

# Accidents at work in the EU in 1996

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## Statistics in focus

### POPULATION AND SOCIAL CONDITIONS

THEME 3 – 4/2000

#### WORK

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Since 1994, Eurostat has produced annual European statistics on accidents at work, applying a harmonised methodology based on national sources mainly of an administrative nature. This publication covers the results for 1996. In addition to information on the victims, their injuries and their economic activities, the 1996 data cover two new aspects: the size of the enterprise, including information on the victim's professional status, and the duration of absence from work resulting from the accident, which is a prime indicator of its cost. Furthermore, for the first time, the 1996 data include information on "commuting accidents" occurring on the journey between home and the place of work.

In 1996 in the European Union (EU), there were 4 757 611 accidents at work resulting in more than three days' absence from work, compared to 4 918 066 in 1994 (estimated numbers): this represents a downward trend from 1994 to 1996 of 3.3%. These results relate to 88% of persons in employment in the EU, i.e. 131.5 million workers. Related to this population, the number of accidents resulting in more than three days' absence per 100 000 persons in employment (incidence rate) in all of the nine main branches of agriculture, industry, energy, construction, trade, transport and business activities fell from 4 539 in 1994 to 4 229 in 1996 - a decrease of approximately 7%.

The decrease in fatal accidents at work was even greater, with numbers falling from 6 423 in 1994 to 5 549 in 1996 in the EU and their incidence rate from 6.1 to 5.3 per 100 000, i.e. a fall of slightly more than 13%.

The risk of having an accident at work was higher for workers in local units of companies with fewer than 50 employees and for the self-employed: their incidence rate of fatal accidents was at least 6.3. For accidents resulting in more than three days' absence, the incidence rate exceeded 5 000 for local units with 10 to 49 employees.

In addition to the major impact of these accidents in human terms, they also had a high socio-economic cost: whereas for 47% of accidents the resulting absence from work was more than three days but less than two weeks, for 48% the absence was between two weeks and three months; for the remaining 5% of accidents, the consequence was an absence of three months or more, or permanent partial or total disability. It is estimated that 146 million work days were lost in 1996 in the EU and Norway owing to accidents at work resulting in more than three days' absence (4 832 329 accidents including Norway), i.e. a mean of 30 days per accident and the equivalent of one day of work lost per year for every person in employment.

Finally, it is possible from the information on commuting accidents from nine Member States to estimate the number of accidents resulting in more than three days' absence throughout the EU at approximately 600 000 in 1996 (in addition to accidents at work). The incidence rate was 489 per 100 000 (nine main branches). The number of fatal commuting accidents, which were chiefly road traffic and transport accidents, was around 2 900 for the entire EU, which makes an incidence rate of 2.9. In addition to this, there were 1 847 fatal accidents at work (a third of the total of 5 549) in the branch of transport and communication or, in the other main branches, caused by road traffic accidents or accidents on means of transport during work, giving an overall total of more than 4 700 for deaths of this type linked to work in 1996.



Manuscript completed on: 21.01.2000  
ISSN 1024-4352  
Catalogue number: CA-NK-00-004-EN-I  
Price in Luxembourg per single copy  
(excl. VAT): EUR 6

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Table 1: Accidents at work in the EU by type of activity

