Costs to Britain of workplace fatalities and self-reported injuries and ill health, 2013/14

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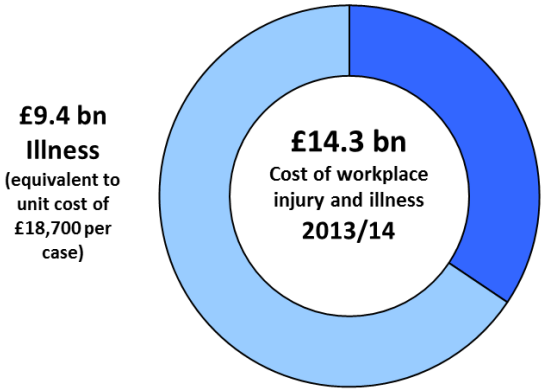
Summary

Each year, significant numbers of workers are injured or made ill by their work. As well as the financial costs from these cases (for example, in terms of lost production and healthcare costs), these cases impose human costs (in terms of the impact on the individual's quality of life and for fatal injuries, loss of life). The total economic cost of workplace injuries and ill health includes both the financial costs incurred and a valuation of the human costs.

Latest estimates show that annually over 600,000[1] workers are injured in workplace accidents and a further 500,000[2] workers suffer a new case of ill health which they believe is caused or made worse by their work.

Estimating the economic costs of these cases …



Total costs have fallen over the last 10 years, though more recently show signs of levelling off. This fall is driven by falls in injury costs.

18% lower than 2004/05

(Injury costs 33% lower; change in ill health costs not statistically significant)

Broadly level with 2009/10

Source: HSE Cost to Britain Model

These costs provide a good representation of the cost of illness and injury arising from current working conditions[3]

The majority of costs fall on individuals, while employers and government/taxpayers bear a similar proportion of the costs of workplace injury and ill health.

Source: HSE Cost to Britain

[1] Source: Labour Force Survey(non-fatal injuries) and RIDDOR (fatal injuries), annual average estimate 2012/13-2014/15

[2]Source: Labour Force Survey, annual average estimate 2011/12,2013/14, 2014/15

[3]By restricting the estimate of ill health cases to self-reports of newly occurring illness allows us to best capture those cases arising from current working conditions. HSE will be publishing a separate estimate of costs of work-related cancer towards the end of 2015

Introduction

This report presents latest estimates of the **'Costs to Britain of workplace injuries and ill health** resulting from current day working conditions'.

Each year, significant numbers of workers are injured or made ill by their work. As well as the financial costs from these cases (for example, in terms of lost production and healthcare costs), these cases impose human costs (in terms of the impact on the individual's quality of life and for fatal injuries, loss of life). Estimating the total economic costs of workplace injuries and ill-health by accounting for these impacts allows us to:

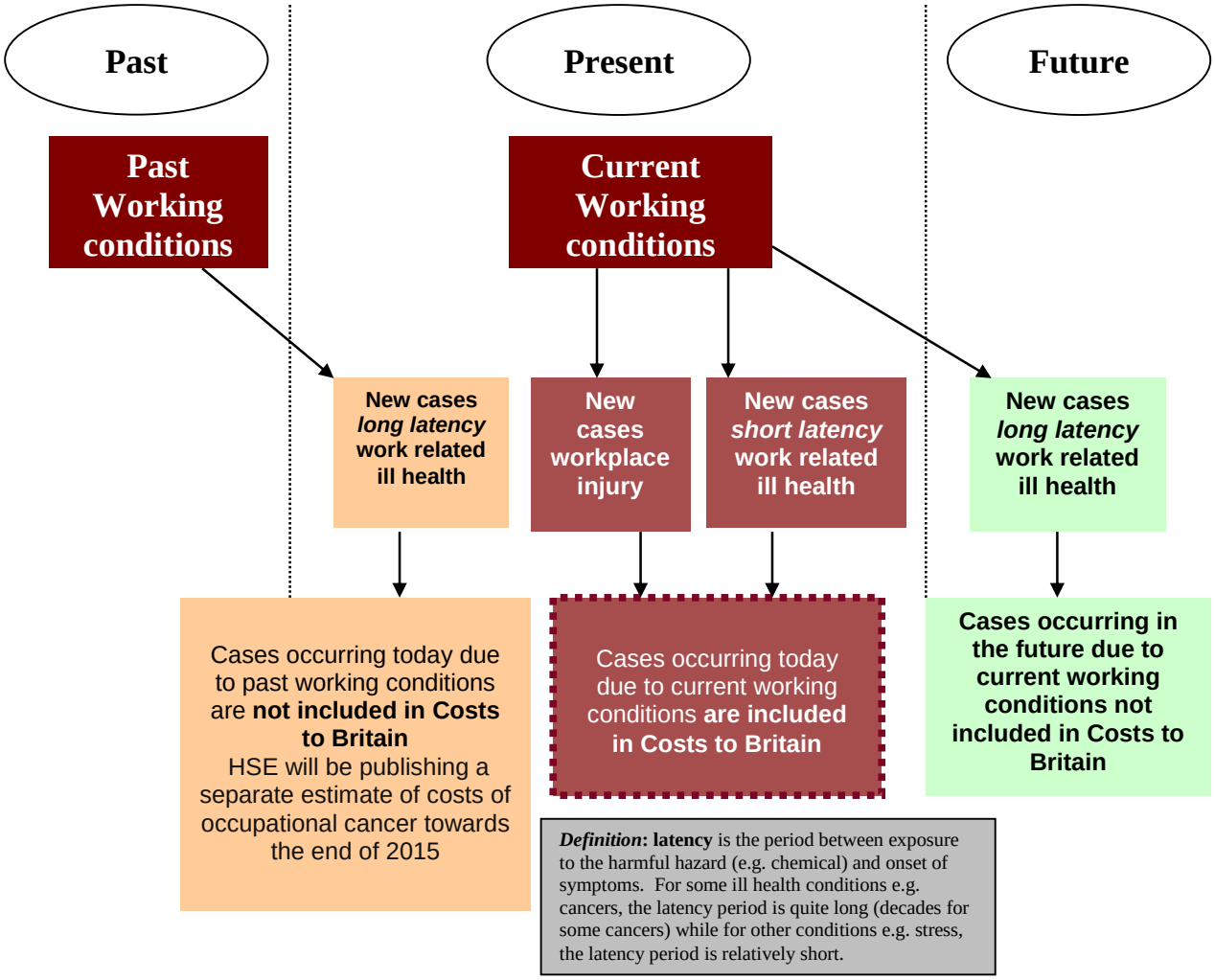
- estimate the overall scale of health and safety failings, taking into account the impacts that fall on different groups (individuals, employers and government/taxpayers);
- provide an overall indicator of movements in the performance of the health and safety system;
- provide unit costs (or 'appraisal values') for cases of workplace injuries and work-related ill health for use in HSE impact assessments and other economic appraisals. This allows us to compare the costs, in monetary terms, of workplace injury and illness with other costs and benefits associated with an intervention policy[4]

Since these 'Costs to Britain' estimates aim to ***reflect the costs of workplace illness and injury occurring today arising from current working conditions,*** they do not include costs of ill health cases occurring in the current year caused by historic working conditions. In particular this excludes fatal occupational illness cases (such as cancer) since, by and large, these cases will result from past working conditions.[5]

[4] It is important to note that the cost estimates presented in this report do not include the costs associated with implementing measures to improve health and safety standards and complying with health and safety regulations.

