15). Data for illnesses causing more than three days' absence is not available for 2004. In 2003, construction had the highest '>3 day illness' rate, followed by public administration. The rate of '>3 day illness' has increased in most sectors since 2003: the rate in agriculture/fishing doubled from 10.8 per 1,000 workers in 2003 to 20.8 in 2005.



Figure 6: Numbers and rates of illnesses by economic sector 2005 (CSO)

Sector	Total Illness				day illness			
	Number illness 2005	Rate per 1000 2005	Rate per 1000 2004	Rate per 1000 2003	Number illness 2005	Rate per 1000 2005	Rate per 1000 2004	Rate per 1000 2003
A-B	7600	65.8	63.1	38.7	2400	20.8	No data	10.1
C-E	7300	25.6	25.2	21.2	1700	6.0	No data	10.8
F	7500	29.6	29.6	32.1	3800	15.0	No data	12.9
G	7200	25.2	23.5	14.0	3100	10.8	No data	8
H	2000	17.7	19.6	21.2	1200	10.6	No data	5.3
I	5500	45.6	45.8	32.6	2200	18.3	No data	10.6
J-K	7200	26.7	24.1	22.6	2300	8.5	No data	6.4
L	3800	36.9	29.0	28.9	1200	11.6	No data	12.2
M	6000	45.2	33.4	23.5	1700	12.8	No data	9.2
N	7600	38.7	51.2	27.1	2800	14.3	No data	10.7
O	2300	18.7	19.1	32.9	600	4.9	No data	11.3
Total	63900	32.0	31.3	25.2	22900	11.5	No data	9.6

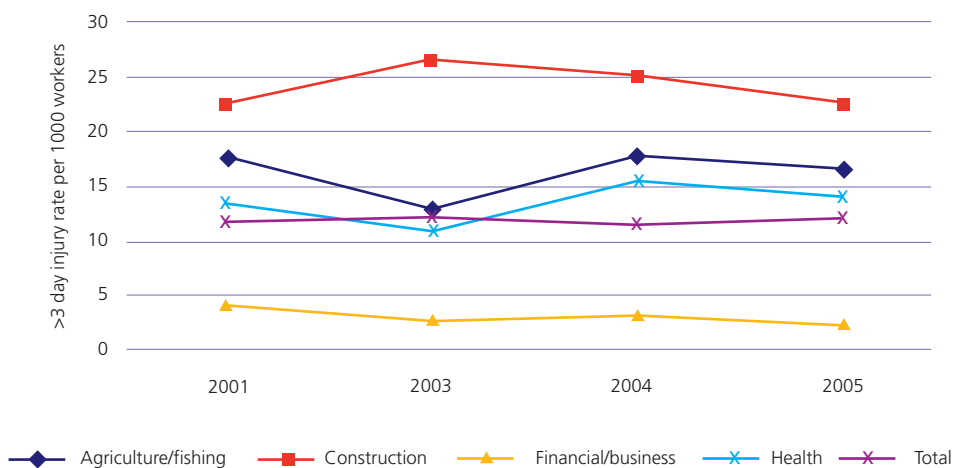
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Figure 7 below shows the rate of injuries causing more than three days’ absence from work in various sectors since 2002, as estimated by the CSO. The trend line for all sectors (‘total’) indicates that the rate of ‘>3 day injury’ has been relatively stable over the four-year period.

- Within sectors, the graph indicates that the rate of >3 day injuries in construction is consistently higher than that in other sectors.
- The rate of >3 day injuries in agriculture/fishing (A-B) and health and social work (N) is also generally above the average rate.
- The rate in the business sectors (J-K) is consistently below the average and continuing to decrease.

Figure 7: Rate of >3 day injury in various economic sectors 2001-2005 (CSO)





During 2006, the Department of Social and Family Affairs admitted 12,416 claims – see *Figure 8*. These figures relate only to injuries causing >3 days' absence from work. 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. 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 (2007)*. The article reports that a record number of claims were admitted in 2006, and suggests that the rate of claims is now stabilising after a reduction in the rate over recent years.

The OIB division also supplied the Authority with a breakdown of claims by injury type and occupation. The data is presented in sections 2.2 and 2.3 of this report.

Figure 8: Number of occupational-injury benefit claims admitted 1997-2006 (OIB)

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Claims allowed	11,169	11,686	11,311	11,995	12,050	12,280	11,096	11,705	11,759	12,416



2.2 Victim Statistics

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

The number of males and females working in each economic sector is presented in *Figure 9*. Female employees dominate in the education and health-care sectors in 2005, while there are more male workers in agriculture/fishing (A-B), production industries (C-E), construction (F) and transport (I). There are similar numbers of male and female workers in the wholesale and retail trade (G) and business services (J-K).

The number of females participating in the workforce has been increasing steadily: 848,300 were employed in 2005 compared to 810,000 in 2004 and 770,100 in 2003. Around 10,000 more females are employed in each of the following sectors compared to 2004: wholesale and retail trade (G), education (M) and health and social work (N).

The number of male employees has increased in every sector, except the production industries (from 210,000 workers in 2004 to 202,500 in 2005). The number of male employees in the business sectors (J-K) increased by over 10,000 in 2005 (from 123,700 in 2004 to 136,400 in 2005).

The injury estimates in *Figure 9* indicate that male workers suffered more than twice as many work-related injuries as females in 2005 (38.6 injuries per 1,000 male workers compared to 15.8 for female workers). Male injury rates are highest in public administration (L) and agriculture/fishing (A-B) (66.3 and 63.9 injuries per 1,000 male workers respectively). Female injury rates are highest in health and social work (N) and hotels and restaurants (H) (27.7 and 25 injuries per 1,000 female workers respectively).

Male workers also had a higher illness rate than female workers in 2005 (35.5 illness cases per 1,000 male workers compared to 27.2 for female workers). The male illness rate is highest in agriculture/fishing sector (67.7 cases per 1,000 male workers) followed by transport (52.6 per 1,000). Female illness rates are highest in education (M), agriculture/fishing (A-B), and health and social work (N). In 2004, men and women had very similar illness rates; both groups reported 32 illness cases per 1,000 workers.

Figure 9: Number and rate of injury/illness by economic sector and gender 2005 (CSO)

Sector	Number employed		Injury rate			Illness rate		
	Male	Female	Male	Female	Total	Male	Female	Total
A-B	104800	10700	63.9	18.7	59.7	67.7	46.7	65.8
C-E	202500	82500	39.5	8.5	30.2	30.1	14.5	25.6
F	241100	12700	43.1	no data	41.0	31.1	0.0	29.6
G	143500	142600	35.5	13.3	24.5	32.8	17.5	25.2
H	49100	64000	55.0	25.0	38.0	22.4	15.6	17.7
I	91300	29200	26.3	10.3	22.4	52.6	24.0	45.6
J-K	136400	132800	11.0	3.0	7.1	27.1	26.4	26.7
L	51300	51800	66.3	7.7	36.9	39.0	34.7	36.9
M	37600	95300	8.0	21.0	17.3	37.2	48.3	45.2
N	33700	162500	29.7	27.7	28.0	35.6	38.8	38.7
O	58500	64200	49.6	23.4	35.8	22.2	15.6	18.7
Total	1,149,800	848,300	38.6	15.8	28.9	35.5	27.2	32.0

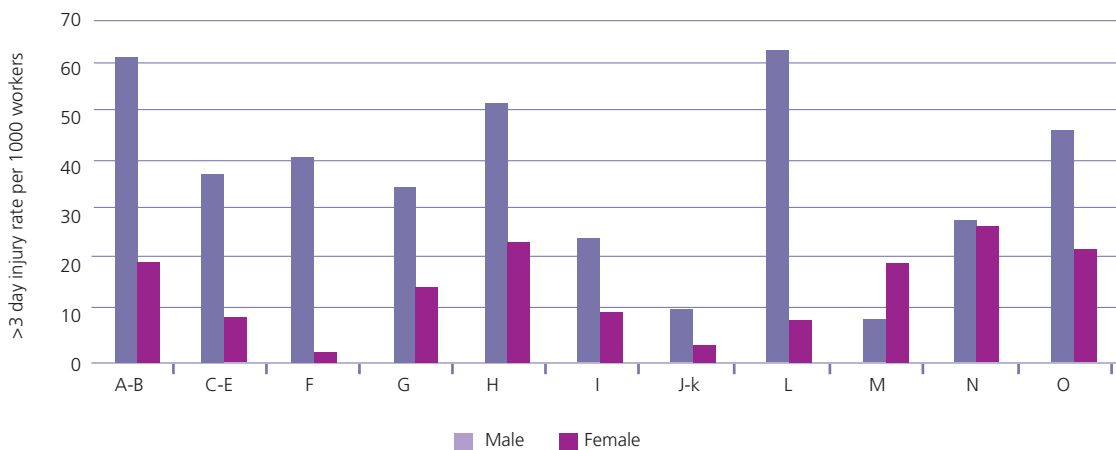
Sector key

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



A breakdown of the injury and illness data for men and women is presented in detail in *Figures 10* and *11*. It is clear from the graphs that male workers suffer higher rates of injury in every sector, except education (M). Males also suffer higher rates of illness in all sectors, except education (M) and health and social work (N). The graphs show that the illness rate among women is higher relative to the injury rate in most sectors.

Figure 10: Rate of injury by gender and economic sector 2005 (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 11: Rate of illness by gender and economic sector 2005 (CSO)

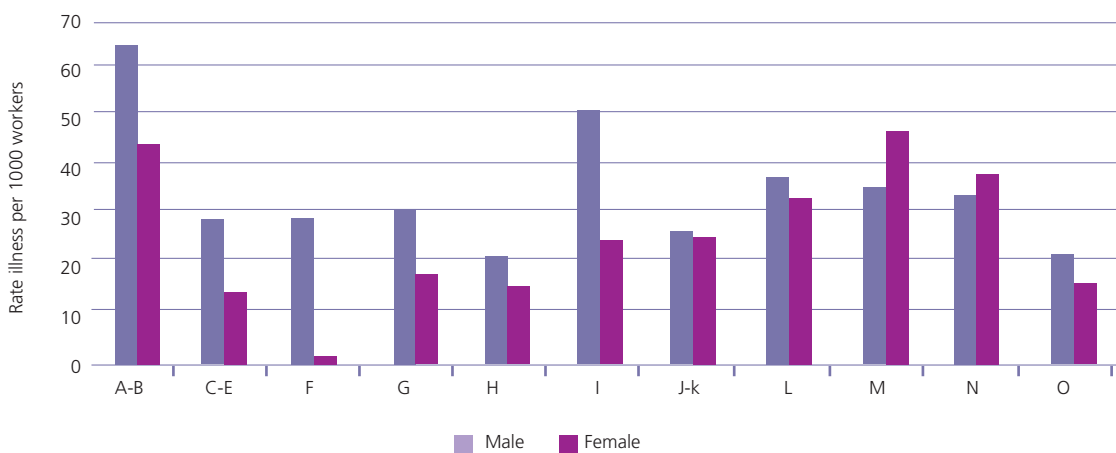
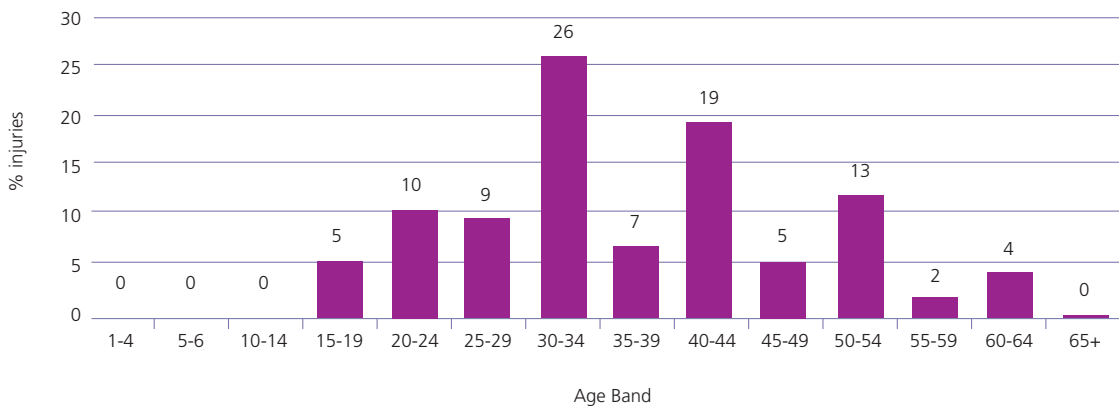


Figure 12 presents the distribution across age bands of accidents reported to the Authority in 2006. The highest proportion of accidents occurred in the 30-34 age band.

Overall, one-third of all reported injuries involved workers in their 30s. Figure 12 also shows that many more injuries were reported in the age bands 30-34, 40-44 and 50-54 than in the bands 35-39, 45-49 and 55-59. This is because many injuries are reported by colleagues who estimate the victim's age – hence many of the reported injuries have age recorded as '30', '40' or '50'.

Figure 12: Distribution of non-fatal injury by age band 2006 (HSA database)



Five per cent of all reported injuries involved those aged 15-19. The breakdown of age bands by economic sector in Figure 13 shows that the hotel and restaurant and education sectors had relatively high percentages of injuries to 15-19-year-olds, compared to other sectors. At the other end of the scale, only 22 injuries in the 65+ age band were reported in 2006, and none of these was reported from the agriculture sector. Given the high number of fatalities of elderly workers in agriculture, it is likely that the result represents a failure to report accidents rather than a low number of accidents in this age band.



Figure 13: Distribution of non-fatal injuries by age and economic sector 2006 (HSA database)

AGE BAND	ECONOMIC SECTOR															Total	Number
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	%	in age band
1-4	0.0	0.0	0.0	0.0	0.0	0.1	0.7	0.7	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.1	8
5-9	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.8	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
15-19	9.8	0.0	3.8	4.5	0.0	6.9	6.2	11.2	2.8	3.3	9.4	1.6	13.8	2.0	3.2	4.7	330
20-24	14.1	0.0	6.3	8.4	15.8	12.4	16.5	9.7	7.2	10.7	10.1	7.7	10.8	8.6	13.2	10.2	717
25-29	3.3	0.0	13.8	7.6	15.8	12.5	5.8	3.7	5.5	7.4	11.4	15.4	6.2	7.6	5.8	9.0	630
30-34	20.7	0.0	22.5	28.0	21.1	25.1	33.4	36.6	25.1	32.8	24.8	20.7	20.0	23.4	21.2	26.0	1834
35-39	3.3	16.7	8.8	6.5	0.0	8.4	2.9	3.0	9.4	2.5	7.4	7.6	7.7	6.2	5.8	6.8	477
40-44	23.9	33.3	11.3	20.2	21.1	14.2	17.9	22.4	20.9	13.9	17.4	22.4	15.4	17.3	26.5	18.7	1313
45-49	2.2	0.0	7.5	4.8	5.3	5.2	2.5	3.0	5.9	4.9	8.1	6.5	4.6	5.6	4.2	5.1	356
50-54	15.2	0.0	10.0	14.5	15.8	8.0	9.6	8.2	16.3	16.4	5.4	11.7	15.4	19.4	11.1	12.7	891
55-59	1.1	16.7	6.3	1.6	5.3	3.1	1.5	0.0	2.5	0.0	1.3	2.0	1.5	3.6	3.2	2.3	164
60-64	6.5	16.7	8.8	3.8	0.0	3.9	2.2	1.5	4.2	6.6	3.4	4.0	3.1	5.9	5.8	4.1	286
65+	0.0	16.7	1.3	0.2	0.0	0.2	0.6	0.0	0.2	0.0	1.3	0.3	1.5	0.4	0.0	0.3	22
Total %	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Number in sector	92	6	80	1640	19	1469	727	134	843	122	149	749	65	747	189		7031

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 14 presents the CSO’s age-band data for 2005. Over one-quarter of the workforce is in the 25-34 band. In general, injury rates are higher for younger workers and illness rates are higher in the older age bands. The 15-19 age band has the highest injury rate, at 74.8 injuries per 1,000 workers aged 15-19 (in 2004 the CSO estimated 111 injuries per 1,000 workers aged 15-19). However, the CSO warns that these figures should be interpreted with caution as they are based on a small number of reports. The 20-24 age band has the second highest injury rate. Illness rates are highest in the 45-54 and 65+ age bands.