NACE rev1	(Economic activity)	Persons in employment	Accidents at work with more than 3 days' absence from work						
			Estimated number <sup>(1)</sup>	Incidence rate (number per 100 000 persons in employment)					
				1996 (1 000)	1996	1993 (pilot year)	1994 ( <sup>2</sup> )	1995	1996
Section (branch) Subsection or division (sector)									
Total - all branches of activity		Total	131 509	4 757 611					
		Men	72 233	3 668 266					
		Women	53 237	919 822					
		Not specified <sup>(5)</sup>	6 039	169 523					
A and D to K - total of 9 common branches <sup>(3)</sup>		Total	93 729	3 963 702	:	4 539	4 266	4 229	-6.8%
		Men	58 810	3 209 750	:	5 960	5 534	5 458	-8.4%
		Women	31 185	599 966	:	1 936	1 864	1 924	-0.6%
		Not specified <sup>(5)</sup>	3 734	153 986					
A Agriculture, hunting and forestry			5 334	408 666	:	6 496	6 123	6 771	4.2%
D Manufacturing			29 120	1 357 022	5 001	5 071	4 962	4 660	-8.1%
of which <sup>(4)</sup> :		da	3 202	283 446	7 504	7 360	6 920	6 557	-10.9%
		db	2 437	58 428	:	:	2 765	2 639	
		dc	513	11 060	:	:	2 505	2 394	
		dd	881	89 909	10 463	8 852	10 238	10 793	
		de	2 517	66 394	:	:	2 795	2 686	
		df	181	1 948	:	:	1 158	1 094	
		dg	1 904	44 680	:	:	2 431	2 400	
		dh	1 220	46 961	:	:	4 233	3 897	
		di	1 120	69 578	6 259	6 518	6 915	6 533	0.2%
		(glass, ceramic goods, construction products)							
		dj	4 263	357 066	8 606	8 650	9 022	8 546	-1.2%
		dk	3 218	105 426	:	:	3 708	3 308	
		dl	3 393	89 688	:	:	2 858	2 684	
		dm	2 714	72 908	:	:	2 936	2 734	
		dn	1 557	59 530	:	:	4 292	3 929	
E Electricity, gas and water supply			1 219	19 734	:	:	1 545	1 619	
of which <sup>(4)</sup> :		e40	979	14 081	:	:	1 368	1 383	
		e41	239	5 653	:	:	2 133	2 426	
F Construction			10 358	831 000	9 463	9 014	9 080	8 023	-11.0%
G Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods			20 081	491 424	2 494	2 552	2 523	2 431	-4.7%
H Hotels and restaurants <sup>(4)</sup>			5 130	176 472	3 969	4 121	3 645	3 532	-14.3%
I Transport, storage and communication			7 294	438 973	:	6 139	5 790	6 018	-2.0%
of which <sup>(4)</sup> :		i60	3 085	188 231	5 352	5 732	5 139	6 000	4.7%
		i61	106	4 739	:	4 933	4 658	4 886	-1.0%
		i62	312	12 238	:	5 470	4 397	4 121	-24.7%
		i63	1 748	181 145	13 922	11 580	11 829	10 526	-9.1%
J+K Financial intermediation; real estate, renting and business activities			15 193	240 411	1 496	1 638	1 627	1 582	-3.4%

<sup>(1)</sup> See methodological notes on page 7 and calculation by Member State for all 9 common branches in Table 2 page 5.

<sup>(2)</sup> For 1994 the incidence was calculated for only 8 common branches, since NACE section E "Electricity, gas and water supply" was not covered by the data from all 15 Member States until 1995; however, since this branch is not very significant, its exclusion in 1994 has very little impact on the mean incidence of all the common branches and the trend from 1994 to 1996.

<sup>(3)</sup> See the definition of "common branches" on page 4 and in the methodological notes on page 7.

<sup>(4)</sup> Incidences recorded outside Portugal; NACE section I "Transport, storage and communication" also includes division i64 "Post and telecommunications".

<sup>(5)</sup> Including all data from the Netherlands.

<sup>(6)</sup> The apparent trend in the wood manufacturing industry from 1994 to 1996 is not significant since in 1994 certain countries confused this sector with the manufacture of furniture, which comes under NACE subsection dn "Manufacturing n.e.c".