[5] HSE will be publishing a separate estimate of costs of work-related cancer towards the end of 2015.

Figure 1: Workplace injury and ill health cases included in 'Costs to Britain'



Methods

The general principle for estimating costs is to apply the formula[6]

Cost = Quantity x Unit price

Costs are estimated separately for different cost components and for different cost bearers using this basic formula.

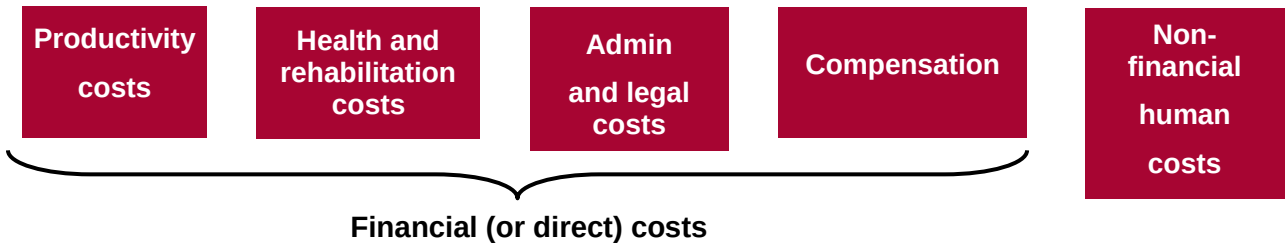
Information on 'quantity' is taken from two sources: statutory reports under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) for estimates of fatal injuries; and survey estimates from the Labour Force Survey[7] of self-reports of non-fatal injury and new cases of work-related ill health. This data is discussed in more detail in the section 'Number of workplace injury and work-related ill health cases'.

The 'Costs to Britain' include estimates of both:

- **financial (or direct) costs incurred** - either in terms of payments that have to be made or income/production that is lost.
- **monetary value of the impact on quality and loss of life** of affected workers (referred to as the non-financial costs) - often the greatest impact of illness and injury. It is standard practice in the economics of public policy to place value on non-financial costs in monetary terms where possible, so they can be represented alongside other costs.

Costs are structured into five broad categories, as shown in Figure 2 below. See Annex 1 for a details of the composition of these cost categories, including breakdown by cost bearer.

Figure 2 – Cost categories



Information on financial costs needed to quantify the different cost categories comes from a wide range of sources including ONS surveys on earnings, NHS data on treatment costs and DWP figures on benefit rates. Some cost elements are limited by availability of suitable data to quantify the impact, for example 'presenteeism', whereby a worker's health impairment results in reduced productivity while present at work. A lack of robust data means that we cannot quantify this cost with any degree of accuracy at this point in time and so it is currently omitted from the cost model.

Non-financial costs are based on the value that individuals would be willing to pay for reduced risk of death or to avoid reductions in quality of life which result from injury. It is therefore a measure of the economic value that people place on risk reduction and is over and above any direct financial costs that they incur.

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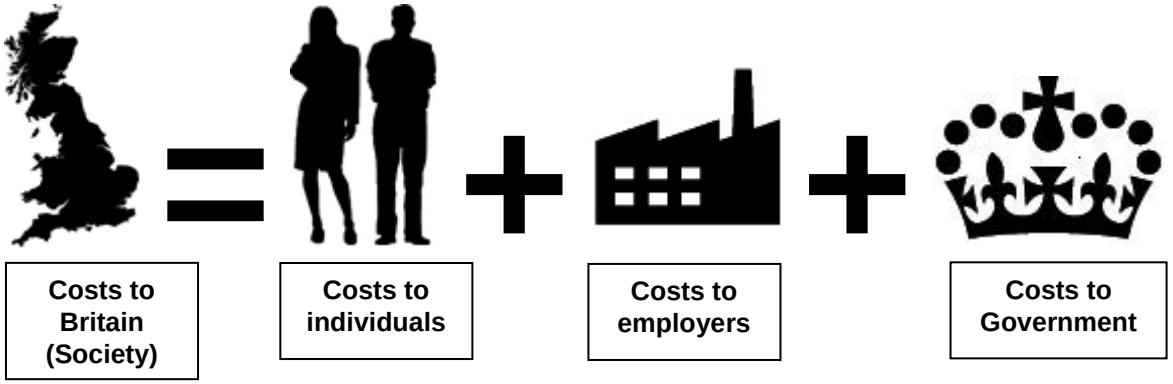
[6] Some costs are only available at the 'total' level (e.g. Employers Liability Compulsory insurance) and are included directly into the cost model. For these cost components, assumptions are used to apportion the total cost between injury and illness cases.

[7] Labour Force Survey Performance and Quality Monitoring Reports see: www.ons.gov.uk/ons/guide-method/method-quality/specific/labour-market/labour-force-survey/index.html

The cost model uses a well-established value, used by other Government Departments,[8] to estimate society's willingness to pay for avoided risk of fatality. However, this value reflects what people would pay to reduce risk, not what they would accept in compensation for suffering. It can never fully capture the losses to victims and their families of actual work-related fatalities. A full description of the method used in the cost model to calculate non-financial values is provided in Annex 3 of the detailed methodology report.[9]

Costs for the different cost components fall to three distinct groups (individuals, employers and government/taxpayers)….

… and combining the costs to these three groups gives an estimate of the total cost to society, sometimes referred to as the 'Costs to Britain'



In some cases, a cost to one group is an equal and opposite benefit for another group. For example sick pay represents a cost to the employer but is an equal and opposite benefit to the individual who receives it, so at the societal level the sick pay cancels out. These are 'transfer payments': a cost from employers transferred as a benefit to individuals.

