

Statistics of Fatal Injuries 2006/07

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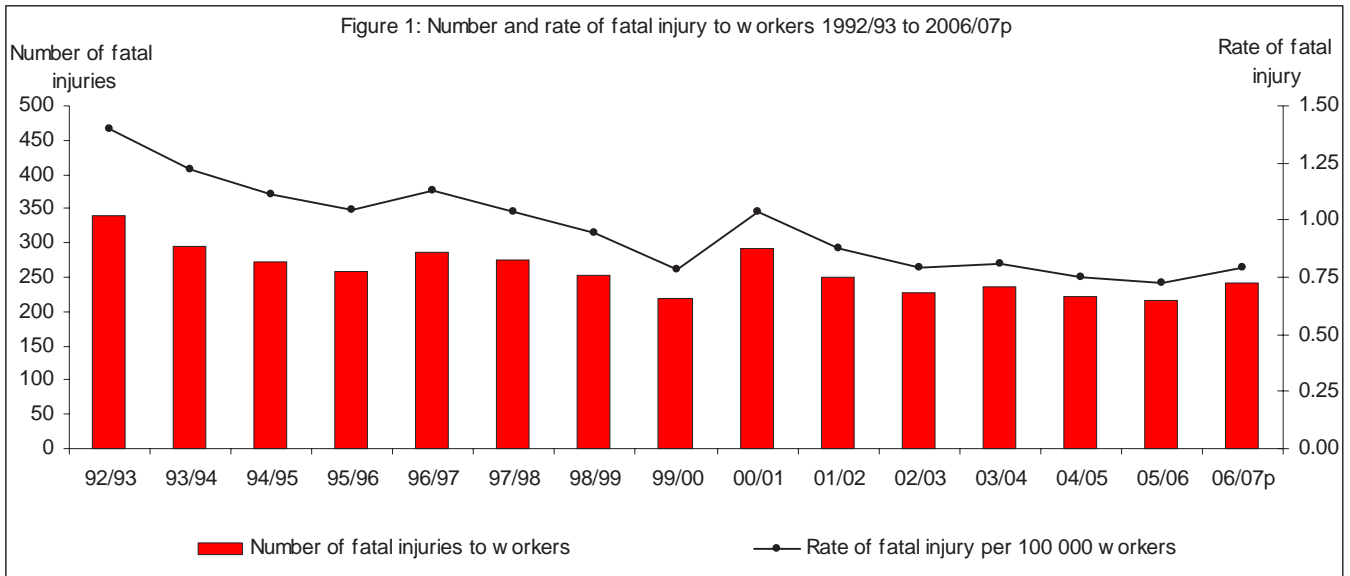
Summary

- The provisional figure for the number of workers fatally injured in 2006/07 is 241, and corresponds to a rate of fatal injury of 0.80 per 100 000 workers. In 2005/06, the finalised figures were 217 and 0.72 respectively; these were the lowest annual figures on record.
- Although a long-term downward trend is still clear, the rate of decrease has slowed over the last 15 years and there has been very little change in the overall rate over the last five years.
- Of the main industrial sectors, agriculture and construction have the highest rates of fatal injury. Together these two sectors account for 46% of fatal injuries to workers.
- Falling from a height continues to be the most common kind (type) of accident, accounting for 19% of fatal injuries to workers in 2006/07. Over the last decade there has been steady and significant reduction in fatal injuries due to this type of accident. Being struck by a moving or falling object, and being struck by a moving vehicle, are the next most common kinds of fatal accident.
- There were 90 members of the public fatally injured in 2006/07 (excluding railways-related incidents). The number of member of the public incidents reported has not shown any significant change over time.

Worker fatalities by main industry

- In **agriculture** there were 34 fatalities and the rate of fatal injury was 8.1 deaths per 100 000 workers. The rate of fatal injury to workers has fluctuated in recent years with no statistically significant trend.
- In **construction** there were 77 fatalities and the rate of fatal injury was 3.7 deaths per 100 000 workers. Over the last 15 years there has been a statistically significant downward trend in the rate of fatal injury to workers; on average a 3.9% year on year decrease. However, the higher number and rate for 2006/07 changes a pattern consistent with continued reduction up to 2005/06 into one of no change since 2002/03.
- In **manufacturing** there were 35 fatalities and the rate of fatal injury was 1.1 per 100 000 workers. The rate of fatal injury to workers has fluctuated in recent years with no statistically significant trend.
- In the **services** sector there were 85 fatalities, and the rate of fatal injury was 0.35 deaths per 100 000 workers. Since 1998/99, the trend in the rate of injury in this sector has remained relatively unchanged.

Fatal injuries to workers - Overview
(See supplementary tables 1 and 2)



Latest provisional figures for 2006/07.

There were 241 fatal injuries to workers in 2006/07, as compared to an average 231 based over the previous five years. The finalised figure for 2005/06 was 217. In 2006/07, the number of fatal injuries to employees was 185 and to the self-employed was 56.

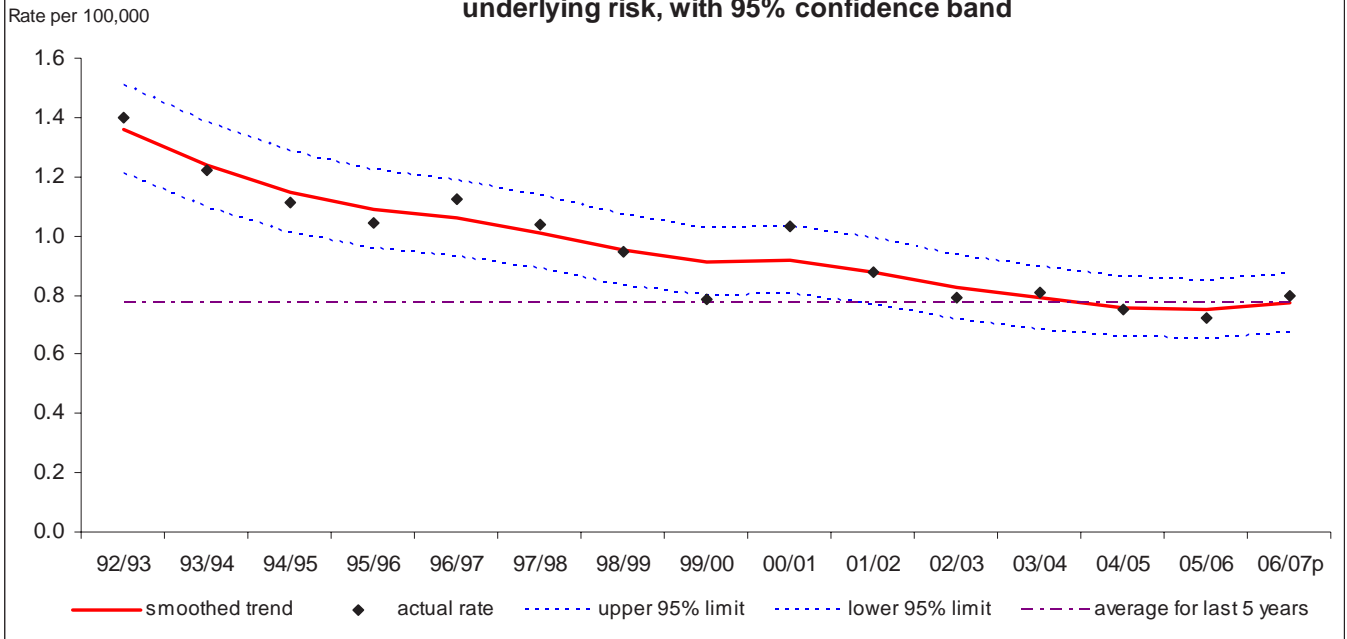
When employment levels are taken into account, the rate of injury to workers in 2006/07 becomes 0.80 deaths per 100 000 employed, compared to 0.72 the previous year. The employee rate of injury for 2006/07 was 0.70 and the self-employed 1.44.

Longer-term trends and underlying risk.

The fatal injury rate in a given year can be seen in two ways. At one level it just records the proportion of workers who died as a consequence of a work accident during the year. Seen this way the rate is a simple statistical fact about the year's fatal injuries. But the rate can also be seen as an *indicator* of the inherent dangerousness of the nation's workplaces. Looking at a range of years, we can ask what these indicators tell us about the level and trend in the underlying risk of fatal injury presented by current conditions. In answering this question we have to take account of the impact of chance variation from year to year, since there will always be an element of chance in whether a particular incident results in a death or not. The actual number of deaths in any given year is therefore a product of the inherent risk of existing work conditions and practices together with the play of chance.

The presentation shown in Figure 2, overleaf, shows the individual year's fatal accident rates (the black diamonds), the smooth trend implied by these points taking account of chance variation (the red line) and the 95% confidence band around this trend (the thin blue dotted lines). To aid interpretation, the average for the last five years is also shown.

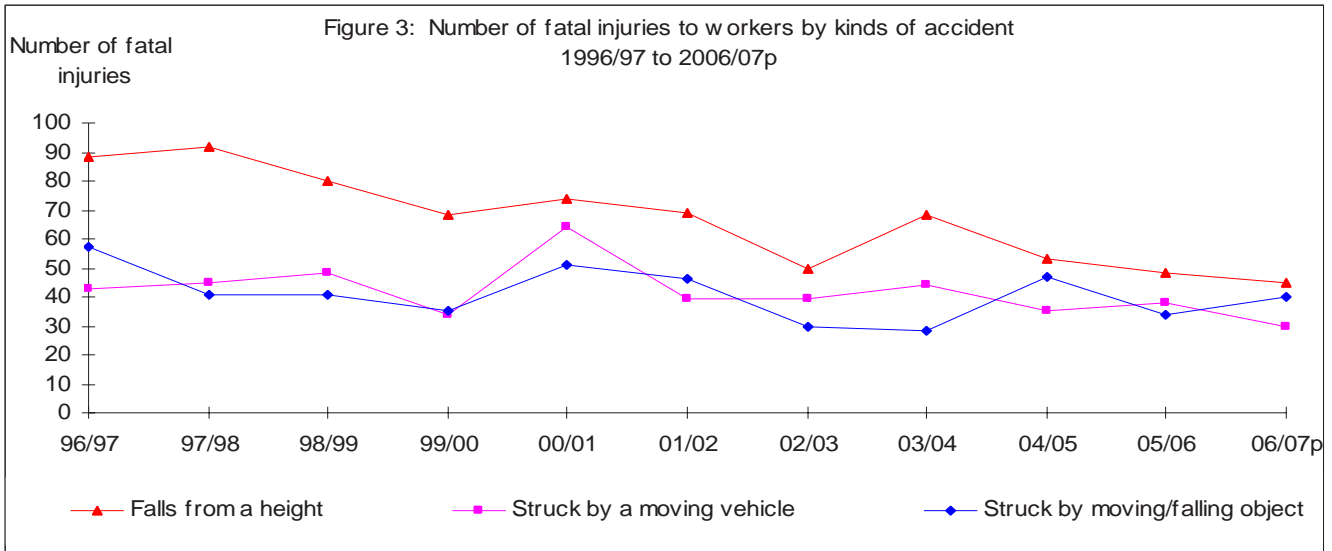
Figure 2: Fatal injury rates to workers showing smooth trend estimate of underlying risk, with 95% confidence band



The first point to make is that the typical change in the trend from one year to the next is much smaller than the margin of uncertainty. Clear changes can therefore only be identified over a span of several years. Over the whole 15 year period there is a clear reduction in the rate, from a level around 1.4 in 1992/93 to around 0.8 in recent years, representing an average annual reduction in the rate of 4.1%. However, the clearer evidence of reduction is seen in the first half of the period shown. Over the most recent ten years to date the average annual rate reduction is 3.3%; and for the most recent five years it is 1.0% (with a 95% confidence range from 5.1% reduction to 3.1% increase: effectively no change). The smooth trend line shows a slight upturn in 2006/07.