Table 1 (continued): Accidents at work in the EU by type of activity

NACE rev1	(Economic activity)	Persons in employment	Fatal accidents at work <sup>(1)</sup>					Trend % 1994-1996		
			Number 1996	Incidence rate (number per 100 000 persons in employment)						
				1996	1993 (pilot year)	1994 ( <sup>2</sup> )	1995		1996	
Total - all branches of activity		Total	131 509	5 549						
		Men	72 233	5 124						
		Women	53 237	315						
		Not specified <sup>(5)</sup>	6 039	110						
A and D to K - total of 9 common branches <sup>(3)</sup>		Total	93 729	4 858	:	6.1	5.9	5.3	-13.1%	
		Men <sup>(5)</sup>	58 810	4 526	:	8.2	8.0	7.7	.	
		Women <sup>(5)</sup>	31 185	236	:	0.8	0.7	0.8	.	
		Not specified <sup>(5)</sup>	3 734	96						
A Agriculture, hunting and forestry			5 334	676	:	14.0	13.8	12.9	-7.9%	
D Manufacturing			29 120	1 128		5.0	4.6	4.2	3.9	-15.2%
of which <sup>(4)</sup> :		da	3 202	191		9.2	9.2	5.2	4.7	-48.9%
		db	2 437	31		:	:	2.1	1.4	
		dc	513	8		:	:	2.1	1.7	
		dd	881	69		5.9	4.8	9.5	8.5	.
		de	2 517	40		:	:	2.7	1.7	
		df	181	1		:	:	1.1	0.6	
		dg	1 904	67		:	:	3.1	3.8	
		dh	1 220	29		:	:	2.5	2.5	
		di	1 120	83		10.4	9.1	7.3	8.1	-11.0%
		(glass, ceramic goods, construction products)								
		dj	4 263	325		8.0	6.2	7.7	7.7	24.2%
		dk	3 218	83		:	:	2.5	2.5	
		dl	3 393	104		:	:	3.6	3.2	
		dm	2 714	59		:	:	2.6	2.0	
		dn	1 557	38		:	:	2.6	2.7	
		Manufacturing n.e.c.								
E Electricity, gas and water supply			1 219	67		:	:	4.4	5.7	
of which <sup>(4)</sup> :		e40	979	64		:	:	4.3	5.8	
		e41	239	3		:	:	4.1	1.3	
		Electricity, gas, steam and hot water supply								
		Collection, purification and distribution of water								
F Construction			10 358	1 349		15.9	14.7	14.8	13.3	-9.5%
G Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods			20 081	486		3.3	2.8	2.9	2.5	-10.7%
H Hotels and restaurants <sup>(4)</sup>			5 130	53		2.3	1.9	1.8	1.1	-42.1%
I Transport, storage and communication			7 294	841		:	13.7	13.7	12.0	-12.4%
of which <sup>(4)</sup> :		i60	3 085	608		22.0	21.7	22.8	20.4	-6.0%
		i61	106	25		:	38.4	30.8	26.4	-31.3%
		i62	312	17		:	7.9	6.0	5.7	-27.8%
		i63	1 748	167		14.0	10.3	13.8	10.0	-2.9%
		Supporting and auxiliary transport activities; activities of travel agencies								
J+K Financial intermediation; real estate, renting and business activities			15 193	258		2.2	2.2	1.8	1.6	-27.3%

<sup>(1)</sup> Including road traffic accidents and accidents on any means of transport occurring during work, except for Ireland, the United Kingdom and, in part, the Netherlands; incidences recorded outside the Netherlands, which records only immediate deaths on the day of the accident.

<sup>(2)</sup> For 1994 the incidence was calculated for only 8 common branches, since NACE section E "Electricity, gas and water supply" was not covered by the data from all 15 Member States until 1995; however, since this branch is not very significant, its exclusion in 1994 has very little impact on the mean incidence of all the common branches and the trend from 1994 to 1996.

<sup>(3)</sup> See the definition of "common branches" on page 4 and in the methodological notes on page 7.

<sup>(4)</sup> Incidences recorded outside Portugal; NACE section I "Transport, storage and communication" also includes division i64 "Post and telecommunications".

<sup>(5)</sup> Not specified: including all data from the Netherlands; in 1994 and 1995, some fatal road traffic accidents were also classified as "not specified"; the apparent trend from 1994 to 1996 is therefore not significant.

<sup>(6)</sup> The apparent trend in the wood manufacturing industry from 1994 to 1996 is not significant since in 1994 certain countries confused this sector with the manufacture of furniture, which comes under NACE subsection dn "Manufacturing n.e.c".

## The trend for 1994-1996: an overall fall in accidents at work

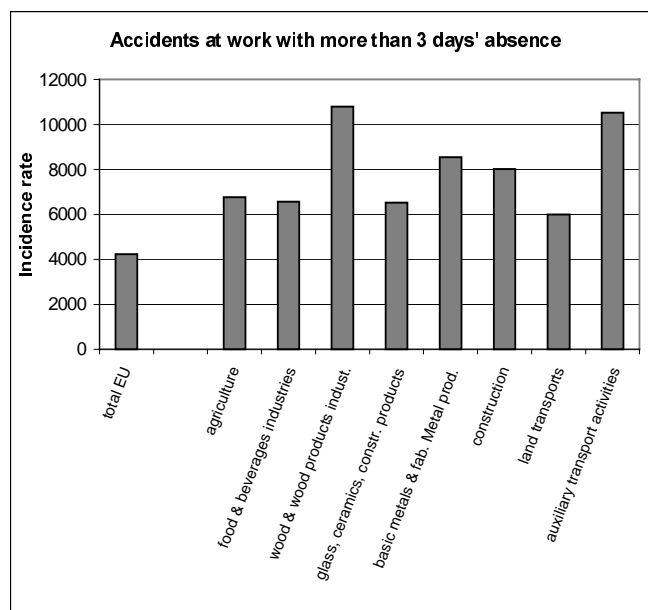
From 1994 to 1996, the incidence rate of accidents at work in the EU (the number of accidents per 100 000 persons in employment) decreased in several sectors of economic activity in the 9 branches covered by the data from all Member States (which are used to calculate the European incidence rates for the "common" branches). The overall reduction in the incidence rate of fatal accidents (5.3 in 1996, i.e. a drop of 13.1% in the 9 common branches as a whole) was approximately double that of accidents resulting in more than 3 days' absence (incidence rate of 4 229, down 6.8%). (Table 1)