Figure 14: Rates of injury and illness by age group 2005 (CSO)

Age range	Total employed	Injury			Illness		
		Number injuries	Rate 2005	Rate 2004	Number illnesses	Rate 2005	Rate 2004
15-19	68200	5100	74.8	111.1	2000	29.3	44.4
20-24	237200	9100	38.4	35.7	4400	18.5	10.7
25-34	582800	14000	24.0	28.9	11600	19.9	22.1
35-44	473600	13300	28.1	23.7	17600	37.2	33.6
45-54	383300	10200	26.6	29.4	18500	48.3	39.5
55-64	215500	5500	25.5	18.6	8100	37.6	51.9
65+	37400	600	16.0	14	1700	45.5	53.3
Total	1988100	57800	29.1	30.2	63900	32.1	31.3



Figures 15, 16 and 17 present data on the occupations of injured parties. Figure 15 is based on figures from the Authority's database of reported accidents; Figure 16 is based on benefit claims admitted by the Occupational Injury Benefits (OIB) division in the Department of Social and Family Affairs in 2006, and Figure 17 is based on CSO estimates for 2005 from the Quarterly National Household Survey.

The Authority and the CSO used a prescribed list of occupations based on the ISCO classification system (see technical note in section 1.4), while the OIB used an extended list of occupations developed over time. Hence, the 58% of incidents in the 'all other occupations' category in the OIB data (Figure 16) compares to only 26% of incidents in the HSA data (Figure 15).

According to the Authority's database of reported injuries, 'labourers in mining, construction, manufacturing and transport' suffer most injuries (30%), followed by 'metal, machinery and related trades workers' (9%) and 'extraction and building trades workers' (8%). The top five occupations in Figure 15 are the same as the top five occupations for reported accidents in 2005.

Figure 15: Reported non-fatal injuries by occupation 2006 (HSA database)

Occupation	%	Number Injuries
Labourers in mining, construction, manufacturing and transport (1)	29.6	2325
Metal, machinery and related trades workers (2)	9.0	709
Extraction and building trades workers	7.5	587
Drivers and mobile plant operators	6.9	544
Personal and protective services workers	5.7	451
Police officers	4.4	343
Nursing and midwifery professionals	3.8	296
Office clerks	3.4	268
Models, salespersons and demonstrators	3.2	249
All other occupations	26.4	2072
Total	100.0	7844

- Notes** (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'.
 (2) Category includes sub-categories 'metal, machinery and related trades workers' and 'machine operators'.

Figure 16: OIB claims by occupation 2006 (OIB)

Occupation	%	Number
Road transport worker	8.2	1023
Construction trade (1)	7.2	897
Health and related occupation (2)	6.3	785
Plant and machine operatives	5.6	698
Sales assistant and check-out operator	5.1	631
Protective service officer	3.9	482
Catering occupation	3.2	397
Woodworking trade	2.6	325
All other occupations	57.8	7178
Total	100	1241

- Notes** (1) Category includes sub-categories 'construction trade' and 'other – construction'.
 (2) Category includes sub-categories 'health and related occupation' and 'associated health professional'.



Occupation data from the CSO shows that 'craft and related' occupations and 'personal and protective service' occupations suffer high rates of work-related injury (50 and 47.7 injuries per 1,000 workers respectively).

The highest rates of work-related illness are reported by 'plant and machine operatives' (45.8 illness cases per 1,000 workers), 'associate professional and technical' (38.2) and 'managers and administrators' (37.9). Rates of injury and illness are lowest in the 'clerical and secretarial' occupations.

The correspondence between the three data sources is quite close:

- The OIB categories 'road transport worker' and 'construction trade' (accounting for around 15% of all OIB claims) contain elements included in the Authority's broader category of 'labourers in mining, construction, manufacturing and transport'.
- The OIB category 'health and related occupations' (accounting for 6% of all OIB claims) is a broader category than the 'nursing and midwifery professionals' category which accounts for 4% of all injuries reported to the Authority.
- The Authority's category 'models, salespersons and demonstrators' is similar to 'sales assistants and check-out operators' in the OIB categorisation and 'sales' in the CSO data.
- 'Drivers and mobile-plant operators' (Authority category) and 'plant and machine operatives' (OIB category) rank fourth on both lists. According to CSO data, 'plant and machine operatives' suffered 34.6 injuries per 1,000 workers and an illness rate of 45.8 per 1,000.
- Protective service workers also feature in all three lists.

Figure 17: Injury and illness by occupation 2005 (CSO)

Occupation	In employment	Injuries		Illness	
		Number	Rate	Number	Rate
Managers and administrators	309000	8000	25.9	11700	37.9
Professional	236000	3200	13.6	7700	32.6
Associate professional and technical	175200	4100	23.4	6700	38.2
Clerical and secretarial	245800	2000	8.1	4200	17.1
Craft and related	277800	13900	50.0	8300	29.9
Personal and protective service	213700	10200	47.7	6600	30.9
Sales	180600	4400	24.4	4800	26.6
Plant and machine operatives	170400	5900	34.6	7800	45.8
Other	189800	6100	32.1	6100	32.1
Total persons	1998100	57800	28.9	63900	32.0

The employment status of the victims of reported incidents is presented in *Figure 18*. Similar to 2005, 97% of the reported incidents involved employees.

There are some reports of injuries to self-employed workers in mining and quarrying (2.4% of all injuries reported from the sector) and construction (3% of all injuries reported). The education sector reports a relatively high proportion of injuries to trainees (17.6%).



Figure 18: Distribution of reported non-fatal incidents by economic sector and employment status 2006 (HSA database)

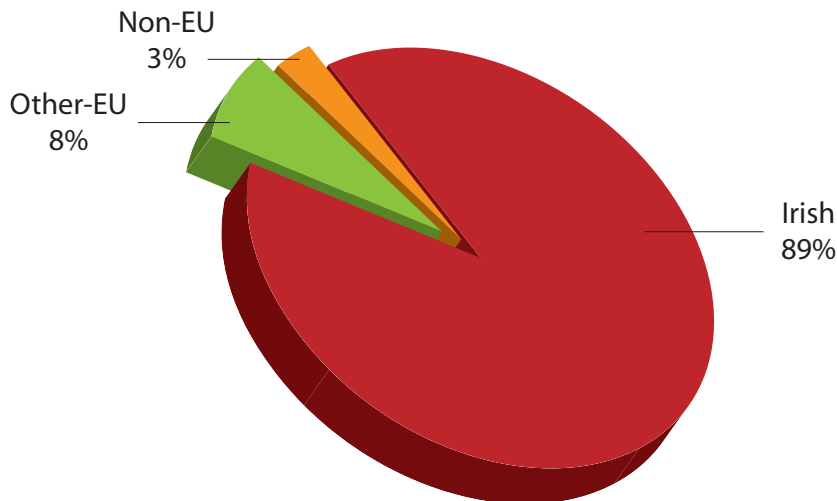
Employment status	Economic sector															Total Total in	
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	% status	
Employee	99.0	100.0	96.5	98.3	100.0	94.6	95.7	95.3	99.3	92.1	98.2	98.9	79.7	98.8	96.4	97.1	7380
Self-employed	0.0	0.0	2.4	0.6	0.0	3.0	0.5	0.0	0.3	1.6	0.6	0.0	0.0	0.1	0.5	0.9	72
Trainee	0.0	0.0	0.0	0.7	0.0	1.6	0.1	2.7	0.1	0.0	0.0	0.6	17.6	0.6	2.6	0.9	72
Member of public	0.0	0.0	1.2	0.2	0.0	0.5	1.4	2.0	0.1	3.2	0.6	0.4	0.0	0.2	0.5	0.5	38
Non-worker	1.0	0.0	0.0	0.3	0.0	0.2	2.2	0.0	0.1	3.2	0.0	0.0	2.7	0.2	0.0	0.5	36
Family worker	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.6	0.1	0.0	0.0	0.0	0.1	4
Total %	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Total in sector	97	6	85	1719	21	1615	783	149	905	126	168	825	74	835	194	7602	

Sector key

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The breakdown of reported injuries by nationality in *Figure 19* indicates that over 10% of all reported injuries involved non-Irish-national workers (9% in 2005). In real terms, the number of reported injuries involving workers from ‘other EU’ and ‘non-EU’ countries increased from over 700 in 2005 to over 800 in 2006.

Figure 19: Distribution of non-fatal injuries by nationality 2006 (HSA database)



The CSO (2007) estimated that 215,500 non-Irish nationals were employed in Ireland in Q4, 2006 (or over 10% of the total workforce) – see *Figure 20*. Of these, 40% were from the new EU member states. The proportion of non-Irish-national workers is particularly high in some sectors: 28% of workers in hotels and restaurants (H), 13% in construction (F) and 12% in the production industries (C-E).



Figure 20: Workers by nationality and economic sector 2006 (CSO)

ECONOMIC SECTOR	Workers at Q4, 2006		
	Irish	Non-Irish	% non-Irish
Agriculture, hunting and forestry/Fishing	111000	4900	4.2
Mining and quarrying/Manufacturing/Electricity, gas, water	256700	35300	12.1
Construction	243900	37700	13.4
Wholesale and retail trade; repair of goods	260700	27600	9.6
Hotels and restaurants	83800	32800	28.1
Transport, storage and communication	107200	9900	8.5
Financial intermediation/Real estate, renting, business	251200	26700	9.6
Public administration, defence	103900	1200	1.1
Education	132700	6900	4.9
Health and social work	190500	19700	9.4
Other community, social and personal services	108900	12700	10.4
Total	1850600	215500	10.4

The Authority's database of reported injuries to non-Irish nationals follows a similar pattern to the CSO estimates – see *Figure 21*. One-third of the injuries reported from hotel and restaurants involved non-Irish nationals. Of these, over 25% are categorised as 'other EU' and 7% as 'non-EU'. This represents an increase from 22% in 2005.

Non-Irish nationals suffered 17% of the injuries reported from the construction sector. In contrast, sectors such as financial intermediation (J), public administration (L) and education (M) report relatively few injuries to non-Irish nationals.

Figure 21: Distribution of non-fatal injuries by sector and nationality 2006 (HSA database)

NATIONALITY	ECONOMIC SECTOR														Total	%	nationality
	A	B	C	D	E	F	G	H	I	J	K	L	M	N			
Irish	83.2	100.0	79.3	87.8	80.0	82.8	89.1	66.9	92.3	95.2	80.7	98.1	95.9	91.5	89.9	88.5	6752
Other EU	10.9	0.0	19.5	9.6	15.0	14.6	7.3	25.5	5.2	3.2	16.1	1.1	1.4	2.4	6.0	8.5	648
Non-EU	5.9	0.0	1.1	2.6	5.0	2.6	3.6	7.6	2.5	1.6	3.1	0.8	2.7	6.1	4.0	3.0	231
Total %	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Total in sector	101	7	87	1743	20	1624	780	145	908	126	161	833	74	823	199		7631

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



Victim Risk Alerts

High rates of injury and illness among male workers in agriculture

- Male workers in the agriculture/fishing sector suffer 64 injuries per 1,000 workers and 68 illness cases per 1,000.
- The male injury rate in the sector in 2004 was 49 per 1,000 workers and the illness rate was 64 per 1,000.
- Males in agriculture/fishing had a higher illness rate than males or females in any other sector in 2003, 2004 and 2005.

Low levels of reporting injuries to elderly workers in agriculture

- The CSO estimates around 600 injuries to people aged 65+ in 2005 (a rate of 16 injuries per 1,000 workers aged over 65). However, only 22 injuries in this age band were reported to the Authority in 2006 (26 were reported in 2005).
- It may also be inferred from the fatality statistics that the rate of non-fatal injuries among elderly workers in agriculture is likely to be high – but no injuries to workers aged 65+ were reported to the Authority from the agriculture sector in 2006 or 2005.
- The employment status data also show that no injuries to self-employed workers were reported from agriculture, despite the high rate of self-employment in the sector.
- While the fatal-accident statistics offer some information, capturing a larger database of non-fatal injuries to self-employed elderly workers in agriculture would provide crucial evidence for targeted interventions.

High proportion of injuries in specific occupational categories

- Several occupational categories feature in all three occupational injury databases (HSA, OIB and CSO). For example:
- 'Drivers and mobile-plant operators' account for 7% of all accidents in the HSA database
- 'Plant and machine operatives' account for 6% of all accidents in the OIB database. The CSO reports that 'plant and machine operatives' suffer 34.6 injuries per 1,000 workers and 45.8 illnesses per 1,000.
- 'Personal and protective service' workers and 'sales' workers also account for a significant proportion of the injuries in all three databases.

High proportion of injuries to non-Irish nationals in hotels and restaurants

- The proportion of reported injuries to non-Irish nationals across all sectors increased in 2006 (11.5% of all reported injuries compared to 9% in 2005).
- Non-Irish nationals working in hotels and restaurants are at particular risk; one-third of all reported injuries are 'other EU' or 'non-EU' – an increase since 2005 when the percentage of injuries to non-Irish nationals was 22%.
- CSO figures also show that hotels and restaurants have a higher proportion of non-Irish-national workers (28%) compared to other sectors (for example, non-Irish-national workers represent 13% of the construction workforce).



2.3 Incident Statistics

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

Figure 22 shows that, consistent with previous years, approximately one-third of all incidents are triggered by 'manual handling'. This category includes 'lifting and carrying', 'pushing and pulling' and 'twisting and turning of the body'. The proportion of accidents due to manual handling is particularly high in the wholesale and retail trade (47%), manufacturing (40%) and health and social work (38%).

The second most frequently reported accident trigger is 'slips, trips, falls'. This trigger accounts for over one-third of all accidents reported from education and 28% from financial intermediation (J). Together, 'manual handling' and 'slips, trips, falls' triggered over 50% of all the reported accidents in 2006 – see Figure 23.

Other notable results in Figure 22 are the 20% of accidents in agriculture (A) triggered by 'loss of control of animal' and the 10% of accidents caused by 'fall from height'.

Public administration (L) and health and social work (N) have high proportions of accidents triggered by 'shock, fright, violence of others' (17% and 16% respectively). Financial intermediation (J) and education (M) also have relatively high percentages for this accident trigger.