Total costs to Britain, estimated by summing across the three groups are net of transfers between one group and another. The Cost Structure summary at Annex 1 explicitly shows the money inflows and outflows included in the HSE Cost to Britain Model and provides a brief narrative on each; the actual money values for workplace injuries and illness in 2013/14 relating to these inflows and outflows are shown in Annex 2.

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[8] See Department of Transport's DfT Webtag databook November 2014, A4.1.1 www.gov.uk/government/publications/webtag-tag-data-book-november-2014 which provides the origin of value of prevented fatalities.

[9] See www.hse.gov.uk/research/rrhtm/rr897.htm

Table 1 summarises how the various cost components fall by cost bearer.

Table 1: Summary of cost components by cost bearer

	Cost bearer		
Cost Category	Individuals 	Employers 	Government / taxpayer 
Productivity Costs	✓	✓	✓
Health and rehabilitation costs	✓	✓	✓
Admin and legal costs	✓	✓	✓
Employers' Liability Compulsory Insurance	✓	✓	
Non-financial human costs	✓		

Accounting for 'uncertainty' in the cost model

The cost estimates are subject to uncertainty, due to both sampling error in the estimated number of annual illness and injury cases[10] and uncertainty in the underpinning prices and assumptions used to assign costs. The cost model accounts for the former uncertainty and estimates are often expressed as 95% confidence intervals - the range of values which has a 95% chance of containing the true cost. When comparing costs over time, it is important that any judgement on change in costs is based on a consideration of the confidence interval, rather than the central estimate itself.

We are unable to quantify the uncertainty associated with the 'price data'. For some price estimates this is likely to be considerable, particularly in the case of non-financial human costs which is inherently difficult to value and can only provide an indication of the potential costs.

[10] Non-fatal workplace injury and ill health estimates (including never returns) are based on the Labour Force Survey, a sample household survey. Like all sample survey estimates, these estimates of injury and illness are subject to uncertainty arising from the sampling process – if a different sample of households had been selected it would be highly unlikely we would achieve exactly the same estimate.

Number of workplace injury and work-related illness cases

The ***number of annual cases*** of workplace injury and work-related illness are important drivers of the total cost estimates. In addition to this, the associated ***time taken off work*** from these cases is important in determining costs. Some direct costs, such as lost income and production are directly related to lost working time. Other costs, such as healthcare costs and non-financial human costs, use the time taken off work to infer severity.

The 2013/14 cost estimates presented in this report are based on average annual number of workplace injury cases for the three years 2012/13 to 2014/15 and average annual number of newly occurring work-related illness cases for the three years 2011/12, 2013/14, 2014/15.[11]

Number of workplace injury cases

630,000 workplace injuries annually

Annual average 2012/13-2014/15

Source: RIDDOR (fatal injuries); Labour Force Survey (non-fatal injuries)

Figure 3: Breakdown of injury incidence by injury severity category[12], annual average 2012/13-2014/15

[11] Estimates of non-fatal injury and work-related illness are based on self-reports from the Labour Force Survey (LFS). In 2011/12 no work-related ill health data was collected on the LFS, hence a slightly different time period is used for the annual average 2013/14 estimate for work-related illness compared to non-fatal injury.

[12] A slightly different method for apportioning injury cases by time off work has been used compared to that for producing the standard headline injury numbers.

Number of new cases of work-related illness

502,000 new cases of work-related illness* annually in workers

Annual average 2011/12, 2013/14, 2014/15

Source: Labour Force Survey

* To best capture illness from current working conditions, the illness estimate is based on new cases to those who worked in last 12 months.

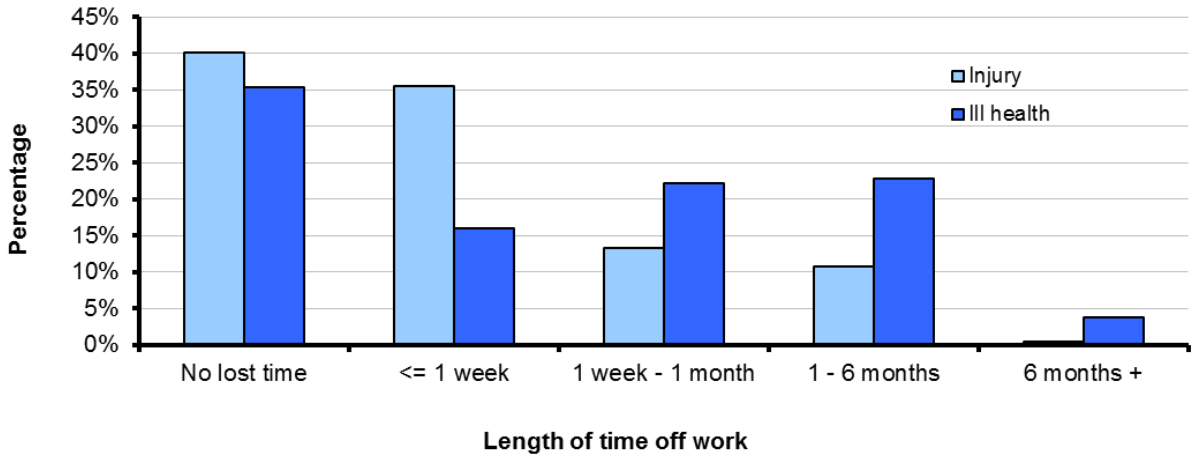
Figure 4: New cases of work-related illness by severity category, annual average 2011/12, 2013/14 and 2014/15

Time off work resulting from workplace injury or work-related illness

Time taken off work due to a work-related illness is on average greater than the time taken off due to a workplace injury

Source: Labour Force Survey

Figure 5: Percentage breakdown of workplace injury and new cases or work-related illness by length of time off work



Source: Labour Force Survey

'Never Returns'

Workers who permanently leave the labour market as a result of their workplace injury or work-related illness are an important sub-set of workplace injury and illness cases, since they incur large costs. Their withdrawal from the labour market will result in lost income and production for the remainder of their working lives. Further, we expect these injuries and illnesses will have a larger impact on quality of life as they are likely to be more severe. We would also expect these cases to incur greater healthcare costs.

An estimated 17,000 workers withdraw permanently from the labour market annually as a result of a workplace injury or work-related illness

Annual average 2008/09 to 2011/12, 2014/15

Source: Labour Force Survey

In order to estimate costs of injury and ill health separately, we need to estimate which of these 'never returns' arise from workplace injuries and which arise from work-related ill health. The Labour Force Survey suggests that the majority of never returns are due to cases of work-related ill health and so within the model a greater proportion of 'never returns' cases are allocated as 'ill health' than 'injury'.

