

ACCIDENTS - COSTS AND STATISTICS

(See also: [Management of Health and Safety\(51\)](#))

INTRODUCTION

As an employer or self-employed person, awareness of the costs of accidents and information about the type/frequency/location etc. of their occurrence can be of considerable value in improving health and safety management in your workplace.

COSTS OF ACCIDENTS

Many employers may not realise the extent of injury and ill-health arising from work activities.

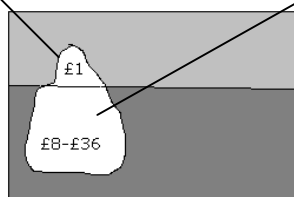
There are an estimated 1.6 million accidents resulting in injury each year and 2.2 million workers suffer ill-health caused or made worse by their work. 30 million working days are lost each year with a cost to industry of some £700 million. Estimates of the overall cost to employers vary from between £4,000 - £9,000 million a year, some 5-10% of gross trading profit. On a national basis (including Social Security and NHS costs) it is estimated that the total cost to society is some £10-£15 billion per year.

A study^y undertaken by the Health and Safety Executive (HSE) in the early 1990's shed some light on the practical and financial consequences for businesses of accidents at work - the costs for one company totalled 37% of annualised profits whilst another suffered losses accounting to 5% of running costs. It is worth noting that the businesses suffered no fatalities, prosecutions or significant civil claims in the study period which would have increased these costs still further. The cost of accidents can be sub-divided into insured and uninsured costs. The average costs for the businesses studied are shown in the diagram below.

Average costs for businesses from accidents at work

Insured Costs

Covering injury, ill health and damage



Uninsured Costs

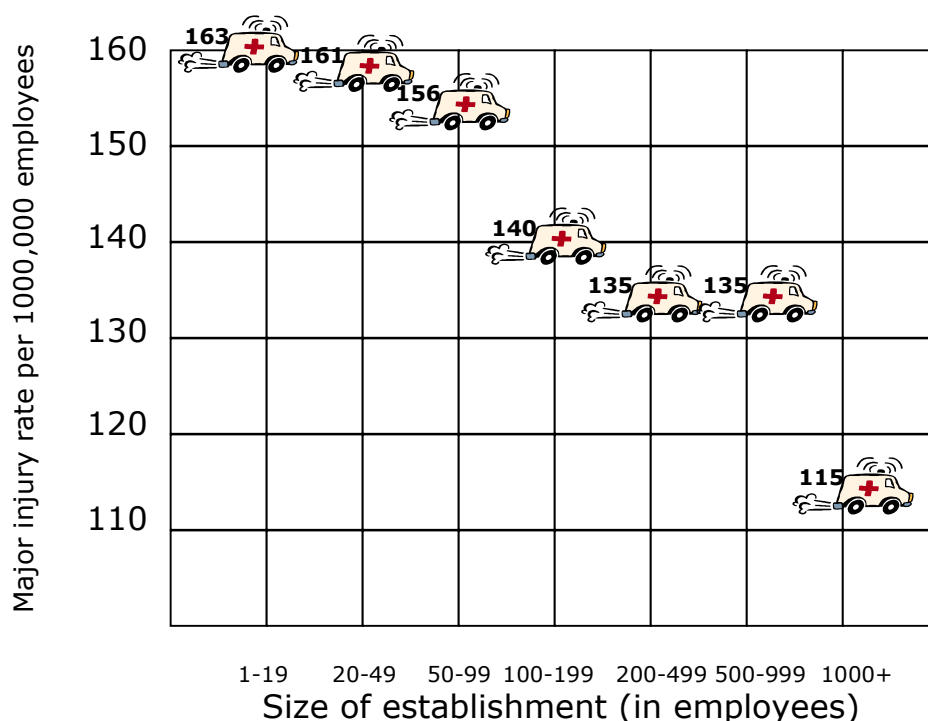
- Product and material damage
- Plant and building damage
- Tool and equipment damage
- Legal costs
- Expenditure on emergency supplies
- Clearing site
- Production delays
- Overtime working and temporary labour
- Investigation time
- Supervisors' time diverted
- Clerical effort
- Fines
- Loss of expertise/experience

Successful businesses are essential to both the national and local economy. Small to medium sized firms in particular give employment, develop new ideas and provide essential services on which many larger companies depend. Unfortunately, small firms often tend to have worse accident records than large firms, as a study carried out in the late 1980's revealed - (see diagram on next page).

