HEALTH AND SAFETY AUTHORITY

Summary of Fatality, Injury & Illness Statistics

2004-2005

Achieving a healthy and safe working life in partnership

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Section 1: Introduction

1.1 Development of the Annual Statistics Summary

In 2004 a decision was taken to publish an Annual Statistics Summary as a separate document from the Authority's Annual Report. Positive feedback throughout 2005 indicates that we should continue publishing the Statistics Summary as an independent document. It has also been decided that this, and all other Health and Safety Authority publications, should be available to download from the Authority's website without charge in 2005. This is particularly welcome in the case of the current publication which is widely used by students and researchers.

The purpose of the Summary is to make the Authority's health and safety statistics accessible to a wider audience by summarising information in tables and graphs and by providing basic interpretation.

The Summary also provides a benchmark against which annual progress may be measured. Where appropriate, comparisons to results from previous years are presented in the tables.

There are several developments in the 2005 Summary. Additional data is presented for the following variables:

- Item associated with the incident
- Nationality of the victim

Special Topics have also been introduced for this report. These sections examine specific health and safety issues in detail. This year, the Special Topics focus on non-Irish national workers and young workers. For example, the section on non-Irish national workers combines the Authority's data with data from other sources to examine the health and safety of Non-Irish national workers in the Irish context.

The 'risk alert' device at the end of each chapter highlights the high-risk issues that emerge from the statistics. These 'risk alerts' proved useful for informing projects and activities in the Authority throughout the year – for example the risk alerts in the 2004 summary were used to select priority areas, such as injuries from sharp knives in the hotel and restaurant sector, for the Authority's 'Simple Safety' campaign (a series of simplified guidance sheets to be launched by the Authority in 2006).

Slip, trip and fall incidents were also identified as a high risk issue in the 2004 statistical summary. The Authority has proceeded to launch a Slips, Trips and Fall Campaign for 2006, aimed at creating awareness of the simple house-keeping interventions that prevent slip, trip and fall incidents. A dedicated statistical report on the Authority's slips trip and fall data will be available on the website in 2006.

1.2 Overview of Results

The statistics for non-fatal injuries are presented in Section 2 of the report, under the following headings:

- General injury and illness statistics
- Victim statistics
- Incident statistics
- Work environment statistics

A range of statistics for fatal injuries is presented in the Section 3 of the report. A brief summary of all fatal incidents is included in the Appendix.

Non-fatal Injury and Illness

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

Estimates for 2004 indicate that the rate of total injuries has increased since 2002, from 24.3 injuries per 1000 workers to 30.1 injuries per 1000 workers in 2004. The rate of total illness has also been steadily increasing – from 18.9 illnesses per 1000 workers in 2001 to 31.3 per 1000 workers in 2004. The total incidence of injury and illness has risen to 117,300 in 2004, representing an increased rate of 61.5 per 1000 workers compared to 54.9 per 1000 workers in 2003.

The CSO warn that the data for injury or illness causing more than 3 days lost should be interpreted with care. The CSO decline to publish these figures due to a data collection problem where respondents may include 'potential' days lost. The Authority therefore includes these figures as a broad indicator but with a warning that the figures may be flawed. The figures do not show any distinct trend – the rate of more than 3 days lost injury has remained between 11 and 12 per 1000 workers since 2002. The more than 3 days lost illness rate has risen to 12.4 per 1000 workers in 2004 from 9.7 in 2003 and 10.4 in 2002. The total incidence of more than 3 days lost injury and illness has risen to 45,500 in 2004, representing an increased rate of 23.8 per 1000 workers, compared to 21.6 per 1000 workers in 2003.

Estimates from the CSO of total injury and illness by economic sector indicate that injury rates have increased in the Agriculture and Fishing sectors (A-B), the Wholesale and retail trade sector (G), the Hotel and restaurant sector (H) and the Transport sector (I). Looking specifically at more than 3 days lost injuries, the Construction sector has the highest rate, but the most marked increase since 2003 is evident in the Transport and Storage sector (I). The Finance and Business sector (J-K) has the lowest rate of more than 3 days lost injury in 2004. The largest decrease in the rate of more than 3 days lost injury since 2003 is in the Production Industries (C-E). Total illness rates have increased in most sectors in 2004, with a marked increase in the Agriculture and Fishing sectors (A-B) and the Health and social work sector (N). Specific figures for more than 3 days lost illness are not available for 2004.

The CSO also provide a breakdown of injury and illness data by gender. In 2004, male have higher injury rates in every sector except Wholesale and retail trade (G) and Health and social work (N). Male and female illness rates are similar – 32 illnesses per 1000 male workers compared to 31 illnesses per 1000 female workers. However, within sectors there are notable differences – Illness rates among females in the Hotel and restaurant sector (H) are at 26.6 per 100 workers compared to 10.4 per 1000 male workers in the same sector. Males report a higher illness rate in the Public administration sector (L) – 49.5 illnesses per 1000 male workers compared to 8.4 illnesses per 1000 female workers.

Other statistics relating to the victim (Section 2.2) and the specific incident (Section 2.3) and environment (Section 2.4) are based on the Authority's database SAFE (System for Accident and Field Enforcement) database of reported accidents for 2005.

Results for 'occupation' suggest that the majority of reported incidents involve 'labourers – mining, construction, manufacturing and transport'. The employment status data reveals that 97% of the victims are employees. Data on nationality of victims is presented for the first time in this Summary – the results show that 90.6% of victims are Irish nationals and 9.4% are classified as 'Other EU' or 'Non-EU'.

Other results from the SAFE database indicate that the most common incident types in 2005 were physical stress or strain to the body (29%), and slips, trips and falls on the level (17%). The most common injury types were sprains and strains (40%), and bruising, grazes and bites (18%). Other results indicate that one third of all reported incidents took place in a 'factory, industrial site, warehouse' environment, followed by 'construction site, opencast quarry, mine' (18%). Over half of all injuries were reported from organisations with over 500 employees whereas only 3% of injuries were reported from micro-businesses (1-9 employees). Overall, the statistics in the incident and environment sections of the 2005 report are very similar to those in 2004.

Fatal Injury and Illness

There were 73 work-related fatalities reported to the Authority in 2005. Of these, 64 were worker fatalities, representing a worker fatality rate of 3.2 per 100,000 workers (based on working population of 1,980,600 reported by CSO for Q4, 2005). This represents an increase of over 25% on the fatality rate in 2004 (2.5 per 100,000 workers) but is comparable to fatality rates in the years 2001 to 2003.

Similar to 2004, the construction sector had the highest number of fatalities (23 fatalities of which 21 worker fatalities), followed by the agricultural sector (18 fatalities of which 15 worker fatalities). But the highest rate of fatality in 2005 is in the agricultural sector, consistent with 2003 and 2004.

The most common fatal incident types were 'trapped or crushed by falling object or machinery' (14 fatalities), 'struck by falling/moving/flying objects (12 fatalities), and falls from heights (10 fatalities). These three incident types accounted for 50% of all fatal incidents in 2005.

1.3 Overview of Risk Alert Issues

The purpose of the risk alert device is to highlight areas for consideration and action by all safety stakeholders – the Health and Safety Authority, legislators, employers, trade bodies and unions among others.

In terms of research and statistical analysis, the risk alert issues highlight areas that warrant continuous attention. The emerging trends in this report will continue to be monitored and reported upon in future publications by the Authority.

The risk alert issues also suggest areas where additional analysis of specific sectors, occupations or age groups would be useful. The current Statistical Summary has been extended to examine issues that were highlighted in the 2004 Summary, such as manual handling, and the Authority will continue to extend the scope of future summaries to incorporate detailed information on the most salient risk issues.

Several high-risk issues emerged from the review of illness, injury and fatality data for 2005.

General Risk Alerts:

- **Increasing injury and illness rates**
  According to CSO estimates the rate of injury (regardless of days absence) has been increasing since 2002 and the rate of illness (regardless of days absence) has been increasing since 2001. The total rate of injury and illness combined has also increased to 61.5 per 1000 workers in 2004 compared to 45.8 per 1000 workers in 2003. The rates of injury and illness (combined) that cause more than 3 days lost show a minor increase in 2004 to 23.8 per 1000 workers.

- **High injury rate in the construction sector**
  Similar to the results from the CSO for 2003, the construction sector has the highest number and rate of total injuries in 2004. The injury rate in the construction sector is consistently higher than any other sector since 2001, and is substantially higher than the average injury rate for all economic sectors. The Construction sector also features the highest rate of more than 3 days lost injuries, similar to 2002 and 2003.

- **High illness rate in the agricultural sector**
  The Agricultural sector has consistently had the highest rate of illness since 2001. The illness rate in 2004 showed a particularly sharp rise, with 63.1 cases per 1000 workers compared to 38.7 illness cases per 1000 agricultural workers in 2003.

Victim-related Risk Alerts:

- **Non-Irish national workers in the Hotel and Restaurant sector**
  The Hotel and restaurant sector has the highest proportion of reported injuries to workers from 'Other EU' and 'Non EU' countries. This corresponds with data from the CSO which indicates that the Hotel and restaurant sector has the highest proportion of Non-Irish national workers (19.2% of the workforce in the sector). The sector also has the highest proportion of Asian workers.

- **Young workers**
  Injuries to workers aged 15-24 are particularly common in some sectors. The percentage of injuries among 15-19 year olds is highest in the Wholesale and retail trade sector, and the highest percentage of reported injuries in the 20-24 age group is in the Hotel and restaurant sector.

Incident-related Risk Alerts:

- **Manual Handling Incidents**
  Similar to 2004, manual handling incidents account for approximately one-third of all injuries reported to the Authority. Such injuries are particularly prevalent in the Wholesale and retail trade sector (G), the Transport, storage and communication sector (I) and the Health and social work sector (N). More detailed analysis of the subset of manual handling incidents reveals that 66% of all manual handling incidents lead to 'sprain or strain type injuries. The majority of the reported manual handling incidents lead to back injury (46%) and a range of upper limb injuries.

- **Violent incidents in specific economic sectors**
  There is consistent evidence that some sectors experience disproportionately high percentages of violent incidents. For example, 'shock, fright, violence of others' triggers 6% of reported accidents across all sectors but accounts for 25% of all reported injuries in the Public Administration sector and 18% of injuries in the Health and Social Work sector. Similarly, the incident type 'Injured by person: malicious' describes 5% of all reported accidents but this rises to 26% of incidents in the Public Administration sector and 15% of incidents in the Health and Social Work sectors. The Financial Intermediation sector also has a high percentage of violent incidents with a corresponding high percentage of injuries categorised as 'psychological shock or trauma'.

Workplace-related Risk Alerts

- **Persistent under-reporting from smaller organisations**
  Comparison of the Authority's SAFE database with CSO estimates of injury and illness leading to 3 days lost suggests that there is significant under-reporting from some economic sectors. The figures suggest that larger organisations (particularly in the construction and manufacturing sectors) report more incidents - over 65% of all incidents are reported to the Authority are from organisations with more than 250 employees. By contrast, only 3% of incidents are reported by organisations with 1-9 employees. This corresponds with data on work environment which indicates that only 1% of the reported incidents occurred in the 'farm, fish farm, forest or park' environment. Yet the CSO estimate that 10% of all injuries are in the agricultural and fishing sectors.

Fatality Risk Alerts:

- **Increase in worker fatality rate**
  The worker fatality rate rose to 3.2 per 100,000 workers in 2005, an increase of over 25% on the worker fatality rate of 2.5 per 100,000 workers in 2004. Within sectors, the Agriculture, Production Industries and Construction sectors featured increased fatality rates.

- **High rate of non-Irish worker fatalities**
  Nine out of 64 worker fatalities involved non-Irish national workers. This represents 14% of all worker fatalities yet figures from the CSO indicate that non-Irish national workers represent 8% of the total workforce. The problem is particularly severe in the construction sector - 5 of the 9 non-Irish national worker fatalities were in this sector.

- **High number and rate of fatalities in the Mining and Quarrying sector**
  Six fatalities (5 workers and 1 non-worker) occurred in the mining and quarrying sector. There were no fatalities in this sector in 2004, and 1 in 2003. The high number of fatalities in mining and quarrying is the main cause of the increased fatality rate in the Production Industries category.

- **Elderly workers in the Agricultural sector**
  Eleven of the 73 fatality victims (or 15%) in 2005 were over 65. Eight of these were in the Agriculture sector. This problem is persisting – 7 of the 9 fatalities in this age group were also in the Agricultural sector in 2004.

1.4 Sources of Information for the Statistical Summary

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

Quarterly National Household Survey (QNHS)

The Central Statistics Office (CSO) estimates the number of persons who suffered a work-related injury or illness based on a special module of the Quarterly National Household Survey (QNHS), administered in the first quarter of each year. The CSO survey 3000 households each week, giving a total sample of 39,000 households per quarter. The injury and illness data relies on self-reporting and thus may be subject to sampling or other survey errors. The numbers presented are therefore indicative of trends and of broad orders of magnitude rather than definitive figures.

The statistics in this Summary are based on the survey conducted during December 2004 to February 2005. **Note that the CSO have identified fundamental flaws in the days lost data for 2004 and have declined to publish the data. Consequently, the Authority presents only headline figures and indicates that the data should be interpreted with caution. The data relating to the number and rate of more than 3 days lost injury and illness is an important indicator for the Authority as this represents the subset of accidents that employers are legally required to report to the Authority.**

Changes in survey methodology since 1998 mean that the results of all QNHS surveys cannot be directly compared. However, the survey carried out in the Q1 2005 is comparable to that carried out in Q1 2004 and Q1 2003.

In the Accidents and Illness Module of the 2005 QNHS, the CSO asked persons aged 15 or over to indicate if they have suffered an injury incurred at work or an illness that the respondent believes was caused or made worse by their work in the past 12 months. The Accidents and Illness Module questions in 2005 were as follows:

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?

Thinking about the times you were in employment over the past 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 in 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)?

Thinking about the times 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

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 or online through the Authority's website. However, comparison between the CSO estimates and the number of incidents reported to the Authority suggest 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 attempt to estimate the number or rates of injuries – these estimates are obtained from the CSO. However, with details of over 8,000 occupational injuries reported in 2005 (over 8,400 in 2004), the Authority's database (SAFE) is a valuable source of information about characteristics of the victim, the type of incident, and the environment in which the accident occurred.

Occupational Injury Benefit Claims (OIB)

OIB statistics are based on the 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 actual 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 cases of illness than the QNHS, but the figures are a useful trend indicator because the criteria for benefit payment have not changed over time.

1.5 Notes for reading this Summary

1.5.1 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:

  http://europa.eu.int/comm/eurostat/ramon/index.cfm?TargetUrl=DSP_PUB_WELC

  Link to document:
  Statistical Classification of Economic Activities in the European Community, Rev. 1.1 (2002)

- **Occupation classification – ISCO** (International Standard Classification of Occupations), maintained by ILO.

  The ISCO codes are available to download (under 'Classifications', Abbreviation = ISCO 88 (COM) from the Eurostat website:

  http://europa.eu.int/comm/eurostat/ramon/index.cfm?TargetUrl=DSP_PUB_WELC

  Link to document:
  International Standard Classification of Occupations (for European Union purposes),1988 version

- **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.

  http://europa.eu.int/comm/employment_social/publications/2002/ke4202569_en.html

  Link to document:
  http://europa.eu.int/comm/employment_social/publications/2002/ke4202569_en.pdf

1.5.2 Calculation of injury and fatality rates

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

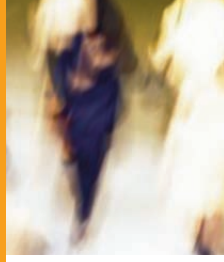
1.5.3 Risk Alerts

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.

1.5.4 Fatal Incident Summary – Appendix 1

Appendix 1 provides a summary of the fatal incidents in 2005. It includes the following details for each fatality:

- Economic sector;
- Date of the fatality;
- Brief narrative account of accident circumstances;
- Victim's age
- Victim's employment status;
- Victim's occupational group;
- Work environment where the fatal incident occurred;
- County where the incident occurred



Section 2: Non-Fatal Injury Statistics

2.1 General injury and illness statistics

This section outlines the numbers and rates of injury and illness estimated by the CSO for 2004 – based on the Accident and Illness module conducted as part of the Quarterly National Household Survey in Q1, 2005.

The numbers and rates of injury and illness for the period 2001 to 2004 are presented, together with information on the number of days' absence due to injury and illness.

Figure 2 Persons incurring injury and illness 2001 - 2004 (CSO)

	2001		2002*		2003*		2004*	
	NUMBER	RATE PER 1000	NUMBER	RATE PER 1000	NUMBER	RATE PER 1000	NUMBER	RATE PER 1000
Total in employment	1745500		1772000		1835900		1908300	
Injury								
Total suffering injury	51800	29.7	43100	24.3	54400	29.6	57500	30.1
0 days absence	16400	9.4	15100	8.5	21000	11.4	22600	11.8
1-3 days absence	9300	5.3	7200	4.1	11500	6.3	13200	6.9
more than 3 days absence	26200	15.0	20900	11.8	21900	11.9	21800	11.4
Illness								
Total suffering illness	33000	18.9	38100	21.5	46300	25.2	59800	31.3
0 days absence	15600	8.9	15400	8.7	20500	11.2	Not available	Not available
1-3 days absence	2400	1.4	4400	2.5	8000	4.4	Not available	Not available
more than 3 days absence	15000	8.6	18400	10.4	17800	9.7	23700	12.4
Injury and Illness								
Total incurring injury or illness	84800	48.6	81200	45.8	100700	54.9	117300	61.5
Total (more than 3 days absence)	41200	23.6	39300	22	39700	21.6	45500	23.8
Total days lost	**1441000**		**1286100**		**1374813**		**Not available**	

* *Figure relates to the most recent injury only*

Note: Days lost data should be interpreted with care as respondents may have included 'potential' days lost

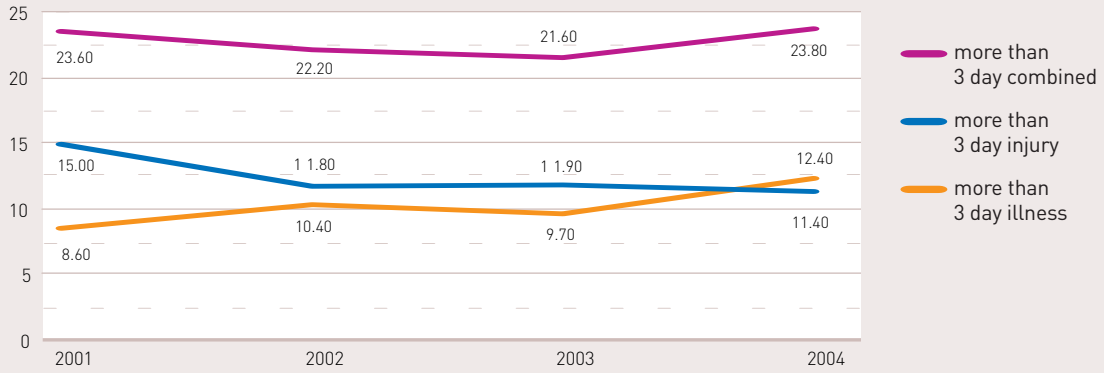
Data may be subject to sampling or other survey errors, which are greater in respect of smaller values or estimates of change

Figure 1 compares the CSO estimates of work-related injury and illness for the period 2001–2004. Overall, the total rate of injury and illness (combined) has increased since 2002 (61.5 per 1000 workers in 2004 compared to 54.9 per 1,000 workers in 2003 and 45.8 per 1,000 workers in 2002).

Looking at injury and illness separately, we see that both sets of figures are rising. The injury rate in 2004 is slightly higher than in 2003, while the illness rate has increased steadily over the 4 years (from 18.9 per 1000 workers in 2001 to 31.3 per 1,000 workers in 2004).

Due to problems with the days lost data the full breakdown of injuries and illness by days lost is not available for 2004. The days lost figures in Figure 1 are presented as broad indicators and should be interpreted with care. There is no distinct pattern in terms of more than 3 day injuries or more than 3 day illness or more than 3 days injury and illness (combined) over the four year period - see Figure 2. However, the rate of more than 3 days illness and the rate of more than 3 days injury and illness (combined) for 2004 both show an increase since 2003.

Figure 2: Rate of injury, illness and combined injury and illness requiring more than 3 days' absence 2001–2004 (CSO)



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

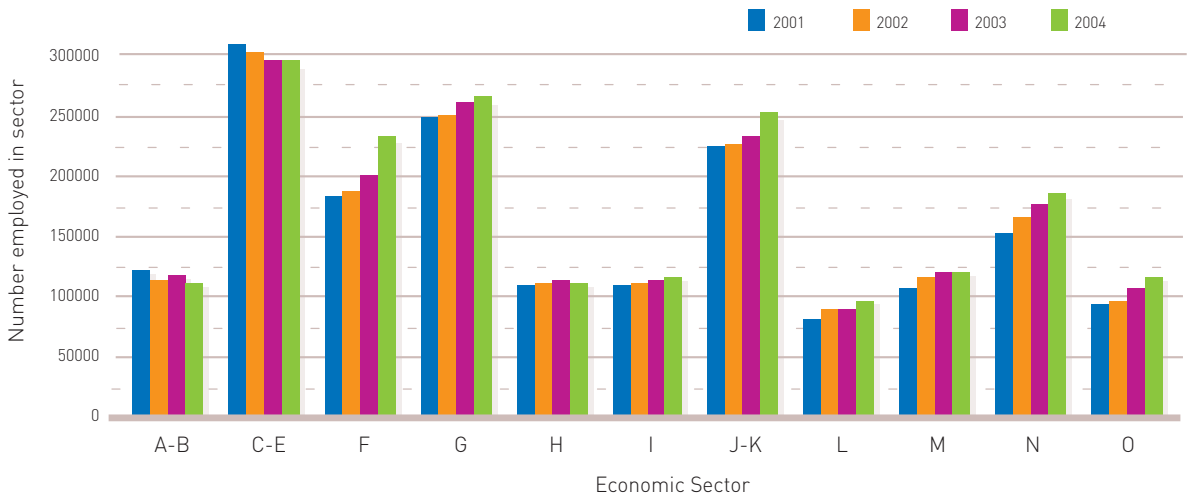
Figure 3 shows the estimated number of persons working in each economic sector from 2001 to 2004 – the same information is presented graphically in Figure 4.