	Average annual change in fatality rate to date (2006/07), with 95% confidence band
Last 5 years to date	No significant change (average 1.0% annual reduction -- range from 5.1% reduction to 3.1% increase)
Last 10 years to date	3.3% reduction (between 4.7% and 1.9% reduction)
Last 15 years to date	4.1% reduction (between 4.9% and 3.4% reduction)

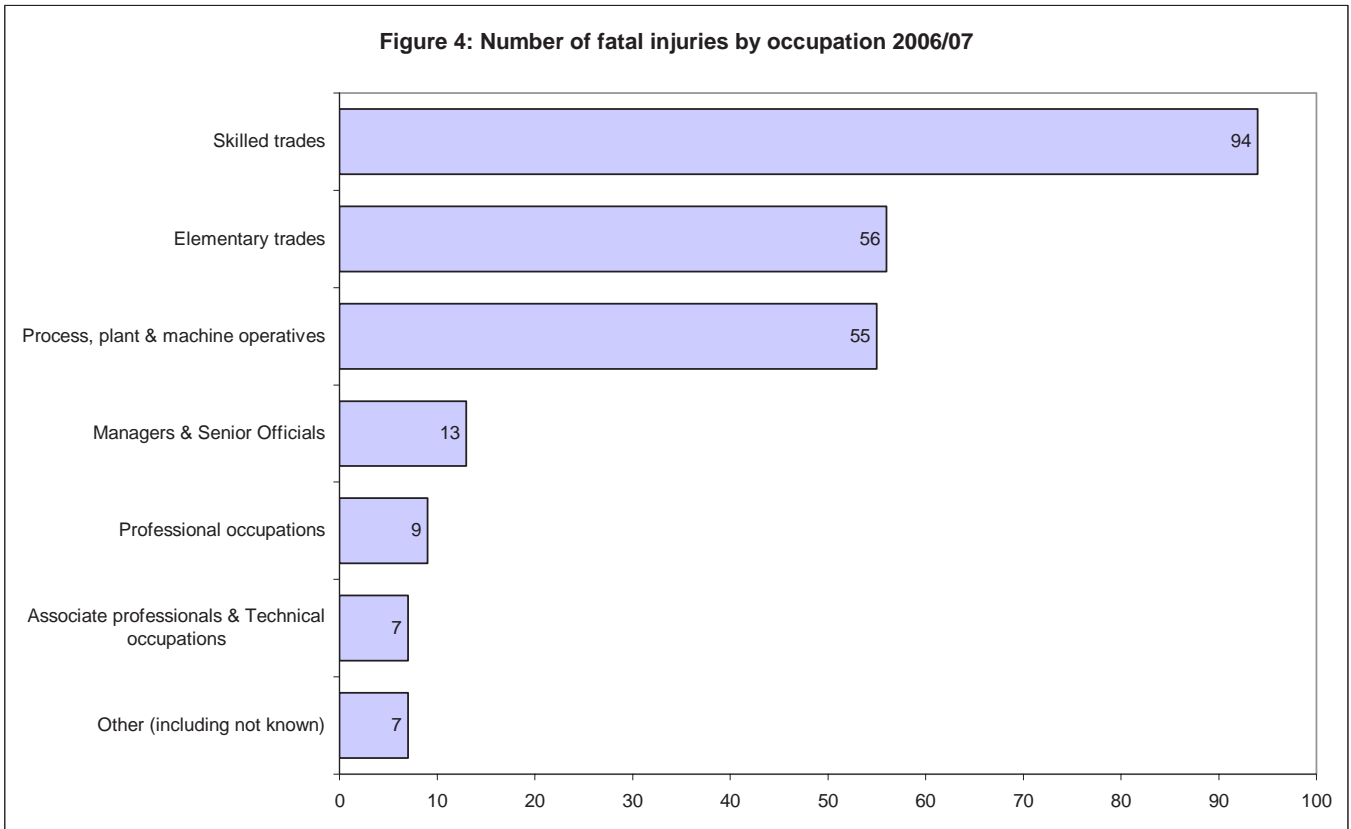
Fatal injuries to workers by kind of accident
(See supplementary table 3)



The most common kind of fatal injury to workers is falling from a height, followed by struck by a moving or falling object and being struck by a moving vehicle. In 2006/07, these three kinds together accounted for nearly half of all fatal injuries to workers.

The number of workers fatally injured due to falling from a height in 2006/07 was 45, with this kind of accident showing a general downward trend over the past ten years. This trend is statistically significant, showing an average decline of 7.2% per year (95% confidence interval between 9.9% reduction and 4.4% reduction per year). There were 11 workers killed by animals in 2006/07, compared to an average 4 per year for the previous ten years; and 16 workers killed due to drowning or asphyxiation, compared to an average 9 per year during the previous ten years.

Fatal injuries to workers by occupation



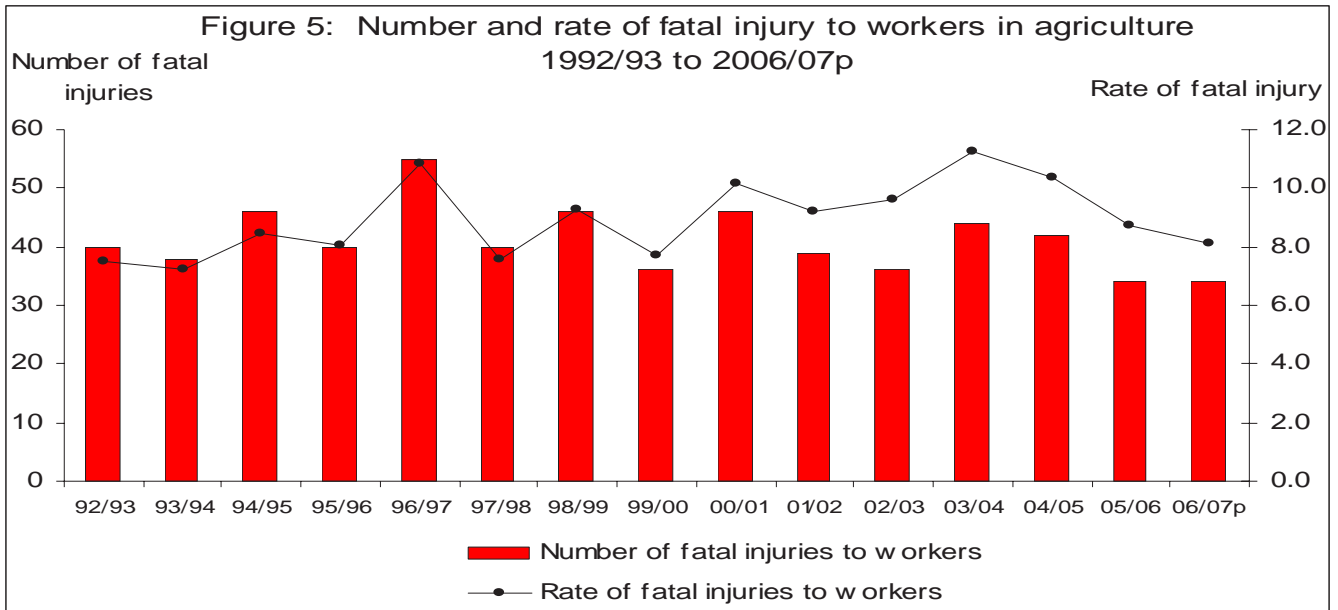
The Standard Occupational Classification 2000 ('SOC 2000') system provides for nine major groupings of occupations, see Table 4. In 2006/07:

'skilled trades' was the most common group, with 94 fatal injuries. Of these, 31 were skilled construction trades, 13 were farmers, 9 were painters and decorators, and 8 were electricians and electrical fitters. Looked at another way, 43 skilled trades fatalities worked in the construction industry, 17 in agriculture, 16 in manufacturing and 18 in 'other' industries.

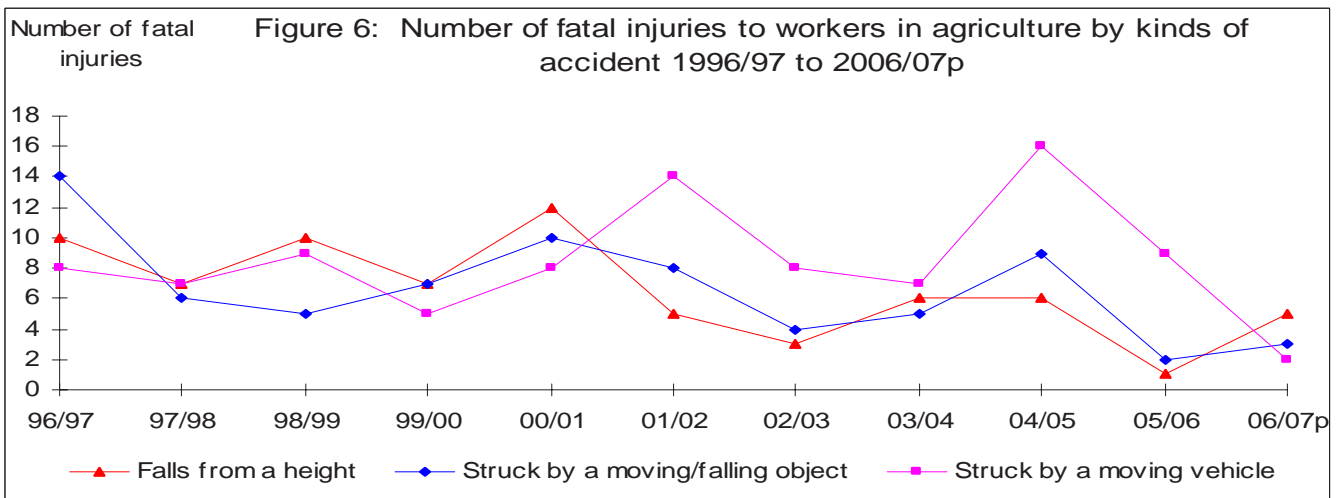
'elementary trades' accounted for 56 fatal injuries. Of these, 15 were construction-related labourers, and 12 'goods storage' workers. 6 fatal injuries occurred to 'refuse and salvage operators' and 5 'farm workers'.