‡ Detailed in 'The Costs of Accidents at Work' (HS(G) 96)

Where standards are below average this is often due to a lack of knowledge and expertise rather than a flagrant contempt for health and safety, though regrettably, this is sometimes found.

A comparison of major injury rates and size of establishment



WORKPLACE INJURY

Statistics on workplace injury are derived from two sources. The first of these are injuries reported under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (RIDDOR). The second source of information is the Labour Force Survey (LFS), a systematic random sample survey of around 60,000 private households conducted on a rolling quarterly basis using 5 'waves' each of 12,000

The LFS for 1993-1996 indicates the rate of total workplace injury in GB is approximately 4,530 per 100,000 employees and just under 4,000 per 100,000 self-employed workers.

A comparison of the LFS figures with those injuries reported under RIDDOR indicates that there is significant under reporting of injuries. For businesses in LA-enforced sectors the rate is estimated to vary from 11% to 28% compared with an all-industry average of 41%.

The LFS suggests that reported injuries (under RIDDOR) do not always reflect the risk of injury within various business sectors. Table 1 below shows the risk of injury (relative to the manufacturing industry) based on both LFS and RIDDOR information for a selection of business sectors.

Table 1: Risk of non-fatal injury relative to the manufacturing sector (Based on years 1993/4 -1995/6)

INDUSTRY	RELATIVE RISK BASED ON THE LFS (%)	RELATIVE RISK BASED ON RIDDOR (%)
Mining	266	294
Construction	151	102
Transport, storage & Communications	110	113
Agriculture	102	45
Manufacturing	100	100
Consumer/Leisure Services	73	36
Distribution, repair hotel and catering	66	32
Business	33	7
All industries	78	56

(Source: Government Statistical Service)

ACCIDENT / INJURY RATES

Studies indicate that there may be a difference between **MAJOR** and **TOTAL** injury rates in establishments of different sizes. For example, in 1990 HSE estimated that employees in firms of under 50 people were 20% more at risk of 'major' injuries than those in firms employing between 100 -1,000 and at least 40% more at risk than those in establishments of more than 1,000. Such major injuries include amputations, serious fractures and other conditions requiring admittance to hospital for more than 24 hours.

Although the relationship between establishment size and major injury is an inverse one (i.e. the smaller the firm, the higher the injury rate) it has been found that other reportable injuries (not being major ones but requiring more than three days off work) were found to increase with size. A recent study (LFS 1994-95) has suggested that the rates of **total** injuries in workplaces employing 25 or more workers are about 50% higher than those employing fewer than 25 staff.

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Studies have also indicated that there is an under-reporting of accidents in smaller firms - only 40% of reportable accidents are actually reported in firms employing more than 25 people and 25% in firms employing less than 25 people. It may be that greater size facilitates the development of safety management resources with more specialist knowledge, greater confidence and a more developed safety culture. There is also more likely to be a joint framework between employer and employee for consultation on, and management of, health and safety. In smaller firms there may be greater pressure to return to work earlier.

INJURIES IN THE SERVICE SECTOR

The following information is taken from the Local Authorities Report on Health and Safety in Service Industries 1996 (C120 - HSE) with information derived from the RIDDOR database.

INJURIES TO EMPLOYEES

1. **FATALITIES**

Caused by what?

- 32% - falls from a height
- 36% - being struck by a moving vehicle or object
- 10% - contact with moving machinery
- 22% - all other causes

Occurred in which industry?

- 30% in wholesale distribution
- 14% in retail
- 7% in hotel and catering
- 7% in offices

Of the deaths caused by falling from a height:

- 46% were falls from racking, boxes, chairs etc.
- 18% were falls from ladders of some kind
- 16% were falls from a goods vehicle or fork lift truck

Of the deaths caused by being struck by a vehicle:

- 52% involved goods vehicles
- 34% involved fork lift trucks

2. **MAJOR INJURIES**

Caused by what?

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48% - slip, trip or fall on the same level
 17% - falls from a height
 11% - handling, lifting or carrying
 10% - struck by flying or moving object
 5% - struck by vehicle

Occurred in which industry?

41% in retail
 17% in hotel and catering
 10% in wholesale
 9% in consumer services/leisure
 7% in offices
 16% in other industries

Occurred in which location/environment?