Figure 3: Numbers employed in each economic sector 2001-2004 (CSO)

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

The production industries (C-E) consistently have the highest number of employees, although the number of employees in this category is decreasing each year from 310,400 in 2001 to 297,300 in 2004. The Wholesale and retail sector (G) has the second highest workforce, with the numbers increasing each year. The workforce in the Construction sector (F), the Financial and business sector (J-K) and Other personal and social services (O) is also increasing each year. It is evident from Figure 4 that the number of workers in the Agricultural sector (A) is decreasing.

Figure 4: Numbers employed in each economic sector 2001–2004 (CSO)



Figures 5 and 6 present the estimates of injury and illness by the CSO for each economic sector in 2004.

Figure 5: Number and rate of injury by economic sector 2004 (CSO)

SECTOR	TOTAL INJURIES			MORE THAN 3 DAY INJURIES			
	NUMBER 2004	RATE PER 1000 2004	RATE PER 1000 2003	NUMBER 2004	RATE PER 1000 2004	RATE PER 1000 2003	RATE PER 1000 2002
A-B	5100	45.3	36.2	1970	17.5	12.6	17.5
C-E	6700	22.5	35.6	3370	11.3	18.5	13.2
F	12600	54.1	56.4	5820	25.0	26.2	22.3
G	7400	27.7	20.5	1960	7.3	10.3	9.1
H	5500	49.0	33.6	690	6.1	9.7	12.7
I	4300	37.2	26.5	2110	18.2	11.5	15.3
J-K	3300	13.0	14.9	770	3.0	2.6	4.4
L	2800	29.0	28.9	1300	13.5	14.5	11.3
M	2000	16.7	15.1	410	3.4	4.2	2.6
N	5000	27.0	32.7	2830	15.3	10.7	13.3
O	2800	24.3	21.6	620	5.4	3.8	10.4
Total	**57500**	**30.1**	**29.6**	**21840**	**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.*

The construction sector (F) features many more injures (12,600) than any other sector, and also has the highest injury rate (54 in every 1,000 workers). The construction sector also has the highest number of injuries resulting in more than 3 days lost (5820 injuries) and the highest rate at 25 injuries per 1000 workers in the industry. Figures from 2002 and 2003 indicate that the Construction sector has consistently had the highest rate of more than 3 days lost injury. In terms of total injuries, the Construction sector, the Agricultural and Fishing sectors (A-B) and the Hotel and Restaurant sector (H) feature high injury rates. The Financial and business sectors (J-K) and the Education sector (M) have relatively low rates of injury.

Compared to 2003, rates of total injury have increased in the Agricultural and Fishing sectors (A-B), the Wholesale and retail trade sector (G), the Hotel and restaurant sector (H) and the Transport sector (I). Total injury rates have decreased since 2003 in the Production industries (C-E) and the Health and social work sector (N).

If we focus specifically on more than 3 days lost injuries in Figure 5, the Construction sector has the highest rate followed by the Transport and Storage sector (18.2 more than 3 days lost injuries per 1000 workers) and the Agricultural and Fishing sectors (17.5 more than 3 days lost injuries per 1000 workers). Similar to the pattern for total injuries, the Financial and Business sectors (J-K) and the Education sector (M) have the lowest rates of more than 3 days lost injury.

Overall, the 2004 rate of more than 3 days lost injury has decreased since 2002 and 2003, but there are increases and decreases within the sectors. Rates of injury have increased substantially in the Transport and Storage sector (from 11.5 in 2003 to 18.2 per 1000 workers in 2004) and the Health and Social Work sector (from 10.7 in 2003 to 15.3 per 1000 workers in 2004) but there are no distinct patterns over the three year period. The rate of injury has decreased in the Production Industries from 18.5 in 2003 to 11.3 per 1000 workers in 2004). There is a minor decrease in the rate of more than 3 days lost injuries in the Construction sector (from 26.2 per 1000 workers in 2003 to 25 per 1000 workers in 2004). Again, these trends are not consistent across the three year period presented in Figure 5. Also, it is necessary to bear in mind the warnings from the CSO about the reliability of the days lost data.

Figure 6: Number and rate of illness by economic sector 2004 (CSO)

SECTOR	TOTAL ILLNESS			MORE THAN 3 DAYS ILLNESS		
	NUMBER	RATE PER 1000 2004	RATE PER 1000 2003	NUMBER	RATE PER 1000 2004	RATE PER 1000 2003
A-B	7100	63.1	38.7	Not Available	Not Available	10.1
C-E	7500	25.2	21.2	Not Available	Not Available	10.8
F	6900	29.6	32.1	Not Available	Not Available	12.9
G	6300	23.5	14.0	Not Available	Not Available	8
H	2200	19.6	21.2	Not Available	Not Available	5.3
I	5300	45.8	32.6	Not Available	Not Available	10.6
J-K	6100	24.1	22.6	Not Available	Not Available	6.4
L	2800	29.0	28.9	Not Available	Not Available	12.2
M	4000	33.4	23.5	Not Available	Not Available	9.2
N	9500	51.2	27.1	Not Available	Not Available	10.7
O	2200	19.1	32.9	Not Available	Not Available	11.3
Total	**59800**	**31.3**	**25.2**	**Not Available**	**Not Available**	**9.6**

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 Health and social work sector (N) has the highest number of illness cases in 2004 – see Figure 6. But the highest rate of illness is in the Agriculture and fishing sector (A-B) – 63 illness cases per 1000 workers. The Health and social work sector (N) has the second highest rate of illness, with 51 illness cases per 1000 workers. The lowest rate of overall illness is in the Other Personal and Social services sector (O) and the Hotel and restaurant sector (H).

Compared to 2003, the total rate of illness in all sectors has increased (from 25.5 per 1000 workers in 2003 to 31.3 per 1000 workers in 2004. This increase is most pronounced in the Agricultural sector (A-B), the Education sector (M) and most particularly in the Health and social work sector (N), where the rate of illness has increased from 27.1 per 1000 workers in 2003 to 51.2 per 1000 workers in 2004.

Data for illness causing more than 3 days lost in each economic sector is not available for 2004, but figures for 2003 show that the Construction sector (F) has the highest rate of illness causing more than 3 days absence, followed by the Public administration/defence sector (L). In 2003, the Hotel and restaurant sector (H) had the lowest rate of illness causing more than 3 days lost.

Figure 7 below shows the rate of injuries in various sectors over the period 2001 to 2004, as estimated by the CSO. If we look at the trend line for 'all sectors' we see that the rate of injury has been relatively stable over the 4 year period. Within sectors, the graph indicates that the estimated injury rate is rising in the Agricultural (A-B) and Construction sectors (F), and that the injury rates in these sectors are consistently higher than the average for all sectors. The rate of injury in the Financial and Business sectors (J-K) has remained static over the four years, but is consistently lower than the average for all sectors.

Figure 7: **Rate of total injury in various economic sectors 2001-2004 (CSO)**

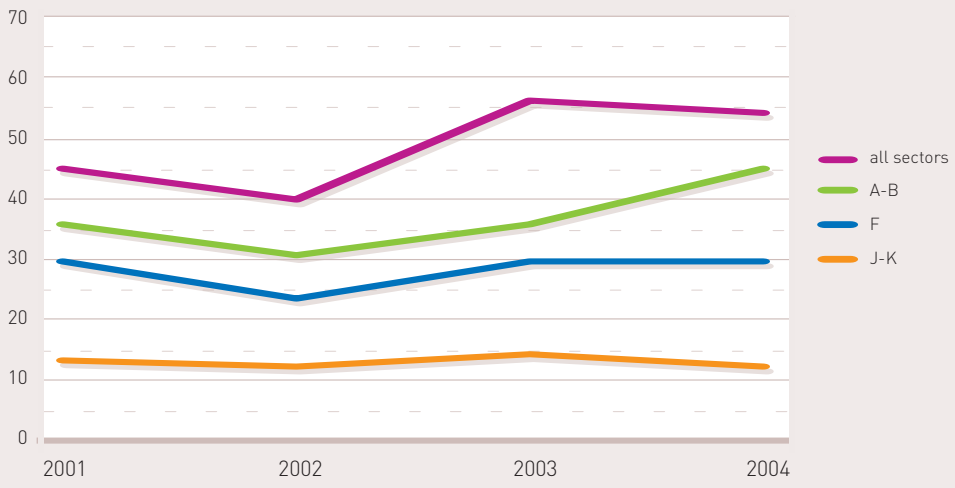
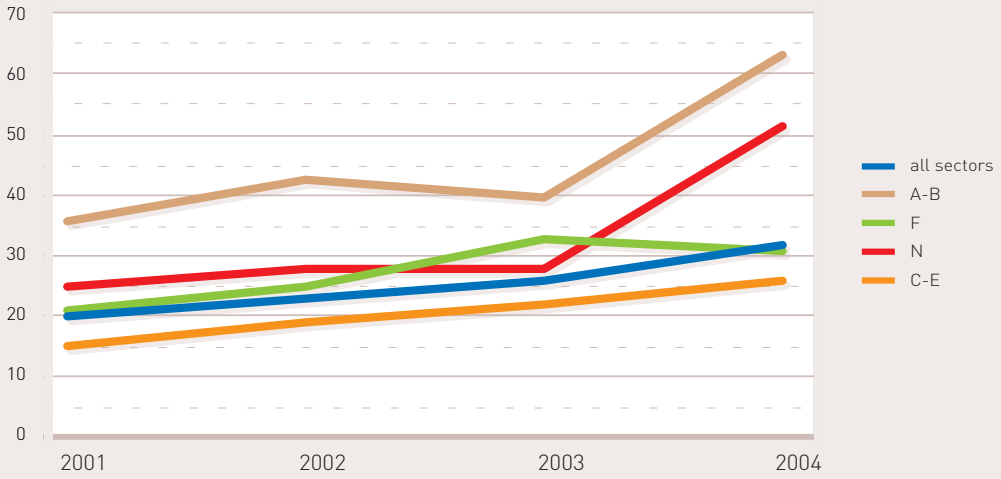


Figure 8 shows the illness rate over the period 2001 to 2004 in various sectors. The trend line for 'all sectors' shows a gradual increase in the estimated illness cases across the four years. This trend is also reflected for all the individual sectors represented in Figure 8 – the Production industries sector (C-E) is lower than the average for all sectors but shows an upward trend, and the Agricultural (A) and Health and Social Work (N) sectors are above the average for all sectors but they also show an increase, particularly in 2004 compared to 2003. The exception is the Construction sector which shows a slight decrease in the estimated number of illness cases in 2004 compared to 2003.

Figure 8: Rate of total illness in various economic sectors 2001-2004 (CSO)



During 2005, the Department of Social and Family Affairs received 16,398 claims for Occupational Injury Benefit, of which 11,759 were allowed – see Figure 9. These figures relate to injuries causing more than 3 days lost only. Note that the number of OIB claims received and allowed is likely to be less than the total number of work-related injuries (the most recent available figure from the CSO indicates that there were 21,800 injuries causing more than 3 days absence in 2004 – see Figure 1) 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.

Figure 9: Number of Occupational Injury Benefit Claims Allowed (OIB)

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

The number and rate of OIB claims were examined in detail in the January / February issue of the Health and Safety Review (2006). The article reports that the accident rate per 100,000 workers is decreasing, while noting that claims are now more rigorously vetted.

GENERAL INJURY AND ILLNESS RISK ALERTS

1. Increasing injury and illness rates

- The rate of injury increased in 2004 to 30.1 per 1000 workers. The rate has been rising since 2002 (24.3 per 1000 workers in 2002 to 29.6 per 1000 workers in 2003).
- The rate of illness also increased in 2004 to 31.3 per 1000 workers. The rate of illness has been increasing since 2001 when it was at 18.9 per 1000 workers.

2. Injury rates in the construction sector

- The construction sector has the highest number and rate of total injuries in 2004. The rate of injuries in the construction sector is substantially higher than the average injury rate for all sectors - 54 injury cases per 1000 construction workers compared to 30.1 injury cases per 1000 workers in all sectors.
- The Construction sector has consistently had the highest rate of total injury since 2001.
- Data from the CSO also indicates that the Construction sector has had the highest rate of more than 3 days lost injuries for 2002, 2003 and 2004.

3. Illness rates in the agricultural sector

- The Agricultural sector has consistently had the highest rate of illness since 2001.
- The rates of illness in Agriculture each year are substantially higher than the average illness rate for all sectors – for example in 2004 there were 63 illness cases per agricultural worker compared to 31 illness cases per 1000 workers in all sectors.
- The illness rate in 2004 showed a particularly sharp rise in 2004, with 63.1 cases per 1000 workers compared to 38.7 illness cases per 1000 agricultural workers in 2003.

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 the first two columns of Figure 10. The number of females participating in the workforce has risen to 810,000 in 2004 from 770,100 in 2003 – an increase of 40,000. There are now over 288,000 more men than women are employed in the Irish workforce (compared to over 295000 more men than women in 2003).

Male employees dominate the Agriculture and fishing sectors (A-B), the Production industries (C-E), Construction (F) and the Transport sector (I). Many more female than male employees work in the Hotel and restaurant sector (H), Education (M) and the Health/social work sector (N). There are approximately 10,000 more females employed in the Financial and business services sector (J-K) and the Health and social work sector (N) compared to 2004.

Figure 10: Number and rate of injury/illness by economic sector and gender (CSO)

	NUMBER EMPLOYED		INJURY RATE			ILLNESS RATE		
SECTOR	MALE	FEMALE	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL
A-B	101500	11000	49.3	9.1	45.3	64.0	63.6	63.1
C-E	210000	87200	28.1	9.2	22.5	23.3	28.7	25.2
F	221800	11400	56.8	*	54.1	31.1	*	29.6
G	134300	133300	24.6	30.8	27.7	20.8	26.3	23.5
H	48200	64000	58.1	43.8	49.0	10.4	26.6	19.6
I	90400	25300	37.6	35.6	37.2	49.8	31.6	45.8
J-K	123700	129200	17.0	9.3	13.0	25.9	22.4	24.1
L	48500	47900	37.1	20.9	29.0	49.5	8.4	29.0
M	34600	85200	20.2	14.1	16.7	31.8	34.0	33.4
N	32900	152600	24.3	28.2	27.0	39.5	53.7	51.2
O	52400	63000	30.5	20.6	24.3	21.0	17.5	19.1
Total	**1,098,300**	**810,100**	**36.3**	**21.7**	**30.1**	**32.0**	**30.5**	**31.3**

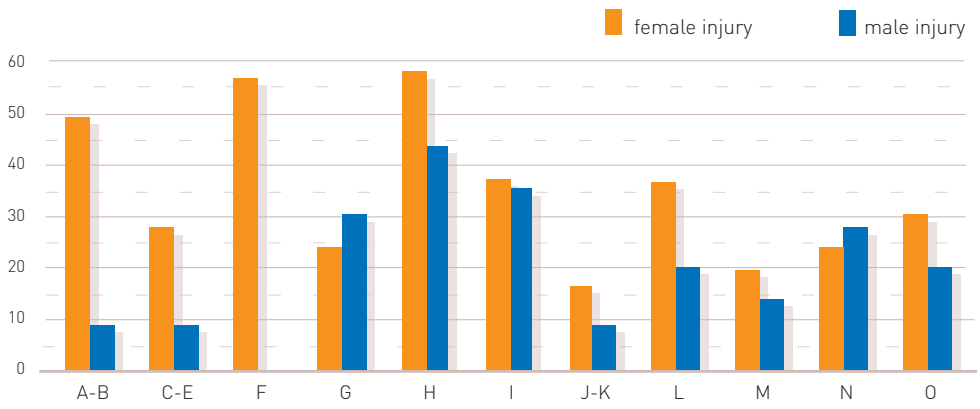
Sector Key:
A *– Agriculture, hunting and forestry,* ***B*** *– Fishing,* ***C*** *– Mining and Quarrying,*
D *– Manufacturing,* ***E*** *– Electricity/gas/water,* ***F*** *– Construction,*
G *– Wholesale/Retail trade; repair of vehicles, personal and household goods,*
H *– Hotels/Restaurants,* ***I*** *– 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.*

Overall, males suffered a higher rate of workplace injury than females in 2004 (36.3 injuries per 1000 male workers compared to 21.7 injuries per 1000 female workers). However, the difference is less pronounced than in 2003 when male workers reported nearly twice as many injuries as female workers (38.1 males compared to 17.9 females in every 1,000 workers).

The gap in illness rates between men and women is also closing. In 2004, the illness rates are similar - 32 illness cases per 1000 male workers compared to 31.5 cases among female workers. In 2003, 29.3 per 1000 male workers reporting illness compared to 19.6 female workers. Male illness rates are much higher in the Construction (F), Transport (I) and Public Administration sector (L), while female illness rates are higher in the Hotel and restaurant sector (H) and the Health and social work sector (N).

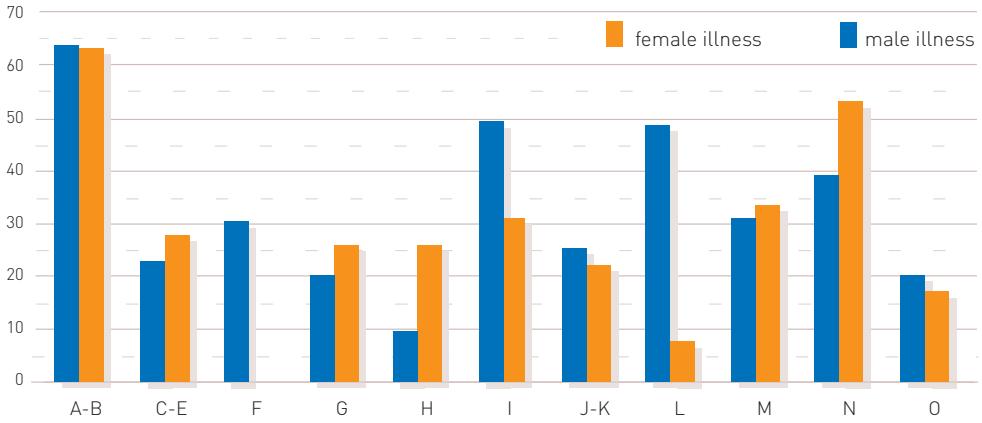
A breakdown of the injury and illness data for males and females is presented in detail in Figures 11 and 12.

Figure 11: **Rate of injury by gender and economic sector 2004 (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 12: Rate of illness by gender and economic sector 2004 (CSO)



Figures 13-16 present the rate of male and female injury over the period 2002 to 2004. It is immediately evident when we compare Figures 13 and 14 that male workers experience a higher rate of occupational injury than females. This contrast is less evident from the illness data – comparing Figures 15 and 16.