'process, plant and machine operatives' accounted for 55 fatal injuries including 17 heavy goods vehicle drivers (excluding road traffic accidents) and 16 construction operatives.

Fatal injuries to workers in agriculture, forestry and fishing
 (See supplementary tables 5 and 6)



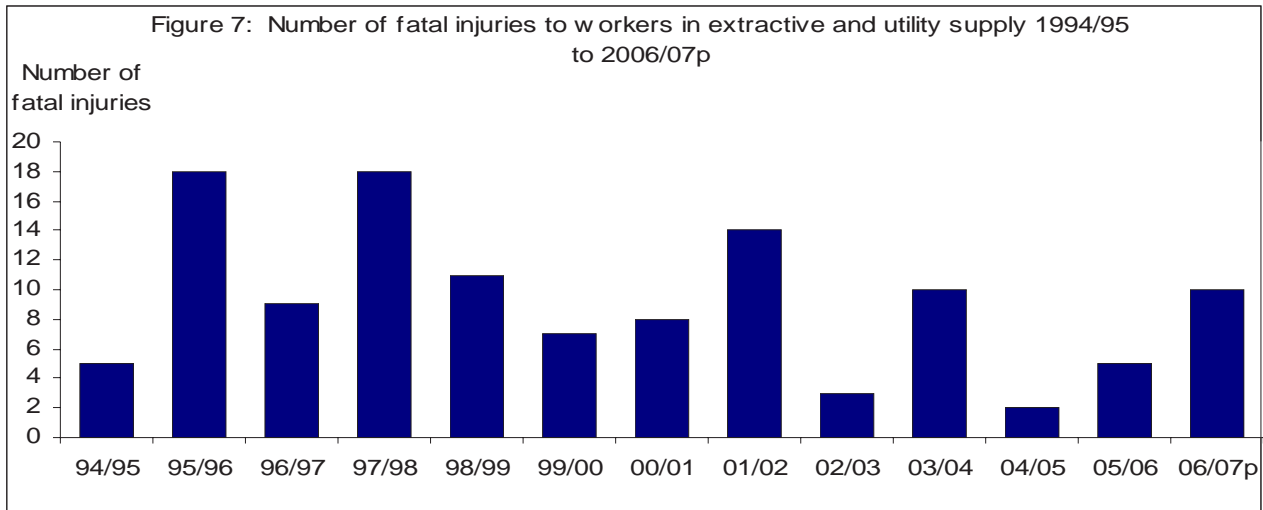
In 2006/07, the number of fatal injuries to workers was 34, the same as 2005/06, and a rate of 8.1 per 100 000 workers. During the past 15 years, the number and rate of injury to workers in agricultural industries has fluctuated with no overall trend.



Nearly three quarters of all fatal injuries in agriculture during the eleven-year period 1996/97 to 2006/07 were due to: being struck by a moving vehicle (22% of all agriculture fatalities); falling from a height (17%); being struck by a moving/falling object (17%); contact with moving machinery (10%); and being trapped by something collapsing/overturning (8%). Of the 34 fatal injuries in 2006/07, 10 resulted from being injured by an animal.

Of the occupations within the agriculture industry, 16 occurred in 'skilled agricultural trades' (farmers, gardeners, grounds person other agricultural), 9 were elementary agricultural workers; 4 were farm managers; 1 agricultural machinery driver and 4 'other' occupations.

**Fatal injuries to workers in extractive and utility supply
(See supplementary tables 5 and 6)**



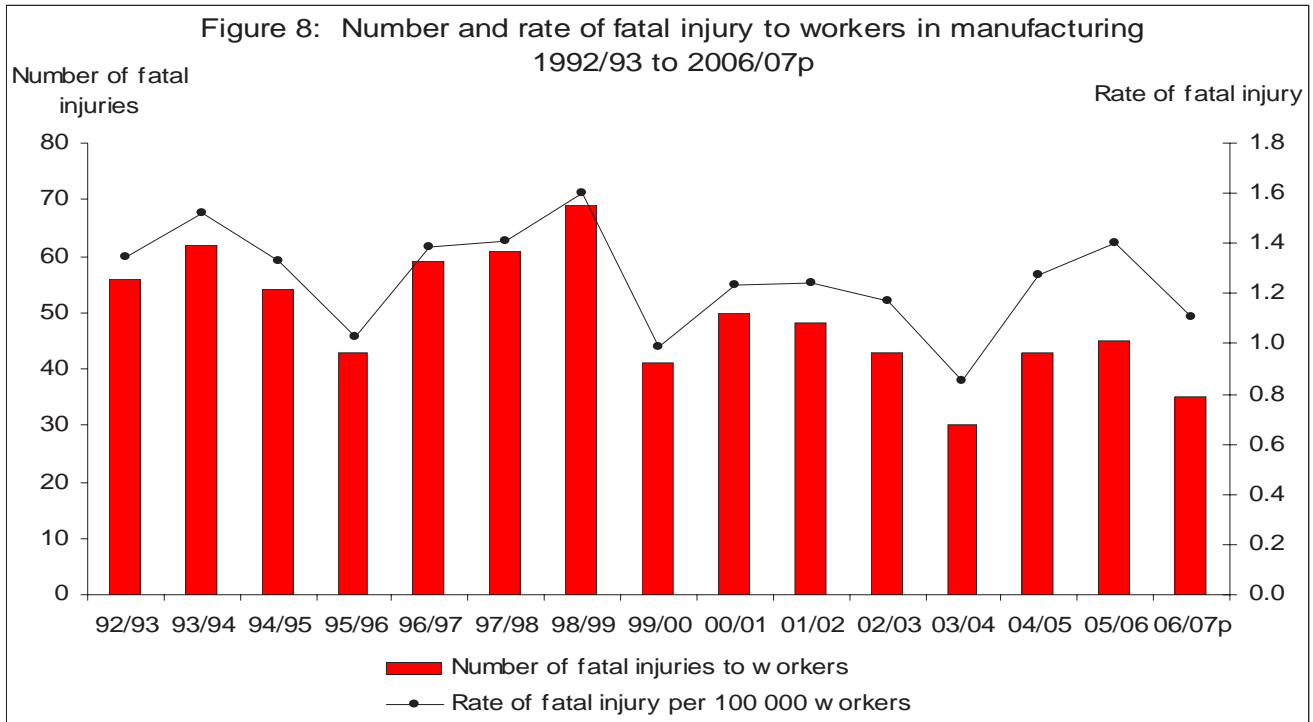
The rate of fatal injury to workers in the extractive and utility supply industry is susceptible to fluctuation as a result of the relatively small numbers of fatalities. However, the rate of fatal injury in this industry is higher than the national average (a rate of 3.4 over the last five years, compared with an all industry average of 0.8).

There have been 88 fatal injuries to workers in the ten years from 1997/98 to 2006/07 in the extractive and utility supply industries. Based on data for the past five years, there were 29 fatal injuries to employees, of which 23 were in the extractive industries (a rate of 7.9) and 6 in utility supply (a rate of 1.1). It can thus be seen that it is the extractive industry element of this grouping which is mainly responsible for the higher than average fatality rate.

Of the 88 fatal injuries, 16 involved being struck by a moving/falling object, 14 resulted from falls from a height, 11 involved contact with electricity and a further 8 were from being struck by a moving vehicle.

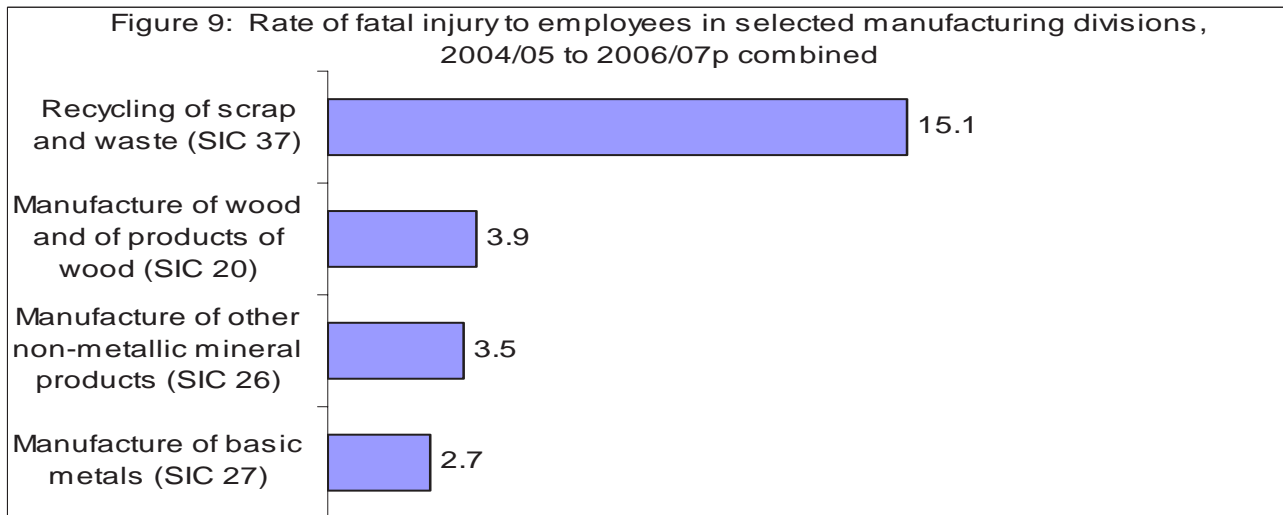
In 2006/07, there were 10 workers fatally injured. Looking at the occupation of these workers, 5 were coal mining operatives; 2 were quarry workers and 3 from 'other' occupations. This represents rates in line with the long term risk differential within this broad industrial grouping.