Figure 22: Percentage of reported non-fatal injuries by accident trigger and economic sector 2006 (HSA database)

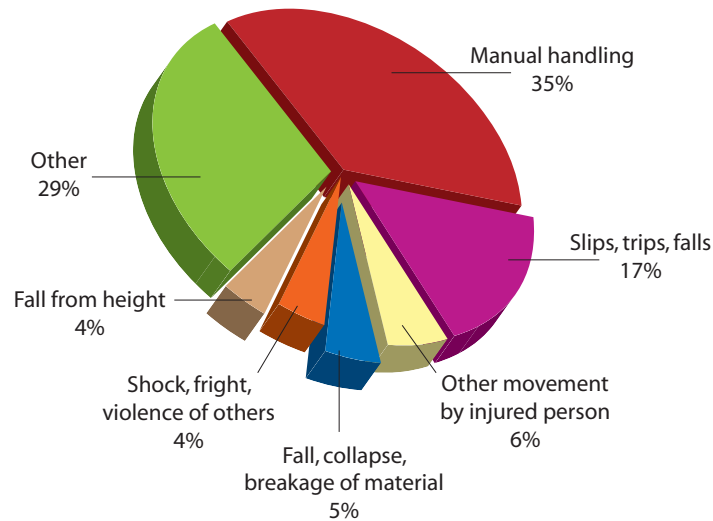
ACCIDENT TRIGGER	ECONOMIC SECTOR															Total %	Total by trigger
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O		
Manual handling	22.2	14.3	28.4	39.5	25.0	28.8	47.2	30.6	33.5	34.4	27.8	25.8	23.0	37.5	31.7	34.4	2650
Slips, trips, falls	12.1	0.0	14.8	12.7	30.0	18.6	17.3	19.0	18.9	28.1	11.2	14.8	33.8	17.9	19.3	16.7	1290
Other movement by injured person	5.1	0.0	3.4	6.3	10.0	6.2	5.3	6.1	5.2	7.8	8.3	5.0	2.7	5.0	5.0	5.7	440
Fall, collapse, breakage of material	3.0	0.0	3.4	5.5	0.0	9.5	5.9	6.1	2.4	2.3	3.6	3.2	2.7	2.5	2.0	5.2	400
Shock, fright, violence of others	1.0	0.0	0.0	0.2	0.0	0.3	0.5	2.7	2.5	7.0	4.1	17.3	6.8	15.9	1.5	4.4	341
Fall from height	6.1	14.3	4.5	3.0	5.0	10.4	3.4	0.0	2.7	0.8	7.1	1.3	0.0	1.5	3.5	4.3	331
Loss of control: handtool	4.0	14.3	6.8	6.7	15.0	6.2	2.2	4.1	0.9	0.8	6.5	1.0	6.8	0.8	3.5	3.9	304
Loss of control: object	2.0	0.0	5.7	5.1	5.0	4.3	2.1	2.0	2.3	0.8	5.3	1.2	2.7	1.4	5.9	3.3	253
Loss of control: machine	2.0	0.0	10.2	5.3	0.0	3.4	2.5	1.4	1.7	0.0	1.2	1.2	2.7	0.5	3.5	2.9	222
Loss of control: road traffic transport	2.0	0.0	3.4	0.4	5.0	0.8	1.0	0.0	5.3	3.9	3.6	8.2	2.7	1.8	4.5	2.4	187
Loss of control: other	3.0	14.3	2.3	1.8	0.0	1.2	1.0	3.4	1.2	1.6	3.6	1.8	2.7	1.4	2.5	1.6	122
Loss of control: transport/handling equipment	1.0	0.0	3.4	1.3	0.0	1.7	2.5	0.0	3.4	0.8	3.0	0.8	0.0	0.4	0.5	1.6	124
Overflow/leakage/emission: liquid	3.0	0.0	1.1	1.4	0.0	0.4	0.4	2.7	0.3	1.6	1.8	0.6	0.0	1.8	1.0	0.9	73
Entered inappropriate area	1.0	0.0	1.1	0.9	5.0	0.5	0.7	0.7	0.8	0.0	1.2	0.4	0.0	0.5	1.0	0.7	53
Overflow/leakage/emission: other	2.0	0.0	1.1	0.7	0.0	0.6	0.4	0.0	0.8	0.8	0.6	0.5	0.0	0.7	0.5	0.6	48
Loss of control: animal	20.2	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.8	0.0	1.2	0.7	0.0	0.6	2.0	0.6	46
Overflow/leakage/emission: smoke	1.0	0.0	2.3	0.3	0.0	0.1	0.2	0.0	0.2	0.8	0.0	0.2	0.0	0.0	1.0	0.2	19
Fire	0.0	0.0	1.1	0.2	0.0	0.2	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.4	0.0	0.2	13
Overflow/leakage/emission: gas	0.0	0.0	0.0	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.1	0.0	0.1	9
Overflow/leakage/emission: solid material	0.0	0.0	1.1	0.1	0.0	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	11
Electric failure	0.0	0.0	1.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	4
Explosion	0.0	0.0	0.0	0.1	0.0	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	5
Other	9.1	42.9	4.5	8.2	0.0	6.1	7.2	21.1	16.9	8.6	10.1	15.5	13.5	9.3	11.4	10.0	769
Total %	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Number injuries	99	7	88	1740	20	1638	825	147	905	128	169	833	74	839	202		7714

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

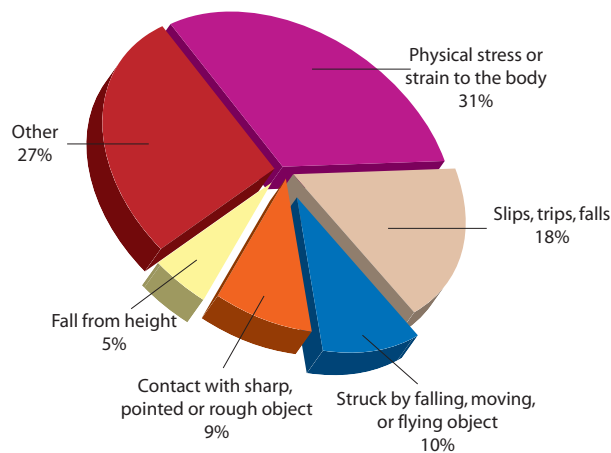


Figure 23: Top five accident triggers of non-fatal accidents – all sectors 2006 (HSA database)



The five most frequently reported incident types, presented in *Figure 24*, account for over 75% of all incidents in 2006. The percentage distribution of incident types largely corresponds to the results for accident trigger: over 30% of incidents are described as 'physical stress or strain to the body' and 18% as 'slip, trip, fall' incidents.

Figure 24: Top five incident types for all economic sectors 2006 (HSA database)



The breakdown by economic sector in *Figure 25* shows that the proportion of accidents due to 'contact with sharp, pointed or rough object' is highest in hotels and restaurants (18%), followed by education (16%) and manufacturing (14%). Hotels and restaurants also suffer a relatively high percentage of 'burns and scalds' incidents compared to other sectors.

Similarly to the accident-trigger data, the results for 'injured by person – violent' suggest that workers in public administration (L) and health and social work (N) experience a higher proportion of violent incidents. Workers in health and social work are also at greater risk of unintentional injuries from other people, compared to other sectors.



Figure 25: Percentage of reported non-fatal injuries by incident type and economic sector (HSA database)

INCIDENT TYPE	ECONOMIC SECTOR																Total %	Total incident
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O			
Physical stress or strain to the body	20.8	14.3	20.7	33.9	30.0	21.8	34.4	23.6	44.2	34.9	21.8	25.3	16.0	36.2	25.9	30.7	2376	
Slips, trips, falls	12.9	0.0	13.8	13.6	35.0	19.7	21.0	21.6	19.5	29.5	14.1	17.5	38.7	19.9	21.4	18.4	1423	
Struck by falling, moving, flying object	13.9	28.6	10.3	11.0	5.0	15.0	14.9	6.8	5.7	7.0	11.8	6.7	6.7	3.9	10.0	10.2	791	
Contact with sharp, pointed or rough object	11.9	0.0	11.5	14.0	0.0	10.3	7.5	18.9	2.5	3.1	10.6	4.7	16.0	3.9	8.5	8.7	670	
Fall from height	5.9	14.3	3.4	3.3	10.0	13.7	4.9	0.7	2.8	1.6	7.6	1.7	0.0	1.2	3.5	5.2	406	
Trapped/crushed by object/machinery	1.0	0.0	20.7	7.5	5.0	5.9	4.1	0.7	2.3	0.8	6.5	1.8	2.7	1.4	2.5	4.5	349	
Injured by person - violent	1.0	0.0	0.0	0.1	0.0	0.3	0.5	1.4	1.9	2.3	3.5	22.4	8.0	12.1	2.5	4.4	340	
Hit against something fixed or stationary	2.0	14.3	5.7	5.6	10.0	3.0	5.0	5.4	3.2	5.4	5.9	1.8	1.3	2.6	6.0	3.9	303	
Injured by vehicle- public road	1.0	0.0	3.4	0.1	0.0	1.0	0.5	0.0	2.8	3.9	2.9	10.4	1.3	1.3	4.0	2.2	169	
Burns, scalds	2.0	0.0	2.3	2.4	5.0	1.2	0.7	7.4	0.6	0.0	0.6	0.4	0.0	2.8	0.5	1.5	117	
Injured by vehicle - workplace	2.0	0.0	1.1	1.2	0.0	1.3	2.1	0.7	3.1	0.8	1.8	0.8	1.3	0.4	2.0	1.4	110	
Injured by person - unintentional	0.0	0.0	0.0	0.6	0.0	0.9	0.2	2.0	0.1	0.8	1.2	0.6	2.7	7.4	2.0	1.4	107	
Contact: chemical/biological - skin or eyes	3.0	0.0	2.3	2.0	0.0	0.9	0.1	1.4	0.4	0.8	2.4	0.6	0.0	1.3	1.5	1.1	84	
Injured by animal	18.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	2.4	0.7	0.0	0.4	2.0	0.6	43	
Psychological shock or trauma	0.0	14.3	0.0	0.1	0.0	0.0	0.0	0.0	2.1	5.4	0.6	0.5	0.0	0.6	0.0	0.5	38	
Contact with electricity	0.0	0.0	0.0	0.2	0.0	0.4	0.0	2.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	13	
Contact: chemical/biological - inhalation	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.2	1.6	0.0	0.4	0.0	0.4	0.0	0.2	13	
Contact with welding spark	0.0	0.0	1.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	5	
Contact: chemical / biological - ingestion	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	0.0	0.0	0.0	1	
Sudden hearing loss	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3	
Other	4.0	14.3	3.4	4.4	0.0	4.4	4.0	7.4	7.5	2.3	6.5	3.8	5.3	4.4	8.0	4.8	373	
Total %	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100		
Total in sector	101	7	87	1736	20	1640	823	148	908	129	170	835	75	854	201		7734	

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 26 shows that over 40% of all reported injuries were sprains and strains. The proportion of sprain and strain injuries is over 50% in transport (I) and financial intermediation (J), and over 40% in manufacturing (D), the wholesale and retail trade (G), public administration (L) and health and social work (N).

The proportion of injuries classified as ‘bruises, grazes, bites’ is highest in agriculture (A). The high percentage of ‘open wound’ injuries in hotels and restaurants corresponds with data on incident-type data which indicated that incidents involving contact with something sharp, pointed or rough were common in the sector.



Figure 26: Percentage of reported non-fatal injuries by injury type and economic sector 2006 (HSA database)

INJURY TYPE	ECONOMIC SECTOR																Total %	Total injuries
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O			
Sprain, strain	30.7	0.0	23.9	41.2	50.0	32.5	43.4	31.5	53.6	51.5	33.1	41.5	28.0	46.3	41.5	41.0	3164	
Bruising, grazes, bites	29.7	0.0	17.0	16.3	20.0	15.5	25.9	19.5	14.8	15.4	17.5	20.7	14.7	21.1	19.5	18.3	1411	
Closed fracture	7.9	33.3	15.9	11.0	15.0	21.5	11.0	8.7	6.0	13.8	15.1	10.4	10.7	8.0	10.5	12.4	956	
Open wounds	11.9	50.0	14.8	16.8	5.0	14.2	10.2	18.1	4.1	2.3	16.3	8.5	20.0	6.0	9.0	11.5	887	
Internal injuries (excl. head)	4.0	0.0	4.5	0.7	5.0	1.8	0.9	0.7	1.7	0.0	0.0	1.7	2.7	1.0	2.0	1.3	102	
Dislocation	0.0	0.0	0.0	1.0	0.0	1.6	0.9	0.0	0.9	1.5	2.4	0.8	1.3	0.6	0.5	1.0	79	
Open fracture	0.0	0.0	8.0	1.0	0.0	1.6	0.6	0.0	0.4	0.0	2.4	0.4	1.3	0.2	1.0	0.9	73	
Infection	4.0	0.0	3.4	0.8	0.0	1.0	0.2	1.3	0.2	0.0	1.8	1.0	0.0	0.7	1.5	0.8	63	
Amputation	0.0	0.0	3.4	1.1	0.0	0.9	0.5	0.7	0.4	0.0	1.8	0.0	2.7	0.2	1.0	0.7	56	
Serious multiple injuries	2.0	0.0	1.1	0.1	0.0	0.1	0.1	0.0	0.4	0.0	0.0	0.1	1.3	0.4	0.5	0.2	17	
Poisoning	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3	
Other	9.9	16.7	8.0	10.0	5.0	9.1	6.4	19.5	17.4	15.4	9.6	15.0	17.3	15.5	13.0	11.8	910	
Total %	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100		
Total in sector	101	6	88	1758	20	1643	816	149	903	130	166	828	75	838	200		7721	

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

Data on the category of injury and illness is also available from the CSO for reference year 2005 – see Figures 27 and 28. ‘Wounds, superficial injuries’ are the most common injury type in the CSO data: 10.7 injuries of this type per 1,000 workers, followed by ‘sprain, strain’ injuries (8.9 per 1,000).

The breakdown by gender in Figure 27 shows that male workers have higher rates of ‘wounds, superficial injuries’ and ‘sprain, strain’. The most common injury category for female workers is ‘sprain, strain’ injuries.

Figure 27: Injury category by gender 2005 (CSO)

Injury	Male		Female		Total	
	Number 2005	Rate 2005	Number 2005	Rate 2005	Number 2005	Rate 2005
Wound, superficial injury	17900	15.6	3400	4.0	21400	10.7
Bone fracture	6500	5.7	1400	1.7	7900	4.0
Sprain, strain	12800	11.1	5000	5.9	17800	8.9
Concussion, internal injury	0	0.0	300	0.4	300	0.2
Burn, scald, frostbite	1000	0.9	1100	1.3	2100	1.1
Poisoning, infection	200	0.2	0	0.0	200	0.1
Suffocation	200	0.2	0	0.0	200	0.1
Other	4500	3.9	1800	2.1	6200	3.1
Not applicable	1300	1.1	400	0.5	1700	0.9
Total	44400	38.6	13400	15.8	57800	28.9



In terms of illness categories, the rate of ‘bone, joint or muscle’ cases is more than twice as high as any other category – this was also the case in 2004.

‘Stress, depression, anxiety’ has the second highest rate (6.5 illness cases per 1,000 workers in 2005 and 6.0 per 1,000 in 2004).