Results

Total costs

Injuries and ill health in workers in Great Britain resulting largely from current working conditions cost an estimated £14.3 billion in 2013/14 (2013 prices)

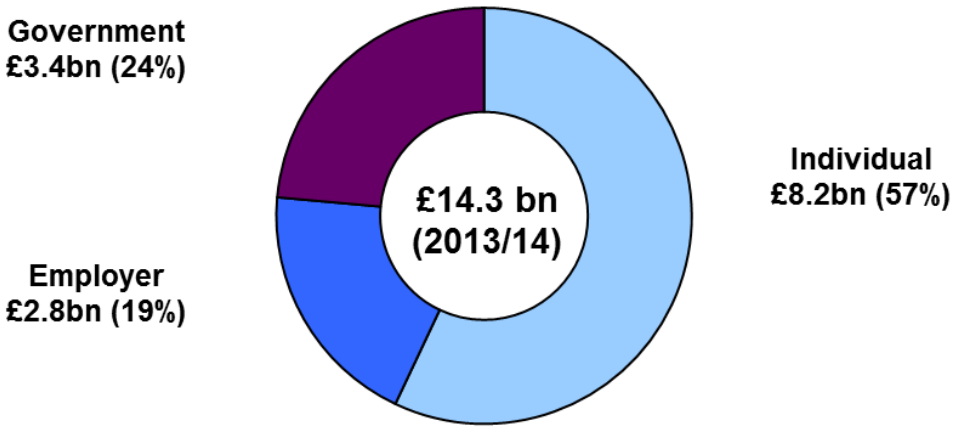
Source: HSE Cost to Britain Model

To put this number in context, the Department for Transport (DfT) estimate of the cost of reported road casualties (which uses a similar costing methodology) is £10.3 billion in 2013[13].

Cost by cost bearer

Somewhat over half of the total cost in 2013/14 fell on individuals whilst the remainder was shared between employers and government, a similar profile as in earlier years. This distribution of costs by cost bearer is useful in understanding the incentives operating on each of these groups with respect to taking risk control measures (when considered alongside the costs of implementing these measures) and is an important consideration when determining the case for government intervention to address workplace health and safety risks.

Figure 6: Costs to Britain of workplace injury and work-related ill health by cost bearer 2013/14 (in 2013 prices)



Source: HSE Cost to Britain

To look at data on cost by cost bearer for earlier years see table COST03 at: www.hse.gov.uk/statistics/tables/cost03.xlsx on the HSE website.

[13] http://www.gov.uk/government/statistical-data-sets/ras60-average-value-of-preventing-road-accidents. (Table RAS60003) Including the costs of 'damage only' accidents (which is not included in the HSE estimate) the cost of reported road accidents in 2013 was £14.7 billion.

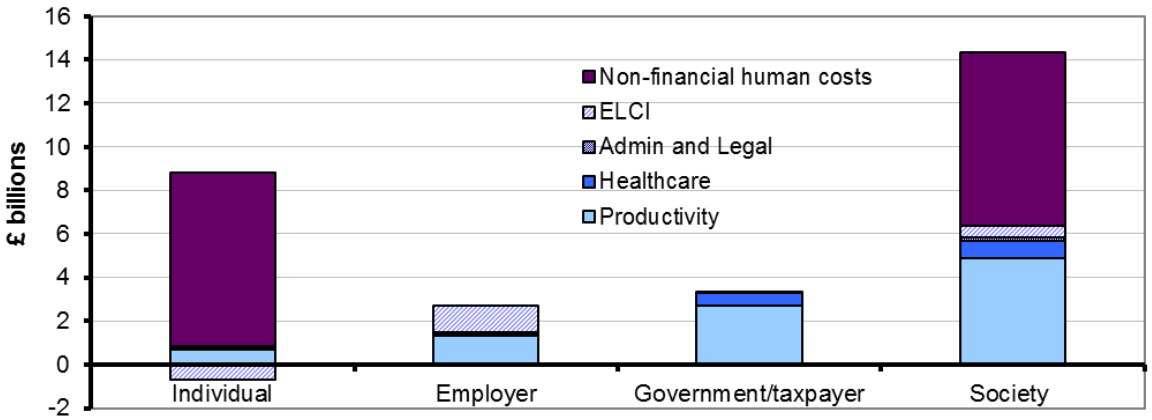
Costs by cost component

Costs to the different cost bearers can be further broken down by cost component.

The major components of total costs to society are non-financial human costs (£8bn) and the financial costs associated with productivity (£4.9bn)

Source: HSE Cost to Britain Model

Figure 7: Costs to Britain of workplace injury and new cases of work-related ill health by cost bearer and cost component 2013/14 (in 2013 prices)



Source: HSE Cost to Britain Model

- **Individuals:** Non-financial human costs account for almost all the costs borne by individuals. The financial losses arising from lost income, healthcare costs and administrative costs are offset by the Employers' Liability Compulsory Insurance (ELCI) payments received. ELCI for individuals shows as negative since it is an inflow to the individual.
- **Employers:** The major costs to employers arise from productivity costs (equivalent to the occupational/statutory sick pay payments made) and ELCI premiums.
- **Government/taxpayer:** Lost income, in terms of state benefits paid and lost tax receipts, accounts for around 80% of government costs, with the majority of the remainder attributed to 'Health and Rehabilitation' costs (incurred through NHS funding).

For more information on cost breakdowns by cost component, please see annexes 1 and 2.

Costs by type of incident

The breakdown of costs by type of incident can help inform strategic policy and new programme development, for example concerning interventions in the area of safety or of health. The 2013/14 cost model produces cost estimates for the following incident types:

Injury	Ill health

• fatal injury;
• non-fatal injury
  ○ with 7 or more days absence from work;
  ○ with up to 6 days absence from work.
	• work-related illness
	  ○ with 7 or more days absence from work;
	  ○ with up to 6 days absence from work.