Fatal injuries to workers in manufacturing
 (See supplementary tables 5, 6 and 7)



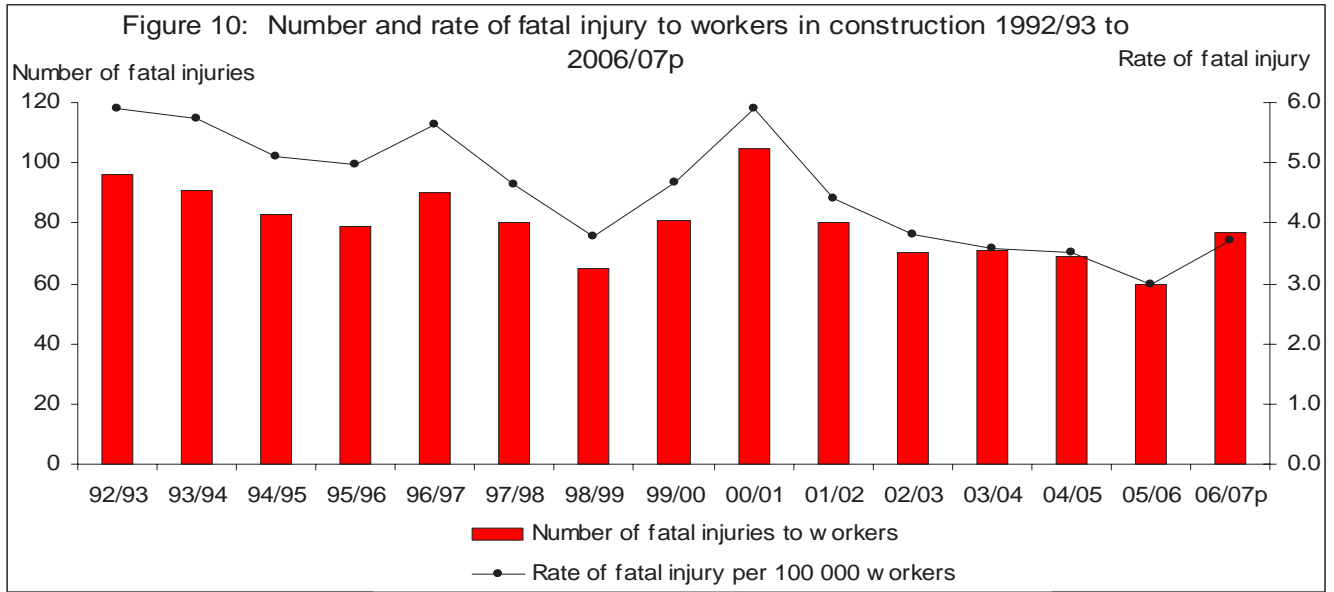
There were 35 fatal injuries to workers in manufacturing industries in 2006/07 (45 in 2005/06), equivalent to a rate of 1.1 fatalities per 100 000 workers. However, when viewed over the past ten years or five years, the rate of injury to workers in manufacturing industries has fluctuated with no overall trend.

For employees, and based on an average of the latest three years combined (2004/05 to 2006/07), those manufacturing industries with the highest rate of fatal injury are: - recycling of scrap and waste (a rate of 15.1 per 100 000, based on 8 fatalities); manufacture of wood and products of wood (rate of 3.9, based on 9 fatalities); manufacture of other non-metallic mineral products (rate of 3.5, based on 11 fatalities); and manufacture of basic metals (rate of 2.7, based on 6 fatalities). The average fatality rate for employees, in all manufacturing over the three-year period, was 1.3 fatalities per 100 000 employees.



When looking at 'kind' (type) of accident, around two-thirds of all fatal injuries in manufacturing during the ten-year period 1997/98 to 2006/07 were due to: being struck by a moving/falling object (23% of all fatalities); contact with moving machinery (19%); falling from a height (15%); and being struck by a moving vehicle (15%). In 2006/07, of those killed by a moving vehicle, five involved a fork-lift truck.

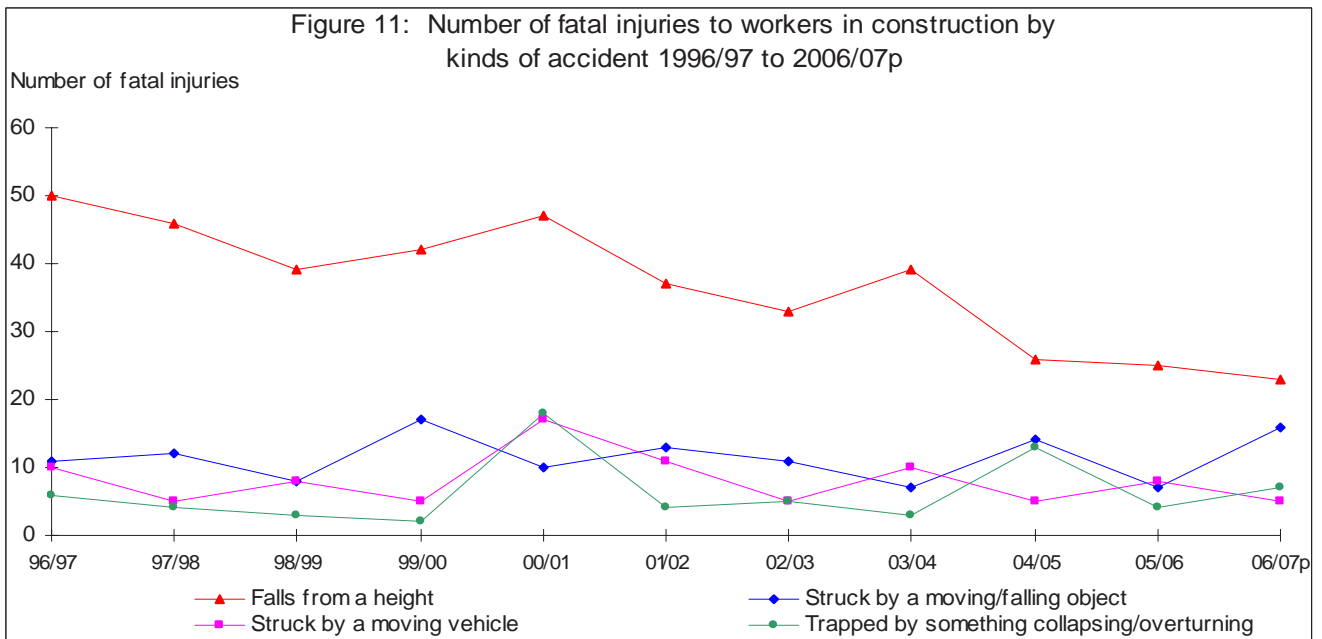
Fatal injuries to workers in construction
(See supplementary tables 5 and 6)



There were 77 fatal injuries to construction workers in 2006/07, equivalent to a rate of 3.7 per 100 000 workers. The finalised figure for 2005/06 was 60. Of the 77 deaths, 50 were employees and 27 self-employed. In 2006/07, 32% of worker fatalities across all industry occurred in construction. Based on an average of the past five years, construction fatalities account for around 30% of all worker deaths.

Looking over the past five years, there is no overall trend in the rate of fatal injury. The 15-year trend in the rate is generally downwards, which is statistically significant, and shows an average decline of 3.9% per year (95% confidence interval between 5.2% reduction and 2.6% reduction per year).

The main occupations of construction workers fatally injured are 'skilled construction and building trades' (38); labourers in building and construction (14); construction operatives, e.g. scaffolders (10); managers in construction (3); 'other' occupations (12).



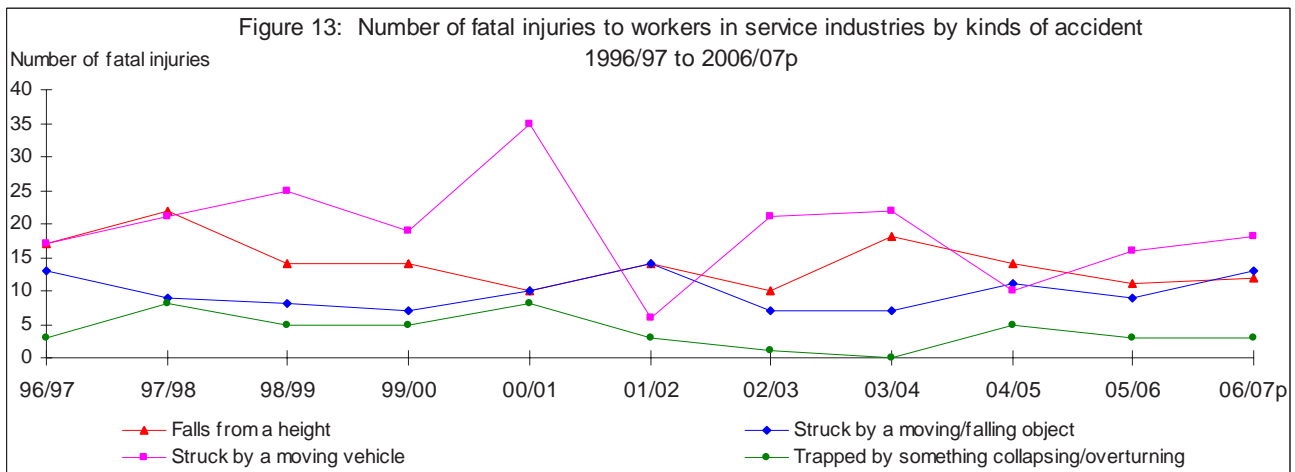
In 2006/07, there were 23 fatal injuries to workers in the construction industry due to falling from a height, and continues the downward trend of the past ten years. Of the 23 fatalities, 19 were as a result of falling from a height of more than 2m, although this type of accident has reduced considerably in recent years. There were 16 fatalities due to being hit by a moving or falling object, and 10 from contact with electricity.

Fatal injuries to workers in service industries
(See supplementary tables 5, 6 and 8)



In 2006/07, there were 85 fatal injuries to workers in the large and varied service industries, a rate of 0.35 per 100 000 workers, compared with 73 in 2005/06. Of the 85 deaths to workers in 2006/07 there were: - 24 in land transport (including railways-related incidents); 9 'other business activities'; 8 in sewage and refuse disposal; 6 in post and telecommunications; 5 in public administration and defence and 5 in health and social work.

Both the number and rate of fatal injury have fluctuated over recent years, with no overall trend when looked over 5 or 15 years. Industries within services, that have significantly higher injury rates than the average for the sector, are sewage and refuse disposal, and land transport.