Figure 13: Rate of male injury by economic sector 2002-2004 (CSO)

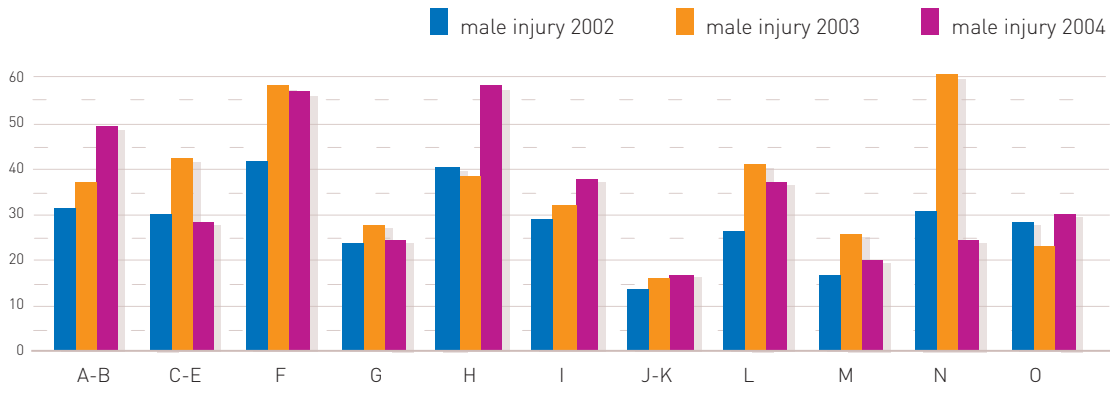


Figure 14: Rate of female injury by economic sector 2002-2004 (CSO)

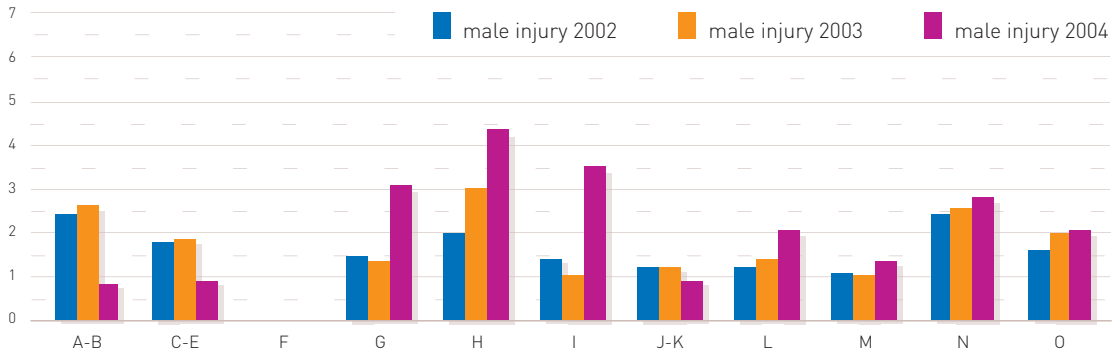


Figure 15: Rate of male illness by economic sector 2002-2004 (CSO)

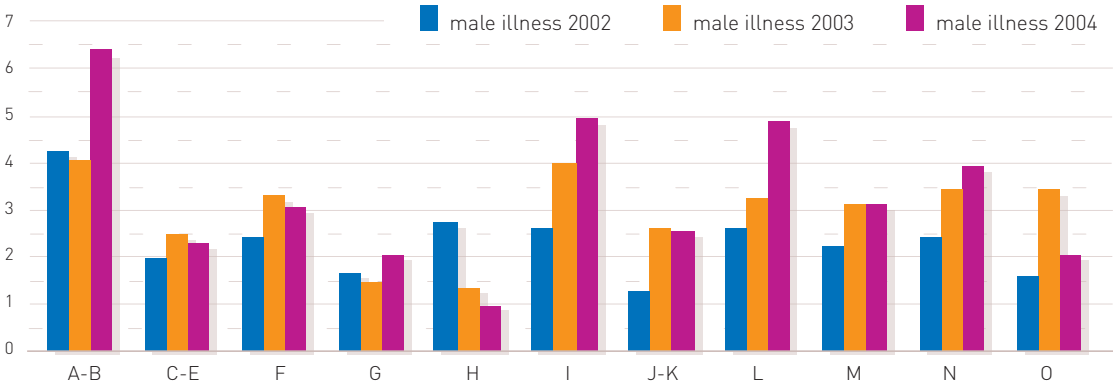
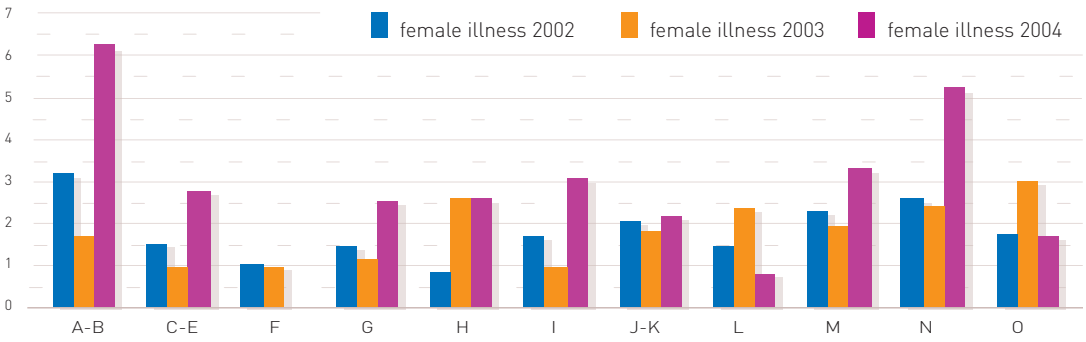


Figure 16: Rate of female illness by economic sector 2002-2004 (CSO)



According to 'Occupation' category of the Authority's SAFE database, 'labourers in the mining, manufacturing, construction and transport' industries suffer the highest proportion (27.3%) of reported injuries – see Figure 17. 'Metal, machinery and related trades workers' is the next highest category with 10.8% of all reported injuries occurring to people in this occupational category. The 'personal and protective services' and 'extraction and building trades' categories each suffer 8% of all reported injuries.

Figure 17: Reported non-fatal injuries by occupation 2005 (HSA)

OCCUPATION - BASED ON ISCO DESCRIPTIONS	%	N
Labourers - mining, construction, manufacturing, transport (1)	27.3	,065
Metal, machinery and related trades workers (2)	10.8	818
Personal and protective services workers	8.4	636
Extraction and building trades	8.0	606
Drivers and mobile plant operators	7.0	527
Sales	5.3	400
Police officer	4.6	350
Office clerks	4.5	337
Physical and engineering science professionals	4.1	312
Nursing and midwifery professionals	3.8	285
All other occupations	16.3	1,236
Total	**100**	**7,572**

(1) category contains sub -categories 'labourer in mining, construction, manufacturing, transport', 'labourer' and 'construction labourer'

(2) category includes sub-categories 'metal, machinery and related trades workers' and 'machine operators'

Figure 18 presents the distribution of incidents reported to the Authority in 2005 across age groups. Note that data is not available for all reported incidents, as accident report forms are often completed by colleagues who do not know the victim's age. Similar to 2004, over 70% of all injuries reported to the Authority in 2005 involved persons between the ages of 20 and 44. Figure 18 illustrates that fewer injuries occur at the younger and older ends of the age scale.

Figure 18: Distribution of non-fatal injury by age band (HSA)

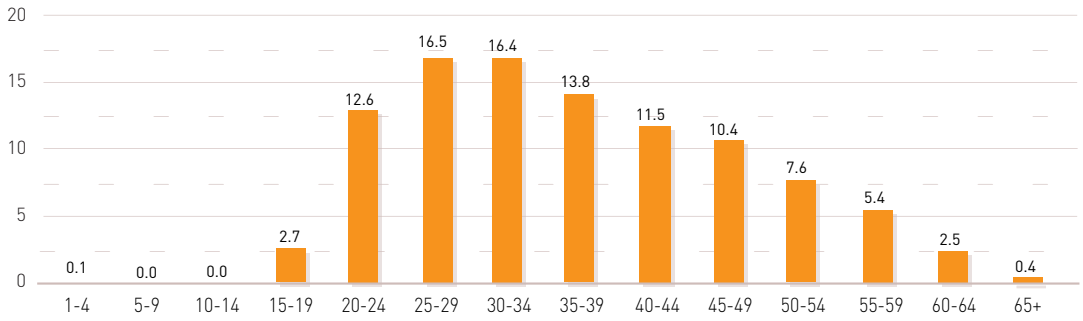


Figure 19 presents the age data across economic sectors. There is a relatively high percentage of injuries recorded for 15-19 year olds in the Wholesale and Retail Trade sector (8.8%) compared to other sectors. The Hotel and restaurant sector has the highest proportion of injuries in the 20-24 age group (28%), closely followed by the Agricultural sector (27% of reported injuries are in the 20-24 age group.

Figure 19: Percentage reported non-fatal injuries by age and economic sector (HSA)

	ECONOMIC SECTOR																
AGE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	TOTAL %	TOTAL N
Age 0-4	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	7
Age 5-9	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
Age 10-14	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
Age 15-19	3.4	0.0	2.6	1.4	0.0	5.0	8.8	6.5	1.2	0.0	1.1	0.4	5.5	0.7	4.1	2.7	182
Age 20-24	27.0	9.1	9.0	10.0	2.9	17.1	20.3	28.3	9.7	11.8	11.6	8.5	12.3	10.2	7.3	12.6	850
Age 25-29	20.2	9.1	12.8	17.1	5.7	17.6	18.0	14.1	12.3	19.3	17.7	19.3	6.8	15.4	13.8	16.5	1110
Age 30-34	7.9	0.0	11.5	17.9	20.0	16.4	12.4	19.6	17.2	16.0	16.0	19.0	8.2	14.3	19.5	16.4	1105
Age 35-39	0.1	9.1	11.5	14.9	17.1	13.9	10.6	4.3	17.4	10.9	18.2	11.9	17.8	12.0	17.1	13.8	933
Age 40-44	9.0	27.3	16.7	12.5	17.1	9.6	10.1	3.3	12.5	8.4	9.9	14.4	8.2	11.5	13.0	11.5	777
Age 45-49	3.4	9.1	12.8	10.3	8.6	7.7	8.4	12.0	11.8	15.1	13.3	10.5	9.6	15.2	8.1	10.4	704
Age 50-54	9.0	18.2	11.5	7.7	8.6	6.1	3.4	5.4	8.2	10.9	7.7	9.1	13.7	9.2	8.9	7.6	511
Age 55-59	4.5	0.0	6.4	5.4	17.1	4.5	3.8	3.3	6.9	5.0	1.7	3.9	12.3	8.2	4.1	5.4	365
Age 60-64	5.6	9.1	5.1	2.7	2.9	1.8	2.5	3.3	2.3	1.7	1.7	2.7	4.1	2.7	3.3	2.5	169
Age 65+	0.0	9.1	0.0	0.2	0.0	0.1	0.7	0.0	0.5	0.8	1.1	0.3	1.4	0.7	0.8	0.4	26
Total %	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	
Total number	**89**	**11**	**78**	**1660**	**35**	**1385**	**557**	**92**	**856**	**119**	**181**	**716**	**73**	**768**	**123**		**6743**

Data on age range is also available from the CSO – presented in Figure 20. Note that the CSO figures are based on estimates of all injuries and illness whereas the Authority's data is based only on injury and illness that resulted in more than three days absence from work. The CSO also use different age bands.

Figure 20 shows that those in the younger age groups are at higher risk of injury whereas those in the older age groups suffer higher rates of illness. Rates of injury and illness in the 15-19 age group are very high compared to other age groups but the CSO warn that these estimates are based on very small samples.

Figure 20: Rates of injury and illness by age group 2004 (CSO)

		INJURY		ILLNESS	
AGE RANGE	TOTAL EMPLOYED	NUMBER	RATE PER 1000	NUMBER	RATE PER 1000
15-19	67500	7500	111.1	3000	44.4
20-24	232400	8300	35.7	2500	10.7
25-34	546700	15800	28.9	12100	22.1
35-44	458100	10900	23.7	15400	33.6
45-54	369600	10900	29.4	14600	39.5
55-64	198400	3700	18.6	10300	51.9
65+	35600	500	14	1900	53.3
Total	**1908300**	**57600**	**30.2**	**59800**	**31.3**

Note: The rates of injury and illness for females aged 15–19 are relatively high – but the numbers of incidents in these categories are small. The CSO warn that sampling or survey errors may occur when estimates are based on smaller values.

Figure 21 presents details of the employment status of victims of injuries reported to the Authority. The vast majority of reported incidents (97%) involve employees. Self-employed persons represent only 1.3% of the injuries reported to the Authority. The Authority believes that this result is more indicative of poor levels of reporting among self-employed workers, rather than of low injury levels among this employment group.

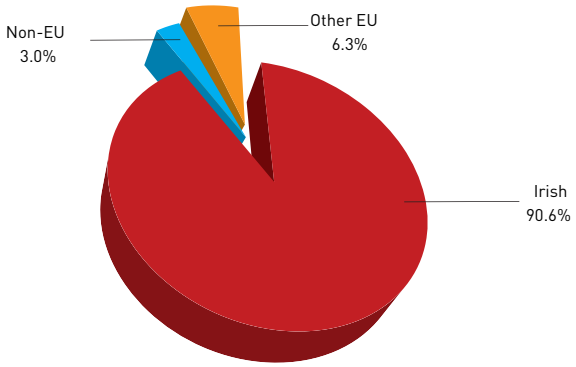
The Financial Intermediation sector (J) reports the highest proportion of 'non-worker' injuries and the Education sector (M) has a relatively high percentage of 'trainee' injuries.

Figure 21: Distribution reported non-fatal incidents by economic sector and employment status 2005 (HSA)

	ECONOMIC SECTOR																
AGE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	TOTAL %	TOTAL N
Employee	94.7	100.0	90.7	98.2	100.0	93.2	96.0	98.7	98.4	94.8	96.5	98.5	83.1	98.4	93.2	96.6	7370
Self-Employed	2.1	0.0	7.2	0.6	0.0	3.8	0.1	0.0	0.2	0.0	2.5	0.1	1.2	0.1	4.5	1.3	96
Trainee	3.2	0.0	1.0	0.7	0.0	1.9	0.7	0.6	0.4	0.0	0.0	0.8	10.8	0.9	1.5	1.1	81
Non-Worker	0.0	0.0	0.0	0.3	0.0	0.6	2.9	0.6	0.9	5.2	1.0	0.5	3.6	0.4	0.8	0.9	66
Family Worker	0.0	0.0	1.0	0.1	0.0	0.3	0.0	0.0	0.1	0.0	0.0	0.1	1.2	0.2	0.0	0.2	13
Member of public	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	4
Total %	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	
Total number in sector	**94**	**13**	**97**	**1769**	**36**	**1544**	**697**	**156**	**974**	**134**	**201**	**790**	**83**	**910**	**132**		**7630**

The nationality of the reported injury victims is presented in Figure 22, with a breakdown by sector in Figure 23. 91% of all reported injuries involved Irish workers, 6% involved workers from other EU countries and 3% involved workers from non-EU countries.

Figure 22: Distribution of non-fatal injuries by nationality 2005 (HSA)



The results for the Hotel and restaurant sector (H) in Figure 23 are noteworthy – this sector reports the lowest proportion of reported injuries for Irish workers (78%) but has the highest proportion of injuries in the 'other EU' (16.4% compared to an average of 6.3% for all sectors) and 'non-EU' categories (5.9% compared to 3% for all sectors).

Figure 23: Distribution of non-fatal injuries by economic sector and nationality 2005 (HSA)

	ECONOMIC SECTOR																
NATIONALITY	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	TOTAL %	TOTAL N
Irish	85.9	92.9	95.9	90.0	94.3	83.7	92.2	77.6	94.4	97.0	83.0	98.6	90.1	94.0	93.1	90.6	6905
Other EU	13.1	7.1	2.1	7.3	0.0	11.6	4.4	16.4	3.3	3.0	12.5	0.9	6.2	2.4	3.8	6.3	481
Non-EU	1.0	0.0	2.1	2.7	5.7	4.7	3.5	5.9	2.2	0.0	4.5	0.5	3.7	3.6	3.1	3.0	231
Total %	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	
Total number in sector	**99**	**14**	**97**	**1800**	**35**	**1535**	**664**	**152**	**988**	**135**	**200**	**785**	**81**	**901**	**131**		**7617**

Injury and fatality rates among Non-Irish national workers are explored in detail in Section 4 of this Summary.

RISK ALERTS

1. Non-Irish national workers in the Hotel and Restaurant sector

- The Hotel and restaurant sector (H) has the highest proportion of reported injuries for 'other EU' and 'non-EU' workers.
- This is consistent with CSO data for Q3, 2005 (AIB, 2006) which indicates that the Hotel and restaurant sector has the highest % of non-Irish national workers at 19.2% of the workforce. More detailed data from the CSO shows that 7.8% of the hotel and restaurant workforce comes from the Accession States and 5.6% comes from Asia. This is the highest percentage of Asian workers in any economic sector.

2. High rates of injury among young workers in certain sectors

- The Wholesale and Retail trade sector has the highest percentage of reported injuries in the 15-19 age group
- The Hotel and restaurant sector has the highest percentage of reported injuries in the 20-24 age group.

2.3 Incident Statistics

This section of the Summary presents information about the reported incident and injury. The statistics describe the accident sequence – starting with the accident trigger, followed by the type of incident, the type of injury and the body part injured.

Figure 24 below shows that 32% of all incidents are triggered by manual handling activity. This category includes "lifting and carrying", "pushing and pulling" and "twisting and turning of the body". Manual handling triggers a high percentage of accidents in all economic sectors, but is particularly high in the Wholesale and retail trade sector (G) and the Health/social work sector (N).

'Slips, trips and falls on a level' are the next most frequent accident trigger (15% of all reported accidents were triggered by a slip, trip or fall) – the proportion of accidents triggered in this way is also high across all economic sectors.

Other notable results in Figure 24 include the high proportion of incidents triggered by "shock, fright, violence of others" in the Public administration/defence sector (25%), the Financial intermediation sector (J) and the Health and social work sector (18%). 32% of incidents in the Agricultural sector are triggered by 'Loss of control of an animal'.

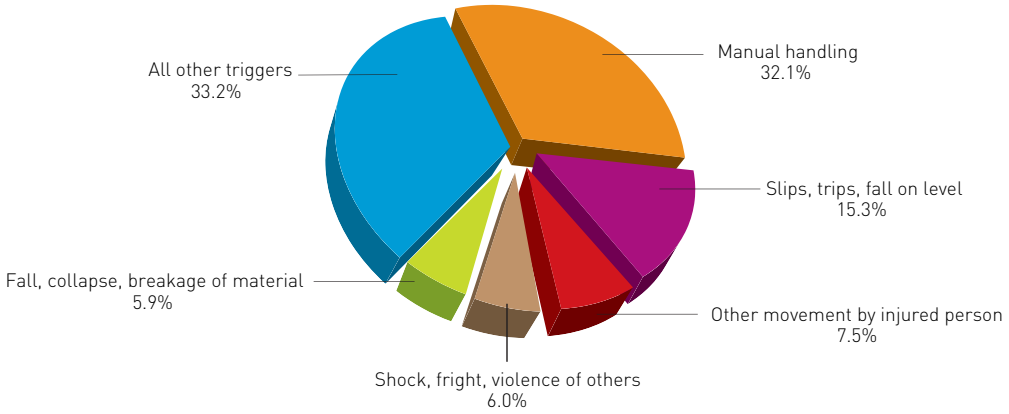
Figure 24: Percentage reported non-fatal injuries by accident trigger and economic sector 2005 (HSA)

	ECONOMIC SECTOR																
ACCIDENT TRIGGER	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	TOTAL %	TOTAL N
Manual handling	7.8	42.9	30.6	34.4	28.6	24.3	43.7	31.1	40.1	33.1	25.0	19.1	33.7	40.0	25.2	32.1	2502
Slips, trips, fall on level	11.7	14.3	10.2	13.6	20.0	16.4	16.2	20.9	15.1	21.3	20.2	13.6	16.9	14.2	23.0	15.3	1189
Other movement by injured person	7.8	21.4	5.1	8.7	11.4	8.0	7.3	4.7	8.4	3.7	8.2	5.7	6.0	6.3	6.7	7.5	587
Shock, fright, violence of others	0.0	0.0	0.0	0.3	0.0	0.7	1.3	2.0	3.6	20.6	0.5	24.8	8.4	18.1	3.7	6.0	469
Fall, collapse,breakage of material	2.9	7.1	9.2	5.6	2.9	10.5	7.9	4.1	4.2	2.2	7.2	2.8	4.8	2.0	6.7	5.9	456
Loss of control: object	7.8	7.1	8.2	9.1	11.4	5.5	2.3	3.4	3.1	0.0	4.3	1.9	0.0	1.5	3.7	4.7	368
Fall from height	6.8	0.0	7.1	2.5	2.9	10.1	4.6	2.0	3.1	3.7	5.8	2.2	7.2	1.3	5.2	4.5	347
Loss of control: handtool	2.9	0.0	5.1	5.2	5.7	7.8	2.5	5.4	1.9	0.7	4.8	2.5	3.6	1.2	3.7	4.1	323
Loss of control: other	0.0	0.0	4.1	3.2	2.9	3.5	2.1	6.1	1.5	2.9	2.9	1.4	1.2	3.5	3.0	2.8	215
Loss of control: machine	5.8	0.0	7.1	3.8	2.9	3.0	2.7	2.0	1.2	0.7	4.3	1.3	2.4	0.7	3.0	2.5	197
Loss of control: road traffic transport	0.0	0.0	0.0	0.6	0.0	1.1	0.8	0.0	5.2	3.7	1.9	8.4	1.2	1.3	1.5	2.3	176
Loss of control: transport/ handling equipment	5.8	0.0	5.1	2.5	2.9	1.2	2.5	2.7	3.1	1.5	3.4	1.8	0.0	0.4	2.2	2.1	160
Overflow/leakage/ emission: liquid	1.0	0.0	1.0	1.5	0.0	0.5	0.4	4.7	0.1	0.7	1.4	0.5	0.0	0.7	0.7	0.8	63
Overflow/leakage/ emission: other	0.0	0.0	0.0	0.9	0.0	0.8	0.3	3.4	0.6	2.2	1.0	0.1	0.0	1.1	3.7	0.8	64
Entered inappropriate area	1.9	0.0	1.0	1.4	0.0	1.1	1.0	0.0	0.2	0.0	1.4	0.3	0.0	0.4	0.7	0.8	64
Loss of control: animal	32.0	0.0	0.0	0.3	0.0	0.2	0.1	0.0	0.7	0.0	1.0	0.9	0.0	0.0	0.0	0.8	59
Electric failure	1.0	0.0	0.0	0.3	2.9	0.4	0.1	0.7	0.1	0.0	0.0	0.1	0.0	0.2	0.7	0.3	21
Fire	1.0	0.0	0.0	0.2	0.0	0.2	0.0	0.7	0.0	0.0	0.0	1.0	0.0	0.1	0.0	0.2	17
Overflow/leakage/ emission: gas	0.0	0.0	1.0	0.4	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.3	1.2	0.1	1.5	0.2	17
Overflow/leakage/ emission: smoke	1.0	0.0	0.0	0.2	0.0	0.5	0.3	0.0	0.1	0.0	0.5	0.0	0.0	0.1	0.0	0.2	18
Overflow/leakage/ emission: solid material	1.0	0.0	0.0	0.3	0.0	0.1	0.3	0.0	0.0	0.0	0.5	0.3	0.0	0.1	0.0	0.2	15
Explosion	0.0	0.0	0.0	0.0	2.9	0.3	0.1	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.1	9
Other	1.9	7.1	5.1	5.1	2.9	3.9	3.2	6.1	7.5	2.9	5.8	11.2	13.3	6.7	5.2	5.8	454
Total %	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	
Total number in each sector	**103**	**14**	**98**	**1818**	**35**	**1587**	**711**	**148**	**1003**	**136**	**208**	**789**	**83**	**922**	**135**		**7790**

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 top five accident triggers – which account for two-thirds of all reported incidents – are presented in Figure 25.