In 2013/14, new cases of work-related illness cost society an estimated £9.4 billion compared to £4.9 billion for workplace injury

Source: HSE Cost to Britain Model

Figure 8: Proportional breakdown of injury and ill health cases by type of incident

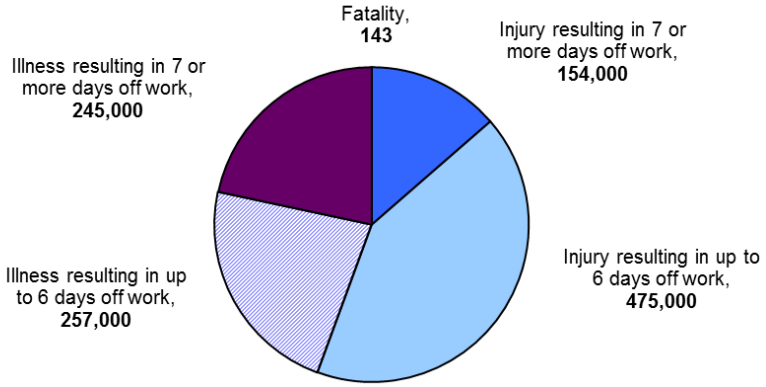
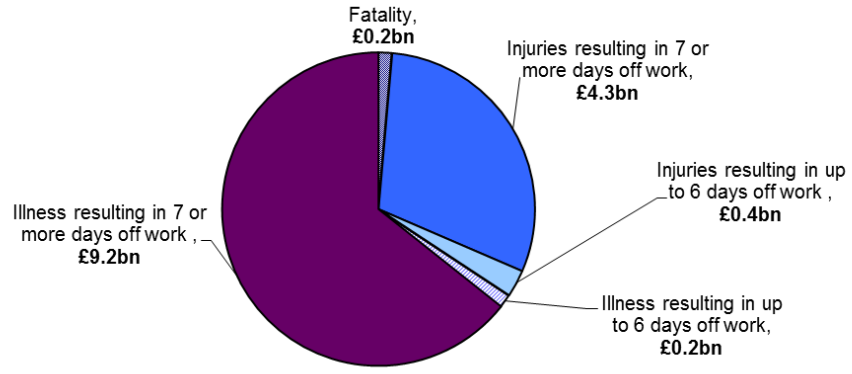


Figure 9: Proportional breakdown of cost by type of incident



Source: RIDDOR & Labour Force Survey (injury and illness cases) HSE Cost to Britain Model

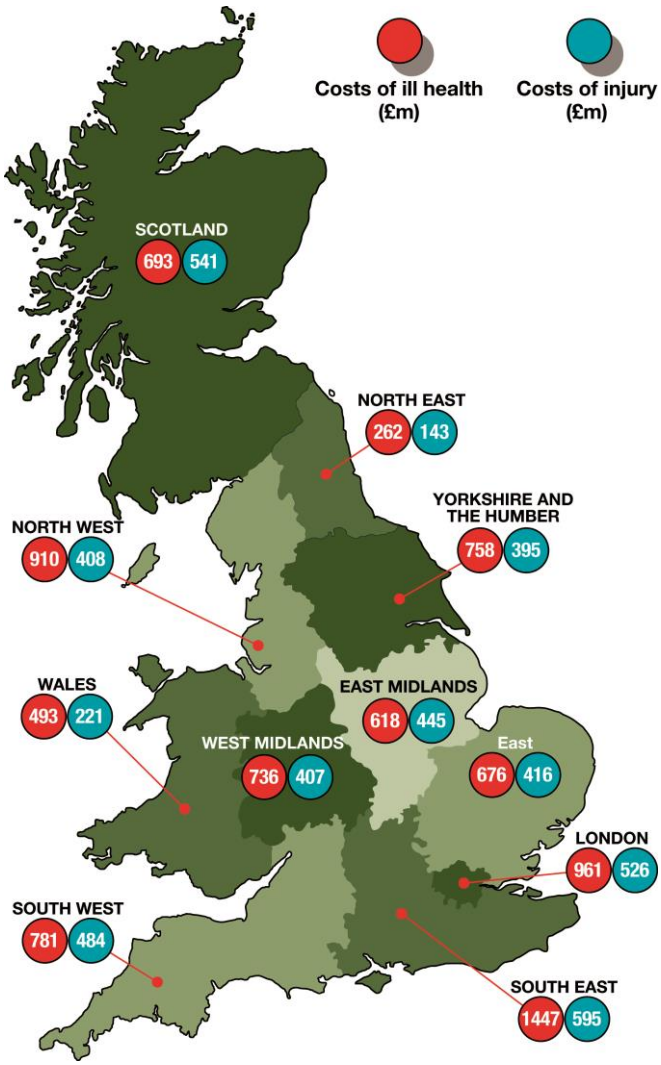
Whilst non-fatal injury and work-related illness with up to 6 days off work account for almost 65% of all incidence cases, their contribution to total costs is small (<5%). In contrast, incidence cases with 7 or more days off work contribute a disproportionally high amount to total costs: the number of ill health cases resulting in over 7 days off work represents less than 25% of all incidence cases but account for nearly 65% of the total costs and injury cases resulting in over 7 days off work while representing less than 15% of all incidence cases account for 30% of the total costs.

For further information on costs by incident type, please see table COST02 www.hse.gov.uk/statistics/tables/cost02.xlsx on the HSE website.

Costs by Region and Industry

Figures 10 and 11 below show the regional and industry breakdowns of the 2013/14 costs estimates. These breakdowns are important in demonstrating the 'local' case for health and safety. Note however, the difference in costs between regions/industries do not in themselves indicate differences in risk and will largely be driven by the number of people working in the region/industry. Costs in figures 10 and 11 should therefore only be used to observe the costs for a particular region or industry of interest and should not be used to make comparisons.

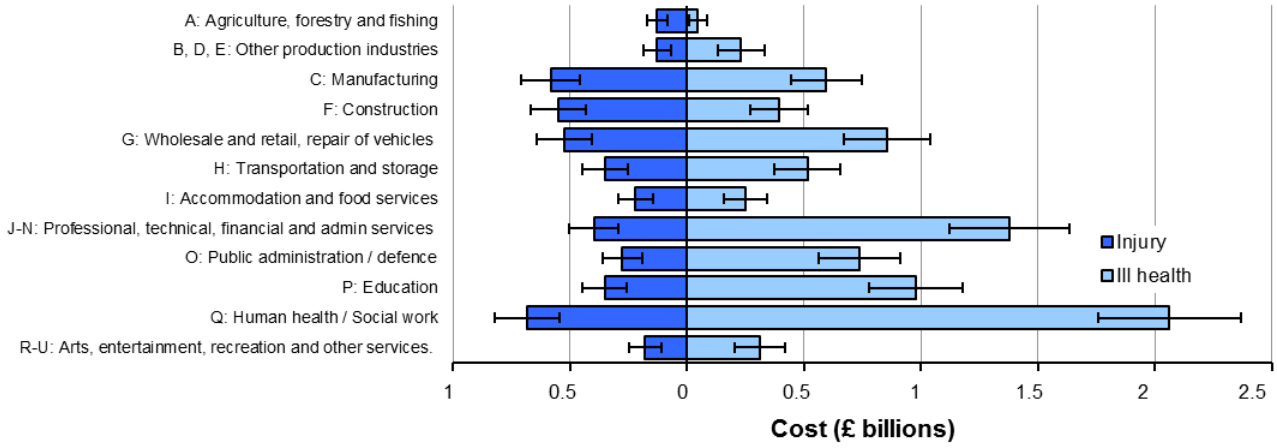
Figure 10: Costs to Britain of workplace injury and new cases of work-related ill-health by country/region of work 2013/14 (in 2013 prices)