### However, the trend varies depending on the branch and sector of economic activity ...

Among the activities with a high risk of accidents at work, there was a noticeable decrease in the food and beverages industry (incidence rate of accidents resulting in absence from work of 6 557 in 1996, i.e. 10.9% down on 1994, and rate of fatal accidents of 4.7, i.e. a drop of almost a half), in the construction (rates of 8 023 and 13.3 respectively, i.e. down 11.0% and 9.5%) and auxiliary transport services (10 526, down 9.1%, and 10.0, down 2.9%, although the drop relative to 1995 was 27.5%). By contrast, the incidence rate of accidents resulting in more than three days' absence from work rose for a second group of high-risk activities: agriculture (6 771, up 4.2%), the wood industry, which had the highest incidence rate of accidents resulting in an absence from work (10 793, up 5.4% on 1995), the glass, ceramics and construction products industry (6 533, up 0.2%) and land transport (6 000, up 4.7%). In the basic metals and fabricated metal products sector, the rate of deaths increased (7.7 or 24.2%). (Table 1 and Figure 1)

In other activities, there was a marked decrease for hotels and restaurants (3 532 and 1.1, down 14.3% and 42.1%), air transport (4 121 and 5.7, down 24.7% and 27.8%) and financial intermediation, real estate, renting and business activities (1.6 for deaths, a drop of 27.3%). Finally, for the electricity, gas and water supply, which is a new common branch, the incidence rate of accidents resulting in absence from work was low in 1996 (1 619), but that of fatal accidents was higher than the mean (5.7). (Table 1)

Figure 1: Activities with a high risk of accidents at work



Branches and sectors of activity, among the nine common branches, accounting for more than 1% of the total number of accidents and with an incidence rate higher than the mean of the nine branches in the EU in 1996.

### ... and is most marked in the area of high-risk activities performed by men

The activities for which the 1994-96 trend in accidents at work (resulting in more than 3 days' absence) was worse than the mean had a high proportion of female workers. In the EU, almost one third of agricultural workers are women. In the retail and repair sectors, they account for 44% (low incidence rate, 2 431, but a drop of only 4.7% from 1994 to 1996). By contrast, only 9% of employees in construction are women. The reduction of accidents resulting in absence was therefore less in favour of women (1 924 per 100 000 in 1996, a fall of 0.6%) than men, although the incidence for men still remained high because their professions have a high risk of accident and were less often part-time (5 458, a fall of 8.4%). (Table 1)

## The risk of having an accident at work varies

### Most prone to accident: the youngest and the oldest ...

Apart from differences due to economic activity, young people are still most at risk from accidents at work. Narrower age bands were introduced for 1996, allowing a more detailed analysis.

For the EU in 1996, the incidence rate of accidents at work resulting in more than 3 days' absence went from 5 751 for the 18-24 age group to 3 558 for the 45-54 group, rising again to 4 063 for those aged 55-64 (9 common branches). The same applied in the euro-zone, although the incidence rates here were higher: from 7 101 for the 18-24 group to 4 155 for the

45-54 group, then up to 4 898 for those aged 55-64 (a mean of 4 966). This rise in incidence rate after 55 years was not observed in Belgium, Spain, Luxembourg, the Netherlands and Finland. In Greece and Ireland, the incidence rate tended to rise with age in general; in Sweden, it remained stable throughout all age groups (except 55-64 years). (Table 2)

However, the incidence of fatal accidents in the EU in 1996 showed a continuous rising trend with age, from 3.8 for the 18-24 age group (4.9 in the euro zone) to 8.7 for the 55-64 age group (10.6). This increase occurred in all countries, despite variations in the intermediate age groups.