Figure 25: **Top five accident triggers of non fatal injuries – all sectors 2005 (HSA)**



Manual handling incidents are examined in greater detail here as they represent a persistent problem – this was also the most common accident trigger in all sectors in 2004, accounting for 30% of all reported accidents. The subset of reported manual handling injuries for 2005 is presented in more detail in Figures 26 and 27. Figure 26 presents details of the types of injury that arise from manual handling accidents. The majority, 66%, cause sprain or strain type injuries. Other common injuries include bruising, grazes and bites (11%), open wounds (8%) and closed fractures (6%).

Figure 26: **Manual handling incidents by injury type 2005**

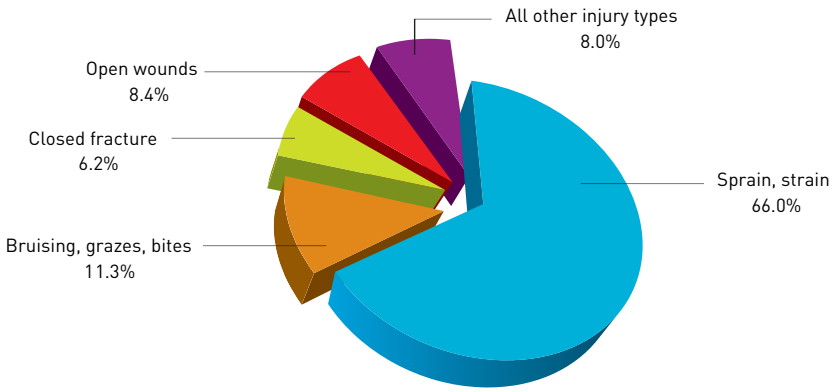


Figure 27 shows the most frequently injured body parts – back injuries result from 46% of all manual handling injuries. Upper limb injuries seem to be a common consequence, with fingers, shoulders, hands and arms featuring as the next most common body parts injured as a result of manual handling incidents.

Figure 27: Manual handling incidents by body part injured 2005 (HSA)

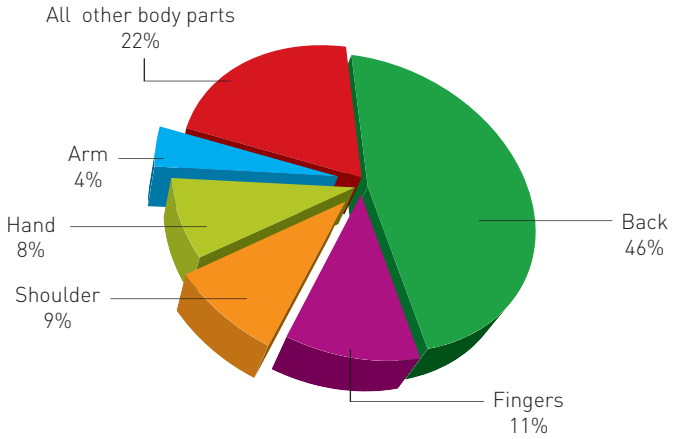


Figure 28 shows that the most common non-fatal incident types reported to the Authority for all sectors in 2005 were "physical stress and strain to the body" (29%), "slips, trips and falls on the same level" (17%) and "struck by falling, moving, flying object" (10%). These three incident types represent 56% of all reported injuries and also represent a high proportion of the reported injuries within most economic sectors.

Figure 28: Percentage reported non-fatal injuries by incident type and economic sector 2005 (HSA)

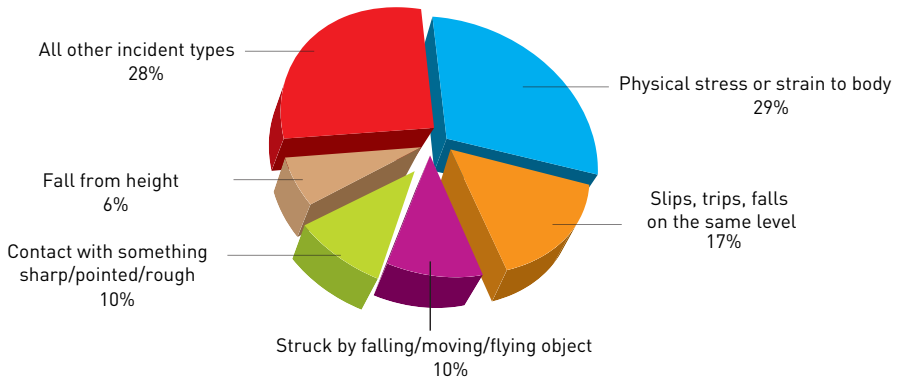
	ECONOMIC SECTOR															ALL SECTOR	
INCIDENT TYPE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	%	N
Physical stress or strain to body	10.6	57.1	20.6	30.9	36.1	20.7	30.1	17.0	43.5	33.1	23.3	17.8	18.3	38.0	25.6	28.9	2246
Slips, trips, falls on the same level	12.5	14.3	11.3	15.3	25.0	17.9	17.9	23.8	15.8	25.7	21.4	14.6	18.3	16.0	21.8	16.8	1302
Struck by falling/moving/ flying object	11.5	14.3	18.6	10.7	13.9	14.6	16.5	4.1	9.2	3.7	12.1	5.1	9.8	3.5	8.3	10.3	797
Contact with something sharp/pointed/rough	5.8	7.1	7.2	14.7	2.8	11.3	9.9	18.4	4.7	3.7	12.1	5.8	8.5	4.8	8.3	9.5	741
Fall from height	7.7	0.0	10.3	3.2	5.6	14.8	5.9	2.0	4.1	3.7	8.7	3.7	11.0	1.4	8.3	6.2	482
Trapped/crushed by an object/machinery	7.7	7.1	14.4	8.6	2.8	6.2	4.9	2.0	2.4	3.7	4.9	2.8	3.7	1.4	6.0	5.2	401
Injured by person: malicious	0.0	0.0	0.0	0.2	0.0	0.3	0.8	0.0	1.9	6.6	0.0	26.1	9.8	15.2	3.0	5.2	402
Hit against something fixed or stationary	4.8	0.0	5.2	6.3	2.8	4.7	5.2	2.7	2.9	0.7	5.8	2.7	3.7	1.7	1.5	4.2	324
Burns, scalds	3.8	0.0	3.1	2.5	2.8	1.3	1.3	15.6	0.5	1.5	0.0	1.8	3.7	2.9	2.3	2.1	161
Injured by vehicle/ transport: in public place	1.0	0.0	0.0	0.4	0.0	1.0	0.4	0.0	3.6	2.2	1.5	9.5	2.4	0.6	3.0	2.0	156
Injured by person: non-malicious	0.0	0.0	0.0	0.8	2.8	0.7	0.6	2.0	0.8	0.0	0.0	2.2	2.4	8.0	1.5	1.8	137
Injured by vehicle/ transport: in workplace	1.9	0.0	5.2	1.5	0.0	1.4	2.5	2.0	2.3	0.7	2.9	1.1	0.0	0.4	0.8	1.6	122
Psychological shock or trauma	0.0	0.0	0.0	0.2	0.0	0.3	0.7	1.4	1.5	12.5	1.0	1.0	0.0	1.9	0.0	1.0	74
Contact with chemical/ biological substances:skin	1.9	0.0	1.0	1.8	0.0	0.9	1.0	3.4	0.3	0.7	1.9	0.4	0.0	0.4	0.8	1.0	77
Injured by an animal	28.8	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.7	0.0	0.5	1.1	0.0	0.1	0.0	0.7	53
Contact with chemical/ biological substances: inhalation	0.0	0.0	0.0	0.3	0.0	0.1	0.1	1.4	0.2	1.5	0.5	0.1	1.2	0.1	3.0	0.3	21
Contact with electricity	0.0	0.0	0.0	0.2	2.8	0.6	0.3	0.7	0.2	0.0	0.0	0.4	0.0	0.4	0.0	0.3	27
Sudden hearing loss	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.1	4
Frostbite	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
Drowning	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	2
Contact with welding arc or spark	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	1.9	0.0	3.1	2.2	2.8	3.0	1.6	3.4	4.9	0.0	3.4	3.8	7.3	3.0	6.0	3.0	236
All incident types - %	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	
All incident types - number	**104**	**14**	**97**	**1808**	**36**	**1577**	**708**	**147**	**998**	**136**	**206**	**788**	**82**	**935**	**133**		**7769**

Figure 28 also indicates that some sectors feature very high percentages of particular incident types. For example:

- Most incidents in the Agriculture sector (29%) are due to injuries by animals.
- The Financial intermediation sector (J) has the highest percentage (13%) of reported "psychological shock or trauma" incidents.
- The Construction sector (F) has a higher percentage (15%) of "falls from heights" incidents than any other sector.
- The Hotel and restaurant sector (H) has a very high proportion of burn and scald incidents (16%)
- The Health and social work sector (N) has the highest percentage of incidents due to non-malicious injuries by another person (8%).
- Malicious injuries inflicted by another person feature particularly in the public administration/defence sector (26%), and the Health and social work (15%) sectors.

Figure 29 presents the five most common incident types for all sectors – which account for 72% of all reported injuries.

Figure 29: Distribution of most frequently reported incident types - all economic sectors 2005 (HSA)



Figures 30 - 33 present the incident type information for specific economic sectors:

- Agriculture (Figure 30): The very high proportion of incidents involving animals dominates the graph for the agricultural sector. 'Stress or strain to the body', 'slips, trips or falls' and 'falling objects' account for over 10% of incidents each.
- Construction (Figure 31): The top five incident types for all sectors (see Figure 29) are also the top five incident types in the construction industry.

- Transport (Figure 32): The Transport sector (I) is dominated by 'physical stress and strain to the body' incidents (44% of all incidents are in this category), followed by slips, trips and falls (16% of all incidents are of this type).
- Health/social work (Figure 33): 'Physical stress and strain to the body' is the most common incident type in the Health and social work sector (N), accounting for 38% of all reported injuries, followed by 'slips, trips and falls' (16% of all injuries reported from the sector). The sector is also characterised by a high incidence of injuries inflicted by other persons – 15% of these were malicious injuries and 8% were non-malicious.

Figure 30: Percentage reported injuries in agricultural sector by incident type 2005 (HSA)

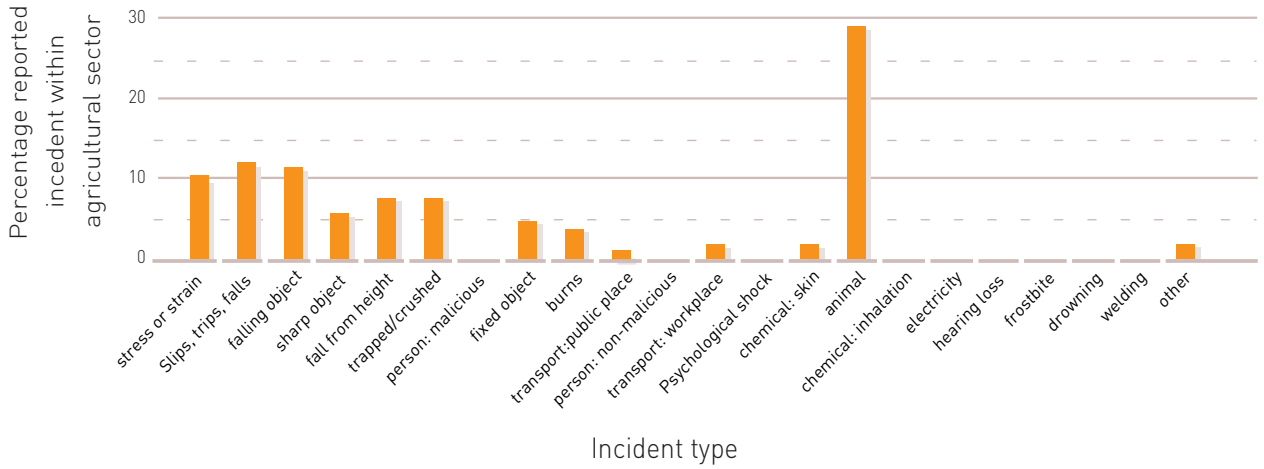


Figure 31: Percentage reported injuries in construction sector by incident type 2005 (HSA)

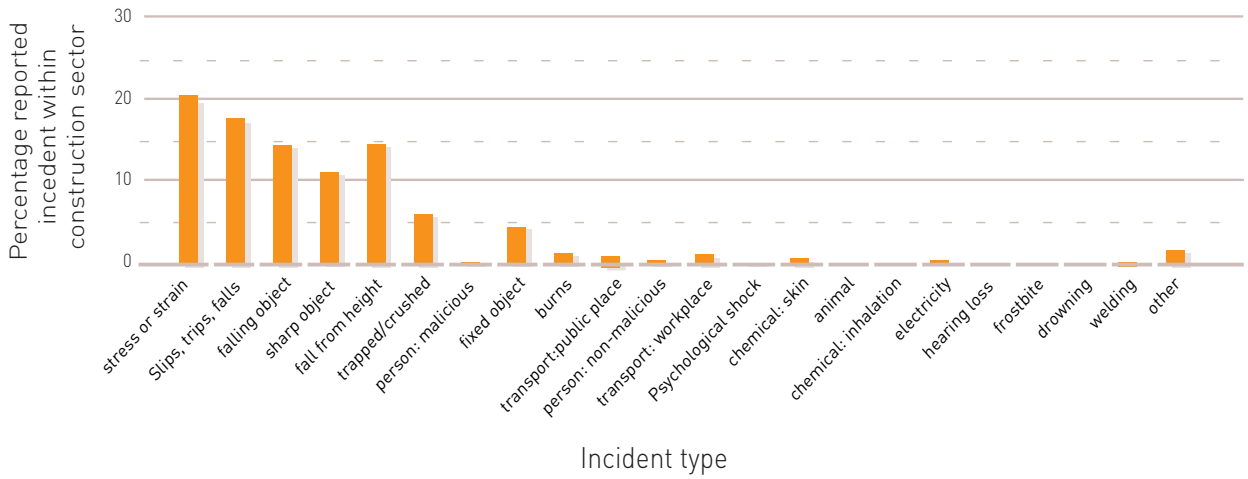


Figure 32: **Percentage reported injuries in transport sector by incident type 2005 (HSA)**

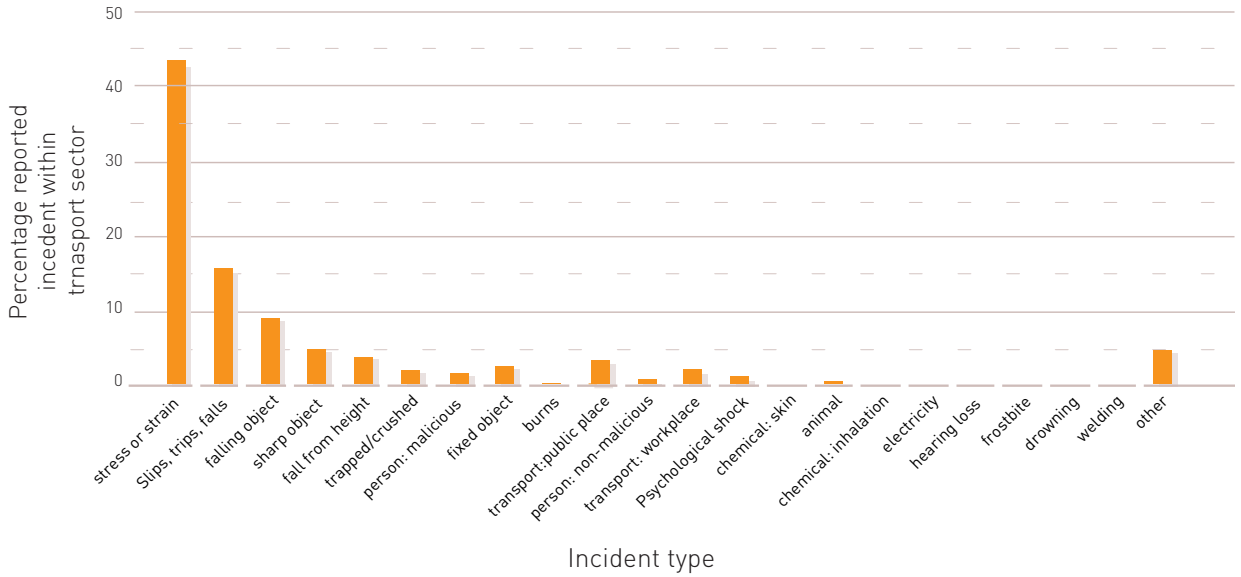


Figure 33: **Percentage reported injuries in health/social work sector by incident type 2005 (HSA)**

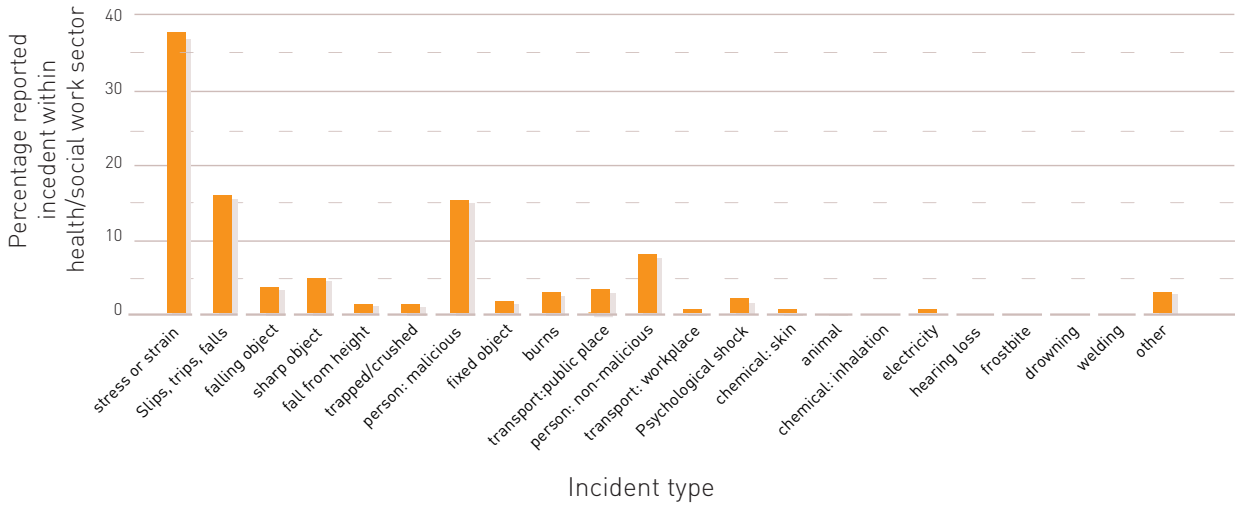


Figure 34 presents details of the type of injury broken down by economic sector. Overall, the most common injury type is "strain or sprain" – 40% of all reported injuries are of this type. Other common injury types include 'bruising, grazes, bites', 'closed fracture' and 'open wounds'. Similar to 2004, there are a high percentage of open wound injuries (27%) in the hotel and restaurant sector (H).

Figure 34: Percentage reported injury by injury type and economic sector 2005 (HSA)

	ECONOMIC SECTOR															ALL SECTOR	
INCIDENT TYPE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	%	N
Sprain, strain	25.0	35.7	29.3	40.8	51.4	29.7	42.6	29.3	54.8	43.1	36.5	34.8	29.4	50.3	36.6	40.2	3152
Bruising, grazes, bites	26.9	7.1	19.2	17.0	17.1	15.8	21.9	15.3	15.9	20.4	13.5	20.9	23.5	15.9	17.2	17.5	1369
Closed fracture	23.1	14.3	20.2	10.5	11.4	21.0	10.8	7.6	7.7	5.1	21.2	13.9	14.1	8.5	15.7	13.0	1016
Open wounds	7.7	28.6	14.1	17.5	5.7	14.9	11.9	21.7	6.9	5.1	11.1	11.1	10.6	4.7	9.0	12.2	957
Internal injuries (excl. head)	5.8	14.3	0.0	1.2	2.9	1.3	1.5	0.0	0.6	0.7	2.4	1.9	4.7	0.7	0.7	1.3	101
Open fracture	1.0	0.0	5.1	0.9	0.0	2.2	1.3	1.3	0.9	0.0	0.5	0.4	1.2	0.3	2.2	1.1	88
Infection	2.9	0.0	1.0	1.9	0.0	1.3	0.8	0.6	0.4	0.0	0.5	1.1	0.0	0.5	0.7	1.1	85
Dislocation	1.9	0.0	1.0	0.5	0.0	1.6	0.6	0.0	1.0	1.5	1.0	1.6	0.0	0.9	0.7	1.0	78
Amputation	1.0	0.0	1.0	1.1	0.0	1.4	0.4	0.0	0.1	0.0	1.9	0.5	0.0	0.3	1.5	0.8	61
Serious multiple injuries	0.0	0.0	0.0	0.2	2.9	0.3	0.3	0.0	0.1	0.0	1.0	0.8	0.0	0.1	0.7	0.3	21
Poisoning	0.0	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	4
Other	4.8	0.0	9.1	8.4	8.6	10.6	7.6	24.2	11.6	24.1	10.6	12.9	16.5	17.6	14.9	11.5	904
Total %	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	
Total number	**104**	**14**	**99**	**1830**	**35**	**1584**	**712**	**157**	**1011**	**137**	**208**	**790**	**85**	**936**	**134**		**7836**

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.*

In 2005, the CSO gathered information about the category of work-related illness - presented in Figure 35. The majority of illnesses are categorised as 'bone, joint or muscle' complaints – this category is more than twice as frequent as any other illness category. A total of 29,600 suffered with this illness type in 2004, a rate of 16 per 1000 workers. The second most commonly reported complaint is 'stress, depression or anxiety'. 12,200 cases were reported to the CSO for 2004.