The breakdown by gender shows that male workers have higher rates of ‘bone, joint or muscle’ cases while female workers have higher rates in the ‘stress, depression, anxiety’ category.

Figure 28: Illness category by gender 2005 (CSO)

ILLNESS	Male		Female		Total		
	Number 2005	Rate 2005	Number 2005	Rate 2005	Number 2005	Rate 2005	Rate 2004
Bone, joint or muscle	23300	20.3	11300	13.3	34600	17.3	16.0
Breathing, lungs	2700	2.3	700	0.8	3400	1.7	1.0
Skin	1000	0.9	400	0.5	1400	0.7	0.0
Hearing problem	1800	1.6	300	0.4	2100	1.1	0.0
Stress, depression, anxiety	6700	5.8	6200	7.3	13000	6.5	6.0
Headache, eyestrain	1000	0.9	1000	1.2	2000	1.0	2.0
Heart	1400	1.2	200	0.2	1600	0.8	1.0
Infectious disease	900	0.8	1300	1.5	2300	1.2	2.0
Other	1900	1.7	1600	1.9	3500	1.8	3.0
Not stated	200	0.2	0	0.0	200	0.1	0.0
Total	40800	35.5	23100	27.2	63900	32.0	31.0

The results for ‘body part injured’ as a result of incidents reported in 2006 are similar to those for 2005. Across all sectors (Figure 30):

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

There are slightly different patterns within sectors (see Figures 29, 31-34). For example, hotels and restaurants suffer a high proportion of hand and wrist injuries, agriculture reports a high proportion of chest injuries, and transport reports more ear injuries than other sectors.



Figure 29: Percentage of reported non-fatal injuries by body part injured by economic sector 2006 (HSA database)

BODY PART	ECONOMIC SECTOR																Total %	Number injuries
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O			
Back	18.8	0.0	21.6	23.0	25.0	19.8	27.9	21.6	28.5	26.2	16.5	22.0	14.9	28.0	29.6	23.8	1847	
Finger(s)	5.9	14.3	20.5	17.6	5.0	12.9	10.2	15.5	5.1	2.3	12.4	6.3	14.9	7.1	11.7	11.3	874	
Leg	6.9	0.0	10.2	6.4	15.0	11.1	8.9	6.8	7.2	14.6	5.9	8.9	6.8	5.6	6.6	8.2	633	
Hand	8.9	14.3	9.1	9.7	0.0	8.7	6.3	13.5	3.8	8.5	8.2	7.2	12.2	6.0	2.6	7.6	589	
Ankle	2.0	0.0	4.5	4.6	10.0	11.0	6.6	1.4	6.6	6.9	11.8	5.7	1.4	5.1	8.2	6.7	523	
Shoulder	5.0	0.0	2.3	6.9	5.0	4.7	5.7	1.4	6.3	4.6	4.7	6.2	5.4	7.4	4.6	5.9	455	
Arm	9.9	0.0	3.4	5.9	0.0	5.1	4.6	11.5	4.6	4.6	6.5	4.2	4.1	7.1	7.1	5.5	427	
Foot	5.9	0.0	3.4	4.1	0.0	6.0	6.8	3.4	4.4	4.6	4.7	3.2	6.8	3.2	6.6	4.7	368	
Wrist	2.0	14.3	6.8	4.9	5.0	3.2	5.7	6.8	3.6	4.6	5.3	3.0	4.1	4.8	2.6	4.2	327	
Head	3.0	28.6	4.5	2.4	10.0	3.6	4.6	3.4	4.3	1.5	4.1	6.1	4.1	4.7	3.1	3.9	304	
Neck	3.0	0.0	0.0	1.9	0.0	1.5	2.7	2.0	3.8	1.5	1.8	4.8	5.4	6.4	2.6	2.9	227	
Eye(s)	4.0	0.0	4.5	2.9	0.0	2.8	1.0	0.0	1.2	1.5	2.9	2.9	0.0	1.9	4.6	2.3	182	
Chest	6.9	0.0	1.1	1.8	0.0	1.9	1.8	0.7	1.4	3.1	2.4	2.9	1.4	2.5	2.0	2.0	159	
Face	3.0	0.0	0.0	1.2	10.0	0.8	0.7	1.4	1.3	0.8	3.5	4.2	4.1	3.4	1.5	1.8	138	
Hip	2.0	0.0	1.1	0.7	0.0	1.1	0.7	2.0	1.7	2.3	0.6	2.0	1.4	1.2	1.0	1.2	93	
Pelvic/abdominal area	2.0	0.0	2.3	1.2	5.0	1.1	0.7	2.0	1.2	0.8	2.4	1.2	2.7	1.1	1.0	1.2	93	
Ear(s)	0.0	0.0	0.0	0.1	0.0	0.1	0.2	0.0	6.3	0.0	0.0	0.4	0.0	0.0	0.0	0.8	64	
Toe(s)	2.0	0.0	0.0	0.7	0.0	0.7	1.3	0.7	0.1	0.8	1.2	0.8	1.4	0.6	0.5	0.7	55	
Serious multiple injuries	0.0	0.0	1.1	0.0	0.0	0.2	0.2	0.0	0.3	0.8	0.0	0.2	1.4	0.0	0.5	0.2	14	
Teeth	0.0	0.0	0.0	0.1	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.2	0.0	0.1	1.0	0.2	12	
Other	8.9	28.6	3.4	3.7	10.0	3.4	3.0	6.1	8.1	10.0	5.3	7.6	8.1	4.0	2.6	4.8	376	
Total %	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100		
Total in sector	101	7	88	1763	201	653	823	148	899	130	170	838	74	850	196		7760	

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 30: Reported most injured body part – all sectors 2006 (HSA database)

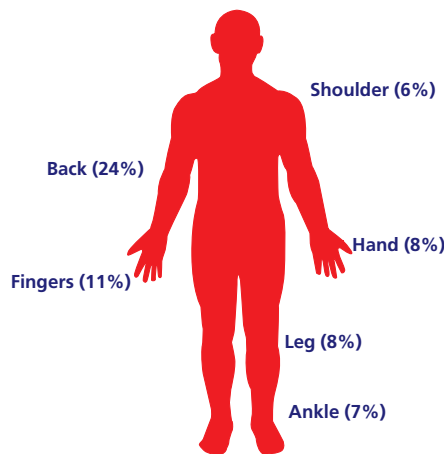




Figure 31: Reported most injured body part – manufacturing sector 2006 (HSA database)

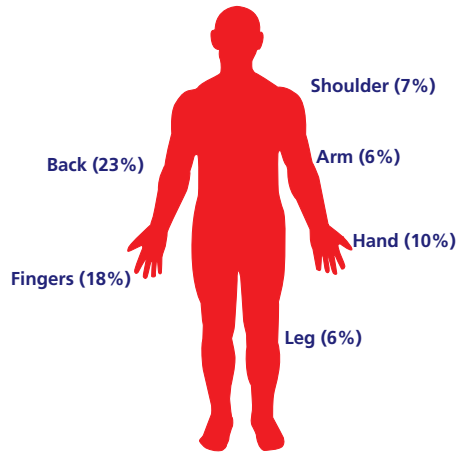


Figure 32: Reported most injured body part – construction sector 2006 (HSA database)

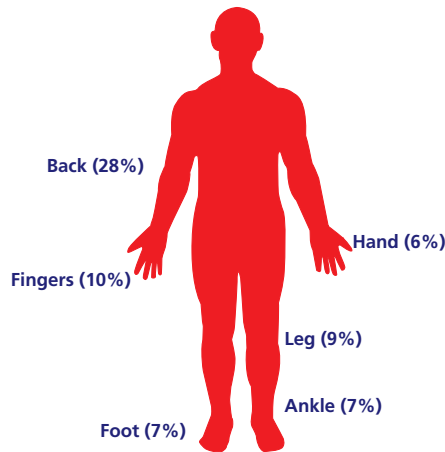


Figure 33: Reported most injured body part – transport sector 2006 (HSA database)

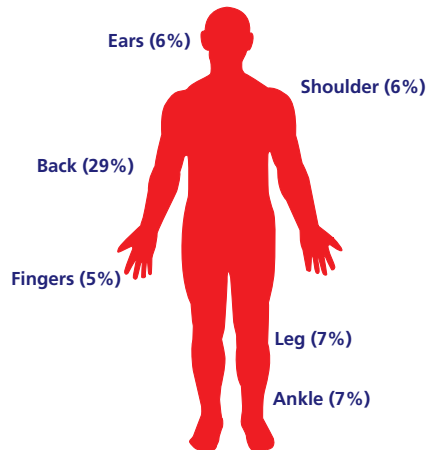


Figure 34: Reported most injured body part – health /social work sector 2006 (HSA database)

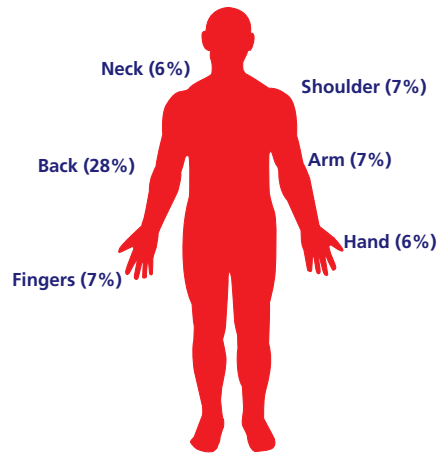


Figure 35 presents injury data supplied by the Occupational Injury Benefit (OIB) division of the Department of Social and Family Affairs, based on its database of claims admitted in 2006. The OIB categories represent a combination of the ‘injury type’ and ‘body part injured’ fields used by the Authority.

An analysis of the OIB data in a recent issue of *Health and Safety Review* (Volume 1, 2007) notes that the same types of injury recur in the OIB data each year.

The top three body parts most frequently injured are the same for both databases: back, finger and leg injuries. ‘Fractures/breaks’ account for 10% in the OIB data and ‘closed fractures’ for 12% of injuries in the Authority’s database.

There are also some discrepancies between the datasets. ‘Bruise/cut/laceration’ accounts for only 3% of OIB claims, while 18% of injuries reported to the Authority are categorised as ‘bruising, grazes and bites’.

The OIB also has a category for ‘stress’. The Authority does not have statistics for any equivalent category because stress is outside the scope of the current European methodology for accident-data collection.

Figure 35: OIB claims by injury type 2006 (OIB)

Injury type	%	Number
Back/neck/rib/disc	30.3	3764
Hand/finger/wrist/injury	11.1	1380
Leg/knee/ankle injury	10.5	1304
Fracture/break	10.1	1256
RTA/multiple injury	9.1	1129
Shoulder/elbow/arm injury	7.2	892
Bruise/cut/laceration	3.1	381
Foot/heel injury	2.1	264
Limb injury	1.8	225
Stresst	1.7	215
Head injury	1.3	162
Burns/scalds	1.3	157
Conjunctivitis/eye	1.0	123
All other	9.4	1164
Total injuries	100.0	12416



The 'absence from work' data in *Figure 36* show that 60% of all reported accidents result in fewer than 14 days' absence from work.

A considerable proportion of the reported accidents have more severe consequences: 1,170 (or 17%) of all reported injuries result in more than one month's absence from work. *Figure 37* shows that the percentage of accidents causing one to three months' absence from work is highest in construction, public administration, education and 'other personal services'. Education has the highest proportion of injuries resulting in more than six months' absence from work compared to other sectors (although this result is based on a small number of cases).

In total, the Authority's database of reported injuries represents an overall total of more than 90,000 days' absence from work in 2006 (calculated using the mid-point of each absence period by the number of incidents reported in each category).

Figure 36: Reported non-fatal injuries by absence from work 2006 (HSA database)

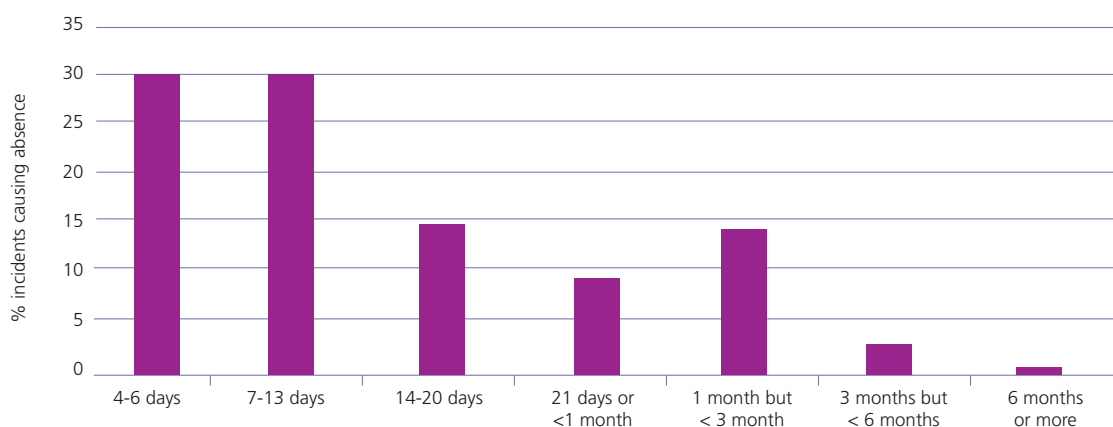


Figure 37: Reported injuries by absence from work and economic sector 2006 (HSA database)

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	36.7	0.0	17.3	33.9	22.2	30.3	34.7	32.3	29.8	30.7	28.2	20.3	29.4	26.4	33.1	29.9	2041
7 - 13 days	33.3	25.0	25.3	29.8	27.8	27.7	27.5	36.9	29.9	28.1	31.5	31.3	14.7	35.1	25.7	29.7	2027
14 -20 days	11.1	25.0	17.3	13.9	11.1	13.4	15.2	12.3	16.1	17.5	12.1	12.8	29.4	16.9	13.1	14.5	987
21 days or < 1 month	4.4	0.0	14.7	7.6	5.6	8.3	7.1	7.7	10.4	7.0	10.7	12.9	5.9	7.2	7.4	8.7	590
1 month but < 3 months	12.2	50.0	16.0	12.5	27.8	16.1	14.2	7.7	11.6	12.3	12.1	17.4	16.2	11.5	17.7	13.9	950
3 months but < 6 months	2.2	0.0	8.0	1.9	5.6	3.5	0.8	1.5	1.4	3.5	2.7	4.4	0.0	2.6	1.7	2.5	171
6 months or more	0.0	0.0	1.3	0.4	0.0	0.6	0.6	1.5	0.8	0.9	2.7	0.9	4.4	0.4	1.1	0.7	49
Total %	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	

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



Incident Risk Alerts

Manual-handling incidents

- Consistent with data for previous years, manual handling triggered one-third of all reported incidents in 2006. There is further evidence of the manual-handling risk in the data for incident type:
 - physical stress or strain to the body – 31%
 - injury type 'sprain, strain' – 41%
 - body part injured 'back' – 24%
- Other data sources also suggest that manual-handling incidents and the resulting musculo-skeletal injuries are a significant problem – the OIB division report that 30% of injury claims relate to 'back/neck/rib/disc' injuries and 'bone, joint or muscle' injuries are the most frequent category in the CSO illness data.