In the EU in 1996, the mean incidence rate of fatal road traffic accidents and fatal transport accidents during work was 1.7 per 100 000 in the 9 common branches (a third of the total of 5.3, since the incidence rate excluding these accidents was 3.6) for 1 847 deaths (4 858 – 3 011). It also reached its maximum in the 55-64 age group: 2.8 (8.7 – 5.9). (Table 2)

### ... and those working in local units of fewer than 50 employees

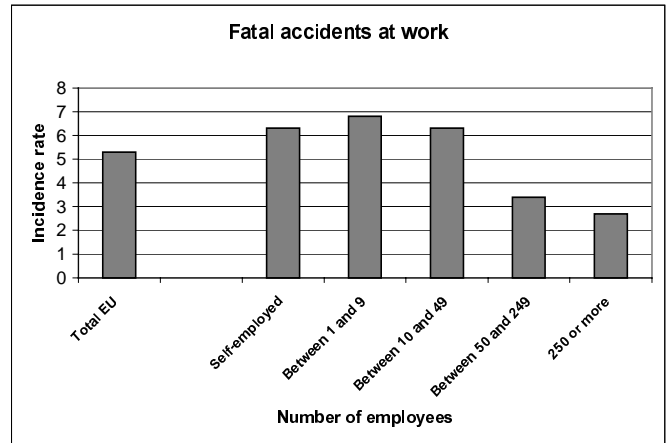
In the EU in 1996, the incidence rate of fatal accidents to employees and their employers was highest for small local units of enterprise (see definition on page 7) with fewer than 50 employees: 6.8 for those with 1 to 9 employees and 6.3 for those with 10 to 49 employees. By contrast, the incidence for large local units of 250 or more employees was less than half of the average, at 2.7. For accidents resulting in more than 3 days' absence, the picture was similar, but only for units of 10 to 49 employees: 5 195 per 100 000 in the EU and Norway. For 1 to 9 employees, the incidence was only slightly above the mean (4 241) and only 30% lower than that for units of over 249 employees (2 943). However, this overall breakdown needs to be examined in the future in more detail by economic activity. (Table 3 and Figure 2)

In local units with 50 to 249 employees, the incidence was slightly below the overall level (4 043 and 3.4), with rates more

likely to be high for lower numbers of employees (i.e. nearer to 50) and low as their numbers approached 250.

For the self-employed and unpaid family workers, the picture was mixed: there was a high incidence of fatal accidents (6.3), but a low incidence of accidents resulting in absence (3 557) (Table 3 and Figure 2). The contradictory picture for this category of worker and, to a lesser extent, for very small enterprises might be explained by the nature of the profession and a tendency to under-report minor accidents.

Figure 2: Risk of accident at work depending on the size of the local unit of the enterprise



EU and Norway in 1996 - Nine common branches of activity

Table 2: Accidents at work in Europe by Member State and age in 1996 - nine common branches of activity