'Bone, joint or muscle' illnesses are the most common category for both males and females. However, males have a higher rate of 'bone, joint or muscle' illness than females – 17 cases per 1000 male workers compared to 13 cases per 1000 female workers. Females report a higher rate of 'stress, depression, anxiety' illness than males – 8 cases per 1000 female workers compared to 5 cases per 1000 male workers.

Figure 35. **Illness category by gender 2004 (CSO)**

ILLNESS	MALE		FEMALE		TOTAL	
	NUMBER	RATE	NUMBER	RATE	NUMBER	RATE
Bone, joint or muscle	18800	17.0	10800	13.0	29600	16.0
Breathing, lungs	2200	2.0	500	1.0	2700	1.0
Skin	800	1.0	100	0.0	900	0.0
Hearing problem	700	1.0	*	*	700	0.0
Stress, depression, anxiety	5300	5.0	6800	8.0	12200	6.0
Headache, eyestrain	2200	2.0	900	1.0	3200	2.0
Heart	1300	1.0	200	0.0	1500	1.0
Infectious disease	900	1.0	2100	3.0	3000	2.0
Other	1800	2.0	3100	4.0	4900	3.0
Not applicable	1000	1.0	100	0.0	1100	1.0
Not stated	200	0.0	*	*	200	0.0
Total	**35200**	**32.0**	**24700**	**30.0**	**59800**	**32.0**

Figure 36 presents details of the body part(s) injured for each incident reported to the Authority. Note that some incidents may have caused injury to more than one body part.

Over 20% of all reported incidents cause back injury. Back injuries are the most common type of injury in every economic sector, with the exception of the Agriculture sector (A) there are more injuries to legs, hands and fingers. The Transport, storage and communication sector (I) and the Health and social work sector (N) have particularly high percentages of back injuries. Finger injuries are most frequent in the Manufacturing sector (D) and the Hotel and restaurant sector (H).

Figure 36: Percentage reported injury by body part injured by economic sector 2005 (HSA)

	ECONOMIC SECTOR															ALL SECTOR	
BODY PART INJURED	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	%	NO.
Back	6.7	21.4	16.2	23.8	33.3	16.5	25.5	22.3	30.2	24.1	17.8	17.8	21.2	30.0	27.1	23.0	1812
Finger(s)	10.5	14.3	16.2	18.3	5.6	15.0	12.3	17.8	6.3	2.9	12.0	8.8	5.9	6.6	9.8	12.3	966
Hand	11.4	0.0	12.1	10.2	5.6	9.3	7.4	12.7	6.1	5.8	11.1	9.3	8.2	6.8	11.3	8.7	688
Leg	11.4	14.3	6.1	7.2	11.1	11.0	9.1	10.2	7.1	8.8	8.7	10.4	4.7	4.9	7.5	8.4	658
Shoulder	3.8	0.0	4.0	6.5	2.8	5.0	5.2	3.8	7.3	4.4	8.7	7.0	4.7	9.4	3.0	6.4	502
Ankle	8.6	7.1	10.1	4.5	11.1	8.4	4.1	1.9	8.0	3.6	8.7	5.0	8.2	4.7	6.0	6.0	475
Arm	5.7	0.0	2.0	5.6	2.8	5.0	6.0	7.0	4.4	4.4	5.3	6.3	3.5	5.1	3.8	5.3	414
Foot	5.7	0.0	8.1	4.4	2.8	6.6	7.0	3.2	3.8	3.6	3.8	2.4	10.6	2.6	5.3	4.7	368
Head	4.8	14.3	6.1	3.3	0.0	3.4	6.6	3.2	3.5	8.0	4.3	6.5	8.2	4.7	4.5	4.4	346
Wrist	6.7	7.1	5.1	3.8	2.8	4.2	3.9	3.8	3.0	5.1	4.3	4.3	2.4	4.3	1.5	3.9	310
Chest	9.5	7.1	3.0	2.3	2.8	3.7	2.4	1.3	3.1	2.2	1.9	2.8	3.5	2.6	3.8	2.9	229
Neck	1.0	0.0	2.0	1.8	2.8	1.4	2.1	1.9	3.3	2.2	1.9	3.6	4.7	5.1	3.0	2.6	204
Eyes	4.8	7.1	2.0	2.8	8.3	2.6	2.0	3.2	1.7	2.2	1.0	1.9	2.4	1.8	2.3	2.3	183
Face	1.0	0.0	2.0	1.2	0.0	1.4	0.7	1.3	1.8	2.9	1.4	5.0	1.2	2.4	0.0	1.8	144
Pelvic/abdominal area	1.0	0.0	1.0	1.3	2.8	1.2	0.7	0.6	1.1	0.7	1.0	1.6	1.2	1.1	0.8	1.2	91
Hip	1.0	0.0	1.0	1.0	0.0	0.9	1.4	1.9	0.6	0.7	1.4	0.9	0.0	1.8	0.8	1.1	83
Toe(s)	1.0	0.0	2.0	0.5	0.0	0.6	0.8	0.6	0.6	0.0	1.4	0.3	1.2	0.5	1.5	0.6	48
Ear(s)	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.4	33
Serious multiple injuries	1.0	0.0	0.0	0.1	0.0	0.3	0.1	0.0	0.0	0.0	1.0	0.3	0.0	0.1	0.8	0.2	13
Teeth	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.4	0.0	0.2	12
Other	4.8	7.1	1.0	1.3	5.6	3.2	2.8	3.2	5.0	18.2	4.3	5.4	8.2	5.1	7.5	3.8	301
All injuries %	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	
All injuries Number	**105**	**14**	**99**	**1838**	**36**	**1595**	**715**	**157**	**1016**	**137**	**208**	**798**	**85**	**944**	**133**		**7880**

Figure 37 shows the six most common body parts injured for all economic sectors. Figures 38–41 show the six most commonly injured body parts in specific economic sectors.

Body parts injured in the specific sectors are generally consistent with the average in all sectors. Deviations from the average include the high percentage of back injuries reported from the transport sector and the health/social work sector (30% compared to the average of 23%). The rate of finger injuries in the manufacturing sector (D) is also above average (18% compared to the average 12%). The figures indicate that lower limb injuries are prevalent in the construction sector - foot injuries feature in the top six injuries in this sector (7%), together with leg (11%) and ankle injuries (8%).

Figure 37:
Reported most injured body part – all sectors 2005 (HSA)

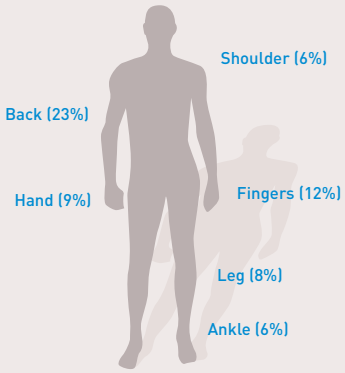


Figure 38:
Reported most injured body part – manufacturing sector 2005 (HSA)

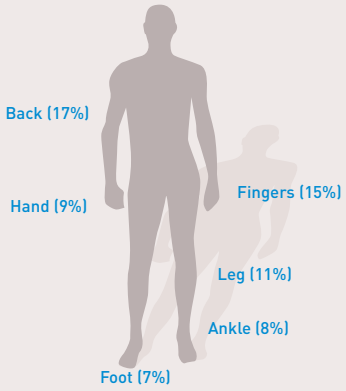


Figure 39:
Reported most injured body part – construction sector 2005 (HSA)

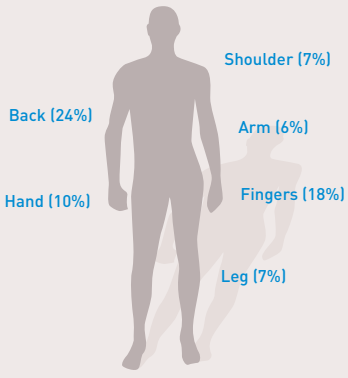


Figure 40:
Reported most injured body part – transport sector 2005 (HSA)

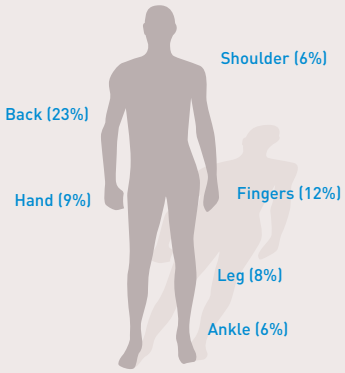
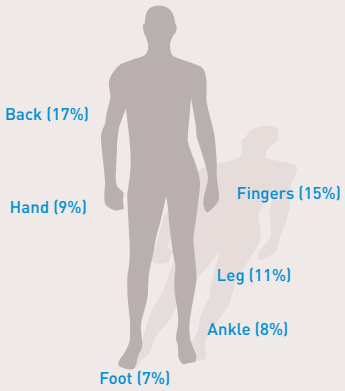


Figure 41:
Reported most injured body part – health /social work sector 2005 (HSA)



INCIDENT RISK ALERTS

1. Persistent problem of manual handling incidents

- Manual handling incidents account for nearly one third of all incidents reported to the Authority in 2005.
- Manual handling was previously identified as a high-risk issue in 2004, when nearly 30% of all reported incidents were triggered by manual handling activity.
- The percentage of manual handling incidents is particularly high in the Wholesale and retail traded sector (G), the Transport, storage and communication sector (I) and the Health and social work sector (N).
- Further analysis was conducted on the subset of manual handling injuries which revealed that 67% of manual handling injuries cause sprain or strain type injuries and nearly half (46%) result in back injuries.

2. Violent incidents in the specific economic sectors

- Results indicate that some sectors experience a disproportionate percentage of incidents triggered by 'shock, fright, violence of others'. While this accident trigger accounts for only 6% of overall reported injuries, 25% of injuries in the Public administration sector (L), 21% of injuries in the Financial intermediation sector (J) and 18% of injuries in the Health and social work sector (N) are triggered by violent incidents.
- Data on incident type shows that 5% of all reported injuries are categorised as 'Injured by person: malicious'. However, 26% of incidents in the Public administration sector (L) and 15% of incidents in the Health and social work sector (N) are in this category. A further 8% of injuries in the Health and social work sector are categorised as 'Injured by person: non-malicious'.
- There is a high incidence of injuries categorised as 'psychological shock or trauma' in the Financial intermediation sector (J), which is likely to be a consequence of the high percentage of violent incidents in the sector.

2.4 Incident Statistics

This section describes the work environment in which non-fatal injuries occurred. Details of the item associated with the incident, the immediate work environment, the size of the employing organisation, and the region are presented.

Only those items that were associated with over 3% of incidents are included in Figure 42 below. Numerous other items were cited but these have been combined in the 'all other items' category.

'Humans' were associated with 9% of reported incidents. The percentage of accidents involving deviations by humans was particularly high in the Health and social work sector (N) – 34% of all incidents compared to the average of 9% across all sectors.

Figure 42: Percentage items associated by economic sector 2005 (HSA)

	ECONOMIC SECTOR																
ITEM ASSOCIATED WITH DEVIATION	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	ALL SECTOR %	ALL SECTOR NO.
Humans	0.0	7.1	0.0	0.2	0.0	0.8	1.8	1.3	4.3	13.8	1.0	28.9	12.8	34.3	2.9	8.5	671
Surfaces at ground level	1.9	7.1	5.1	4.4	5.6	6.7	6.3	12.1	4.5	7.2	9.6	5.9	8.1	8.0	8.1	6.1	479
Building components, structural components (1)	3.8	7.1	5.1	4.7	5.6	7.9	3.6	1.9	3.3	7.2	4.8	4.3	4.7	1.8	4.4	4.7	369
Loads handled by hand	1.0	7.1	8.1	5.4	5.6	3.4	4.9	4.5	7.5	5.1	6.7	2.0	4.7	3.5	2.9	4.6	362
Buildings, structures, surfaces - at ground level (2)	5.7	0.0	2.0	3.4	5.6	4.2	4.0	2.5	4.6	2.9	2.4	3.0	4.7	3.2	5.9	3.7	296
Miscellaneous packaging, small and medium sized (3)	1.0	0.0	1.0	4.2	2.8	1.1	5.6	7.0	5.2	5.8	2.4	2.5	5.8	2.0	5.1	3.4	267
Mobile handling device (4)	1.9	0.0	0.0	4.3	0.0	0.6	10.7	5.1	3.9	2.2	1.9	0.8	1.2	2.3	2.9	3.2	256
All other items	84.8	71.4	78.8	73.4	75.0	75.3	63.1	65.6	66.5	55.8	71.2	52.7	58.1	44.9	67.6	65.9	5209
All injuries %	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	
All injuries Number	**105**	**14**	**99**	**1839**	**36**	**1603**	**718**	**157**	**1016**	**138**	**208**	**799**	**86**	**955**	**136**		**7909**

Notes:

1. *Building components, structural components (doors, walls, partitions etc) and intentional obstacles (windows etc)*
2. *Buildings, structures, surfaces - at ground level (indoor or outdoor, fixed or mobile, temporary or not)*
3. *Miscellaneous packaging, small and medium sized, mobile (skips, miscellaneous containers, bottles crates extinguishers)*
4. *Mobile handling devices, handling trucks (powered or not) - barrows, pallet trucks, etc.*

Figure 43 includes details of other items associated with 3% or more incidents in each economic sector. This analysis provides useful information about the specific items that should be targeted as high risk in each sector. The most striking result is that over 30% of all incidents in the Agricultural sector are associated with animals. Other notable results include:

- 12% of accidents in the Mining and quarrying sector involved 'portable or mobile machines for extracting materials or working the ground'
- 9% of construction accidents involve 'structures and surfaces above ground level'
- 9% of accidents in the Wholesale and retail trade sector involve stored products
- In the Hotels and restaurants sector, 10% of accidents involve processing machines and 9% involved 'knives, cleavers and cutters'.

Figure 43: Percentage items associated with incidents by economic sector 2005 (HSA)

ITEM ASSOCIATED	%
A – Agriculture, hunting and forestry	
Animals – domestic and for breeding	30.5
Trees, plants, crops	5.7
Forklift trucks	4.8
Pulled farm equipment	4.8
Hand tools – not powered	3.8
Mobile ladders, step ladders	3.8
C – Mining and quarrying	
Portable or mobile machines - for extracting materials or working the ground - mines, quarries and plant for building and civil engineering works	12.1
Hand tools – not powered	5.1
Mechanical hand tools	4.0
Elevators, lifts - hoists, bucket elevators, jacks, etc.	3.0
Systems for the supply and distribution of materials, pipe networks - fixed - for gas, air, liquids, solids - including hoppers	3.0
Vehicles - heavy: lorries, buses, coaches (passenger transport)	3.0
Machines for preparing materials, crushing, pulverising, filtering, separating, mixing, blending	3.0
Materials, objects, products, machine or vehicle components, debris, dust - not specified	3.0
Mobile ladders, step ladders	3.0
D – Manufacturing	
Machines and equipment - portable or mobile	4.1
Storage accessories, shelving, pallet racks, pallets	3.9
Stored products - including objects and packaging in storage areas	3.0
F – Construction	
Structures, surfaces, above ground level - mobile (including scaffolding, mobile ladders, cradles, elevating platforms)	9.4
Mobile ladders, step ladders	6.2
Building materials - large and small: prefabricated shells, formwork, girders, beams, bricks, tiles, etc.	5.7
Portable or mobile machines - for extracting materials or working the ground - mines, quarries and plant for building and civil engineering works	4.2
Mechanical hand tools	3.9
Hand tools – not powered	3.6
G – Wholesale / retail trade; repair of vehicles, personal, household goods	
Stored products - including objects and packaging in storage areas	9.3
Storage accessories, shelving, pallet racks, pallets	5.3
Knife, cleavers, cutters	3.1

ITEM ASSOCIATED	%
H– Hotels and restaurants	
Machines for processing materials - hot processes (ovens, driers, kilns)	9.6
Knife, cleavers, cutters	8.9
Stored products - including objects and packaging in storage areas	5.1
Stairs	4.5
Furniture	3.8
I – Transport, storage, communication	
Buses, coaches: passenger	4.8
Stored products - including objects and packaging in storage areas	4.6
Vans, trucks	3.2
J – Financial intermediation	
Vans, trucks	7.2
Vehicles - light: goods or passengers	5.1
Furniture	5.1
Stairs	4.3
Weapons	3.6
Stored products - including objects and packaging in storage areas	3.6
K – Real estate, renting, business	
Mobile ladders, step ladders	4.3
Hand tools – not powered	4.3
Building materials - large and small: prefabricated shells, formwork, girders, beams, bricks, tiles, etc.	3.4
L – Public Administration / defence; compulsory social security	
Cars	6.3
M – Education	
Furniture	8.1
Parts of building, above ground level - fixed (roofs, terraces, doors and windows, stairs, quays)	4.7
N – Health and social work	
Furniture	5.2
O – Other community, social, personal services	
Machines and equipment - portable or mobile	4.4
Storage systems, packaging equipment, containers - mobile	3.7
Vans, trucks	3.7
Hand tools – not powered	3.7
Mobile ladders, step ladders	3.7
Stairs	3.7

The classifications in Figure 44 describe the work environment in which reported incidents occur. More incidents occurred in 'factories, industrial sites or warehouses' (33%) than in any other work environment. Other environments with a reported rate of injuries above 10% include 'construction sites', 'office, schools etc', 'transport related area or road' and 'healthcare establishments'. This is a similar ranking to that in the work environment analysis in the Statistics Summary for 2004.

Several of the work environment results are consistent with the economic sector classification. For example:

- 75% of all incidents in the Construction sector (F) are categorized under 'construction site, opencast quarry or mine'
- 85% of all reported incidents in the Health/social work sector (N) take place in 'healthcare establishments'
- 88% of all incidents in the Manufacturing sector (D) take place in a 'factory, industrial site or warehouse'.

Some less obvious results include the 20% of incidents in the Real estate, renting and business sector (K) that occur in the 'construction site, opencast quarry or mine' environment and the 35% of all incidents in the 'Public administration' sector that occur in 'transport related areas or roads'.

Incidents in the Education sector (M) are reported in a wide range of work environments – 49% of all incidents are recorded under 'office, school etc' as would be expected. But 16% of incidents occur in 'healthcare establishments', 11% in 'transport related areas or roads' and 10% in 'sports areas'.

Figure 44: Percentage reported injuries by work environment and economic sector 2005 (HSA)

WORKING ENVIRONMENT	ECONOMIC SECTOR A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	ALL SECTOR TOTAL %	TOTAL NO.
Factory, industrial site, warehouse	16.2	7.1	31.3	88.0	44.4	11.0	29.2	3.2	28.7	8.8	35.1	11.5	2.4	1.9	45.2	33.3	2617
Construction site, opencast quarry, mine	1.0	0.0	49.5	3.4	19.4	75.5	1.4	1.9	0.7	0.0	19.7	2.2	1.2	0.2	3.0	18.0	1411
Office, school, shop, restaurant, hotel etc	2.9	0.0	0.0	3.1	11.1	3.1	59.4	82.2	6.3	58.4	21.2	11.7	48.8	2.5	11.9	13.1	1027
Transport related area or road	5.7	7.1	6.1	2.6	13.9	3.5	5.0	1.3	46.2	27.7	9.1	35.0	10.7	3.4	14.1	12.9	1017
Healthcare establishment	0.0	0.0	0.0	0.6	0.0	1.8	1.0	3.8	0.5	0.0	1.4	2.0	15.5	86.8	1.5	11.6	914
Private home or related area	2.9	0.0	2.0	0.3	0.0	1.6	0.3	0.0	3.0	1.5	2.4	5.8	1.2	2.5	4.4	1.9	151
Farm, fish farm, forest or park	48.6	21.4	0.0	0.3	2.8	0.6	0.3	0.0	0.0	0.0	2.4	2.7	0.0	0.1	1.5	1.3	100
In the air	0.0	0.0	0.0	0.1	5.6	0.1	0.1	0.0	4.8	0.0	0.0	0.3	0.0	0.0	0.7	0.7	59
Sports area	1.0	0.0	0.0	0.1	0.0	0.1	0.0	0.6	0.1	0.0	0.5	1.4	9.5	0.2	6.7	0.5	37
On/over water	0.0	21.4	0.0	0.1	0.0	0.1	0.1	0.0	0.3	0.0	0.0	0.4	0.0	0.1	0.0	0.2	14
High pressure air/water environment	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.1	5
Underground (excl. construction)	0.0	0.0	4.0	0.1	0.0	0.0	0.0	0.0	0.2	0.0	0.5	0.1	0.0	0.0	0.7	0.1	11
Other	21.9	42.9	7.1	1.5	2.8	2.4	3.1	7.0	9.1	3.6	7.7	26.9	10.7	2.2	10.4	6.4	503
Total %	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	
Total number in sector	**105**	**14**	**99**	**1836**	**36**	**1598**	**715**	**157**	**1014**	**137**	**208**	**781**	**84**	**947**	**135**		**7866**

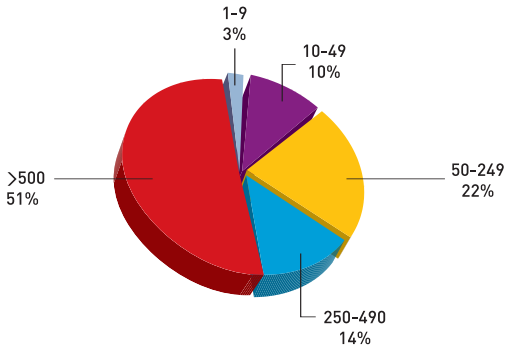
Sector Key:
A *– Agriculture, hunting and forestry,* ***B*** *– Fishing,* ***C*** *– Mining and Quarrying,* ***D*** *– Manufacturing,* ***E*** *– Electricity/gas/water,*
F *– Construction,* ***G*** *– Wholesale/Retail trade; repair of vehicles, personal and household goods,* ***H*** *– Hotels/Restaurants,*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

The Authority records the size of the employing organisation for every reported incident. This information is summarised in Figures 45 and 46. Similar to 2004, over 50% of all incidents were reported from very large organisations with more than 500 employees. Only 3% of the incidents were reported from micro-businesses (1-9 employees). The results indicate that the percentage of reported incidents increases with the size of the organisation. The result also suggests that larger organisations are more likely to comply with reporting requirements.