The Authority has commissioned a research project to analyse the costs and causes of manual-handling incidents in the Irish health-care sector, due for publication in Q4, 2007. Further initiatives to address manual-handling risk will be organised during European Safety Week in October 2007. The theme this year is musculo-skeletal disorders.

Violent injuries

Accident-trigger and incident-type data suggest that workers in certain sectors are at greater risk of violent injuries inflicted by other people.

- The accident trigger 'shock, fright, violence of others' represents a high percentage of incidents in public administration, and health and social work. These two sectors have higher rates of incidents categorised as 'injured by person – violent' compared to other sectors.
- These results are consistent since 2004: 'shock, fright, violence of others' has been ranked fourth or fifth on the list of accident triggers each year and accounts for 4-7% of all reported injuries, while the category 'injured by person – malicious' accounts for between 5% and 7% of all reported injuries each year.

Stress

- 'Stress, depression, anxiety' ranks second on the CSO list of illness categories, representing a rate of 6.5 cases per 1,000 workers or 13,000 cases of 'stress, depression, anxiety' in 2005 (an increase from six per 1,000 workers in 2004). The breakdown indicates a rate of 5.8 cases per 1,000 male workers and 7.3 per 1,000 female workers.
- OIB also admits a number of occupational-stress claims – 1.7% of all claims admitted in 2006.
- The Authority does not report figures for stress cases as they are outside the remit of the Eurostat accident-data collection methodology. However, the data from other sources indicates that stress presents a significant occupational risk.

Absence from work

The Authority's database of reported accidents for 2006 represents a total of approximately 90,000 days lost from work. This figure is likely to be a significant underestimate given that information on absence was unavailable for over 1000 incidents in the database, and that not all incidents causing more than three days' absence are reported to the Authority.



2.4 Incident Environment Statistics

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

Figure 38 shows the items associated with reported incidents. Only items associated with over 3% of incidents are included. Numerous other items are combined in the 'all other items' category. Figure 39 lists any additional items that were associated with over 3% of incidents within economic sectors.

Overall, the most common items were 'loads – handled by hand' (7%), followed by 'humans' (6%) and 'surfaces – at ground level' (5%).

Looking at the specific items within sectors is useful for identifying high-risk scenarios. For example:

- The proportion of incidents associated with humans in health and social work (29%) and public administration (18%) far exceeds that in any other sector.
- Animals are associated with over 20% of all incidents in agriculture.
- The wholesale and retail trade suffers a high proportion of incidents associated with 'mobile handling devices' such as barrows and pallet trucks (9%) and 'objects and packaging in storage areas' (9%).
- A less obvious result is that 6% of the injuries in the financial-intermediation sector are associated with 'vans, trucks', suggesting that many workers in this sector are driving in the course of their work. The 6% of incidents associated with stairs suggests that another proportion of the sector work in office-based environments.

Figure 38: Percentage of items associated with non-fatal incidents by economic sector 2006 (HSA database)

ITEM ASSOCIATED	ECONOMIC SECTOR															Total	Total
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	%	injuries
Loads handled by hand	3.0	0.0	8.0	9.6	4.8	5.6	11.5	9.3	8.5	10.0	4.1	3.3	2.6	4.8	7.4	7	568
Humans	1.0	0.0	0.0	0.5	0.0	0.6	1.2	0.7	3.6	3.8	4.1	18.4	9.2	28.7	6.4	6.3	497
Surfaces at ground level	5.9	0.0	3.4	4.0	0.0	6.3	5.6	4.7	5.3	6.2	2.9	4.4	10.5	7.4	4.9	5.4	420
Building/structural components	1.0	0.0	4.5	2.7	4.8	5.4	2.4	4.0	4.1	7.7	4.1	2.9	6.6	2.9	4.4	3.7	287
All other items	89.1	100.0	84.1	83.2	90.5	82.1	79.3	81.3	78.4	72.3	84.8	71.0	71.1	56.3	76.8	77.4	6062
Total %	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Total in sector	101	7	88	1766	21	1664	835	150	918	130	171	842	76	862	203		7834

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: The 'building/structural components' definition includes 'building components, structural components (doors, walls, partitions, etc) and intentional obstacles (windows etc)'.
The 'surfaces at ground level' definition includes 'surfaces at ground level – ground and floors (indoor or outdoor, farmland, sports fields, slippery floors, cluttered floors, plank with nails in)'.



Figure 39: Percentage of items associated with non-fatal incidents by economic sector 2006 (HSA database)

ITEM ASSOCIATED	%
A – Agriculture, hunting and forestry	
Animals – domestic and for breeding	21.8
Particles, dust, splinters, fragments, splashes, shards, other debris	4.0
Trees, plants, crops	4.0
Parts of building, above ground level - fixed (roofs, terraces, doors and windows, stairs, quays)	3.0
Stored products - including objects and packaging in storage areas	3.0
D – Manufacturing	
Stored products - including objects and packaging in storage areas	3.3
F – Construction	
Structures, surfaces, above ground level - mobile (including scaffolding, mobile ladders, cradles, elevating platforms)	5.5
Building materials - large and small: prefabricated shells, formwork, girders, beams, bricks, tiles, etc.	4.9
Mobile ladders, step ladders	4.6
Portable or mobile machines - for extracting materials or working the ground - mines, quarries and plant for building and civil engineering works	3.1
G – Wholesale/retail trade; repair of vehicles, personal, household goods	
Mobile handling devices, handling trucks (powered or not) – barrows, pallet trucks, etc	9.1
Stored products - including objects and packaging in storage areas	6.6
Buildings, structures, surfaces – at ground level (indoor or outdoor, fixed or mobile, temporary or not) – not specified	3.6
Storage accessories, shelving, pallet racks, pallets	3.0
H – Hotels and restaurants	
Buildings, structures, surfaces – at ground level (indoor or outdoor, fixed or mobile, temporary or not) – not specified	4.7
Hand tools, not powered – for cutting, separating (including scissors, shears, secateurs)	4.0
Machines for processing materials - hot processes (ovens, driers, kilns)	4.0
Miscellaneous packaging, small and medium-sized, mobile (skips, miscellaneous containers, bottles, crates, extinguishers ...)	3.3
I – Transport, storage, communication	
Buses, coaches: passenger	5.0
Mobile handling devices, handling trucks (powered or not) – barrows, pallet trucks, etc	4.6
Buildings, structures, surfaces – at ground level (indoor or outdoor, fixed or mobile, temporary or not) – not specified	3.8
Vehicles – aerial: passenger	3.2
J – Financial intermediation	
Vans, trucks	6.2
Stairs	6.2
Buildings, structures, surfaces – at ground level (indoor or outdoor, fixed or mobile, temporary or not) – not specified	5.4
Vehicles - light: goods or passengers	5.4
Parts of building, above ground level - fixed (roofs, terraces, doors and windows, stairs, quays)	3.1
K – Real estate, renting, business	
Vehicles - light: goods or passengers	3.5
L – Public administration/defence; compulsory social security	
Cars	5.8
N – Health and social work	
Furniture	3.6
Buildings, structures, surfaces – at ground level (indoor or outdoor, fixed or mobile, temporary or not) – not specified	3.0
O – Other community, social, personal services	
Vehicles - light: goods or passengers	3.4



Figure 40 shows how the work environment generally characterises the economic sector – for example, most manufacturing incidents happen in ‘factory, industrial site, warehouse’ environments and most construction incidents occur in ‘construction site, opencast quarry, mine’ environments.

However, there are indications that some sectors report incidents in a range of environments. For example:

- 12% of the incidents in the ‘real estate, renting, business’ category occur in ‘construction site, opencast mine, quarry’ environments, suggesting that the safety of workers in ancillary services should be factored into the safety systems on construction sites
- 38% of accidents in financial intermediation and 34% of accidents in public administration occur in ‘transport-related area or road’ environments, suggesting occupational risks due to the increasing mobility of workers in these sectors

Figure 40: Percentage of reported non-fatal injuries by work environment and economic sector 2006 (HSA database)

WORK ENVIRONMENT	ECONOMIC SECTOR															Total	Total
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	%	injuries
Factory, industrial site, warehouse	25.7	28.6	31.8	88.0	38.1	9.8	37.3	0.7	21.8	3.1	41.9	8.2	2.6	1.5	26.2	32.1	2496
Construction site, opencast, quarry, mine	5.9	0.0	44.3	5.3	9.5	75.6	2.1	0.7	1.1	0.0	12.0	2.1	3.9	0.0	5.0	18.9	1471
Office, school, shop, restaurant, hotel, etc	8.9	14.3	0.0	2.3	0.0	3.1	52.2	77.9	6.3	48.8	18.6	9.3	61.8	2.2	13.9	12.5	972
Transport-related area or road	2.0	0.0	11.4	1.3	23.8	4.8	2.5	0.0	42.6	38.0	16.2	34.3	7.9	3.6	15.3	12.3	955
Health-care establishment	0.0	0.0	0.0	0.1	0.0	2.1	0.4	1.3	0.1	0.0	3.6	3.4	6.6	85.9	7.9	10.7	835
Private home or related area	0.0	0.0	0.0	0.4	0.0	1.3	0.7	0.7	3.0	0.8	0.6	6.0	0.0	4.0	6.4	2.1	162
Farm, fish farm, forest, park	39.6	42.9	1.1	0.3	0.0	0.5	0.1	0.0	0.0	0.0	1.8	2.5	0.0	0.3	6.9	1.3	100
In the air	0.0	0.0	1.1	0.0	4.8	0.1	0.1	0.0	10.1	0.0	0.0	0.2	0.0	0.0	0.0	1.3	98
Sports area	1.0	0.0	0.0	0.1	0.0	0.0	0.1	1.3	0.0	0.8	1.8	1.7	3.9	0.1	1.5	0.4	30
Underground	0.0	0.0	5.7	0.1	4.8	0.0	0.0	0.0	0.3	0.0	0.0	0.0	1.3	0.0	0.0	0.2	12
On/over water	0.0	14.3	0.0	0.1	0.0	0.0	0.0	0.0	0.4	0.0	0.0	1.0	0.0	0.0	1.0	0.2	16
Other	16.8	0.0	4.5	2.0	19.0	2.7	4.5	17.4	14.3	8.5	3.6	31.4	11.8	2.3	15.8	8.2	637
Total %	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Total in sector	101	7	88	1764	21	1657	826	149	909	129	167	829	76	859	202		7784

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 reported incidents are categorised in Figure 41 by the size of the employing organisation. The figures are broken down by sector in Figure 42. Similarly to 2004 and 2005, only 3% of injuries in the Authority’s database were reported by organisations with one to nine employees, while approximately 50% of all incidents were reported by organisations with more than 500 employees.

The high proportion of reports from organisations with more than 500 employees in the sectors of transport, public administration, education, and health and social work is likely to represent high reporting rates from the large state organisations in these sectors.



The figures also indicate that the largest organisations in the wholesale and retail trade and the hotel and restaurant sector are reporting injuries, but that the micro-businesses in these sectors are submitting relatively few reports.

The Authority is aware of the organisational factors that underlie poor reporting compliance among smaller businesses, such as the lack of dedicated safety personnel. But low reporting levels have created a knowledge gap, so that the Authority has limited information from which to formulate strategies to improve safety in smaller organisations.

The construction sector, compared to other sectors, has the highest proportion of reports from organisations with one to nine employees (11% in 2006; 9% in 2005). This suggests that actions to increase awareness of reporting requirements are beginning to filter down to the smaller organisations in the construction sector.

Figure 41: Percentage of reported non-fatal injuries by size of employing organisation (HSA database)

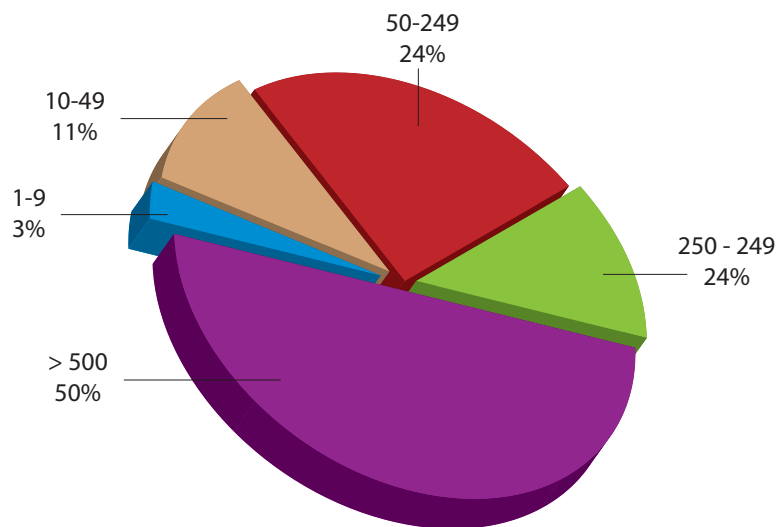


Figure 42: Percentage of reported non-fatal injuries by size of employing organisation by economic sector (HSA database)

NUMBER EMPLOYED IN ORGANISATION	ECONOMIC SECTOR															Total %	Total injuries
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O		
01-Sep	3.2	0.0	1.3	1.2	5.0	11.0	1.3	1.4	0.6	1.6	3.7	0.6	4.3	0.8	2.5	3.2	234
10-49	18.9	20.0	16.3	10.9	15.0	26.3	7.8	7.4	3.4	3.3	11.7	2.3	11.6	1.4	13.6	10.9	801
50-249	45.3	80.0	45.0	35.3	35.0	34.9	13.8	32.4	13.1	36.9	30.9	6.9	21.7	7.4	22.7	23.9	1748
250-499	11.6	0.0	8.8	21.4	10.0	13.3	4.9	6.1	5.7	2.5	13.6	6.4	7.2	14.1	11.1	12.2	893
> 500	21.1	0.0	28.8	31.2	35.0	14.5	72.2	52.7	77.1	55.7	40.1	83.7	55.1	76.4	50.0	49.8	3646
Total %	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Total in sector	95	5	80	1703	20	1489	778	148	875	122	162	781	69	797	198		7322

The CSO provides a regional breakdown of its injury and illness estimates – presented in *Figures 43 and 44* below. The regions are of different sizes so cannot be compared directly. However, the data provides a general guide to injury and illness rates across the country.

Estimated injury rates are highest in the South-East region (43.1 injuries per 1,000 workers). Illness rates were highest in the Border region (47.2 illness cases per 1,000 workers). In 2004, the Western region had the highest injury and illness rate.



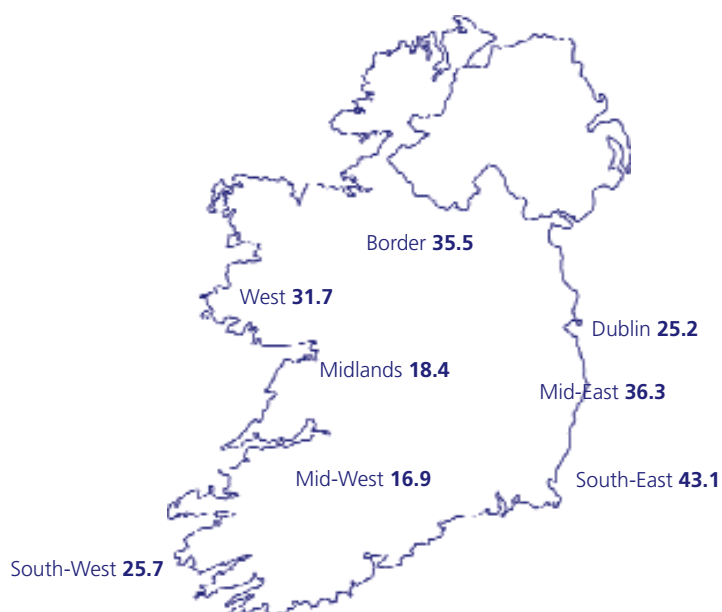
The Mid-West region has the lowest injury rate and the South-West region has the lowest illness rate. In 2004, the Mid-West region had the lowest injury and illness rates.