Source: HSE Cost to Britain Model

Note:
(i) these regional estimates are subject to relatively wide confidence intervals, driven by the sampling uncertainty in the underlying estimates of number of workplace injury and ill health cases by region. (Typically the confidence interval around a regional injury/illness cost estimate is about +/- 25% of the cost estimate, but as high as +/- 40% on the injury/illness cost estimates for the North East). Nonetheless, regional cost estimates are still a useful measure to demonstrate the local cost burden from workplace injury and ill health and thus the need for good health and safety.
(ii) Regional breakdown of costs is for those illness and injury cases for which we know the region of work in which they occurred. Those illness and injury cases for which we do not know the region of work account for a further £1,046 million and £335 million respectively.

Figure 11: Costs to Britain of workplace injury and new cases of work-related ill-health by industry, 2013/14 (in 2013 prices)



Source: HSE Cost to Britain Model

Note:
(i) Chart includes an error bar to show the 95% confidence interval around each cost estimate.
(ii) Industry breakdown of costs is for those illness and injury cases for which we know the industry associated with the illness or injury. Those illness and injury cases for which we do not know the industry account for a further £1,004 million and £509 million respectively.

For further information on costs by region and industry, please see tables COSTREG at www.hse.gov.uk/statistics/tables/costreg.xlsx and COSTIND at www.hse.gov.uk/statistics/tables/costind.xlsx on the HSE website.

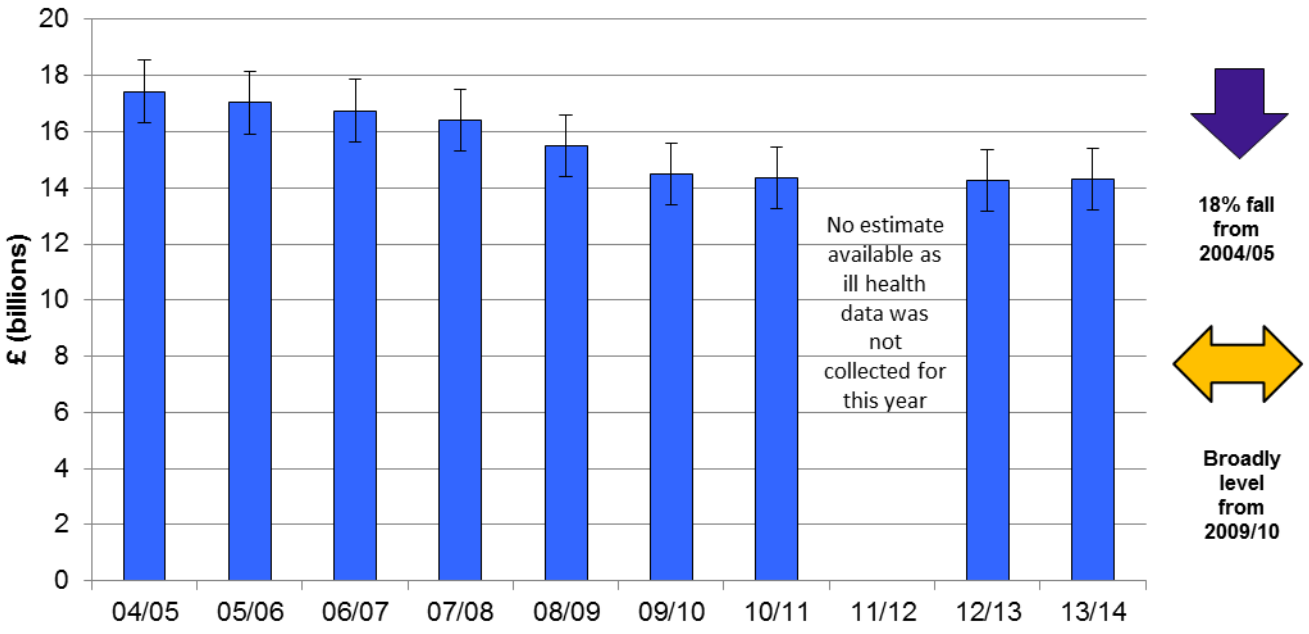
Changes in cost estimates over time

Changes over time in the aggregate costs provide an indicator of movements in the overall performance of the health and safety system – since the estimates focus on costs due to current working conditions, they provide a good indication of current performance.

Total costs of workplace injuries and new cases of work-related illness have fallen by 18% since 2004/05 reflecting downward movements in the number of cases. The total cost shows signs of levelling off in recent years

Source: HSE Cost to Britain Model

Figure 12: Costs to Britain of workplace injuries and new cases of work-related illness, 2004/05 to 2013/14 (2013 prices)



Source: HSE Cost to Britain Model

Between 2004/05 and 2013/14 the estimated total cost fell by 18% (£14.3 billion in 2013/14 compared with £17.4 billion in 2004/05). However, this masks a substantial difference in behaviour between injury and ill health: across the period injury costs fell 33% (from £7.4 billion to £4.9 billion) while the change in illness costs was not statistically significant. More recently, both injury and illness costs have remained broadly level.

Appraisal values, or 'Unit Costs'

Unit costs of workplace incidents, commonly referred to as 'appraisal values', are important in policy appraisal. Policy appraisal requires comparing the costs of any proposed new health and safety interventions against the likely benefits (in terms of reduced costs associated with reduced workplace illness and injury cases) the proposed measure is likely to deliver.

The appraisal values (or unit costs) are estimated by dividing the total cost estimate by the number of new incidence cases. This can be done for the same range of incident types as for which total cost estimates are produced, namely:

- fatal injury;
- non-fatal injury
    - with 7 or more days absence from work;
    - with up to 6 days absence from work;
- work-related illness:
    - with 7 or more days absence from work;
    - with up to 6 days absence from work.