Figure 45: Percentage reported non-fatal injuries by size of employing organisation by economic sector 2005 (HSA)

NUMBER IN EMPLOYING ORGANISATION	ECONOMIC SECTOR															ALL SECTOR	
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	TOTAL %	TOTAL NO.
1--9	8.6	15.4	4.4	1.0	0.0	9.0	1.9	0.0	0.4	0.0	4.7	0.3	0.0	0.0	3.8	2.6	193
10 - 49	18.3	15.4	12.1	10.3	17.1	25.3	6.0	4.0	2.4	0.0	22.6	2.4	9.3	2.6	10.8	10.2	751
50 - 249	51.6	53.8	23.1	32.6	20.0	35.6	14.2	28.9	11.5	4.5	27.4	6.3	16.0	7.1	26.2	22.2	1624
250 - 490	10.8	7.7	22.0	22.5	60.0	15.4	5.4	4.7	8.7	2.3	13.7	5.0	10.7	14.4	7.7	13.7	1001
more than 500	10.8	7.7	38.5	33.5	2.9	14.6	72.5	62.4	77.0	93.2	31.6	86.0	64.0	75.9	51.5	51.3	3756
Total %	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Total number in sector	93	13	91	1760	35	1418	668	149	981	132	190	744	75	846	130		7325

Figure 46: Percentage reported non-fatal injuries by size of employing organisation 2005 (HSA)



The CSO provide a regional breakdown of their injury and illness estimates – presented in Figure 47 below. Figure 48 presents the estimated rates of injury in each region. The regions are different sizes so they cannot be compared directly. However, the data provides a general guide to injury and illness rates across the country.

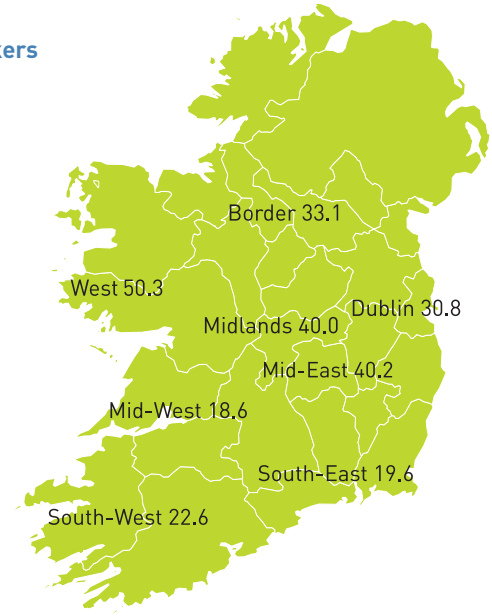
Estimated injury and illness rates are highest in the Western region. In 2003, the Western region also had the highest illness rate and the second highest injury rate. The Mid-West region has the lowest injury and illness rates.

Figure 47: Rate of illness and injury by region 2004 (CSO)

		INJURY		ILLNESS	
REGION	TOTAL EMPLOYED	NUMBER	RATE PER 1000	NUMBER	RATE PER 1000
Border	196600	6500	33.1	9000	45.8
Midlands	109900	4400	40.0	2800	25.5
West	183500	7400	50.3	8600	46.9
Dubiln	567300	17500	30.8	15900	28.0
Mid-East	216200	8700	40.2	7200	33.3
Mid-West	161000	3000	18.6	2100	13.0
South-East	198900	3900	19.6	5600	28.2
South-West	274900	6200	22.6	8600	31.3

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 NR, Waterford, Wexford
South-West	Cork, Kerry
West	Galway, Mayo, Roscommon

Figure 48: Rate of injury per 1,000 workers by region 2004(CSO)



RISK ALERTS

1. Persistent under-reporting from smaller organisations

- Larger organisations report more incidents - over 65% of all incidents are reported from organisations with more than 250 employees
- Relatively few incidents are reported from smaller organisations – only 13% of incidents are reported from organisations with less than 50 employees and only 3% are reported from micro-businesses (1-9 employees).
- The results for 'work environment' correspond with this conclusion – 33% of incidents are reported from 'factory, industrial site, warehouse' - environments which tend to characterise larger organisations. By contrast, work environments that characterise smaller organisations such as 'private home or related area' and 'farm, fish farm, forest or park' report only 2% and 1% of incidents respectively.
- The low levels of reporting from smaller organisations are a cause for concern when we consider that the Agricultural sector has the highest fatality rate and the third highest injury rate (based on CSO injury estimates for 2004).

2. Specific items associated with injuries in different sectors

- 'Humans' are most often associated with injuries in the Health and social work sector (34%) and the Public administration and defence sector (29%)
- Animals are associated with over 30% of all injuries reported from the Agricultural sector
- The equipment used in the Hotel and restaurant sector seems to pose significant risks – 10% of all incidents involve processing machines and 9% involve 'knife, cleavers, cutters'.

Section 3:
Fatal Injury Statistics

This section presents details of all fatal injuries in the workplace in 2005.

The statistics are presented in the following sequence:

- Numbers and rates of fatality by economic sector
- Victim information – employment status / age / nationality
- Incident information– incident type

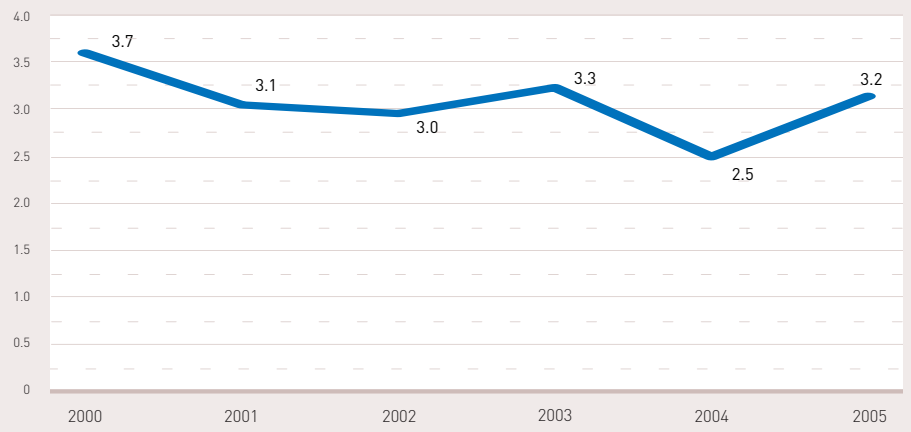
Note that some statistics are based on the number of worker fatalities while others are calculated using the total number of work-related fatalities (including non-workers and members of the public). The basis for the calculation is indicated in each case.

In addition to the workplace fatalities presented here are road traffic fatalities that have not been reported to the Authority. Recent information on road traffic fatalities is available from the National Roads Authority at: **www.nra.ie/RoadSafety**

3.1 Number and rate of fatalities by economic sector

There were 73 work-related fatalities in 2005, of which 64 were worker fatalities. This represents a rise in the worker fatality rate in 2005 to 3.2 fatalities per 100,000 workers. This is an increase of over 25% on the fatality rate of 2.5 per 100,000 workers in 2004. However, it is similar to fatality rates in the period 2001 to 2003 which indicated approximately 3 fatalities per 100,000 workers.

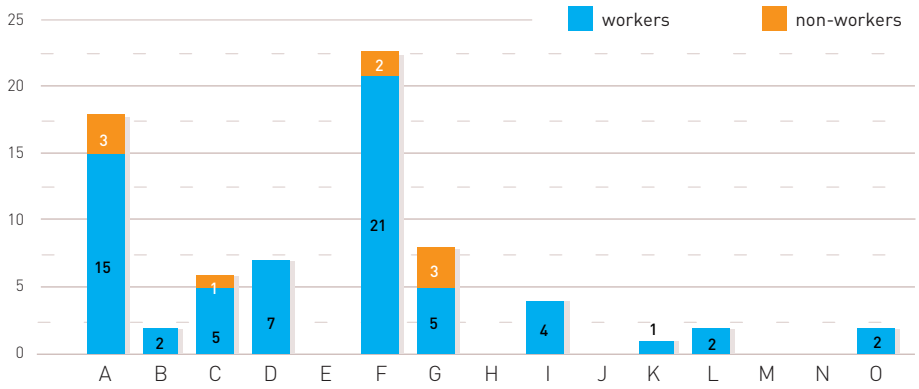
Figure 49: Rate of worker fatalities 2000-2005 (HSA)



Note: The fatality rate is calculated using the numbers in employment aged over 15 at Q4 of the reference year as reported by the CSO (i.e. 1,980,600 at Q4, 2005).

The number of fatal incidents in each economic sector in 2005 is presented in Figure 50. The graph distinguishes worker / non-worker fatalities.

Figure 50: **Total number of fatalities by economic sector – worker and non-worker 2005 (HSA)**



Sector Key:

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

The highest number of fatal incidents occurred in the Construction sector (23 fatalities of which 21 worker fatalities), followed by the Agriculture sector (18 fatalities of which 15 worker fatalities). Details of the work environment in which the fatalities occurred (see Appendix 1) show that 1 fatality categorised in the Transport and Storage sector (I) occurred on a construction site.

Figure 51 provides a breakdown of the fatality rate by economic sector. The Agricultural and Construction sectors have the highest rate of fatalities - in 2005 there were 14.7 fatalities per 100,000 workers in the Agricultural sector and 8.3 fatalities per 100,000 workers in the Construction sector, compared to the average for all sectors of 3.2 fatalities per 100,000 workers.

Figure 51: Rate of worker fatalities by economic sector (HSA)

ECONOMIC SECTOR	WORKER					NON-WORKER	TOTAL
	EMPLOYEE	SELF EMPLOYED	FAMILY WORKER	TOTAL	RATE PER 100,000		
A - B	2	12	3	17	14.7	3	20
C – E	12	0	0	12	4.2	1	13
F	18	2	1	21	8.3	2	23
G	3	2	0	5	1.8	3	8
H	0	0	0	0	0.0	0	0
I	1	3	0	4	3.4	0	4
J – K	1	0	0	1	0.4	0	1
L	2	0	0	2	2.0	0	2
M	0	0	0	0	0.0	0	0
N	0	0	0	0	0.0	0	0
O	2	0	0	2	1.6	0	2
Total	**41**	**19**	**4**	**64**	**3.2**	**9**	**73**

Note: Rate is calculated on CSO estimates of numbers employed in each sector at Q4,2005

Figure 52 and 53 compare the number and rate of fatalities in each economic sector in 2005 with the figures for 2003 and 2004. Figure 52 indicates that the pattern in the number of fatalities for 2005 is largely consistent with 2003 and 2004 and with the total figure for 2003-2005 which shows that the Construction sector has the highest number of fatalities (59) followed by the Agricultural sector (51 fatalities).

Figure 52: Total number of fatalities (worker and non-worker) by economic sector 2003-2005 (HSA)

ECONOMIC SECTOR	NUMBER OF FATALITIES			TOTAL IN SECTOR
	2003	2004	2005	
A - Agriculture, hunting and forestry	20	13	18	51
B – Fishing	0	3	2	5
C – Mining and quarrying	1	0	6	7
D – Manufacturing	7	3	7	17
E – Electricity / gas / water	2	0	0	2
F – Construction	20	16	23	59
G – Wholesale/retail trade; repair of goods	4	4	8	16
H – Hotels and restaurants	0	0	0	0
I – Transport, storage and communication	9	6	4	19
J – Financial intermediation	0	1	0	1
K – Real estate, renting, business	0	0	1	1
L - Public Admin / Defence	1	0	2	3
M – Education	0	1	0	1
N – Health / social work	0	1	0	1
O – Other community, social and personal services	4	2	2	8
Total	**68**	**50**	**73**	**191**

Although the number of fatalities tends to be higher in the Construction sector, Figure 53 below shows that it is the Agricultural sector that consistently has the highest rate of worker fatalities from 2003 to 2005.

Figure 53: Worker fatality rate by economic sector 2003-2005 (HSA)

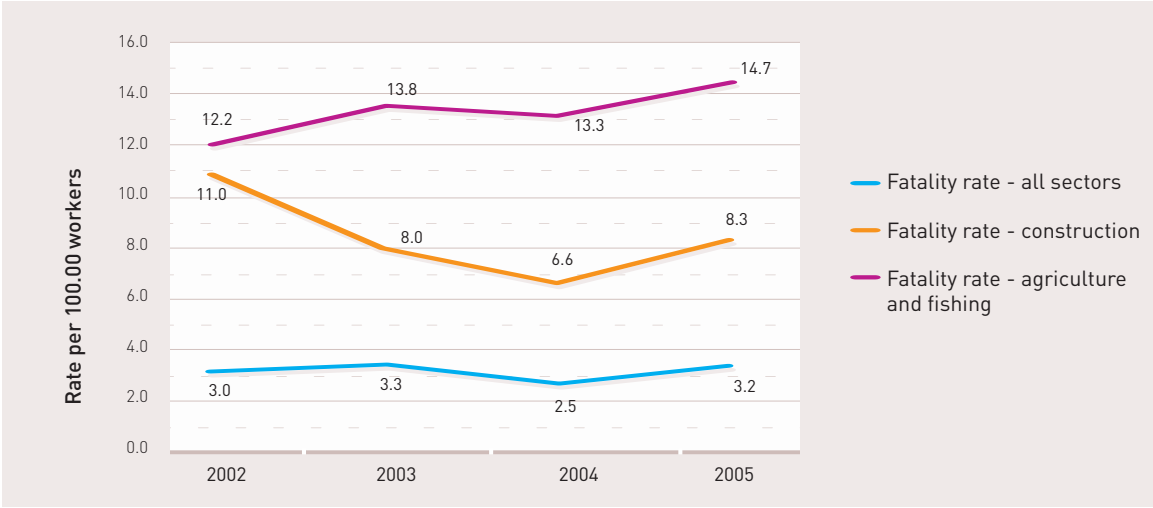
ECONOMIC SECTOR	RATE OF WORKER FATALITIES		
	2003	2004	2005
A - B	13.8	13.3	14.7
C - E	3.4	1.0	4.2
F	8.0	6.6	8.3
G	1.6	1.5	1.8
H	0.0	0.0	0.0
I	7.0	5.2	3.4
J - K	0.0	0.4	0.4
L	1.1	0.0	2.0
M	0.0	0.8	0.0
N	0.0	0.5	0.0
O	3.8	1.7	1.6
Total	**3.3**	**2.5**	**3.2**

Note 1: Figures 51-53 combine sectors A-B, C-E and J-K – this is because estimates for these sectors are combined by the CSO. However, based on agricultural fatalities only (n = 15), the rate is still the highest in any sector (13 per 100,000 workers).

Note 2: The rates of fatality in Figure 53 are calculated using the numbers employed in each sector in Q4 of the reference year as reported by the CSO.

Figure 54 compares the overall fatality rate to the fatality rates in the Agriculture and fishing (A-B) and Construction sectors (F). It is evident from this graph that these sectors have significantly higher rates of fatalities than other sectors. There is evidence of a general upward trend in the agricultural fatality rate and a general downward trend in the construction fatality rate, although the rate has increased in 2005.

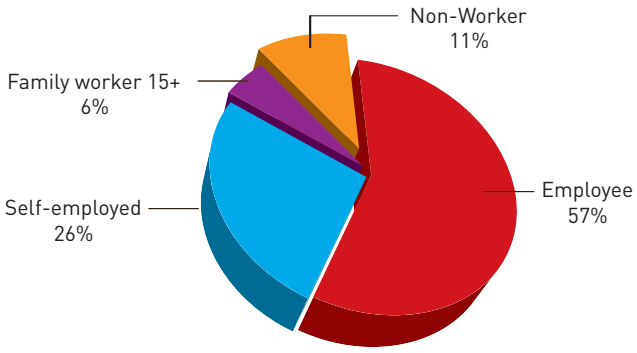
Figure 54. **Comparison of overall fatality rate with fatality rates in agriculture and fishing/construction sectors 2002-2005**



3.2 Fatal Victim Statistics

Figure 55 below illustrates the percentage breakdown by employment status of the fatal injury victims in 2005.

Figure 55: **Percentage fatal injuries by employment status 2005 (HSA)**



A total of 64 workers and 9 non-workers were killed in workplace incidents in 2005. Of the workers:

- 41 were employees
- 19 were self-employed (working in the agricultural, construction, wholesale and retail trade, and transport and storage sectors)
- 4 were family workers (3 in agriculture and 1 in construction).

The age profile of the fatal incident victims is presented in Figures 56 and 57. The highest numbers of fatal incidents occur in the 45–49 age group (11 fatalities), the 65+ age group (11 fatalities) and the 55-59 age group (10 fatalities). Note that 8 of the 11 victims in the 65+ age group were working in the Agricultural sector.

Figure 56: **Number of fatalities (worker and non-worker) by economic sector and age band 2005 (HSA)**

	ECONOMIC SECTOR										
AGE	A	B	C	D	F	G	I	K	L	O	TOTAL
Age 0-4	0	0	0	0	0	0	0	0	0	0	0
Age 5-9	0	0	1	0	0	0	0	0	0	0	1
Age 10-14	2	0	0	0	0	0	0	0	0	0	2
Age 15-19	0	0	0	0	1	0	0	0	0	0	1
Age 20-24	0	0	0	2	2	0	0	0	1	0	5
Age 25-29	1	0	0	0	3	1	0	0	0	0	5
Age 30-34	0	0	1	2	3	1	1	0	0	0	8
Age 35-39	0	1	0	0	0	0	0	0	0	0	1
Age 40-44	2	0	0	1	1	0	2	1	0	1	8
Age 45-49	1	1	2	1	5	1	0	0	0	0	11
Age 50-54	0	0	0	0	3	1	0	0	0	0	4
Age 55-59	2	0	2	0	2	2	1	0	1	0	10
Age 60-64	2	0	0	0	2	1	0	0	0	1	6
Age 65+	8	0	0	1	1	1	0	0	0	0	11
Total	**18**	**2**	**6**	**7**	**23**	**8**	**4**	**1**	**2**	**2**	**73**

Figure 57: Number of fatalities (worker and non-worker) by age group 2005 (HSA)

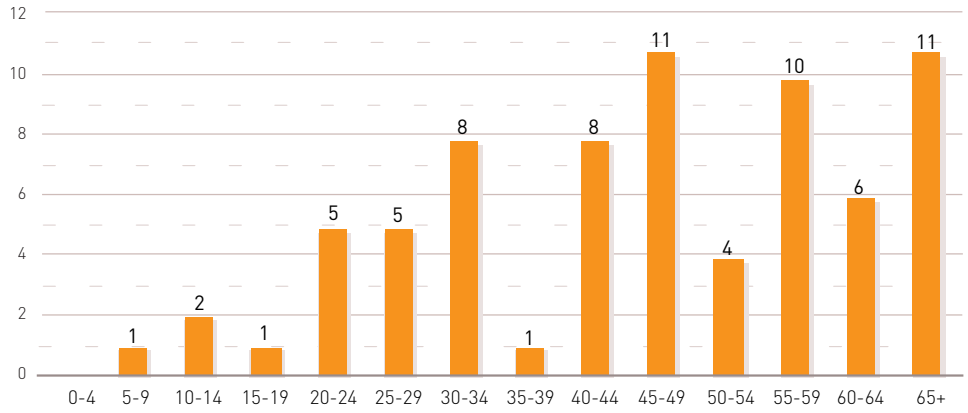


Figure 58 provides a breakdown of the number of victims by their nationality (workers only). Five of the 9 non-Irish national fatalities occurred in the construction sector, 2 were in manufacturing, 1 in wholesale and retail trade and 1 in other community, social and personal services.