Retail

30% in sales areas
 24% in warehouse/storage rooms
 10% in loading bays

Wholesale

29% in loading bays
 27% in warehouse/storage rooms

Hotel and catering

29% in food preparation area
 19% in residential accommodation
 17% in restaurants and bars

Consumer/Leisure

36% in sporting/leisure/recreational activity
 19% in residential accommodation

Note

1. 82% of all major injuries were due to a fracture of some type
2. Injury rates take into account changes in employment and are therefore a better indicator of risk in an industry. They are as follows:-

<u>Industry</u>	<u>Approx. rate of major injuries (per 100,000 employees)</u>
Retail	52
Wholesale	50
Consumer/Leisure	43
Hotel and Catering	10

3. OVER 3 DAY INJURIES

What injuries in which industries?

All figures are percentages - figures in bold indicate areas of greatest concern from accidents

Kind of accident	Industry					
	Retail	Wholesale	Hotel/ Catering	Offices	Consumer/ Leisure	Total
Handling, lifting or carrying	36	40	21	35	41	36
Slip, trip on same level	24	19	31	30	23	24
Struck by moving object	16	13	16	12	12	14
Fall from a height	5	7	6	12	8	7
Struck by a vehicle	8	11	1	1	1	6
Strike against something fixed	7	5	4	5	3	6
Other	4	5	21	5	12	7
Total	100	100	100	100	100	100

Where do accidents take place?

Environment of accident	Industry					
	Retail	Wholesale	Hotel/ Catering	Offices	Consumer/ Leisure	Total
Warehouses/ storage areas	33	36	4	6	4	25
Loading bays	13	31	4	8	2	13
Sales areas	30	5	1	1	2	19
Off premises (delivery)	4	15	7	15	9	7
Food preparation	4	-	44	1	8	10
Office	2	2	1	64	7	6
Stairs, corridors	7	1	6	3	5	5
Residential accommodation	-	-	17	-	36	5
Restaurants, bars	3	-	16	1	6	5
Cold room/cold store	4	10	-	-	-	4
Sporting activity	-	-	-	-	14	1
Other	-	-	-	1	7	-
Total	100	100	100	100	100	100

Over-3-day injury rates (per 100,000 employees)

<u>Industry</u>	<u>Rate(approx.)</u>
Retail	418
Wholesale	374
Consumer/leisure	297
Hotel/catering	223
Offices	56

INJURIES TO SELF EMPLOYED PEOPLE

All figures are percentages and relate to the period 1986-1995; figures in bold indicate priority areas.

Kind of accident	Severity of injury			
	Fatal	Major	Over 3 day	Total
Fall from height	61	52	32	41
Slip, trip, fall - same level	-	21	16	18
Injured whilst handling, lifting, carrying	-	5	17	12
Stuck by moving object	7	6	15	5
Struck by moving vehicle	7	4	5	4
Contact with moving machinery/material	4	4	4	3
Contact with electricity	11	3	2	2
Strike against something fixed/stationary	4	1	3	2
Exposure/contact - harmful substance	-	-	3	1
Other	6	4	3	2
Total	100	100	100	100

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CHECKLIST - ACCIDENTS - COSTS AND STATISTICS

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1. Are you aware of the main accident information relating to your type of business? YES NO
i.e. do you know:-
- what type of accidents are most common? YES NO
 - where most of your accidents occur? YES NO
 - what are the main types of injuries caused? YES NO
 - what causes most of your accidents? YES NO
 - If accident analysis can reveal any other useful information for you? YES NO
2. Do you utilise accident information to improve your management of health and safety (i.e. identifying hazards, assessing and controlling risks, instructing and training your workforce, setting standards and reviewing performance etc.) YES NO

REFERENCES/FURTHER DETAILS

- *1. Booklet HS(G)96 - The costs of accidents at work (HSE).ISBN 0 7176 1343 7.
- *2. Local authorities report on health and safety in service industries 1996 (HSE)
- *3. Booklet HS(G)65 - Successful health and safety management (HSE).ISBN 0 7176 1276 7.
- **4. Leaflet IND(G)132L – Managing Health and Safety- Five steps to successful health and safety management (HSE).
www.hse.gov.uk/pubns/indg275.pdf

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- * Available to view by prior arrangement at Nuneaton and Bedworth Borough Council, Environmental Health Services, Council House, Coton Road, Nuneaton. CV11 5AA
 - ** Free copy available from Nuneaton and Bedworth Borough Council at the above address.

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