Figure 43: Rate of illness and injury by region 2005 (CSO)

REGION	TOTAL EMPLOYED	INJURY		ILLNESS	
		Number	Rate per 1000	Number	Rate per 1000
Border	205,500	7,300	35.5	9,700	47.2
Midlands	114,300	2,100	18.4	3,000	26.2
West	192,400	6,100	31.7	5,900	30.7
Dublin	594,400	15,000	25.2	18,100	30.5
Mid-East	225,800	8,200	36.3	7,900	35.0
Mid-West	171,500	2,900	16.9	6,500	37.9
South-East	206,300	8,900	43.1	6,300	30.5
South-West	287,900	7,400	25.7	6,500	22.6

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

Figure 44: Rate of injury per 1,000 workers by region 2005 (CSO)



Workplace Risk Alerts

High proportion of transport incidents

The data for 'item associated' highlights that 'vans/trucks' are associated with 6% of injuries in the financial intermediation sector and 'cars' with 6% of injuries in public administration.

The working-environment data shows that over a third of all accidents reported from financial intermediation and public administration occur in 'transport-related area or road' environments. Despite a traditional perception of these sectors as largely office-based, the statistics suggest that they now engage in a wide range of activities and that their workers are increasingly mobile.

3. Fatal Injury Statistics

This section presents details of all fatal injuries in the workplace in 2006. Summary details of each fatality are presented in *Appendix 1*.

Some statistics are based on the number while others are based on the total number of work-related fatalities (including family workers aged under 15, non-workers, and members of the public). The basis of the calculation is indicated in each case.

In addition to the workplace fatalities presented here, there are road traffic fatalities that were not reported to the Authority. Information on road traffic fatalities is available from the Road Safety Authority (www.nsc.ie).

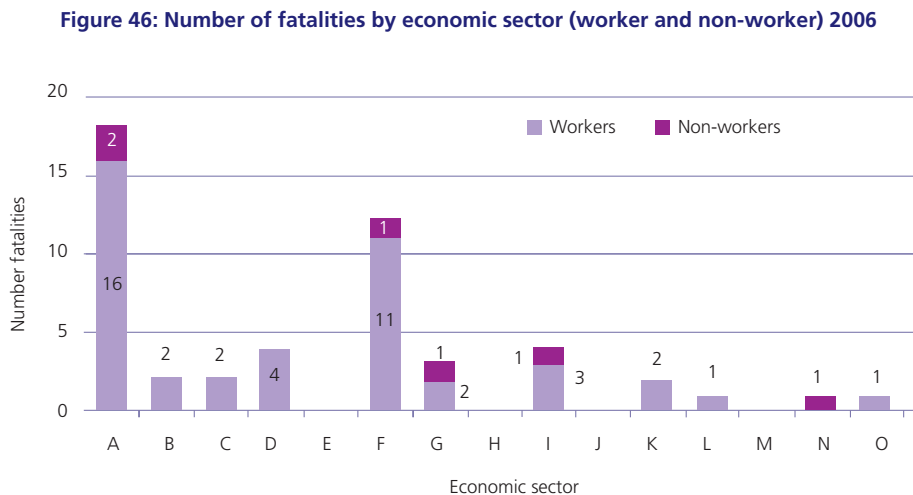
There were 50 work-related fatalities in 2006, of which 44 were worker fatalities. This represents a reduction of over 35% in the worker fatality rate since 2005 – from 3.3 fatalities per 100,000 workers to 2.1 in 2006.

Figure 45 shows that 2006 had the lowest fatality rate since 2000.



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 (i.e. 2,066,100 at Q4, 2006).

The number of fatal incidents in each economic sector in 2006 is presented in *Figure 46*.



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.



Agriculture suffered the highest number of fatal incidents in 2006: 18 fatalities (of which 16 were workers) – the same number as in 2005.

Construction had the second highest number of fatalities in 2006, but this represented a reduction of almost 50% compared to 2005 - from 23 to 12 fatalities (of which 11 were of workers).

Figure 47 shows the fatality rate in each economic sector in 2006.

The rate of fatalities in agriculture and fishing (A-B) is over three times higher than the fatality rate in any other sector – at 16 fatalities per 100,000 workers. The second highest fatality rate is in construction, with four fatalities per 100,000 workers.

Figure 47: Rate of worker fatalities by economic sector 2006

ECONOMIC SECTOR	WORKER					Non-worker	Total
	Employee	Self-employed	Family worker 15+	Total	Rate per 100,000		
A - B	3	14	1	18	15.5	2	20
C - E	6	0	0	6	2.1	0	6
F	9	2	0	11	3.9	1	12
G	1	1	0	2	0.7	1	3
H	0	0	0	0	0.0	0	0
I	3	0	0	3	2.6	1	4
J - K	1	1	0	2	0.7	0	2
L	1	0	0	1	1.0	0	1
M	0	0	0	0	0.0	0	0
N	0	0	0	0	0.0	1	1
O	0	1	0	1	0.8	0	1
Total	24	19	1	44	2.1	6	50

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 1: Rate is based on CSO estimates of numbers employed in each sector at Q4, 2006.

Note 2: 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 48 and 49 compare the number and rate of fatalities in each economic sector from 2003 to 2006.

Figure 48 shows 242 work-related fatalities since 2003 (both worker and non-worker) – an average of 61 fatalities each year. In 2003-2005, construction had the higher number of fatalities, but in 2006 agriculture suffered nearly twice as many fatalities as construction.



Figure 48: Total number of fatalities (worker and non-worker) by economic sector 2003-2006

ECONOMIC SECTOR	Number of fatalities				Total in sector
	2003	2004	2005	2006	
A - Agriculture, hunting and forestry	20	13	18	18	69
B - Fishing	0	3	2	2	7
C - Mining and quarrying	1	0	6	2	9
D - Manufacturing	7	3	7	4	21
E - Electricity / gas / water	2	0	0	0	2
F - Construction	20	16	23	12	71
G - Wholesale/retail trade; repair of goods	4	4	8	3	19
H - Hotels and restaurants	0	0	0	0	0
I - Transport, storage and communication	9	6	5	4	24
J - Financial intermediation	0	1	0	0	1
K - Real estate, renting, business	0	0	1	2	3
L - Public Admin / Defence	1	0	2	1	4
M - Education	0	1	0	0	1
N - Health / social work	0	1	0	1	2
O - Other community, social and personal services	4	2	2	1	9
Total	68	50	74	50	242

The fatality rates in *Figure 49* reflect this change – the fatality rate in agriculture/fishing is consistently high, while that in construction is less than half the rate in 2005. Even if fatalities in the fishing sector are omitted (thereby reducing the number of agriculture worker fatalities to 16), agriculture still has the highest fatality rate, at 14 per 100,000 workers.

Figure 49: Worker fatality rate by economic sector 2003-2006

ECONOMIC SECTOR	RATE OF DEATHS			
	2003	2004	2005	2006
Agriculture, hunting and forestry/Fishing	13.8	13.3	14.7	15.5
Mining and quarrying/Manufacturing/Electricity, gas, water	3.4	1	4.2	2.1
Construction	8	6.6	8.3	3.9
Wholesale & retail trade; repair of goods	1.6	1.5	1.8	0.7
Hotels and restaurants	0	0	0	0.0
Transport, storage and communication	7	5.2	4.2	2.6
Financial intermediation/Real estate, renting, business	0	0.4	0.4	0.7
Public administration/Defence	1.1	0	2	1.0
Education	0	0.8	0	0.0
Health and social work	0	0.5	0	0.0
Other: community, social and personal services	3.8	1.7	1.6	0.8
Total	3.3	2.5	3.3	2.1

Note 1: Rate is based on CSO estimates of numbers employed in each sector in Q4 of reference year.

Figure 50 compares the fatality rate for all sectors to the fatality rates in agriculture/fishing and construction. The graph suggests a general upward trend in the agriculture fatality rate and a general downward trend in the construction fatality rate – including a substantial decrease in 2006.



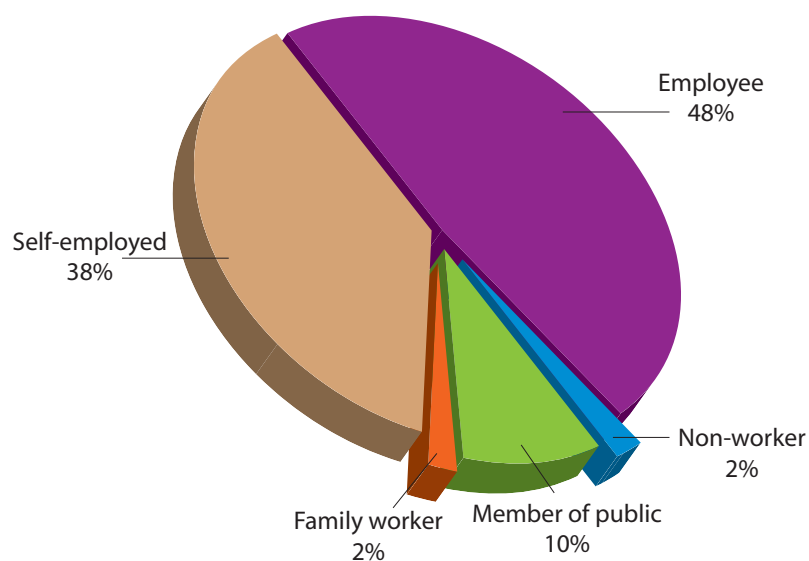
Figure 50: Comparison of total fatality rate with fatality rate in agriculture/fishing and construction 2002-2006



Figure 51 presents the percentage breakdown by employment status of the fatal-injury victims in 2006. Of the 44 worker fatalities in 2006:

- 24 were employees
- 19 were self-employed (14 in agriculture)
- one was a family worker (in agriculture)

Figure 51: Percentage of fatal injuries by employment status 2006





The age profile of the fatal-incident victims is presented in *Figures 52 and 53*. More than twice as many fatalities occurred in the 65+ age band as in any other - 10 of these 13 fatalities were in agriculture. Four of the six fatalities in the 45-49 age band were in construction.

Figure 52: Number of fatalities (worker and non-worker) by economic sector and age band 2006 (HSA)

Age	A	B	C	D	F	G	I	K	L	N	O	Total
0-4	1	0	0	0	0	0	0	0	0	0	0	1
5 to 9	0	0	0	0	0	0	0	0	0	0	0	0
10-14	1	0	0	0	0	0	0	0	0	0	0	1
15-19	0	0	0	0	0	0	0	0	0	0	0	0
20-24	0	0	1	0	2	1	0	0	0	0	0	4
25-29	0	0	0	0	0	0	1	0	0	0	1	2
30-34	0	1	0	1	0	0	1	0	0	0	0	3
35-39	2	0	0	1	2	0	1	0	0	0	0	6
40-44	1	0	0	1	1	1	0	1	0	0	0	5
45-49	1	1	0	0	4	0	0	0	0	0	0	6
50-54	1	0	1	0	1	0	0	0	0	0	0	3
55-59	0	0	0	1	1	0	0	1	0	0	0	3
60-64	1	0	0	0	0	0	1	0	1	0	0	3
65+	10	0	0	0	1	1	0	0	0	1	0	13
Total	18	2	2	4	12	3	4	2	1	1	1	50

Figure 53: Number of fatalities (worker and non-worker) by age band 2006 (HSA)

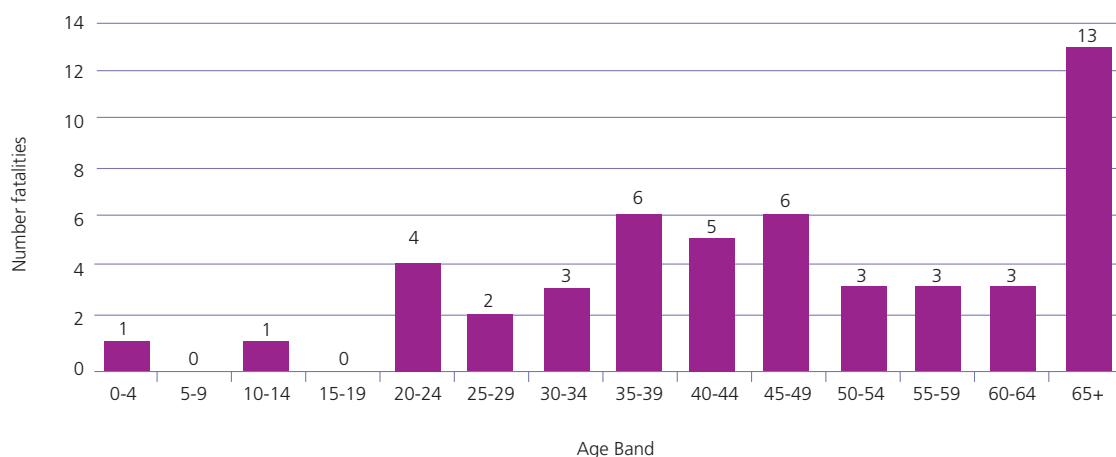


Figure 54 provides a breakdown of worker fatalities by nationality. In total, six non-Irish-national workers suffered fatal injuries in 2006 (two in manufacturing and one each in fishing, construction, transport and wholesale and retail trade).



Figure 54: Number of worker fatalities by nationality by economic sector 2006 (HSA)

Economic sector	Irish	Other EU	Non EU
A – Agriculture, hunting and forestry	16	0	0
B – Fishing	1	1	0
C – Mining and quarrying	2	0	0
D – Manufacturing	2	2	0
F – Construction	10	1	0
G – Wholesale/retail trade; repair of goods	1	1	0
I – Transport, storage and communication	2	1	0
K – Real estate, renting, business	2	0	0
L – Public admin/Defence	1	0	0
O – Other: community, social and personal services	0	0	1
Total	37	6	1

Figure 55 below shows that 84% of fatal-injury victims were Irish, 14% from other EU countries and 2% from non-EU countries. Recent CSO estimates indicate that non-Irish-national workers constitute 10% of the Irish labour force.

Figure 55: Percentage of worker fatalities by nationality 2006

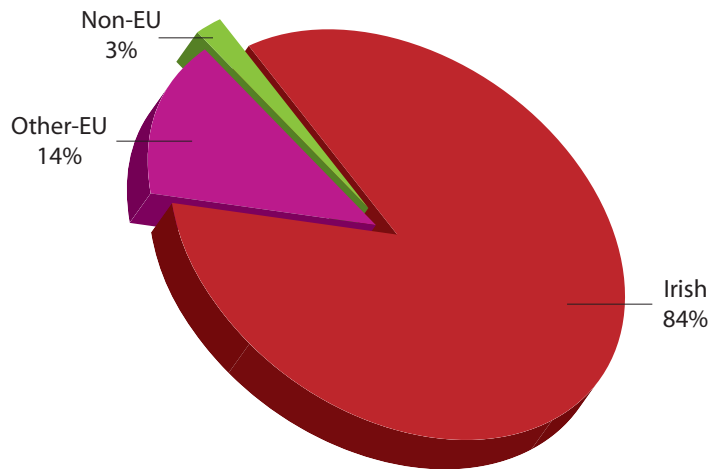


Figure 56 shows that the fatality rate of non-Irish-national workers is higher than that for Irish workers (3.2 fatalities per 100,000 non-Irish-national workers compared to two fatalities per 100,000 Irish workers). Both Irish and non-Irish-national fatality rates have decreased since 2005.