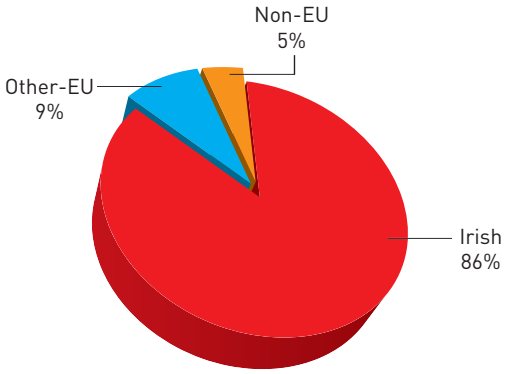
Figure 58: Number of worker fatalities by nationality by economic sector 2005 (HSA)

ECONOMIC SECTOR	NATIONALITY (WORKERS ONLY)		
	IRISH	OTHER EU	NON-EU
A - Agriculture, hunting and forestry	15	0	0
B – Fishing	2	0	0
C – Mining and quarrying	5	0	0
D – Manufacturing	5	2	0
E – Electricity / gas / water	0	0	0
F – Construction	16	3	2
G – Wholesale/retail trade; repair of goods	4	0	1
H – Hotels and restaurants	0	0	0
I – Transport, storage and communication	4	0	0
J – Financial intermediation	0	0	0
K – Real estate, renting, business	1	0	0
L - Public Admin / Defence	2	0	0
M – Education	0	0	0
N – Health / social work	0	0	0
O – Other community, social and personal services	1	1	0
Total	**55**	**6**	**3**

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 59 below shows that 86% of fatal injury victims were Irish, 9% were from other EU countries and 5% were from non-EU countries – a total of 14% of non-Irish worker fatalities. Note that the Irish Labour Market Review 2005 (FÁS, 2006) estimates that non-Irish national workers constitute 8% of the Irish labour force.

Figure 59: **Percentage worker fatalities by nationality 2005 (HSA)**



3.3 Fatal Incident Statistics

The type of fatal incident is presented in Figure 60. Most fatal incidents are due to victims being trapped or crushed by an object or machinery (14 fatalities), injuries from falling/moving/flying objects (12 fatalities), falls from height (10 fatalities) and injuries by vehicles in the workplace (9 fatalities). These four incident types account for nearly 63% of fatalities in 2005.

Most of the trapped / crushed fatalities occurred in the Mining and Quarrying (4 fatalities), Agriculture (3 fatalities), and Construction (3 fatalities) sectors Most of the falls from height occurred in the Construction sector (6 out of 10 falls). All 4 of the fatalities caused by contact with electricity also occurred in the Construction sector.

Figure 60: Number of fatalities (worker and non-worker) by incident type 2005 (HSA)

	ECONOMIC SECTOR										
INCIDENT TYPE	**A**	**B**	**C**	**D**	**F**	**G**	**I**	**K**	**L**	**O**	**TOTAL**
Trapped or crushed by an object or machinery	3	0	4	1	3	1	1	0	0	1	14
Struck by falling, moving or flying object	3	0	0	3	3	2	1	0	0	0	12
Fall from a height	0	0	1	0	6	1	0	1	0	1	10
Injured by a vehicle or transport: in the workplace	3	0	0	1	2	1	1	0	1	0	9
Drowning or burial	2	2	0	1	2	0	0	0	0	0	7
Injured by animal	4	0	0	1	0	0	0	0	0	0	5
Contact with electricity	0	0	0	0	4	0	0	0	0	0	4
Injured by a vehicle or transport: in a public place	0	0	0	0	1	0	0	0	1	0	2
Suffocation	1	0	0	0	0	0	1	0	0	0	2
Slips, trips or falls on the same level	1	0	0	0	0	1	0	0	0	0	2
Contact with chemical or biological substance	0	0	0	0	0	1	0	0	0	0	1
Physical stress or strain to the body	0	0	0	0	0	1	0	0	0	0	1
Other	1	0	1	0	2	0	0	0	0	0	4
Total	**18**	**2**	**6**	**7**	**23**	**8**	**4**	**1**	**2**	**2**	**73**

3.4 RISK ALERTS

1. Increasing number and rate of worker fatalities in 2005

- The rate of worker fatality rose to 3.2 per 100,000 workers in 2005 from a rate of 2.5 fatalities per 100,000 workers in 2004. However, the rate in 2005 is in line with the average rate for the period 2001 to 2003 which indicated approximately 3 fatalities per 100,000 workers each year.
- Within sectors, Agriculture and Construction are both showing increases in the fatality rate since 2004.
- Sectors C-E shows a particularly high increase in the fatality rate (from 1.0 per 100,000 workers in 2004 to 4.2 per 100,000 workers in 2005).

2. High number and rate of fatalities in Mining and Quarrying sector

- There were 5 worker fatalities (6 fatalities including 1 non-worker) in the Mining and Quarrying sector in 2005, compared to 0 fatalities in this sector in 2004 and 1 in 2003. It is the number of fatal incidents in Mining and Quarrying that is driving the increase in the fatality rate in sectors C-E. The Mining and Quarrying fatalities is also influencing the overall rise in the fatality rate for 2005 – if we remove the 5 Mining and Quarrying worker fatalities from the calculation, the overall fatality rate is 3.0 per 100,000 workers.

3. Non-Irish national fatality rate

- The number of fatal incidents involving non-Irish national workers (9 out of 64 or 14% of all worker fatalities) is out of proportion with the number of non-Irish nationals in the workforce – currently estimated by FÁS at 8% (FÁS 2006).
- Non-Irish national fatalities appear to be concentrated in the Construction sector (5 of the 9 non-Irish national worker fatalities). This risk alert is explored in detail in the Special Topic on non-Irish national workers in Section 4 of the Summary.

4. Elderly workers in the Agricultural sector

- Eleven of the 73 fatality victims in 2005 (15%) were aged over 65. This figure is of particular concern given that the 65+ age group represents only 2% of the working population. CSO figures for Q2, 2005 estimate that there were 38,000 workers in the 65+ age group out of a total working population of 1,929,200.
- Eight of the 11 fatalities involving victims aged over 65 were in the Agricultural sector The issue of elderly workers in Agriculture is persisting – it featured as a risk alert in the Authority's Statistics Summary in 2004, when 7 of the 9 fatality victims aged over 65 were working in the Agricultural sector.

5. Recurring Fatal Incident Types

- Some economic sectors are characterised by high numbers of specific incident types:
- 4 of the 17 fatalities in the Agricultural sector were due to 'injuries by animals'.
- 4 of the 6 fatalities in the Mining and Quarrying sector were as a result of being 'trapped or crushed by an object or machinery'.
- 6 of the 23 fatalities in the Construction sector were due to 'falls from heights' and 4 were due to 'contact with electricity'.

Section 4: Special Topics

Special Topic 4.1: Non-Irish national Workers

This section provides a detailed examination of the Authority's statistics on non-Irish national workers, and examines these statistics in the wider context of changes in the Irish labour force.

Non-Irish nationals in the Irish Workforce

The FÁS Labour Market Review for 2005 (FÁS, 2006) notes the reversal in net migration trends in Ireland over the past twenty years – 'from an outflow of over 40,000 in 1988 and 1989 to an inflow averaging almost 40,000 over the last 5 years' (p.15). The Labour Market Review estimates that Non-Irish national workers now constitute 8% of the Irish labour force – one of the highest percentages in the EU (p.4). A recent report by AIB (AIB Global Treasury Economic Research, 2006), based on data collected by the CSO, also presents a figure of 8% or 159,300 Non-Irish national employees out of a total of 1,989,800 at Q3, 2005. The AIB (2006) forecast that the growth in Non-Irish national workers in the Irish economy is expected to continue.

The figures in the AIB report indicate that non-Irish nationals work in a wide range of economic sectors – see Figure 61 below. The highest percentage of non-Irish national workers is in the Hotel and restaurant sector (19.2%). Non-Irish nationals represent 9.4% of the Manufacturing workforce and 9.0% of the Construction workforce (p.4).

Figure 61: Levels of non-Irish nationals in Irish employment by sector in Q3, 2005

ECONOMIC SECTOR	TOTAL	IRISH NATIONALS		NON-IRISH NATIONALS	
		NUMBER	%	NUMBER	%
A – Agriculture, forestry and fishing	119,600	114,800	96.0	4,800	4.0
C – E Other production industries	294,600	266,900	90.6	27,800	9.4
F – Construction	252,100	229,600	91.0	22,600	9.0
G – Wholesale/retail trade; repair of goods	286,600	267,800	93.4	18,900	6.6
H – Hotels and restaurants	120,400	97,200	80.8	23,100	19.2
I – Transport, storage and communication	118,500	110,600	93.3	7,900	6.7
J – K Financial and other business services	263,300	241,800	91.8	21,500	8.2
L - Public Admin / Defence	101,000	99,500	98.5	1,500	1.5
M – Education	119,800	114,200	95.3	5,600	4.7
N – Health	191,500	175,900	91.9	15,600	8.1
O – Other Services	122,400	112,000	91.9	9,900	8.1
Total Employment	**1,989,800**	**1,830,600**	**92.0**	**159,300**	**8.0**

Adapted from AIB report, 2006, p.2

Non-Irish national fatalities

Of the 64 worker fatalities in 2005, 9 of the victims were classified as 'other EU' or 'non-EU' – see Figure 62. Data from the CSO allows us to compare rates of fatality for Irish national and Non-Irish national workers. With 55 fatalities in 2005, the rate of Irish worker fatality is 3.0 per 100,000 workers (based on population of 1,830,600). This compares to a non-Irish national worker fatality rate of 5.6 per 100,000 workers (based on population of 159,300).

Of the 9 non-Irish national fatalities, 5 occurred in the construction sector. The rate of Irish worker fatality in the construction sector is 7.0 per 100,000 workers compared to a rate of 22.1 per 100,000 non-Irish national workers.

Figure 62: Worker fatalities by nationality 2005 (HSA)

ECONOMIC SECTOR	NATIONALITY (WORKERS ONLY)		
	IRISH	OTHER EU	NON-EU
A - Agriculture, hunting and forestry	15	0	0
B – Fishing	2	0	0
C – Mining and quarrying	5	0	0
D – Manufacturing	5	2	0
E – Electricity / gas / water	0	0	0
F – Construction	16	3	2
G – Wholesale/retail trade; repair of goods	4	0	1
H – Hotels and restaurants	0	0	0
I – Transport, storage and communication	4	0	0
J – Financial intermediation	0	0	0
K – Real estate, renting, business	1	0	0
L - Public Admin / Defence	2	0	0
M – Education	0	0	0
N – Health / social work	0	0	0
O – Other community, social and personal services	1	1	0
Total	**55**	**6**	**3**

Non-Irish national injuries

The figures for non-Irish national injuries are based on the Authority's database of reported incidents – which shows that the percentage of reported injuries suffered by non-Irish national workers has increased steadily over the past 5 years. In 2000, non-Irish nationals represented only 1% of all reported injuries compared to 9% of all injuries reported to the Authority in 2005.

Figure 63. Reported injuries by nationality 2000-2005 (HSA)

NATIONALITY STATUS	2000	2001	2002	2003	2004	2005
Irish	8829	8947	7801	7716	7634	7017
Other EU	73	143	140	183	263	487
Non-EU	29	67	100	134	193	238
% reported Non-Irish national injuries	1.1	2.3	2.9	4.0	5.7	9.4

Figure 64 below shows how reported injuries to non-Irish nationals were distributed across the economic sectors in 2005. The construction sector reported 35% of non-Irish national injuries, followed by the manufacturing sector which reported 25% of all non-Irish national injuries. However, this distribution is largely influenced by general reporting patterns in the sectors – the construction and manufacturing sectors consistently have higher reporting rates than other sectors, regardless of the nationality of the victim.

Figure 64: Reported non-Irish national injuries by economic sector 2005 (HSA)

ECONOMIC SECTOR	% REPORTED NON-IRISH NATIONAL INJURY	NUMBER REPORTED NON-IRISH NATIONAL INJURY
A - Agriculture, hunting and forestry	1.9	14
B – Fishing	0.1	1
C – Mining and quarrying	0.6	4
D – Manufacturing	25.0	181
E – Electricity / gas / water	0.3	2
F – Construction	34.5	250
G – Wholesale/retail trade; repair of goods	7.4	54
H – Hotels and restaurants	4.8	35
I – Transport, storage and communication	8.0	58
J – Financial intermediation	0.6	4
K – Real estate, renting, business	4.8	35
L - Public Admin / Defence	1.7	12
M – Education	1.1	8
N – Health / social work	7.9	57
O – Other community, social and personal services	1.2	9
Total	**100**	**724**

Figure 65 shows that the majority of reported non-Irish national injuries occurred in 'factory, industrial site or warehouse' environments (36%) and 'construction site, opencast quarry or mine' environments (31%).

Figure 65: Reported non-Irish national injuries by work environment 2005 (HSA)

ECONOMIC SECTOR	% REPORTED NON-IRISH NATIONAL INJURIES	NUMBER REPORTED NON-IRISH NATIONAL INJURIES
Factory, industrial site, warehouse	36.4	264
Construction site, opencast quarry, mine	30.8	223
Office, school, shop, restaurant, hotel etc	11.9	86
Healthcare establishment	9.2	67
Transport related area or road	4.8	35
Farm, fish farm, forest, park	1.2	9
Private home or related area	0.8	6
In the air	0.4	3
Sports area	0.4	3
Underground (excl. construction)	0.3	2
On/over water	0.1	1
Other	3.6	26
Total	**100**	**725**

Commentary

The issue of work-related injury and fatality in the non-Irish national workforce urgently needs to be tackled. Results indicate that the overall fatality rate for non-Irish national workers is higher than for Irish national workers, with non-Irish national workers in the construction sector at particular risk of fatal injury. Data from the Authority's reporting system suggests that non-Irish nationals also represent an increasing proportion of reported non-fatal injuries.

It is important to distinguish between non-Irish national and non-English speaking workers. Specific data is not available but figures from the CSO suggest that many non-Irish national workers do not have English as a first language, with 26,000 or 38% of in-migrants in 2005 coming from the EU10 (see Figure 66).

Figure 66: In-migration by nationality 2005 (CSO)

	Irish	UK	Other EU15	EU10	USA	Other
2005	11,169	11,686	11,311	11,995	12,050	12,280

Source: CSO, Population and Migration Estimates April 2005. Adapted from FAS Labour Market Review 2005, p.16

The AIB report (2006) presents the percentage of workers entering the Irish workforce from specific Accession states – since the enlargement of the EU the majority of PPS numbers have been issued to people from Poland (54%), followed by Lithuania (18%), Latvia (9%) and Slovakia (8%). This data should be used to inform and direct the Authority's initiatives to improve health and safety among non-Irish national workers.

4.2 Special Topic – Young Workers

The European Agency for Safety and Health at Work is highlighting the issue of young people in the workplace for 2006. The Sure Start Campaign (http://ew2006.osha.eu.int/about) aims to promote a safe and healthy start for young people in their working lives. European Safety Week takes place in October 2006, when member states will engage in activities in schools, colleges and the wider education community, and raise the issue among the relevant policy makers in the education field.

The Safe Start Campaign has several targets:

- Young workers – promoting awareness of occupational health and safety risks and what to do when starting work
- Employers – promoting the provision of training and supervision, suitable work allocation and what to do when a young person starts work
- The Education community – promoting risk awareness and prevention as an integral activity for schools and colleges, training providers and education authorities

Statistics at the European level suggest that young workers (aged 18-24) are 50% more likely to suffer a workplace accident than other workers. The European Agency suggest that the higher accident rate among young workers may be due to several factors including lack of training, experience and awareness of OSH; their immaturity, both physically and mentally; and, the types of jobs and employment situations in which they are placed.

Eurostat reports that risk behaviour in general is influenced by age and work experience, and that this is reflected in the rate of accidents at work. Therefore, risk awareness is a key issue for ensuring the health and safety of younger workers. A recent survey commissioned by the Health and Safety Authority found that respondents with less than five year's experience in their job were less risk aware than workers who had been in the post for more than five years (report on 'Communication with Micro Business' to be published on Authority's website in 2006). This suggests that risk perception and awareness increases with experience. Therefore, young workers starting new jobs may not appreciate the risk factors in their workplace, and may not be in a position to take appropriate action if they do.

The Authority has planned a range of special events and activities to promote the key messages of the Sure Start Campaign in the Irish workplace. The Irish Sure Start Campaign will launch in June 2006 with an advertising campaign, newspaper supplement and a Good Practice Award scheme. A series of dedicated events are planned for European Week for Safety and Health at Work (23-37 October 2006).

Young workers in the Irish labour force

The Central Statistics Office estimate that there are over 300,000 workers aged 15-24 employed in the Irish workforce in Q4, 2005. Figure 67 indicates the distribution of young workers (male and female) across the economic sectors. Note that the CSO collect age data using the age bands 15-19 and 20-24.

Figure 67: Persons aged 15-24 in employment by gender and economic sector, Q4, 2005 (CSO)

INCIDENT TYPE	A-B	C-E	F	G	H	I	J-K	L	M	N	O-Q	TOTAL
Age 15-19	1800	6400	13900	24700	11600	1200	3000	300	600	1900	5800	71200
Male	1600	5000	13800	9700	4300	800	1500	200	100	300	1900	39200
Female	200	1400	100	15000	7300	400	1500	100	500	1600	3900	32000
Age 20-24	4100	32400	42500	51000	22800	9000	32800	6100	7400	14900	17000	239800
Male	3600	22400	41500	21900	8800	5100	12200	3000	1800	1600	5100	127000
Female	500	10000	1000	29100	14000	3900	20600	3100	5600	13300	11900	112800
Total	**5900**	**38800**	**56400**	**75700**	**34400**	**10200**	**35800**	**6400**	**8000**	**16800**	**22800**	**311000**

Source: Database Direct (www.cso.ie)

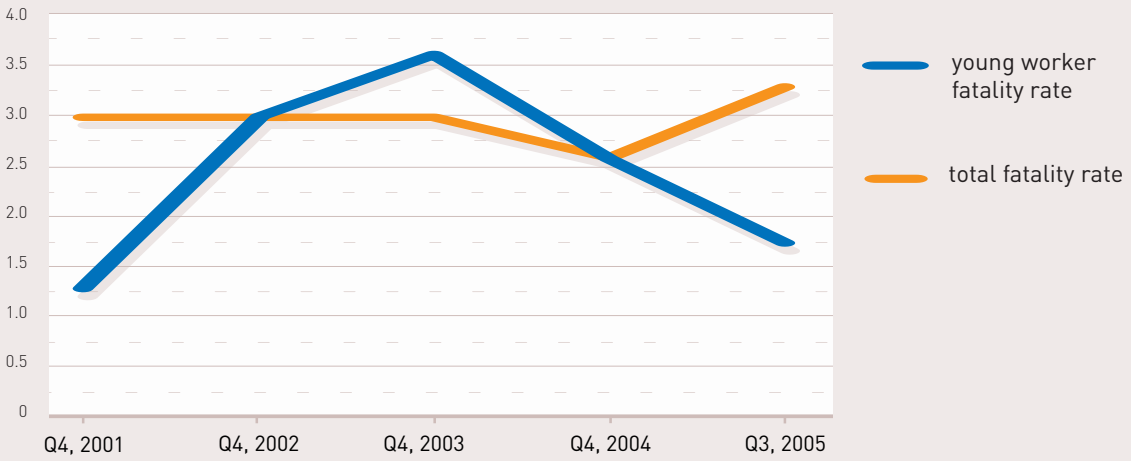
There are many more workers in the 20-24 age band than the 15-19 age band across all economic sectors. The Wholesale and retail trade sector (G) has the highest number of young workers (75,700), followed by the Construction sector (F) and the Production industries (C-E).

Overall, there are more male workers than female workers within each age band. However, within sectors, there are more young female workers in the Wholesale and retail trade sector (G), the Hotel and restaurant sector, the Financial services sector (J-K), the Education sector (M) and the Health sector (N).

Young worker fatalities

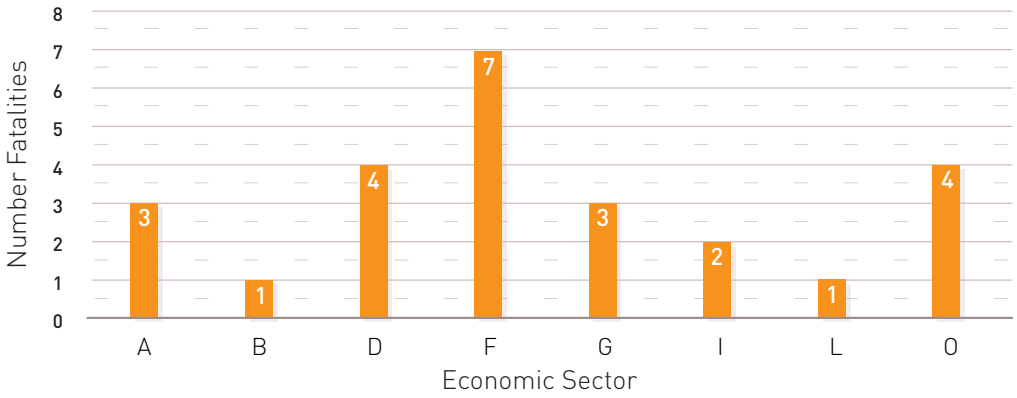
Figure 68 below compares the rate of young worker fatality since 2001 with the worker fatality rate for all age groups. Despite an increase in the overall fatality rate in 2005, the young worker fatality rate decreased from 2.6 per 100,000 workers in 2004 to 1.8 per 100,000 workers in 2005.