Being struck by a moving vehicle accounted for 18 deaths in 2006/07, and generally the most common kind of accident in this sector over the past ten years.

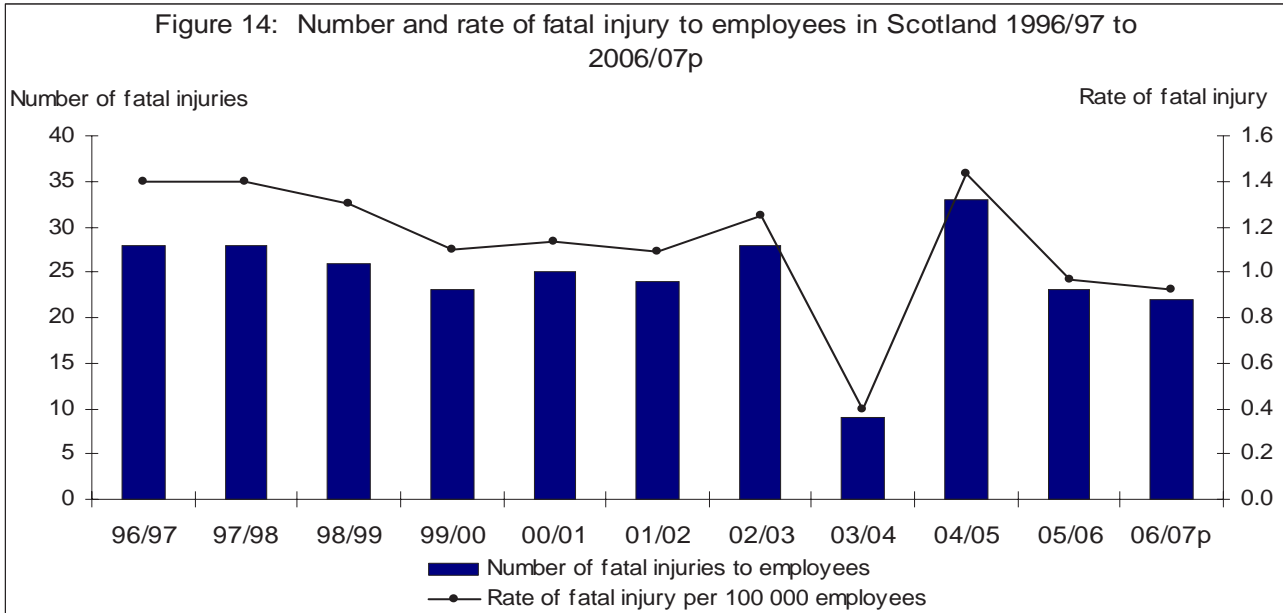
In 2006/07, there were 12 fatalities to workers in the services sector resulting from falls from a height, of which 7 were falls over two metres.

There were 13 fatalities due to being struck by a moving/falling object. Four people died as a result of physical violence at work in 2006/07 (such incidents are generally reportable under RIDDOR).

Fatal injuries to employees in Scotland and Wales
(See supplementary tables 9 and 10)

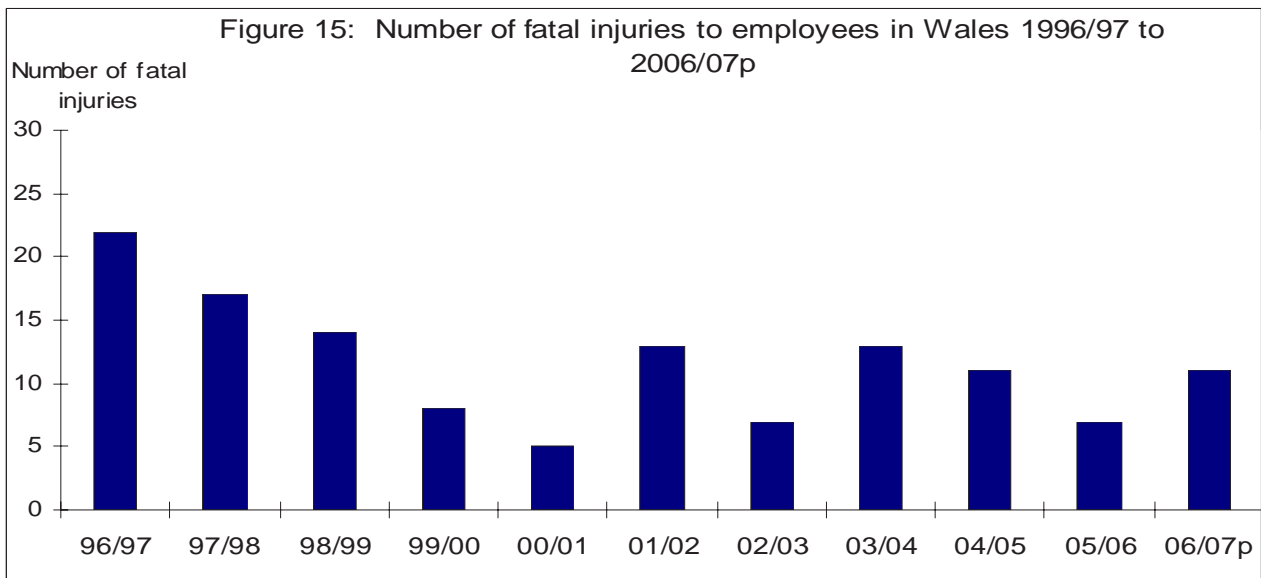
The *rate* of fatal injury to employees in Scotland and Wales is subject to variation, which is not uncommon since the numbers of employees are relatively small compared to Great Britain as a whole. These variations preclude robust comment on trends by industry.

Based on the latest five years, the overall fatal injury rates of Wales and Scotland are generally higher than Great Britain.



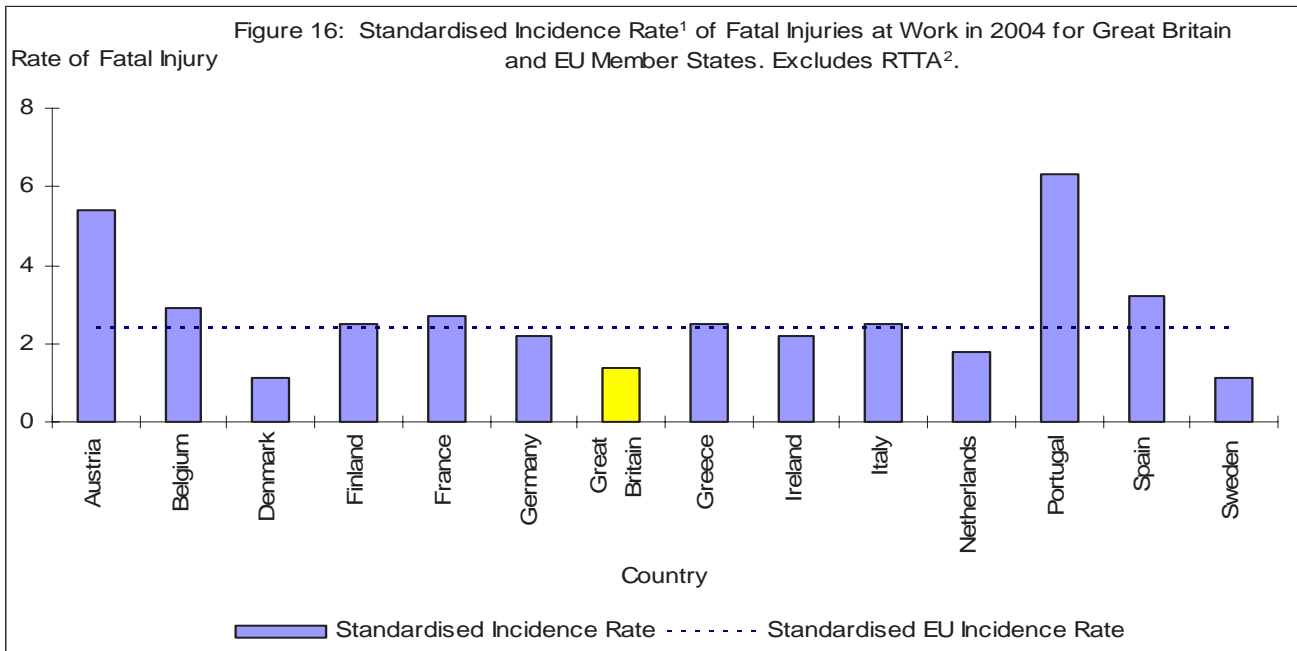
The number of fatal injuries to employees in Scotland in 2006/07 was 22, representing 0.92 deaths per hundred thousand.

Of the 22 deaths, 7 occurred in the services sector, 6 in construction, 5 in agriculture and 2 each in manufacturing and extraction and utility supply.



There were 11 fatal injuries to employees in Wales in 2006/07. Of the 11 fatalities, 3 occurred in each of: services sector; manufacturing; construction; and 2 in agriculture. The *rate* of fatal injury to employees is subject to variation, which is not uncommon since the numbers of employees in Wales are relatively small.

Fatal injuries in Great Britain and European Union member states (15 countries)
 (See supplementary table 12)



Source: Eurostat. ¹ The rate for each member state is standardised to a common basis of the European Union mix of employment by industry.

² RTTA - Road Traffic and Transport Accidents

Different member states of the European Union have different methods for collating information relating to fatal injuries at work. For example, some countries include road traffic accidents and commuting accidents (i.e. accidents occurring during journeys to and from a place of work) in their statistics. The statistics shown above exclude such cases, however, there will still be some variation in the criteria used by different countries.

Coverage of accidents in certain member states is not complete for a number of sectors, particularly in relation to the public sector, the fishing industry and the extractive industries; and for self employed persons, employers and family workers. For this reason, the data collected cover only the nine branches of activity that are common to all member states. The nine branches are: agriculture; manufacturing; utilities; construction; retail and wholesale distribution; hotels and restaurants; transport; financial services; real estate business activities.

In 2004, the most recent year for which data are published across the European Union, there were 3 901 work-related fatalities, of which 1 618 were road traffic and transport accidents (RTTA). Excluding transport accidents, the average rate of workplace fatal injury in the European Union was 2.4 deaths per hundred thousand workers. The equivalent rate for Great Britain was 1.4, which is nominally the second lowest among member states. All but four of the EU 15 countries have statistically significantly higher recorded work fatality rates than the UK.

Since each member state may also collect information on other sectors, the individual figures quoted for each member state may differ from those published at a national level.