The average appraisal values for 2013/14 are summarised in Table 2: as well as the overall cost per case, unit costs per case are also broken down by financial and non-financial costs. In most cases these unit (appraisal) values are the values that should be used for appraisal of HSE interventions.[14]

Table 2: Cost to Britain per case 2013/14 - average appraisal value estimates (2013 prices)

	Non financial human cost (rounded)	Financial cost (rounded)	Total cost (rounded)
Fatal injuries	1,153,000	421,600	1,575,000
Non-fatal injuries	4,600	2,900	7,500
7 or more days absence	17,600	10,100	27,700
Up to 6 days absence	330	550	880
Ill health	9,900	8,700	18,700
7 or more days absence	20,100	17,300	37,400
Up to 6 days absence	290	560	850

Source: HSE Cost to Britain model

Further information on appraisal values for particular cost bearers can be found at: www.hse.gov.uk/economics/eauappraisal.htm

[14] The appraisal values should be applied with care. In particular, the user should consider whether the injury and illness classifications above are appropriate for the injury and illness types under consideration. Where these appraisal values are not considered suitable for the appraisal at hand, specific unit cost estimates should be derived.

Annexes

Annex 1: Costing framework: A description of the different cost components by cost bearer

Note: Cost components in red show money outflows; cost components in black show money inflows

<table>
<tr><th>Cost component</th><th colspan="3">Description</th></tr>
<tr><td rowspan="5">Productivity costs</td><td colspan="3">At the society (total) level</td></tr>
<tr><td colspan="3">Captures costs associated with productivity:
Loss of output (gross loss of earnings) – the cost model assumes full employment in the economy, therefore at the macro level the effect is one less productive worker;
Production disturbance (reorganisation and recruitment)
(At the society level, transfer payments (e.g. sick pay, benefits, tax, national insurance) cancel out.</td></tr>
<tr><td colspan="3">How the productivity costs fall to the different cost bearers</td></tr>
<tr><td>Individual</td><td>Employer</td><td>Government / taxpayer</td></tr>
<tr><td>(-) Loss of gross family earnings
Loss of gross earnings due to absence from work (both short-term absences in the current year and absences in future years for those whose illness or injury leads to their permanent withdrawal from the workforce).</td><td></td><td></td></tr>
<tr><td>(+) OSP/SSP receipts
Many employers offer an occupational sick pay scheme (OSP), but others offer only statutory sick pay (SSP) and the self-employed will receive nothing at all from their employer. OSP and SSP provide the individual with income to offset their lost earnings. (The OSP/SSP receipts to the individual are exactly equal and opposite to that paid out by employers and government).</td><td>(-) OSP/SSP payments net of reimbursements
It is assumed that the employer maintains production at the same marginal cost prior to the individuals' illness or injury by either rearranging work or hiring a replacement. Therefore the employers OSP/SSP payments represent an additional cost to the employer.</td><td>(-) SSP reimbursements
Up until March 2014, the Government provided employers some reimbursement of their SSP payments under certain conditions (known as the percentage threshold scheme).</td></tr>
</table>

	(+) State benefit receipts There are a range of state benefits available to people who are not able to work because of injury or illness, including jobseekers allowance, industrial injuries disablement benefit, disability living allowance, housing benefit and council tax benefit. Like OSP/SSP receipts these offset individuals' lost earnings		(-) State benefit payments The State benefits paid by the Department of Work and Pensions are exactly equal and opposite to the state benefits received by individuals not able to work.
	(+) Income tax and NI savings The loss of gross income results in the individual 'saving' on their income tax and national insurance contributions to Government.	(-) NI paid on OSP/SSP Payments to absent employees continue to attract employers' class 1 National Insurance contributions.	(-) Net income tax and NI reduction The loss of income tax and NI paid by the individual to the Government is partly offset by the employer NI received on OSP/SSP payments
		(-) Work reorganisation For the first 6 months of any absence the model assumes that the employer will reorganise work to cover the absent employees' duties: this reorganisation incurs managerial/supervisory time.	
		(-) Recruitment and induction costs The model assumes that for absences of 6 months or more, the employer will recruit temporary or permanent replacement staff and provide them with suitable induction support.	
Employers' Liability Compulsory Insurance	**At the society (total) level**		
	Captures the overhead cost of Employers Liability insurance, a compulsory insurance for all employers, other than Government. Cost represents the profit margin and overheads for the insurance companies and the claim value consumed in legal costs and expenses.		
	How the compensation costs fall to the different cost bearers		
	Individual	***Employer***	***Government / taxpayer***

	(+) Lump sum payments to individuals made from claims against Employers' Liability insurance cover.	(-) Total cost of Employers Liability insurance premiums made by employers.	
Non-financial human costs	**At the society (total) level**		
	A monetary value of the impact on quality of life of affected workers: often the greatest impact of illness and injury is on quality of life, including lost life. It is standard practice in the economics of public policy to place a monetary value on non-financial costs where possible.		
	How the non-financial costs fall to the different cost bearers		
	Individual	***Employer***	***Government / taxpayer***
	(-) A monetary value of the impact on quality of life of affected workers.		
Health and rehabilitation	**At the society (total) level**		
	Total cost of health and rehabilitation associated with workplace injury and work-related illness (whilst the majority of costs are borne by the Government through NHS funding, there are some additional costs borne by individuals (eg prescriptions). Added to this is the profit margins and overheads for insurance companies providing private health insurance.		
	How the health and rehabilitation costs fall to the different cost bearers		
	Individual	***Employer***	***Government / taxpayer***
	(-) Out of pocket expenses… … including funeral expenses (for fatal injuries), prescription charges, additional travel and living costs, home modifications.		(-) NHS treatment and rehabilitation costs… ... including ambulance costs, hospital and clinic costs, GP costs, NHS prescription costs.
	(-) Premiums for private medical insurance Proportion of premiums assumed to be associated with work related incidents (based on data provided by the health insurance industry).	(-) Corporate private health insurance Proportion of premiums assumed to be associated with work related incidents (based on data provided by the health insurance industry).	(+) Treatment and rehabilitation covered by private health insurance Value of medical insurance claims paid by insurers assumed to be associated with workplace incidents (based on data provided by the health insurance industry).
	At the society (total) level		
	The costs of administrative activities to individuals, employers and Government associated with informing of sickness absence and processing the various money inflows and outflows from sick pay and benefit payments, compensation and insurance claims etc. The total legal costs and internal labour costs incurred by employers, HSE and Local Authorities are also a net cost to society.		