Figure 68: Rate of young worker fatality compared to overall fatality rate 2001-2005 (HSA)



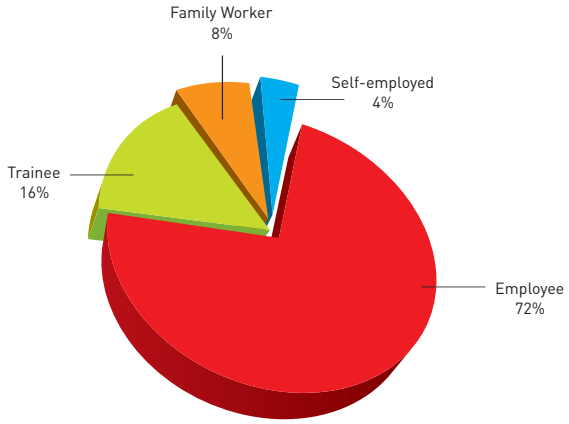
There were 25 fatalities in the 15-24 age group in the period 2003-2005 - 11 fatalities in 2003, 8 fatalities in 2004 and 6 fatalities recorded in 2005. The economic sectors in which the 25 fatalities occurred are shown in Figure 69. The construction sector (F) has the highest number, with 7 fatalities over the three years.

Figure 69: Number young worker fatalities by economic sector 2003-2005 (HSA)



The employment status of the fatal injury victims aged 15-24 is presented in Figure 70. Note that 16% of the victims were working as trainees when the fatal accident occurred.

Figure 70: Number fatalities in 15-24 age range by employment status 2003-2005 (HSA)



Young worker injuries

CSO estimates of the injury and illness rates (per 1000 workers) by age group are presented in Figure 71 - these figures relate to 2004. The rate of injury in the 15-19 is extremely high at 111 injuries per 1000 workers aged 15-19. This rate is more than three times higher than the injury rate in any other age group. The 20-24 age group has the second highest injury rate at 36 injuries per 1000 workers. However, the CSO warn that these rates may be unreliable as they are based on a smaller number of cases compared to rates in other age groups.

Figure 71: Rates of injury and illness by age group 2004 (CSO)

AGE RANGE	RATE OF INJURY	RATE OF ILLNESS
15-19	111.1	44.4
20-24	35.7	10.8
25-34	28.9	22.1
35-44	23.8	33.6
45-54	29.5	39.5
55-64	18.6	51.9
65+	14.0	53.4
Total	**30.2**	**31.3**

The database of injuries reported to the Authority in 2005 was used as the basis for Figure 72 below. The graph shows the relative percentage of reported injuries to 15-24 year olds in each economic sector. The Hotel and restaurant sector (H) has the highest percentage of reported injuries in this age group (34.5%), followed by the Agricultural sector (31% of all reported injuries) and the Wholesale and retail trade sector (G) (29% of all reported injuries). A similar analysis of the injury data for 2003 and 2004 indicates that the Hotel and restaurant sector (H) consistently has the highest proportion of reported injuries to 15-24 year olds.

Figure 72: **Percentage reported injuries in 15-24 age range by economic sector 2005 (HSA)**

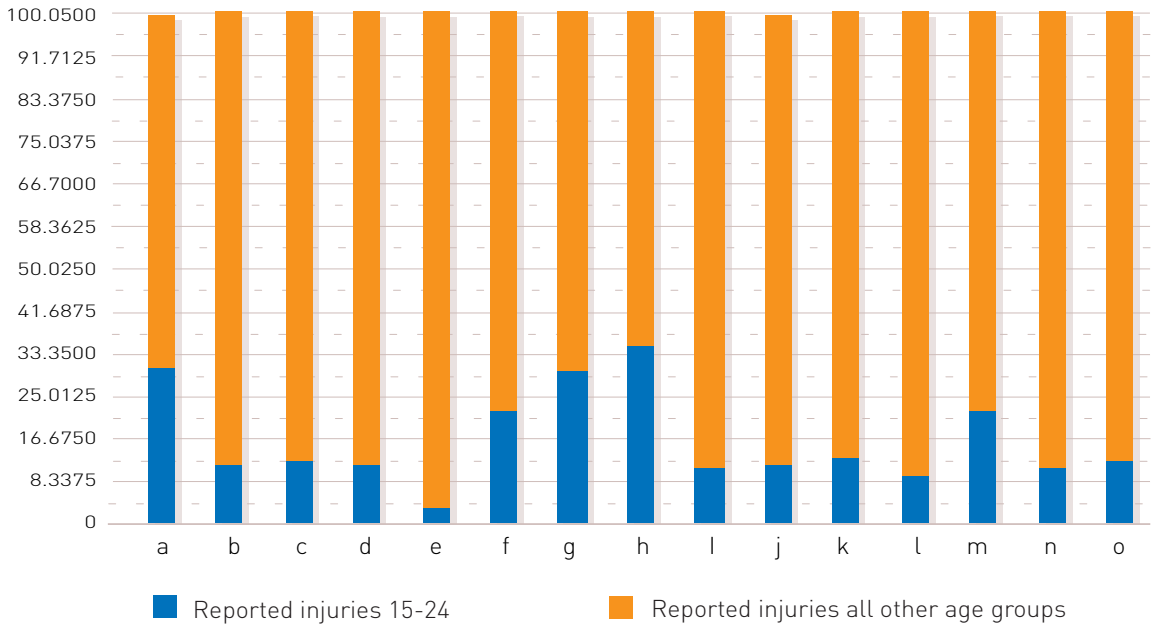


Figure 19 in section 2.2 of the report breaks this result down further. It shows that the Wholesale and retail trade sector has the highest percentage of injuries in the 15-19 age group compared to other sectors – 8.8% of all reported injuries are in this age group compared to an average of 2.7% across all sectors. This result suggests that particular attention should be paid to ensuring the health and safety of very young workers in the Wholesale and retail trade sector.

The Hotel and restaurant sector has the highest proportion of injuries in the 20-24 age group at 28%, closely followed by the Agricultural sector at 27%. This compares to an average of 12.6% injuries in the 20-24 age group across all sectors.

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Appendix 1 - Summary of Fatal Accidents in 2005

Total Fatalities in 2005 = 73

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

Date	Event	Employment Status	Occupational Group	Work Environment	County	Age
11/01/05	The deceased was caught under a trailer wheel as he assisted his son who was reversing a tractor and feeder out of farm buildings.	Self-employed	Managers of small Enterprises	Farm, Fish Farm, Forest or Park	Louth	74
24/01/05	The deceased was struck as she walked behind a reversing tractor with beet chopper attached.	Non-worker	Non-worker	Farm, Fish Farm, Forest Farm, Forest	Cork	82
04/02/05	The victim was trapped under the wheel of a tractor which rolled down a slight incline.	Self-employed	Managers of small Enterprises	Farm, Fish Farm, Forest or Park	Cavan	59
12/03/05	The deceased was taking a calf from a cow when the animal attacked, causing the deceased to fall and strike his head.	Self-employed	Managers of small Enterprises	Farm, Fish Farm, Forest or Park	Mayo	76
24/03/05	The deceased was attacked by a charolais bull.	Self-employed	Managers of Small Enterprises	Farm, Fish Farm, Forest or Park	Wexford	66
28/03/05	The deceased was drowned in an open quarry pit.	Family Worker	Metal, machinery and related trades workers	Farm, Fish Farm, Forest or Park	Clare	41
28/03/05	The deceased was drowned in an open quarry pit.	Non-worker	Non-worker	Farm, Fish Farm, Forest or park	Clare	10
01/06/05	The deceased was caught under the wheel of a tractor.	Employee	Crop and animal producers	Farm, Fish Farm, Forest or Park	Cork	64
07/06/05	The deceased was caught under the wheel of a tractor.	Self-employed	Managers of small Enterprises	Farm, fish Farm, Forest or Park	Kerry	47
04/07/05	The deceased was observing the loading of cows on to a trailer. One animal became agitated and pushed the deceased against a gate pillar.	Self-employed	Managers of Small Enterprises	Farm, Fish Farm, Forest or Park	Longford	78
08/08/05	The deceased collapsed in the trailer of a tipper truck due to hydrogen sulphide poisoning.	Non-worker	Non-worker	Farm, Fish Farm, Forest or Park	Cavan	14

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

Date	Event	Employment Status	Occupational Group	Work Environment	County	Age
16/08/05	The deceased was crushed between his moving tractor and a stationary lorry which was delivering materials to his farm.	Family worker	Managers of small Enterprises	Farm, fish farm, forest or park	Louth	69
26/08/05	The deceased lost control of a combine while combining down steep part of hill. The combine became lodged in a dyke and deceased was thrown through lower windscreen into head of combine.	Self-employed	Managers of small Enterprises	Farm, fish farm, forest or park	Meath	62
11/10/05	The deceased slipped and fell while assisting at testing cattle.	Self-employed	Managers of small Enterprises	Farm, fish farm, forest or park	Cavan	42
24/10/05	The deceased drowned in a slurry pit.	Self-employed	Agricultural, fishery and related labourers	Farm, fish farm, forest or park	Donegal	67
19/11/05	The deceased was assisting cutting trees using a chain saw and rope when the tree dislodged striking him on the head.	Self-employed	Agricultural, fishery and related labourer	Private home or related area	Kildare	28
03/12/05	The deceased was kicked in the head by the horse.	Self-employed Enterprises	Managers of small	Farm, fish farm, forest or park	Westmeath	56
16/12/05	A stack of large square bales fell on the deceased.	Family worker producers	Crop and animal	Farm, fish farm, forest or park	Kildare	73

NACE B – FISHING (2 FATALITIES)

Date	Event	Employment Status	Occupational Group	Work Environment	County	Age
29/11/05	The deceased was drowned while working on a vessel laying lobster pots.	Self-employed	Managers of small Enterprises	On/over water (excluding construction)	Wexford	37
29/11/05	The deceased was drowned while working on a vessel laying lobster pots.	Employee	Skilled agricultural and fishery workers	On/over water (excluding construction)	Wexford	46

NACE C - Mining and Quarrying (6 fatalities)

Date	Event	Employment Status	Occupational Group	Work Environment	County	Age
01/03/05	The deceased was buried when a quarry face collapsed.	Employee	Labourers in mining, construction, manufacturing and transport	Construction site, opencast quarry or mine	Donegal	48
03/05/05	The deceased was entrapped in the cross bars of a block-making . machine	Employee	Labourers in mining, construction, manufacturing and transport	Factory, industrial site or warehouse	Wexford	57
10/05/05	The deceased was trapped between a return roller and the belt of a mobile screening unit.	Employee	Labourers in mining, construction, manufacturing and transport	Construction site, opencast quarry or mine	Donegal	31
07/06/05	The deceased became entrapped while carrying out maintenance on a block-making machine.	Employee	Extraction and building trades workers	Construction site, opencast quarry or mine	Tipperary	47
21/06/05	The deceased fell due to ground collapse.	Employee	Stationary plant and related operators	Construction site, opencast quarry or mine	Meath	58
23/08/05	The deceased was crushed when a stockpile collapsed at a quarry.	Non-worker	Non-worker	Construction site, opencast quarry or mine	Donegal	9

NACE D – MANUFACTURING (7 FATALITIES)

Date	Event	Employment Status	Occupational Group	Work Environment	County	Age
17/02/05	The deceased was struck on the head by an air spring while installing an axle beam to a milk tanker.	Employee	Metal, machinery and related trades workers	Factory, industrial site or warehouse	Cavan	53
17/05/05	The deceased was hit by a vehicle in the workplace car park.	Employee	Extraction and building trades workers	Factory, industrial site or warehouse	Dublin	24
01/07/05	The deceased was crushed by a rectangular tubular frame which fell from a forklift truck.	Employee	Metal, machinery and related trades workers	Factory, industrial site or warehouse	Meath	23
01/07/05	The deceased was injured by cattle in a cattle crush at a meat plant.	Employee	Labourers in mining, construction, manufacturing and transport	Factory, industrial site or warehouse	Meath	79

NACE D – MANUFACTURING (7 FATALITIES) - CONTINUED

Date	Event	Employment Status	Occupational Group	Work Environment	County	Age
08/07/05	The deceased was crushed when a steel frame collapsed.	Employee	Metal, machinery and related trades workers	Factory, industrial site or warehouse	Offaly	31
22/08/05	A mould panel fell on the deceased while he was operating a dual cast concrete post manufacturing machine.	Employee	Machine operators and assemblers	Factory, industrial site or warehouse	Dublin	33
22/10/05	The deceased drowned in a waste treatment tank.	Employee	Labourers in mining, construction, manufacturing and transport	Factory, industrial site or warehouse	Tipperary	47

NACE F – CONSTRUCTION (23 FATALITIES)

Date	Event	Employment Status	Occupational Group	Work Environment	County	Age
11/01/05	The deceased was run over by the track of an excavating machine as he walked beside the machine to speak to a colleague.	Employee	Construction and maintenance labourers: roads, dams and similar constructions	Construction site, opencast quarry or mine	Kildare	29
19/01/05	The deceased fell from a height as he climbed down a scaffolding upright on a construction site.	Self-employed	Corporate managers	Construction site, opencast quarry or mine	Cork	52
22/01/05	The deceased was reaching for his gloves, which were drying on the exhaust of a truck. He was crushed when the driver of the truck accidentally activated the mechanism for lowering and raising the tipper body.	Employee	Labourers in mining, construction, manufacturing and transport	Farm, fish farm, forest or park	Donegal	50
27/01/05	The deceased fell from a height when two bridge beams that were loaded onto temporary supports collapsed.	Family worker	Construction and maintenance labourers: roads, dams and similar constructions	Construction site, opencast quarry or mine	Louth	24
19/02/05	The deceased was crushed when a pre-cast flight of steps collapsed.	Employee	Construction and maintenance labourers: roads, dams and similar constructions	Construction site, opencast quarry or mine	Dublin	49
23/02/05	The deceased was unloading a mobile elevating working platform from a low loader. The deceased was killed when the platform freewheeled off the low loader.	Employee	Construction and maintenance labourers: roads, dams and similar constructions	Factory, industrial site or warehouse	Laois	47

NACE F – CONSTRUCTION (23 FATALITIES) - CONTINUED

Date	Event	Employment Status	Occupational Group	Work Environment	County	Age
15/03/05	The deceased was killed when a steel angle (approx 1.8m long) fell from the roof of a block of apartments that were under construction.	Member of the public	Non-worker	Construction site, opencast quarry or mine	Dublin	25
29/04/05	The deceased was struck by a reversing tipper lorry.	Employee	Construction and maintenance labourers: roads, dams and similar constructions	Construction site, opencast quarry or mine	Tipperary	65
09/05/05	The deceased was hit on the head by forks of tele-porter.	Self-employed	Extraction and building trades workers	Construction site, opencast quarry or mine	Cork	59
24/06/05	The deceased was trapped when the mini-dumper he was driving overturned.	Employee	Building construction labourers	Construction site, opencast quarry or mine	Dublin	45
27/06/05	The deceased was electrocuted as he welded the leg stand of a water tank in the plant room.	Employee	Metal, machinery and related trades workers	Construction site, opencast quarry or mine	Tipperary	40
30/06/05	The deceased was trapped between the handrails of the cherry-picker he was operating and the steel structure of the building he was working on.	Employee	Building construction labourers	Construction site, opencast quarry or mine	Clare	47
22/07/05	The deceased fell from ground level to a lower ramp level.	Employee	Extraction and building trades workers	Construction site, opencast quarry or mine	Dublin	61
05/08/05	The deceased was working in an excavation when the embankment subsided resulting in engulfment.	Employee	Labourers in mining, construction, manufacturing and transport	Construction site, opencast quarry or mine	Limerick	25
09/08/05	The deceased was between the tailgate and rear of a trailer.	Employee	Drivers and mobile plant operators	Construction site, opencast quarry or mine	Kildare	34
31/08/05	The deceased fell from the sixth floor of building complex.	Employee	Labourers in mining, construction, manufacturing and transport	Construction site, opencast quarry or mine	Waterford	19
16/09/05	The deceased fell from the lower rungs of an A-frame stepladder and hit his head on the ground.	Employee	Metal, machinery and related trades workers	Factory, industrial site or warehouse	Cork	64
19/10/05	The deceased was erecting electrical poles. He was electrocuted when he grabbed a stay cable that was trailing from a pole which was being transported in an excavator machine.	Employee	Labourers in mining, construction, manufacturing and transport	Construction site, opencast quarry or mine	Leitrim	30

NACE F – CONSTRUCTION (23 FATALITIES) - CONTINUED

Date	Event	Employment Status	Occupational Group	Work Environment	County	Age
21/10/05	Deceased was assisting with the installation of a precast concrete floor slab when he collapsed. Current indications are that he may have been electrocuted as a result of contact with overhead power lines by the crane from which the slab was suspended.	Employee	Construction and maintenance labourers: roads, dams and similar constructions	Construction site, opencast quarry or mine	Laois	23
26/10/05	The deceased was killed when the trench he was working in collapsed.	Employee	Labourers in mining, construction, manufacturing and transport	Construction site, opencast quarry or mine	Kerry	57
23/11/05	The deceased fell from a scaffold.	Employee	Extraction and building trades workers	Construction site, opencast quarry or mine	Galway	52
25/11/05	The deceased was found in an excavation approx 4 metres deep.	Member of public	Non-worker	Construction site, opencast quarry or mine	Laois	45
06/12/05	The deceased was operating a conveyor mounted on the back of a ready-mix concrete truck when the conveyor made contact with a single phase 10KV overhead power line.	Employed	Drivers and mobile plant operators	Construction site, opencast quarry or mine	Kilkenny	30

NACE G – WHOLESALE/RETAIL TRADE; REPAIR OF VEHICLES, PERSONAL AND HOUSEHOLD GOODS (8 FATALITIES)

Date	Event	Employment Status	Occupational Group	Work Environment	County	Age
14/03/05	The deceased was electrocuted while using a heat press to iron letters onto football jerseys.	Employee	Manufacturing Labourers	Transport related area or road	Louth	28
07/04/06	The deceased was separating cattle in pens at a mart. An animal hit against a pen gate, causing the victim to lose his balance and strike his head as he fell to the ground.	Member of public	Crop and animal producers	Other	Monaghan	72
08/06/05	The deceased was standing behind a tractor when his colleague turned it on. The tractor was in reverse gear and jumped back over a transport box, trapping the deceased.	Employee	Metal, machinery and related trades workers	Office, school, shop, restaurant, hotel, theatre etc	Galway	54
19/07/05	The deceased was rushing to get equipment to extinguish a fire when it appears the deceased had a heart attack.	Member of public	Metal, machinery and related trades workers	Factory, industrial site or warehouse	Cork	58

NACE G – WHOLESALE/RETAIL TRADE; REPAIR OF VEHICLES, PERSONAL AND HOUSEHOLD GOODS (8 FATALITIES)

Date	Event	Employment Status	Occupational Group	Work Environment	County	Age
27/07/05	The deceased was struck on the head by a bale of timber.	Self-employed	Other	Other	Galway	59
20/08/05	The deceased fell from a ladder while repairing a television satellite.	Self-employed	Physical and Engineering Science Associate Professionals	Private home or related area	Mayo	48
17/09/05	The car which the deceased was driving collided with the end of a rolling security barrier which was in a partially open position.	Member of public	N/A	Transport related area or road	Kildare	31
20/09/05	The deceased and co-worker were loading a vacuum tanker onto a flatbed trailer. The load became dislodged from the forks of a forklift truck and fell onto the deceased.	Employee	Drivers and mobile plant operators	Factory, industrial site or warehouse	Tipperary	60

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

Date	Event	Employment Status	Occupational Group	Work Environment	County	Age
05/01/05	Deceased was connecting an arctic tractor unit to an arctic trailer when the combined unit moved forward. The deceased attempted to enter cab and was crushed between that and another stationery trailer.	Employee	Drivers and mobile plant operators	Transport related area or road	Cork	43
07/01/05	The deceased was fixing the tailboard on the rear of a rigid low loader when the tailboard came down on top of him.	Self-employed	Drivers and mobile plant operators	Other	Cork	30
25/04/05	The deceased was trapped under the clay which he was unloading from the back of his lorry.	Self-employed	Drivers and mobile plant operators	Construction site, opencast quarry or mine	Wexford	55
10/08/05	The deceased was trying to offload three crates of headstones from a container. The top two crates became unstable and pinned him to the side of the container.	Self-employed	Corporate managers	Transport related area or road	Dublin	40

NACE K – REAL ESTATE, RENTING AND BUSINESS (1 FATALITY)

Date	Event	Employment Status	Occupational Group	Work Environment	County	Age
18/01/05	The deceased fell from a height while cleaning second floor windows	Employee	Sales and Services Elementary Occupations	Office, school, shop, restaurant, hotel, theatre etc	Dublin	40

NACE L – PUBLIC ADMINISTRATION AND DEFENCE; COMPULSORY SOCIAL SECURITY (2 FATALITIES)

Date	Event	Employment Status	Occupational Group	Work Environment	County	Age
30/06/05	Deceased was taking part in "off-road" driving training in an armoured fighting vehicle.The deceased was killed when the vehicle rolled while or after negotiating a right hand turn at the top of the gradient.	Employee	Armed Forces	Farm, fish farm, forest or park	Kildare	21
19/07/05	The deceased was killed when a truck crashed into the back of the van from which he was unloading cones.	Employee	Construction and maintenance labourers: roads, dams and similar constructions	Transport related area or road	Cork	58

NACE O – COMMUNITY, SOCIAL AND PERSONAL SERVICES (2 FATALITIES)

Date	Event	Employment Status	Occupational Group	Work Environment	County	Age
01/02/05	The deceased was cutting a branch from a tree. The branch fell and hit the ladder he was standing on, causing the deceased to lose his balance and fall to the ground.	Employee	Labourers in mining, construction, manufacturing and transport	Other	Donegal	64
29/12/05	The site entrance gate fell on the deceased causing serious multiple injuries.	Employee	Labourers in mining, construction, manufacturing and transport	Transport related area or road	Dublin	44

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