Figures for Luxembourg are not available for this year, although numbers killed are typically very small (less than 10 per year, including RTTA).

Supplementary tables – figures for the latest year are denoted ‘p’ (provisional), and subject to small changes in due course.

Table 1 Fatal injuries to workers 1992/93 to 2006/07p as reported to all enforcing authorities

Year	Employees (a)	Self-employed (b)	Workers (c)
1992/93	276	63	339
1993/94	245	51	296
1994/95	191	81	272
1995/96	209	49	258
1996/97	207	80	287
1997/98	212	62	274
1998/99	188	65	253
1999/00	162	58	220
2000/01	213	79	292
2001/02	206	45	251
2002/03	183	44	227
2003/04	168	68	236
2004/05	172	51	223
2005/06	164	53	217
2006/07p	185	56	241

Table 2 Rate of fatal injuries to workers 1992/93 to 2006/07p as reported to all enforcing authorities

Year	Employees (a)	Self-employed (b)	Workers (c)
1992/93	1.3	2.0	1.4
1993/94	1.2	1.6	1.2
1994/95	0.9	2.5	1.1
1995/96	1.0	1.5	1.0
1996/97	0.9	2.3	1.1
1997/98	0.9	1.8	1.0
1998/99	0.8	1.9	0.9
1999/00	0.7	1.7	0.8
2000/01	0.9	2.4	1.0
2001/02	0.8	1.3	0.9
2002/03	0.7	1.3	0.8
2003/04	0.7	1.8	0.8
2004/05	0.7	1.3	0.8
2005/06	0.6	1.4	0.7
2006/07p	0.7	1.4	0.8

- (a) per 100 000 employees
- (b) per 100 000 self-employed
- (c) per 100 000 workers

Table 3 Fatal injuries to workers by kind of accident 1996/97 to 2006/07p as reported to all enforcing authorities

Kind of accident	96/97	97/98	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07p
Falls from a height	88	92	80	68	74	69	50	68	53	48	45
Struck by moving or falling objects	57	41	41	35	51	46	30	28	47	34	40
Struck by moving vehicle	43	45	48	34	64	39	39	44	35	38	30
Contact with moving machinery	20	21	21	14	19	22	21	10	12	21	13
Trapped by something collapsing/overturning	16	25	15	16	40	8	11	7	19	11	19
Contact with electricity/electrical discharge	16	17	17	18	14	12	15	14	7	11	18
Drowning or asphyxiation	9	7	9	7	6	11	8	22	10	3	16
Contact with harmful substance	7	4	2	5	3	3	8	6	3	7	4
Hit something fixed or stationary	4	3	-	1	-	8	13	6	4	6	8
Slip or trip	2	-	3	3	4	2	1	4	7	6	3
Injured while handling, lifting or carrying	-	3	1	-	1	1	3	3	2	1	7
Exposure to fire	5	2	4	7	2	2	6	1	3	4	1
Exposure to an explosion	7	6	6	2	2	6	6	1	4	4	6
Injured by an animal	4	6	4	6	3	4	4	1	3	2	11
Acts of violence	2	-	1	-	3	4	1	2	1	1	4
Other kind of accident	5	1	1	3	5	8	9	13	7	12	8
Injuries not classified by kind	2	1	-	1	1	6	2	6	6	8	8
Total	287	274	253	220	292	251	227	236	223	217	241

Note: The number of fatal injuries due to overturning is counted in the struck by a moving vehicle kind of accident from 2001/02. This will account for part of the drop in the collapse and overturn kind of accident in 2001/02.

Table 4 Fatal injuries to workers by occupation* and industry 2005/06 and 2006/07p as reported to all enforcing authorities**

*Standard Occupation Classification (SOC 2000)	**Standard Industrial Classification (SIC 92)											
	Agriculture		Extraction and Utility Supply		Manufacturing		Construction		Services		Total	
	05/06	06/07p	05/06	06/07p	05/06	06/07p	05/06	06/07p	05/06	06/07p	05/06	06/07p
Managers & senior Officials	4	4	-	-	5	1	3	3	3	5	15	13
Professional occupations	-	-	-	-		3	2	3	3	3	5	9
Associate professionals & technical occupations	1	-	-	-	1	1	1	1	6	5	9	7
Administrative & secretarial occupations	-	-	-	-	-	-	-	-	-	1	-	1
Skilled trade occupations	19	17	2	2	10	16	30	43	14	16	75	94
Personal service occupations	-	1	-	-	-	-	-	-	2	3	2	4
Sales occupations	-	-	-	-	-	-	-	-	2	1	2	1
Process, plant & machine operatives	1	3	3	8	22	8	10	13	17	23	53	55
Elementary occupations	9	9	-	-	7	6	14	14	23	27	53	56
Not known	-	-	-	-	-	-	-	-	3	1	3	1
Totals	34	34	5	10	45	35	60	77	73	85	217	241

Supplementary tables

Table 5 Fatal injuries to workers by industry* 1992/93 to 2006/07p as reported to all enforcing authorities

*Standard Industrial Classification (SIC 92)		Agriculture hunting forestry & fishing (a)	Extractive & utility supply industries (b)	Manufacturing industries	Construction	Service industries	All industries
	Section Year	A,B	C,E	D	F	G-Q	A-Q
Employees	1992/93	21	29	53	70	103	276
	1993/94	16	17	59	75	78	245
	1994/95	14	4	46	58	69	191
	1995/96	20	18	42	62	67	209
	1996/97	20	9	53	66	59	207
	1997/98	20	17	54	58	63	212
	1998/99	16	10	63	47	52	188
	1999/00	13	6	38	61	44	162
	2000/01	13	8	46	73	73	213
	2001/02	20	14	47	60	65	206
	2002/03	16	3	42	56	66	183
	2003/04	6	9	27	52	74	168
	2004/05	16	2	42	55	57	172
	2005/06	11	5	41	43	64	164
2006/07p	14	10	34	50	77	185	
Self-employed	1992/93	19	-	3	26	15	63
	1993/94	22	-	3	16	10	51
	1994/95	32	1	8	25	15	81
	1995/96	20	-	1	17	11	49
	1996/97	35	-	6	24	15	80
	1997/98	20	1	7	22	12	62
	1998/99	30	1	6	18	10	65
	1999/00	23	1	3	20	11	58
	2000/01	33	-	4	32	10	79
	2001/02	19	-	1	20	5	45
	2002/03	20	-	1	14	9	44
	2003/04	38	1	3	19	7	68
	2004/05	26	-	1	14	10	51
	2005/06	23	-	4	17	9	53
2006/07p	20	-	1	27	8	56	
Workers	1992/93	40	29	56	96	118	339
	1993/94	38	17	62	91	88	296
	1994/95	46	5	54	83	84	272
	1995/96	40	18	43	79	78	258
	1996/97	55	9	59	90	74	287
	1997/98	40	18	61	80	75	274
	1998/99	46	11	69	65	62	253
	1999/00	36	7	41	81	55	220
	2000/01	46	8	50	105	83	292
	2001/02	39	14	48	80	70	251
	2002/03	36	3	43	70	75	227
	2003/04	44	10	30	71	81	236
	2004/05	42	2	43	69	67	223
	2005/06	34	5	45	60	73	217
2006/07p	34	10	35	77	85	241	

(a) Excludes sea fishing

(b) Includes the number of injuries in the offshore oil and gas industry collected under offshore installations safety legislation, before 1996/97

Supplementary tables

Table 6 Rate of fatal injuries to workers by industry* 1992/93 to 2006/07p as reported to all enforcing authorities

*Standard Industrial Classification (SIC 92)	Agriculture hunting forestry & fishing (b)	Extractive & utility supply industries	Manufacturing industries (c)	Construction	Service industries	All industries	
Section Year	A,B	C,E	D	F	G-Q	A-Q	
Employees (d)	1992/93	7.1	9.0	1.4	7.8	0.7	1.3
	1993/94	5.3	6.1	1.6	8.9	0.5	1.2
	1994/95	4.8	1.6	1.2	6.9	0.4	0.9
	1995/96	7.8	8.0	1.1	7.7	0.4	1.0
	1996/97	7.6	4.2	1.3	8.2	0.4	0.9
	1997/98	6.7	7.9	1.3	5.7	0.4	0.9
	1998/99	5.4	4.7	1.6	4.4	0.3	0.8
	1999/00	4.5	3.1	1.0	5.5	0.2	0.7
	2000/01	4.7	4.6	1.2	6.5	0.4	0.9
	2001/02	7.9	6.9	1.3	5.3	0.3	0.8
	2002/03	7.3	1.6	1.2	4.9	0.3	0.7
	2003/04	2.8	5.1	0.8	4.3	0.4	0.7
	2004/05	7.0	1.3	1.3	4.8	0.3	0.7
	2005/06	5.1	3.3	1.4	3.6	0.3	0.6
2006/07p	6.1	6.4	1.2	4.0	0.4	0.7	
Self-employed (e)	1992/93	7.9	(c)	1.1	3.6	0.8	2.0
	1993/94	9.9	(c)	1.1	2.1	0.5	1.6
	1994/95	12.9	(c)	3.2	3.2	0.8	2.5
	1995/96	8.3	-	0.4*	2.2	0.6	1.5
	1996/97	14.3	-	2.3	3.0	0.7	2.3
	1997/98	8.7	10.3*	2.7	3.1	0.5	1.8
	1998/99	15.0	13.0*	2.2	2.8	0.4	1.9
	1999/00	13.0	13.7*	1.2	3.2	0.5	1.7
	2000/01	19.0	-	1.8	5.0	0.4	2.4
	2001/02	11.0	-	0.4*	3.0	0.2	1.3
	2002/03	12.9	-	0.5*	2.0	0.4	1.3
	2003/04	21.3	12.1*	1.2	2.5	0.3	1.8
	2004/05	14.7	-	0.4*	1.7	0.4	1.3
	2005/06	13.3	-	1.6	2.1	0.3	1.4
2006/07p	10.6	-	0.4	3.3	0.3	1.4	
Workers (f)	1992/93	7.5	(c)	1.3	5.9	0.7	1.4
	1993/94	7.3	(c)	1.5	5.7	0.5	1.2
	1994/95	8.5	(c)	1.3	5.1	0.5	1.1
	1995/96	8.0	7.7	1.0	5.0	0.4	1.0
	1996/97	10.8	4.0	1.4	5.6	0.4	1.1
	1997/98	7.5	8.0	1.4	4.6	0.4	1.0
	1998/99	9.3	5.0	1.6	3.8	0.3	0.9
	1999/00	7.7	3.5	1.0	4.7	0.3	0.8
	2000/01	10.2	4.4	1.2	5.9	0.4	1.0
	2001/02	9.2	6.5	1.2	4.4	0.3	0.9
	2002/03	9.6	1.5	1.2	3.8	0.3	0.8
	2003/04	11.3	5.4	0.9	3.6	0.3	0.8
	2004/05	10.4	1.2	1.3	3.5	0.3	0.8
	2005/06	8.7	3.1	1.4	3.0	0.3	0.7
2006/07p	8.1	6.0	1.1	3.7	0.3	0.8	

(a) Excludes sea fishing.