Administration and legal	***How the health and rehabilitation costs fall to the different cost bearers***		
	Individual	***Employer***	***Government / taxpayer***
	(-) Administration of insurance, compensation and benefit claims Individual incur costs from the administrative activities associated with initiating and managing claims for sick pay and state benefits and compensation and insurance payouts.	(-) Administration of SSP/OSP, insurance and compensation claims Employers incur costs from the administrative activities necessary to deal with the above payments and claims.	(-) Administration of SSP and benefits claims The clerical overhead associated with administering state benefits and statutory sick pay is a cost to the government.
	(-) Insurance company profit margin Individuals can have life insurance products to protect their income in the event of death. The cost of insurance to the individual is the net difference between premiums paid and payments received which represent the insurance companies' profit margin and overheads.		
		(-) HSE or LA investigation/prosecution – internal costs + legal costs Cost to employers of management time for dealing with HSE or Local Authorities investigations/ prosecutions and the arising legal costs.	(-) HSE or LA investigation/prosecution – internal costs The internal costs borne by the HSE and Local Authorities for investigating work related incidents.
		(-) Fines paid The cost of any fines paid by employers due to breach of health and safety regulations.	(+) Fines received The cost of any fines received by government due to breach of health and safety regulations (equal and opposite to that paid by employers).

Annex 2: Detailed breakdown of costs by cost bearer in 2013/14 (2013 prices)

	A. Individuals and their families (including the self-employed)	£ m	B. Employers	£ m	C. Government and general taxpayer	£ m	D. Total cost to society = A + B + C £m
Productivity costs	Loss of gross family earnings: (i) temporary losses prior to return to work, (ii) permanent losses due to withdrawal from workforce or death	-4,748					-4,748
(Due to income losses)	OSP/SSP receipts	1,155	OSP/SSP payments net of reimbursements	-1,145	SSP reimbursements	-10	0
	State benefit receipts	1,919			State benefit payments	-1,919	0
	Income tax and NI saving due to difference between pre and post injury/illness income, assuming all compensation payments are tax free	943	National Insurance paid on OSP/SSP	-159	Net income tax and NI reduction	-784	0
(Due to production disturbance)			Work reorganisation	-54			-54
			Recruitment and induction costs for temporary/permanent replacement staff	-68			-68
Employers' Liability Compulsory Insurance	EL insurance receipts, net of legal costs	708	EL insurance premiums	-1,176			-468

Non-Financial Human Costs	Monetised value of non-financial human costs	-8,022					-8,022
Health and Rehabilitation	Out of pocket funeral expenses, travel expenses, prescription charges, home expenses	-79			NHS treatment and rehabilitation costs (short and long term)	-714	-793
	Proportion of individual private health insurance premiums attributable to work related illness/injury	-21	Proportion of corporate private health insurance premiums attributable to work related illness/injury	-97	Value of treatment and rehabilitation covered by private health insurance claims	92	-26
Administration and Legal	Administration of insurance, compensation and benefit claims	-8	Administration of SSP/OSP, insurance and compensation claims	-19	Administration of SSP and benefits claims	-24	-51
	Insurance company profit margin and administration costs on other insurance products	-1					-1
			HSE or LA investigation / prosecution - internal costs + legal costs	-37	HSE or LA investigation / prosecution - internal costs	-28	-65
			Fines paid	-17	Fines received	17	0
Total Costs		-8,154		-2,773		-3,371	-14,298

Source: HSE Cost to Britain Model

Annex 3: Glossary of economic terms and concepts

Term	Explanation
'in 2013 prices'	Costs are estimated by using the basic formula 'costs=quantity x price' (see 'Methods' section). The price information used for all cost estimates presented in this report are prices that were current in 2013 (e.g. the wage data used to estimate the lost income of an individual is based on average wages in 2013; the tax and national insurance rates used are those that were in place in 2013/14). Estimating costs for all years in constant 2013 prices means comparisons of costs over time can be made free of price changes.
Cost bearer	The group in society to whom the costs fall. Within the cost model, there are three cost bearers: individuals, employers and government//taxpayer. Note that this assessment considers only where costs fall directly; it does not consider whether costs can be 'passed on' to others e.g. where businesses are able to pass on some or all of their costs in the form of higher prices to consumers.
Costs to Britain / Costs to Society	Combining the costs to the 3 different cost bearers gives a total 'Cost to Britain' (sometimes referred to as 'Cost to Society'). This total cost is net of transfers from one group to another (for example sick pay, which represents a cost to the employer but is an equal and opposite 'benefit' to the individual who receives it).
Cost component	The total cost estimate is made up of a range of different cost elements, including both financial and non-financial costs. Costs can be categorised into 5 broad groups: productivity costs, health and rehabilitation costs, administrative and legal costs, compensation and non –financial human costs. More details of each of these cost groups are given in Annex 1.
Financial costs	Direct cost incurred by one of the cost bearers – either in terms of payments that have to be made or income/production that is lost.
Non-financial costs	A monetary valuation of the impact that the illness or injury has on the quality of life (and for fatal injuries, loss of life) of the affected worker.
'Never returns'	Those workers who permanently leave the labour market as a result of their workplace injury or work-related illness.
Appraisal values	The unit cost of a work-related injury or illness, calculated by dividing the total cost by the number of cases. These values are used in policy appraisal (hence the term 'appraisal values'), whereby the costs of any proposed new health and safety interventions are measured against the likely benefits (in terms of reduced costs associated with reduced workplace injury and illness cases) the proposed measure is likely to deliver.

Links

For more information about costs of workplace fatalities, injuries and ill health in Great Britain see:

- Detailed cost breakdown for years 2004/05 to 2013/14: www.hse.gov.uk/statistics/tables/index.htm#cost-to-britain
- Detailed report of the methods used to estimate economic costs: www.hse.gov.uk/research/rrhtm/rr897.htm
- For more detail on the annual number of injury and work-related ill health cases , used within the cost model, see:
  - For fatal injuries: www.hse.gov.uk/statistics/tables/index.htm#riddor
  - For non-fatal injuries and ill health: www.hse.gov.uk/statistics/lfs/

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For information regarding the quality guidelines used for statistics within HSE see www.hse.gov.uk/statistics/about/quality-guidelines.htm

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Additional data tables can be found at www.hse.gov.uk/statistics/tables/.

Statistician: Heidi Edwards

Contact: heidi.edwards@hse.gsi.gov.uk

Economist: Michael Zand

Contact: michael.zand@hse.gsi.gov.uk

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