Figure 56: Worker fatality rates by nationality 2005-2006

	Irish workers	Non-Irish-national workers	All workers
Number of deaths	37	7	44
Worker population	1,850,600	215,500	2,066,100
Rate of worker death 2006	2.0	3.2	2.1
Rate of worker death 2005	3.0	5.6	3.3



Figure 57 shows falls from height to be the most common trigger of fatal accidents in 2006. Of the 10 'fall from height' incidents, four were in construction and three in agriculture.

Figure 57: Number of fatalities (worker and non-worker) by accident trigger 2006 (HSA)

	A	B	C	D	F	G	I	K	L	N	O	Total
Fall from height	3	0	0	0	4	1	1	1	0	0	0	10
Fall, collapse or breakage of material	0	0	0	2	4	0	1	1	0	0	1	9
Loss of control of: machine	4	0	0	0	0	1	0	0	0	0	0	5
Loss of control of: other	2	0	0	0	3	0	0	0	0	0	0	5
Loss of control of: road traffic transport	1	0	0	1	0	0	1	0	1	0	0	4
Loss of control of: animal	4	0	0	0	0	0	0	0	0	0	0	4
Person entered inappropriate area	1	0	1	0	1	0	0	0	0	0	0	3
Lifting or carrying	0	0	0	0	0	0	0	0	0	1	0	1
Other	3	2	1	1	0	1	1	0	0	0	0	9
Total	18	2	2	4	12	3	4	2	1	1	1	50

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 58 provides a breakdown of fatal incidents by county.

There were 11 fatal accidents in Cork in 2006 (22% of all fatalities), of which eight were in agriculture. Cork and Dublin had the highest number of fatalities in 2005: nine each.

Figure 58: Number of fatalities (worker and non-worker) by county 2005-2006 (HSA)

County	Year	
	2005	2006
Carlow	0	0
Cavan	4	1
Clare	3	6
Cork	9	11
Donegal	6	4
Dublin	9	4
Galway	3	1
Kerry	2	1
Kildare	6	1
Kilkenny	1	2
Laois	3	1
Leitrim	1	0
Limerick	1	2
Longford	1	2
Louth	4	0
Mayo	2	4
Meath	4	0
Monaghan	1	0
Offaly	1	2
Roscommon	0	1
Sligo	0	1
Tipperary	5	0
Waterford	1	0
Westmeath	2	2
Wexford	5	3
Wicklow	0	1
Total	74	50



Fatal Incident Risk Alerts

1. High fatality rate in agriculture

The agriculture sector suffered the highest rate and number of fatalities in 2006. The fatality rate is four times the rate in any other sector, at nearly 16 per 100,000 workers. The fatality rate has been consistently high in agriculture since 2003.

2. High fatality rate of elderly workers

Over 25% of fatality victims in 2006 were aged over 65 (13 out of 50 fatalities) compared to 15% in 2005. Of the 13 fatalities, nine were of workers and four of non-workers. All nine workers were working in agriculture.

3. High fatality rate of non-Irish nationals

The number of fatal incidents involving non-Irish-national workers (seven out of 44 or 16% of all worker fatalities) is disproportionate to the number of non-Irish nationals in the workforce – estimated at 10% by the CSO in Q4, 2006. Non-Irish-national fatalities occurred in a range of sectors in 2006: manufacturing (2), transport (2), fishing (1), construction (1), 'other personal services' (1), wholesale and retail trade (1).

The fatality rate for non-Irish nationals in 2006 has decreased since 2005 (from 5.6 to 3.2 fatalities per 100,000) but is still considerably higher than the rate for Irish workers (2 per 100,000 workers).

4. High number of 'fall from height' fatalities

Falls from heights were the most frequent trigger of fatal accidents, despite indications that progress has been made to improve the safety of those working at height in the construction sector. However, the figures for 2006 suggest that workers in other sectors should also be aware of this hazard: 'fall from height' incidents occurred in agriculture (3), wholesale and retail trade (1), transport (1) and real estate, renting, business (1).

The Authority has commissioned a study to assess the impact of its efforts to tackle the hazards associated with working at heights (in terms of legislation, enforcement, advertising and other interventions) on the rate of 'fall from height' incidents in the construction sector. The findings of this assessment are due to be published in Q4, 2007.

4. Special Topic

Comparisons of Health and Safety Statistics across Europe

This section presents detailed information on the sources and methodology for collecting statistics on health and safety at work at EU level, together with the most recent available data. Incorporating EU data broadens the scope of the analysis, so that Ireland's health and safety performance (Ireland here and below refers to the Republic) may be assessed within the European context. Comparisons with other EU member states (MS) will be presented as a regular feature in the main body of future statistics summaries.

Eurostat

Eurostat is the European Commission agency with responsibility for compiling statistics on health and safety at work. Member states submit to Eurostat each year details of reported accident and illness cases. Ireland currently submits an annual data file for accidents (including fatal accidents) but does not submit illness data.

Eurostat implements the European Statistics on Accidents at Work (ESAW) methodology (Eurostat, 2001) to ensure comparability of data across member states. Requirements to provide additional variables were introduced in three phases:

- Unique case identifier (includes reference year)
 - Economic activity of the 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
 - Workstation
 - Working environment*
 - Working process
 - Specific physical activity
 - Material agent of specific physical activity
 - Deviation*
 - Material agent of the deviation
 - Contact – mode of injury*
 - Material agent of contact – mode of injury*
 - Weight*
- Phase I
- Phase II
- Phase III

* Indicates Phase III variables supplied by Ireland for reference year 2004 onwards



Ireland is currently fully compliant with the ESAW methodology, having supplied data for five Phase III variables in the submission for reference year 2004 (submitted June 2006).

Data for each of the required variables is collected on the Authority's Incident Reporting (IR1) form (paper form or online submission) and inputted on the SAFE database (System for Action and Field Enforcement) by Authority staff. The 'weight' variable, an indicator of incident reporting levels within each economic sector, is based on injury estimates from the Accidents and Illness module of the Quarterly National Household Survey (QNHS), conducted annually by the Central Statistics Office (CSO).

Published statistics

Statistics on health and safety at work are published under the 'Population and Social Conditions' theme on the Eurostat website (<http://epp.eurostat.ec.europa.eu/portal/>). The most recent available data is for reference year 2004.

Accident statistics are presented in two formats: pre-defined tables for the most common statistical queries, and a query tool for more detailed interrogation of the database.

There are pre-defined tables for the following statistics:

1. Serious accidents at work - total
2. Serious accidents at work - females
3. Serious accidents at work - males
4. Accidents at work by key sector - incidence rate
5. Fatal accidents at work – total
6. Fatal accidents at work - incidence rate

The query tool provides access to data on variables such as economic activity, severity, age, type of injury, body part injured, size of enterprise, and employment status. The full list of available queries is:

1. Number of accidents at work by economic activity and severity
2. Number of accidents at work by economic activity and size of enterprise
3. Number of accidents at work by economic activity and employment status
4. Number of accidents at work by part of body injured and severity
5. Number of accidents at work by type of injury and severity
6. Number of accidents at work by economic activity, severity and sex
7. Number of accidents at work by economic activity, severity and age
8. Number of fatal accidents at work by economic activity, member state and age (excluding road traffic accidents and accidents on board any means of transport in the course of work)
9. Standardised incidence rate of accidents at work by economic activity, severity and sex
10. Standardised incidence rate of accidents at work by economic activity, severity and age
11. Standardised incidence rate of accidents at work by economic activity and size of enterprise
12. Standardised incidence rate of accidents at work by economic activity and employment status
13. Standardised incidence rate of fatal accidents at work by economic activity, member state and age (excluding road traffic accidents and accidents on board any means of transport in the course of work)



Eurostat publishes data for individual EU member states and aggregate figures for the EU15 and the EU Area (including accession states). Despite considerable progress in harmonising data, users should exercise caution when comparing data from different member states. Factors that effect comparability include differences in data-collection systems (whether data collected is through a regulatory system or a social-compensation system, for example) and the stage of industrial development within the Member State. There may also be methodological discrepancies. For example, the Eurostat website includes an information note to advise that Irish figures from 1998 to 2002 are not directly comparable due to changes in the data available from the Central Statistics Office in these years.

Under-reporting of incidents from various economic sectors may also affect the quality of the published data. While Eurostat corrects the data for estimated under-reporting within economic sectors, the small number of reported incidents in some sectors (the agriculture sector in Ireland, for example) inevitably compromises the reliability of the published data.

Comparison of Ireland to other EU member states

The most recent comparative data available from Eurostat suggests that Ireland's health and safety performance is positive in the European context. The fatality rate for Irish workers is just below the average for the EU15, while the rate of non-fatal incidents is consistently one of the lowest in Europe.

Figure 59 shows that Ireland had a standardised rate of 2.2 fatalities per 100,000 workers in 2004 compared to an average 2.5 per 100,000 in the EU15. Ireland has a higher fatality rate than the Netherlands, the United Kingdom, Denmark and Sweden.

Figure 59: Standardised fatality rates in the EU 2004

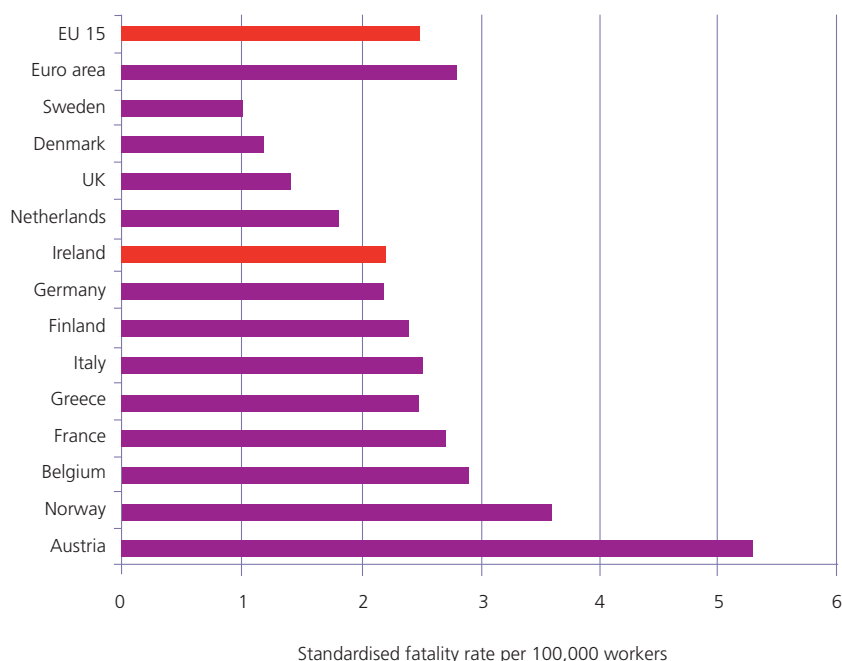


Figure 60 shows the standardised fatality rates for EU member states in 2000 to 2004. Figure 61 presents a graphical comparison of the rates in the EU15 and Ireland for five years.

The EU15 fatality rate decreased between 2000 and 2002 and has remained static since 2002, at 2.5 fatalities per 100,000 workers.

Ireland's fatality rate has been generally similar to the EU15 average, except in 2003 when there were 60 worker fatalities in Ireland and the Irish rate rose to over three fatalities per 100,000 workers.

The Netherlands, Sweden, UK and Denmark have generally shown consistent reductions in their fatality rate since 2000.

Figure 60: Standardised fatality rates in the EU 2000-2004					
	2000	2001	2002	2003	2004
EU15	2.8	2.7	2.5	2.5	2.5
Euro area	3.2	3.1	2.9	2.9	2.8
Belgium	3.1	3.8	2.6	2.4	2.9
Denmark	1.9	1.7	2	1.8	1.1
Germany	2.1	2	2.5	2.3	2.2
Ireland	2.3	2.6	2.6	3.2	2.2
Greece	2.7	2.9	3.8	3	2.5
Spain	4.7	4.4	4.3	3.7	:
France	3.4	3.2	2.6	2.8	2.7
Italy	3.3	3.1	2.1	2.8	2.5
Luxembourg	6.8	1.7	2.4	3.2	
Netherlands	2.3	1.7	1.9	2	1.8
Austria	5.1	4.8	5.1	4.8	5.3
Portugal	8	9	7.6	6.7	:
Finland	2.1	2.4	2	1.9	2.4
Sweden	1.1	1.4	1.2	1.2	1
United Kingdom	1.7	1.5	1.4	1.1	1.4
Norway	3.8	3.2	3.1	3.2	3.6

Figure 61: Comparison of standardised fatality rate for EU15 and Ireland 2000-2004





Ireland has one of the lowest non-fatal incidence rates in the EU – see *Figure 62*. The Irish rate of 1,126 incidents per 100,000 workers in 2004 was well below the EU15 average of 3,211 incidents per 100,000 workers in that year.

Only the Netherlands had a lower rate in 2004. The UK and Sweden also have rates of fewer than 1,500 incidents per 100,000 workers.

Figure 62: Standardised non-fatal incidence rate in the EU 2004

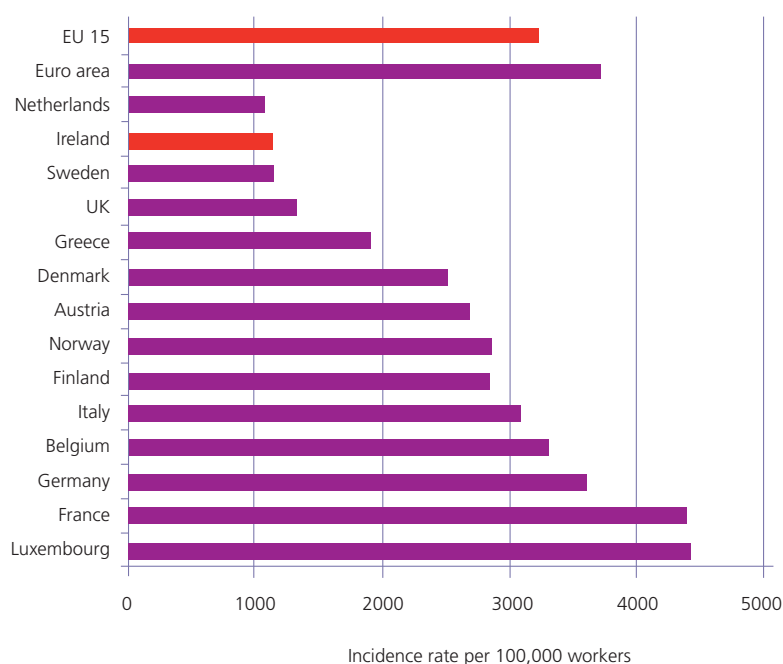


Figure 63 shows the standardised incidence rates for EU member states in 2000-2004. *Figure 64* presents a graphical comparison of the rates for the EU15 and Ireland for five years. The EU15 incident rate has been steadily decreasing since 2000.