(b) Includes the number of injuries in the offshore oil and gas industry collected under offshore installations safety legislation, before 1996/97.

(c) Employment data for the self-employed in extractive and utility supply industries are not available before 1995/96, hence rates cannot be calculated for the self-employed or workers for this period.

(d) per 100 000 employees.

(e) per 100 000 self-employed.

(f) per 100 000 workers.

*rates based on one fatal case, and can fluctuate substantially.

Supplementary tables

Table 7 Fatal injuries to workers in manufacturing industries* 2003/04 to 2006/07p as reported to all enforcing authorities

*Standard Industrial Classification (SIC 92) Manufacturing of:	Section	Year			
		2003/04	2004/05	2005/06	2006/07p
Food products and beverages	15	2	3	4	5
Textiles	17	1	1	2	-
Wood and wood products	20	2	3	4	3
Pulp, paper and paper products; publishing and printing	21	2	1	-	1
Publishing, printing and reproduction of recorded media	22	-	1	1	1
Coke, Refined Petroleum Products & Nuclear Fuel	23	-	-	-	1
Chemicals, chemical products and man-made fibres	24	-	3	3	2
Rubber and plastic products	25	-	9	4	-
Other non-metallic mineral products	26	4	4	7	1
Basic metals	27	2	-	2	4
Fabricated metal products	28	7	7	3	5
Machinery and equipment not elsewhere classified	29	2	3	2	7
Medical, precision & optical instruments, watches and clocks	33	1	1	-	-
Motor vehicles, trailers and semi-trailers	34	1	4	3	-
Other transport equipment	35	-	1	2	3
Furniture manufacturing not elsewhere classified	36	1	-	2	1
Recycling of waste and scrap	37	5	2	6	1
Manufacturing industries total	15-37	30	43	45	35

Table 8 Fatal injuries to workers in the service industries* 2003/04 to 2006/07p as reported to all enforcing authorities

*Standard Industrial Classification (SIC 92)	Section	Year			
		2003/04	2004/05	2005/06	2006/07p
Sale, maintenance & repair of motor vehicles and motorcycles	50	9	4	7	2
Wholesale trade & commission trade; except of motor vehicle & motorcycles	51	4	5	2	3
Retail trade, except motor vehicle & motor-cycles; repair of personal & household goods	52	3	2	7	1
Hotels and restaurants	55	5	3	3	4
Land transport; rail, land & transport via pipeline	60	24	19	20	24
Water transport (a)	61	-	1	-	-
Air transport	62	1	-	-	-
Supporting & auxiliary transport activities; activities of travel agencies	63	6	2	-	4
Post and telecommunications	64	2	-	-	6
Financial intermediation	65	-	-	1	-
Real estate activities	70	1	1	1	3
Renting of machinery & equipment without operator and of personal and household goods	71	1	2	6	2
Other business activities	74	9	5	12	9
Public administration and defence; compulsory social security	75	4	9	2	5
Education	80	1	1	1	2
Health and social work:	85	4	-	2	5
<i>Health services</i>	851	2	-	1	1
<i>Social work activities</i>	853	2	-	1	4
Sewage and refuse disposal, sanitation and similar activities	90	1	10	7	8
Recreational, cultural & sporting activities	92	5	2	2	5
Other service activities not elsewhere classified	93	1	1	-	1
Extra-Territorial Organisations	99	-	-	-	1
Service industries total	50-99	81	67	73	85

(a) Injuries arising from shore-based services only. Excludes incidents reported under merchant shipping legislation

Supplementary tables

Table 9 Fatal injuries to employees by industry* and country 1996/97 to 2006/07p (a)

*Standard Industrial Classification (SIC 92)		Agriculture hunting forestry & fishing (b)	Extractive & utility supply industries	Manufacturing industries (c)	Construction	Service industries	All industries
	Section Year	A,B	C,E	D	F	G-Q	A-Q
Great Britain	1996/97	20	7	53	66	57	203
	1997/98	20	14	54	58	60	206
	1998/99	16	9	63	47	48	183
	1999/00	13	4	38	61	39	155
	2000/01	13	5	45	73	64	200
	2001/02	20	9	47	60	59	195
	2002/03	15	3	42	56	59	175
	2003/04	6	6	27	52	65	156
	2004/05	16	2	42	54	51	165
	2005/06	11	2	41	43	56	153
2006/07p	14	8	34	50	73	179	
Scotland	1996/97	2	1	9	12	4	28
	1997/98	2	6	7	9	4	28
	1998/99	3	1	11	7	4	26
	1999/00	3	1	3	11	5	23
	2000/01	1	-	5	12	7	25
	2001/02	1	2	5	10	6	24
	2002/03	4	1	4	11	8	28
	2003/04	-	1	4	1	3	9
	2004/05	5	-	14	11	3	33
	2005/06	1	-	6	7	9	23
2006/07p	5	2	2	6	7	22	
Wales	1996/97	3	1	7	4	7	22
	1997/98	1	1	3	4	8	17
	1998/99	1	2	5	3	3	14
	1999/00	-	-	3	3	2	8
	2000/01	-	-	2	3	-	5
	2001/02	1	-	7	2	3	13
	2002/03	1	-	1	1	4	7
	2003/04	2	-	3	5	3	13
	2004/05	1	-	1	6	3	11
	2005/06	-	-	3	2	2	7
2006/07p	2	-	3	3	3	11	

(a) Excludes injuries reportable to the Railways Inspectorate, and HSE's Hazardous Installations Directorate's Offshore Division occurring in GB waters or the UK continental shelf.

(b) Excludes sea fishing; (c) Prior to 1998/99, data exclude injuries reportable to HSE's Explosives Inspectorate.

Table 10 Fatal injuries to workers by country and government office region 2003/04 to 2006/07p

Country/Region	Year			
	2003/04	2004/05	2005/06	2006/07p
England	190	166	165	192
East	17	18	19	19
East Midlands	17	11	13	14
London	28	24	15	19
North East	12	7	11	5
North West	49	28	32	33
South East	18	19	22	35
South West	12	20	17	24
West Midlands	14	26	16	33
Yorkshire & the Humber	23	13	20	10
Scotland	18	37	32	31
Wales	19	15	12	14
Great Britain	227	218	209	237

The figures above exclude fatalities reported to the Railways Inspectorate (9 in 2003/04; 5 in 2004/05, 8 in 2005/06, and 4 in 2006/07p)

Supplementary tables

Table 11 Rate of fatal injuries to employees (a) by industry* and country 1996/97 to 2006/07p (b)

*Standard Industrial Classification (SIC 92)	Agriculture hunting forestry & fishing (c)	Extractive & utility supply industries	Manufacturing industries (d)	Construction	Service industries	All industries	
	A,B	C,E	D	F	G-Q	A-Q	
Great Britain	Section Year						
	1996/97	7.6	3.2	1.3	8.2	0.3	0.9
	1997/98	6.7	6.5	1.3	5.7	0.3	0.9
	1998/99	5.4	4.3	1.6	4.4	0.3	0.8
	1999/00	4.5	2.1	1.0	5.5	0.2	0.6
	2000/01	4.7	2.9	1.2	6.5	0.3	0.8
	2001/02	7.9	4.4	1.3	5.3	0.3	0.8
	2002/03	6.8	1.6	1.2	4.9	0.3	0.7
	2003/04	2.8	3.4	0.8	4.3	0.3	0.6
	2004/05	7.0	1.3	1.3	4.7	0.2	0.6
2005/06	5.1	1.3	1.4	3.6	0.3	0.6	
2006/07p	6.1	5.1	1.2	4.0	0.3	0.7	
Scotland (e)	1996/97	6.3	2.4	2.9	11.2	0.3	1.4
	1997/98	6.0	14.8	2.2	7.8	0.3	1.4
	1998/99	8.2	2.2	3.5	6.0	0.3	1.3
	1999/00	7.4	2.5	1.0	8.3	0.3	1.1
	2000/01	2.6	-	1.7	9.0	0.4	1.1
	2001/02	2.9	5.3	1.8	8.1	0.3	1.1
	2002/03	12.2	2.3	1.5	8.9	0.5	1.3
	2003/04	-	2.6	1.6	0.7	0.2	0.4
	2004/05	15.8	-	5.9	8.9	0.2	1.4
	2005/06	3.3	-	2.6	5.4	0.5	1.0
2006/07p	15.8	5.5	0.9	4.2	0.4	0.9	
Wales (e)	1996/97	16.4	9.3	3.3	11.0	1.0	2.3
	1997/98	4.3	10.4	1.4	8.8	1.2	1.7
	1998/99	5.4	19.9	2.3	5.8	0.4	1.4
	1999/00	-	-	1.5	5.5	0.3	0.8
	2000/01	-	-	1.0	5.6	-	0.5
	2001/02	6.9	-	3.6	3.5	0.4	1.2
	2002/03	7.6	-	0.5	1.9	0.5	0.6
	2003/04	15.8	-	1.7	9.0	0.4	1.2
	2004/05	7.6	-	0.6	12.1	0.3	0.9
	2005/06	-	-	1.8	3.8	0.2	0.6
2006/07p	14.7	-	1.8	4.0	0.3	0.9	

(a) per 100 000 employees

(b) Excludes injuries reportable to the Railways Inspectorate, and Hazardous Installations Directorate Offshore Division occurring in GB waters or the UK continental shelf

(c) Excludes sea fishing

(d) Prior to 1998/99, data exclude injuries reportable to HSE's Explosives Inspectorate

(e) Rates are based on small numbers and can fluctuate substantially

Supplementary tables

Table 12 Fatal accidents at work in Europe by member state in 2004 (15 countries)

Member State	Fatal Accidents at Work (a)				
	Total excluding RTTA (b)		Fatal RTTA (b)		Total including RTTA (b)
	Number	Standardised Incidence Rate (c)	Number	% of total deaths	Number
Austria	152	5.4	39	20%	191
Belgium	54	2.9	49	48%	103
Denmark	18	1.1	14	44%	32
Finland	38	2.5	12	24%	50
France	318	2.7	352	53%	670
Germany	428	2.2	298	41%	726
Great Britain (d)	174	1.4	Not available	Not available	174
Greece	41	2.5	12	23%	53
Ireland (d)	34	2.2	Not available	Not available	34
Italy	386	2.5	483	56%	869
Luxembourg	Not disclosed	Not calculated	Not calculated	Not calculated	Not calculated
Netherlands	55	1.8	10	15%	65
Portugal	231	6.3	38	14%	269
Spain	329	3.2	290	47%	619
Sweden	25	1.1	21	46%	46
European Union	2 283	2.4	1 618	41%	3 901

- (a) These statistics have been published by Eurostat as a result of its programme with member states on the harmonisation of definitions of work-related accidents. Accidents at work are defined as “a discrete occurrence in the course of work which leads to physical or mental harm”. This includes accidents in the course of work outside business premises and cases of acute poisoning. Occurrences having only a medical origin (such as a heart attack at work) or occupational illnesses are excluded. The data collected covers the nine branches of activity that are common to all member states; the nine branches are agriculture, manufacturing, utilities, construction, retail and wholesale distribution, hotels and restaurants, transport, financial services and real estate business activities. Since each member state may also collect information on other sectors, the individual figures for each member state quoted above may differ from those published at a national level.
- (b) RTTAs (road traffic and transport accidents) at work are defined as accidents in the transport branch and traffic accidents or accidents on all means of transport at work in all other branches of economic activity.
- (c) The profile of employment by industrial sector will vary between member states and will impact therefore on the comparison between member states. The standardised incidence rate of fatal injury for each member state is calculated on the basis of sectoral rates in the member state applying to the profile of employment at EU level. In effect, the rates for member states are standardised to the same basis of employment by industry- the EU profile.
- (d) Data on road traffic and transport accidents are not available for Great Britain and Ireland (except for accidents in the transport branch other than traffic and means of transport).

Table 13 Fatal injuries to members of the public by industry* 1996/97 to 2006/07p as reported to all enforcing authorities

*Standard Industrial Classification (SIC 92)	96/97	97/98	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07p
Agriculture, hunting, forestry & fishing	9	11	9	8	7	2	3	7	3	8	9
Extractive and utility supply industries	3	1	2	2	3	3	4	3	1	-	3
Manufacturing industries	1	1	-	4	2	3	-	3	3	-	-
Construction	3	6	3	6	8	5	5	4	8	4	7
Services industries	351	374	355	416	424	380	384	357	355	389	350
<i>Suicide/trespass on railways**</i>	252	265	247	274	300	266	257	243	253	283	246
<i>Other railway</i>	23	46	36	60	30	36	44	35	32	33	33
<i>Other services</i>	76	63	72	82	94	78	83	79	70	73	71
All industries	367	393	369	436	444	393	396	374	370	401	369

***About two-thirds of fatal injuries in each year are due to acts of suicide or trespass on railway systems. Such incidents are reportable under RIDDOR.*

Technical Notes

Overview

This report gives the statistics of fatal injuries to workers and members of the public in 2006/07 and recent years for Great Britain. It also gives graphics and tables to show the number and rate of fatal injury in key industries and occupations, and the numbers by the main kinds of accident in which workers and members of the public were fatally injured. Summary figures are given for Wales, Scotland and for government office regions. The most recent rates of fatal injury to workers are also included for Great Britain and other European Union member states.

Unless otherwise stated, each reporting year covers the period 1 April to 31 March. Fatal injuries include deaths up to a year after the date of the accident and therefore the statistics for the year 2006/07 are provisional and will be finalised next year. Changes each year due to finalisation are usually only small, and also reflect changes to the coded details of records should more accurate information subsequently become available. Provisional figures are denoted by 'p'. Rates of fatal injury are expressed per 100 000 employees, self-employed or workers as appropriate. The term 'workers' describes both employees and self-employed combined. Those on a training scheme, or on work experience, are classified here as employees. References to a 'member of the public' are those persons killed as a result of an accident, which has arisen out of or in connection with work activity, although they are not 'at work' themselves. For example, some of the following member of the public fatalities may be notifiable to the enforcing authority: customers on retail premises; residents in residential care homes; passengers on trains; trespassers on railways.

Notes

Reporting requirements.

Statistics of fatal injuries given in this report are compiled primarily from notifications made to the enforcing authorities in Great Britain, namely HSE, local authorities (LAs) and the Office of Rail Regulation (ORR). These notifications are made under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (RIDDOR 95), which came into effect on 1 April 1996.

Since 1 April 2006, enforcement of safety on railways has been the responsibility of ORR, and they have provided HSE with the relevant figures since that date. Prior to this date, enforcement was the responsibility of HSE's Railways Inspectorate. More information on these arrangements can be found at <http://www.hse.gov.uk/railways/index.htm>. ORR publish detailed railways-specific safety statistics, which can be found at <http://www.rail-reg.gov.uk/server/show/nav.1210>.

Fatal *diseases* are outside the scope of this report, irrespective of whether the disease is notified under RIDDOR.

Although each fatal injury is considered on an individual basis, those which are generally considered *non-reportable* under RIDDOR are:

1. Road traffic accidents on a public highway, which involve people travelling in the course of their work. These are covered by road traffic legislation;
2. Accidents reportable under separate merchant shipping, civil aviation and air navigation legislation;
3. Accidents to members of the armed forces;
4. Accidents to the self-employed arising out of accidents at premises which the injured person either owns or occupies. For example, if a self-employed washing machine engineer was electrocuted while doing paid repairs at a private house, (but see 1 below).

Fatal injuries included in this report.

The following are clarifications of the fatal injuries that are generally included or excluded in these statistics. It must be stressed that each fatal injury is considered on an individual basis of the particular facts, but generalised here for convenience. Although a particular fatal incident may fall outside the scope of this report, the relevant health and safety enforcing authority (HSE, LA, or ORR) may still have an interest.

Fatal injuries generally included in the statistics:

Those primarily deemed to be reportable under RIDDOR. These include workers or members of the public killed on railways (including those killed as a result of suicide or trespass); those killed involving a vehicle operating on private land; road maintenance and roadside refuse collection; workers killed in the course of their work as a result of violence; plus the following:

1. Injuries to the self-employed, where they are in control of the work or premises (these are technically non-reportable).
2. Volunteer workers. There are very few such workers killed, although classified here as 'employees'.

Fatal injuries generally excluded from the statistics are those deemed non-reportable under RIDDOR:

1. A person at work, which involves a moving vehicle on a public highway (a 'road traffic accident'). Such incidents are enforced by the police and reported by the Department for Transport. Those killed whilst commuting (travelling from home to work, and vice versa) are also excluded.
2. A person at work, whilst travelling by air or sea. These incidents are the responsibility of the Air Accident Investigation Bureau and Marine Accident Investigation Bureau, and reported accordingly.
3. Fatal injuries at work due to 'natural causes', usually heart attacks or strokes, unless brought on by trauma due to the accident.
4. Suicide (although those occurring to members of the public on railways are specifically included under RIDDOR).
5. Where the work activity is most likely considered to be illegal.

Industry and occupation classifications, and employment estimates.

Standard Industrial Classification (SIC) is the system used in UK official statistics for classifying businesses by the main type of economic activity they are engaged in, and is the responsibility of Office for National Statistics (ONS). This has been revised several times since first introduced in 1948. The latest version, SIC 2003, made minor revisions to SIC 1992. Standard Occupational Classification 2000 ('SOC 2000'), also the responsibility of ONS, attempts to classify jobs in terms of their skill level and skill content, and is used by many other government organisations.

Rates of fatal injury for employees produced by HSE are based on employment estimates produced by ONS. The Short Term Employment Survey is used to obtain top-level employment data and the Annual Business Inquiry has been used to obtain more detailed SIC 92/2003 four-digit employment data since 2000/01; previously this was taken from the Annual Employment Survey. Such estimates are normally subject to a number of revisions based on information from the Annual Employment Survey. When HSE finalises the provisional statistics, rates are revised using the employment data available at that particular time. Rates of fatal injury are not normally revised to incorporate subsequent revisions to employment estimates by the ONS.

Rates of fatal injury for the self-employed are based on employment estimates from the Labour Force Survey (LFS), produced by ONS. In 2003/04, estimates of the self-employed were revised by ONS for two reasons: a re-weighting of pre-2003/04 data as a consequence of the 2001 Census results; and a shift between employees and self-employed, as a result of the introduction of SOC 2000 (occupation coding framework). The net result is to increase the estimates of the self-employed slightly from 2003/04 onwards, although the overall pattern in injury rates for the self-employed and workers remain unchanged.

European comparisons.

The European Statistics on Accidents at Work (ESAW) are drawn up on the basis of Council Directive No 89/391/EEC of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at work, in accordance with definitions and classifications that have been harmonised in conformity with the recommendations of the International Labour Office. Nine common branches of activity are covered by the data of all the member states and these are used to calculate the incidence rates. The nine branches are agriculture, manufacturing, utilities, construction, retail and wholesale distribution, hotels and restaurants, transport, financial services and real estate business activities.

Other.

Research by the Institute of Employment Research (IER), suggests that differences in non-fatal injury rates between the countries and regions of Great Britain, can be almost fully explained by their mix of industries, occupations and other workplace characteristics. More details can be found at <http://www.hse.gov.uk/research/rrhtm/rr386.htm>

Technical note on smoothing method for figure 2 (see page 4).

The smooth trend line shown in figure 2 is calculated by choosing an "expected" fatal injury count for each year such that:

1. the series of rates corresponding to the expected counts is as smooth as possible, subject to the constraint that
2. the overall scatter of the observed counts from the expected values is consistent with the theoretically predicted year to year chance variation.

The smoothness of the rate series is measured (inversely) by the sum of its squared second differences. Maximising smoothness of the rate series expresses a view that the underlying state of the world (in respect of the inherent dangerousness of the nation's workplaces) changes gradually from year to year.

The theoretically predicted year to year variation is based on an assumption that the annual count of fatal accidents follows a Poisson distribution, and condition 2 is implemented as a constraint on the overall chi-squared value to be less than or equal to its expected value. The potential flexibility of the fitting process (separate fitted value assigned to each observation, but subject to maximal smoothing) means that the number of degrees of freedom lost in the fitting process is not precisely determined. It follows that the expected value of the total chi-squared (i.e. the number of observations minus the degrees of freedom due to the fitted model) is also somewhat indeterminate. Since the resulting fit is close to linear we have assumed it accounts for two degrees of freedom.