Ireland had the lowest incident rate in the EU in 2000 and consistently had one of the lowest incident rates over the five years.

The Netherlands, UK and Sweden all had low and decreasing rates in the same period.



Figure 63: Standardised non-fatal incidence rate in EU 2000-2004

	2000	2001	2002	2003	2004
EU15	4016	3841	3529	3329	3221
Euro area	4665	4426	4035	3783	3698
Belgium	4213	4242	3685	3456	3300
Denmark	2866	2876	2630	2443	2527
Germany	4757	4380	4082	3674	3586
Ireland	1027	1509	1204	1262	1126
Greece	2595	2530	2441	2090	1925
Spain	7052	6917	6728	6520	:
France	5030	4819	4887	4689	4397
Italy	4049	3779	3387	3267	3085
Luxembourg	4891	4585	5131	5033	4420
Netherlands	4095	3588	1442	1188	1065
Austria	3056	2763	2788	2629	2703
Portugal	4863	4986	4054	3979	:
Finland	3046	2973	2914	2847	2853
Sweden	1475	1500	1347	1252	1148
UK	1607	1665	1632	1614	1333
Norway	4593	3981	3622	3325	2874

Figure 64: Comparison of standardised incidence rate for EU15 and Ireland 2000-2004



Numerous and detailed comparative statistics are available through the Eurostat query tool. A selection of additional statistics which are particularly relevant to health and safety in the Irish context are presented below.



Figure 65 presents the incident rate for selected economic sectors by selected member states. The two highest-risk sectors in Ireland – agriculture (A) and construction (F) – were selected for this query. Irish rates are compared to those for the EU15, Sweden and the UK.

Ireland's non-fatal incident rate is considerably below the EU15 average in both agriculture and construction.

Figure 65: Comparison of incidence rates in all sectors/agriculture/construction for EU15 and selected EU states 2000-2004

	2000			2001			2002			2003			2004		
	All sectors	A	F	All sectors	A	F	All sectors	A	F	All sectors	A	F	All sectors	A	F
EU 15	4016	6625	7548	3841	6159	7247	3529	5193	6890	3329	5048	6492	3221	5512	6399
Ireland	1027	3356	1630	1509	1559	2496	1204	1548	2318	1262	989	2725	1126	1505	2876
Sweden	1475	1629	2410	1500	1577	2491	1347	1692	2306	1252	1355	2090	1148	1199	1837
UK	1607	2328	2506	1665	3056	2737	1632	2040	2635	1614	2139	2493	1333	1947	2390

Sector key: A = Agriculture, F = Construction

Figure 66 presents the non-fatal incidence rate in the EU15 for selected economic sectors by age band (this query is not available by individual member state). The high rate of incidents in the 65+ age group in agriculture at EU15 level reflects the pattern in the Irish data.

Figure 66: Incidence rates by age band in agriculture/construction sectors in EU15 2004

		EU15
Agriculture, hunting and forestry	Total	13
	Less than 18 years	5.7
	Between 18 and 24 years	8.1
	Between 25 and 34 years	6.9
	Between 35 and 44 years	8.2
	Between 45 and 54 years	13.1
	Between 55 and 64 years	20.9
	65 years and over	45.1
Construction	Total	10
	Less than 18 years	3
	Between 18 and 24 years	7.6
	Between 25 and 34 years	7.7
	Between 35 and 44 years	9.1
	Between 45 and 54 years	11.6
	Between 55 and 64 years	16.2
	65 years and over	18.9



The non-fatal incidence rate for selected economic sectors by employment status is presented in *Figure 67* (this query is not available by individual member state). The result offers insight into priority groups within economic sectors:

- Agriculture is characterised by a high rate of accidents to self-employed and family workers, compared to the average for all sectors.
- Construction suffers a relatively high proportion of accidents involving self-employed workers.
- In hotels and restaurants, employees are more likely to be injured than self-employed or family workers who suffer relatively few incidents.

Figure 67: Incidence rates by employment status in all sectors/agriculture/construction/hotels and restaurants in EU15 2004

	All sectors	Agriculture, hunting and forestry	Construction	Hotels and restaurants
Employees	3,427	5,683	6,989	3,435
Self-employed	1,852	5,238	3,860	252
Family workers	1,773	5,505	1,265	129

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Appendix

Summary of Fatalities 2006 – Total fatalities = 50

NACE A – AGRICULTURE, HUNTING AND FORESTRY (18 FATALITIES)

DATE	CIRCUMSTANCES & INCIDENT	EMPLOYMENT STATUS	OCCUPATIONAL GROUP	WORK ENVIRONMENT	COUNTY	AGE
08/01/06	Drowned in slurry pit on neighbouring farm	Member of public	Not applicable	Farm, fish farm, forest or park	Cork	82
13/01/06	Struck head when he collided with parked tractor	Self-employed	Managers of small enterprises	Farm, fish farm, forest or park	Cork	52
30/01/06	Struck by front-end loader on tractor	Self-employed	Managers of small enterprises	Farm, fish farm, forest or park	Cork	70
06/02/06	Trapped by silage grab	Self-employed	Managers of small enterprises	Farm, fish farm, forest or park	Cork	69
11/02/06	Became entangled in rotating power take-off shaft of slurry agitator	Self-employed	Managers of small enterprises	Farm, fish farm, forest or park	Donegal	72
22/04/06	Crushed between tractor and wall of slatted shed	Self-employed	Managers of small	Farm, fish farm, forest or park	Mayo	43
30/04/06	Crushed between tractor with front-end loader and fertilizer spreader attached to another tractor	Self-employed	Managers of small enterprises	Farm, fish farm, forest or park	Cork	37
18/05/06	Attacked by bull in field	Self-employed	Managers of small enterprises	Farm, fish farm, forest or park	Mayo	36
26/06/06	Kicked in chest by horse	Family worker	Not applicable	Farm, fish farm, forest or park	Galway	77
15/07/06	Struck by tractor cutting hay	Non-worker	Not applicable	Farm, fish farm, forest or park	Cork	4
18/07/06	Crushed by tractor	Self-employed	Crop and animal producers	Farm, fish farm, forest or park	Clare	81
22/07/06	Fell from ladder that was struck by JCB which had been left with engine running	Self-employed	Managers of small enterprises	Farm, fish farm, forest or park	Cork	64
02/08/06	Crushed by tractor while attempting to release clutch pedal which was jammed in disengaged position	Self-employed	Managers of small enterprises	Farm, fish farm, forest or park	Cavan	80
08/08/06	Fell from working platform of potato harvesting machine and was struck by tractor which was reversing harvesting machine	Employee	Not applicable	Farm, fish farm, forest or park	Kilkenny	11
14/08/06	Gored by cattle as they were unloaded from trailer	Self-employed	Managers of small enterprises	Farm, fish farm, forest or park	Cork	82
08/09/06	Fell through corrugated perspex sheet while repairing shed roof	Self-employed	Managers of small enterprises	Private home or related area	Clare	83
29/09/06	Trampled by cattle being herded into farmyard	Self-employed	Managers of small enterprises	Farm, fish farm, forest or park	Offaly	69
14/12/06	Fell while pruning trees for client	Self-employed	Managers of small enterprises	Farm, fish farm, forest or park	Longford	46



NACE B – FISHING (2 FATALITIES)

DATE	CIRCUMSTANCES & INCIDENT	EMPLOYMENT STATUS	OCCUPATIONAL GROUP	WORK ENVIRONMENT	COUNTY	AGE
29/03/06	Drowned when trawler sank while fishing for shellfish	Employee	Skilled agricultural/fishery workers	On/over water	Wexford	-
29/03/06	Drowned when trawler sank while fishing for shellfish	Employee	Skilled agricultural/trades workers	On/over water or warehouse	Wexford	

NACE C – MINING AND QUARRYING (2 FATALITIES)

DATE	CIRCUMSTANCES & INCIDENT	EMPLOYMENT STATUS	OCCUPATIONAL GROUP	WORK ENVIRONMENT	COUNTY	AGE
30/03/06	Fell into silo containing limestone rock dust while trying to clear blockage	Employee	Labourers in mining, construction, manufacturing and transport	Construction site, opencast quarry or mine	Kilkenny	53
20/05/06	Became entangled in conveyor	Employee	Corporate managers	Construction site, opencast quarry or mine	Westmeath	23

NACE D – MANUFACTURING (4 FATALITIES)

DATE	CIRCUMSTANCES & INCIDENT	EMPLOYMENT STATUS	OCCUPATIONAL GROUP	WORK ENVIRONMENT	COUNTY	AGE
17/01/06	Involved in road traffic accident with another vehicle	Employee	Craft and related trades workers	Transport-related area or road	Kildare	57
06/03/06	Working at drilling machine when drill bit broke and struck his head	Employee	Metal, machinery and related trades workers	Factory, industrial site or warehouse	Westmeath	31
22/04/06	Crushed between forklift truck and shelving	Employee	Labourers in mining, construction, manufacturing and transport	Factory, industrial site or warehouse	Wexford	38
22/08/06	Struck by steel tube which fell from rack	Employee	Metal, machinery and related trades workers	Factory, industrial site or warehouse	Offaly	42



NACE F – CONSTRUCTION (12 FATALITIES)

DATE	CIRCUMSTANCES & INCIDENT	EMPLOYMENT STATUS	OCCUPATIONAL GROUP	WORK ENVIRONMENT	COUNTY	AGE
13/04/06	Struck by dumper truck	Employee	Extraction and building trades workers	Transport-related area or road	Wicklow	35
14/04/06	Was in personnel basket mounted on forks of teleporter when personnel basket slipped off forks of machine; was thrown from basket and struck his head on kerb	Employee	Labourer in mining, construction, manufacturing or transport	Other	Roscommon	49
17/05/06	Was tipping load from dumper when tipper truck overturned	Employee	Drivers and mobile plant operators	Construction site, opencast quarry or mine	Clare	49
23/05/06	Fell from scaffolding he was dismantling	Employee	Labourer in mining, construction, manufacturing or transport	Construction site, opencast quarry or mine	Donegal	22
22/06/06	Struck by pipe that fell from teleporter that was transporting it	Employee	Extraction and building trades workers	Construction site, opencast quarry or mine	Sligo	15
03/07/06	Sat on wall and fell backwards into unprotected opening	Member of public	N/A	Construction site, opencast quarry or mine	Donegal	69
29/07/06	Was using dumper to transport boulder weighing an estimated 8.5 tonnes; thrown from driver's seat when dumper tipped forward	Self-employed	Drivers and mobile plant operators	Construction site, opencast quarry or mine	Mayo	52
18/08/06	Was off-loading pipe from lorry when struck in chest by length of pipe that had fallen from truck and had first struck wheel of passing car	Employee	Building construction labourers quarry or mine	Construction site, opencast quarry or mine	Limerick	49
22/08/06	Struck by bucket of excavator while pouring concrete for foundations of house	Employee	Labourers in mining, construction, manufacturing or transport	Construction site, opencast quarry or mine	Laois	35
08/12/06	Killed when trench collapsed	Employee	Construction and maintenance labourers: roads dams and similar constructions	Construction site, opencast quarry or mine	Dublin	59
09/12/06	Laying pipes when trench he was working in collapsed	Employee	Corporate managers	Construction site, opencast quarry or mine	Cork	47
16/12/06	Fell from roof of farm building where he was installing roof panels	Self-employed	Labourers in mining, construction, manufacturing or transport	Forest, fish farm, forest or park	Kerry	40



NACE G – WHOLESALE AND RETAIL TRADE; REPAIR OF MOTOR VEHICLES, MOTORCYCLES AND PERSONAL AND HOUSEHOLD GOODS (3 FATALITIES)

DATE	CIRCUMSTANCES & INCIDENT	EMPLOYMENT STATUS	OCCUPATIONAL GROUP	WORK ENVIRONMENT	COUNTY	AGE
31/01/06	Crushed between side of reversing lorry and boundary wall on construction site	Non-worker	Not applicable	Construction site, opencast quarry or mine	Donegal	71
28/08/06	Trapped between crane and its transporter	Self-employed	Metal, machinery and related trades workers	Transport-related area or road	Cork	41
01/12/06	Fell from cage mounted on forks of truck	Employee	Models, salespersons and demonstrators	Factory, industrial site or warehouse	Dublin	24

NACE I – TRANSPORT, STORAGE AND COMMUNICATION (4 FATALITIES)

DATE	CIRCUMSTANCES & INCIDENT	EMPLOYMENT STATUS	OCCUPATIONAL GROUP	WORK ENVIRONMENT	COUNTY	AGE
21/02/06	Crushed by hangar doors at airport	Employee	Labourers in mining, construction, manufacturing and transport	Transport-related area or road	Dublin	25
18/10/06	Cycling on cycle track when she was struck by truck entering construction site	Member of public	Not applicable	Construction site, opencast quarry or mine	Limerick	31
08/12/06	Crushed by pallet being moved by pallet truck	Employee	Labourers in mining, construction, manufacturing and transport	Transport-related area or road	Dublin	60
19/12/06	Fell while descending ladder	Employee	Drivers and mobile plant operators	On/over water	Clare	37

NACE K – REAL ESTATE, RENTING AND BUSINESS ACTIVITIES (2 FATALITIES)

DATE	CIRCUMSTANCES & INCIDENT	EMPLOYMENT STATUS	OCCUPATIONAL GROUP	WORK ENVIRONMENT	COUNTY	AGE
27/05/06	Taking photographs of roadworks from cage of teleporter and fell to ground when teleporter turned over	Self-employed	Precision, handicraft, craft printing and related trades workers	Construction site, opencast quarry or mine	Cork	55
05/06/06	Standing on roof of entrance porch to clean windows when he fell to ground	Employee	Sales and services elementary occupations	Construction site, opencast quarry or mine	Longford	41



NACE L – PUBLIC ADMINISTRATION AND DEFENCE; COMPULSORY SOCIAL SECURITY (1 FATALITY)

DATE	CIRCUMSTANCES & INCIDENT	EMPLOYMENT STATUS	OCCUPATIONAL GROUP	WORK ENVIRONMENT	COUNTY	AGE
08/09/06	Struck by vehicle while collecting refuse bins	Employee	Sales and services elementary occupations	Transport-related area or road	Mayo	64

NACE N – HEALTH AND SOCIAL WORK (1 FATALITY)

DATE	CIRCUMSTANCES & INCIDENT	EMPLOYMENT STATUS	OCCUPATIONAL GROUP	WORK ENVIRONMENT	COUNTY	AGE
06/02/06	Fell while being transported from bed to chair by hoist and harness	Member of public	Not applicable	Health-care establishment	Clare	90

NACE O – OTHER COMMUNITY, SOCIAL AND PERSONAL SERVICE ACTIVITIES (1 FATALITY)

DATE	CIRCUMSTANCES & INCIDENT	EMPLOYMENT STATUS	OCCUPATIONAL GROUP	WORK ENVIRONMENT	COUNTY	AGE
28/08/06	Fell to ground while performing aerial circus act	Self-employed	Other associate professionals	In the air or at high elevation	Clare	26