	Persons in employment (1 000)	Accidents at work with more than 3 days' absence										Fatal accidents at work								
		Number of cases reported 1996	Average reporting level % 1996	Estimated number 1996	Standardised incidence rate (standardised number of accidents per 100 000 persons in employment)						Number 1996	Standardised incidence rate (standardised number of accidents per 100 000 persons in employment)								
					1994 total	1996						1994 total	1996							
						Total e (1)	18-24 years	25-34 years	35-44 years	45-54 years			55-64 years	Total g (1)	18-24 years	25-34 years	35-44 years	45-54 years	55-64 years	
a	b	c	d = b / c%	e (1)	years	years	years	years	years	f	g (1)	years	years	years	years	years				
EU-15	93 729	3 483 171	88	3 963 702	4 539	5 751	4 390	3 766	3 558	4 063	EU-15	4 858	6.1	5.3	3.8	4.2	4.7	6.3	8.7	
EUR-11 (2)	71 116	3 296 591	92	3 581 763		4 966	7 101	5 087	4 334	4 155	4 898	EUR-11	4 409		6.3	4.9	4.9	5.5	7.5	10.6
National data from the insurance system covering accidents at work (3)													Including road traffic accidents and accidents on any means of transport occurring during work (1)							
B	1 840	86 814	100	86 814	4 415	5 059	8 816	5 096	4 400	3 814	2 904	EU-15	3 011	3.9	3.6	2.6	2.8	3.1	4.2	5.9
D	24 000	1 266 909	100	1 266 909	5 583	5 098	7 599	5 410	4 577	3 960	4 855	EUR-11	2 647		4.1	3.2	3.2	3.5	4.8	7.0
EL	1 208	18 334	39	46 838	3 702	3 783	3 871	3 568	3 638	4 146	4 471	B	76	6.0	5.5	5.3	4.5	4.9	7.3	9.5
E	7 719	488 756	100	488 756	6 166	6 736	8 497	7 490	6 335	5 932	4 828	DK	46	2.8	3.0	1.6	2.6	1.8	4.3	4.1
F	12 156	570 381	100	570 381	5 515	4 964	7 777	5 140	4 259	4 006	4 785	D	776	3.7	3.5	2.6	2.9	3.1	3.2	6.3
I	14 653	580 358	(5)	643 229	4 641	4 179	5 600	3 905	3 683	3 998	5 127	EL	39	4.3	3.7	1.3	2.5	4.9	4.5	6.7
L	186	8 275	100	8 275	4 508	4 741	6 538	4 959	4 423	3 887	3 372	E	396	7.0	5.9	4.1	5.7	5.6	8.0	6.9
A (5)	2 675	88 534	.	.	5 259	3 554	3 605	2 787	3 026	3 268	6 413	F	366	4.3	3.6	2.8	2.3	3.3	5.4	8.1
P (5) (6)	2 114	134 327	.	.	7 361	6 949	8 586	6 747	.	5 597	.	IRL	17	3.9	3.3	.	.	.	.	.
FIN	1 348	43 301	100	43 301	3 914	3 372	4 753	3 532	3 325	3 101	2 855	I	569	5.3	4.1	3.7	2.8	3.5	5.2	7.7
National data from declarations made to another competent authority (4)													Excluding the transport and communications branch and excluding road traffic accidents and accidents on any means of transport occurring during work (5)							
DK	1 649	24 777	56	44 172	2 653	2 704	3 203	3 038	2 661	2 436	2 539	EU-15	3 011	3.9	3.6	2.6	2.8	3.1	4.2	5.9
IRL	692	3 433	36	9 498	852	1 494	1 223	1 456	1 778	1 708	1 628	EUR-11	2 647		4.1	3.2	3.2	3.5	4.8	7.0
NL (6)	3 734	25 503	(6)	153 613	4 287	4 251	7 271	4 290	3 473	2 909	2 735	B	76	6.0	5.5	5.3	4.5	4.9	7.3	9.5
S	2 457	14 957	50	29 649	1 123	1 217	1 237	1 210	1 230	1 230	1 370	DK	46	2.8	3.0	1.6	2.6	1.8	4.3	4.1
UK	17 299	109 837	42	261 280	1 915	1 550	1 637	1 619	1 550	1 477	1 646	D	776	3.7	3.5	2.6	2.9	3.1	3.2	6.3
NO (6)	1 153	18 675	(6)	46 689	.	4 352	4 872	4 817	4 008	3 853	4 938	EL	39	4.3	3.7	1.3	2.5	4.9	4.5	6.7

(1) e = (d / a) x 100 000 then standardisation and g = (f / a) x 100 000 then standardisation; see methodological notes on page 7.

(2) The euro-zone (EUR-11) consists of Belgium, Germany, Spain, France, Ireland, Italy, Luxembourg, the Netherlands, Austria, Portugal and Finland.

(3) Public insurance (social security) or private insurance, depending on Member States. (4) Usually the Labour Inspectorate.

(5) Italy: 100% except for the self-employed in craft professions: 65%; Austria: 100% except for agriculture and public administration - the 1994 data included accidents with 1 to 3 days' absence, this is no longer the case in 1996; Portugal: almost 100%; the Netherlands: <30% or 30 to 70% depending on the branch of activity; Norway: between 25 and 100%.

(6) 1996: Portugal and Norway = 1995 data; the Netherlands = estimates based on 1994 data; Portugal: the 25-34 years range includes the ages 35-44, and the 45-54 years range includes the ages 55-64.

(7) Except for Ireland and the United Kingdom which do not have data on this type of accident; the Netherlands (excluded from the incidence calculation): only immediate deaths.

(8) National breakdown by age drawn up as a proportion of the national division by age which includes road traffic accidents and accidents on any means of transport during work.

Table 3: Accidents at work in the EU and Norway in 1996 by size of local unit of the worker's enterprise  
All branches of activity

	Accidents with more than 3 days' absence		Fatal accidents (excluding Norway)	
	% of the total	Incidence rate <sup>(1)</sup>	% of the total	Incidence rate <sup>(1)</sup>
Self-employed <sup>(2)</sup>	7.6	3 557	12.0	6.3
Employers and employees according to the number of employees of the local unit <sup>(3)</sup>				
Between 1 and 9	24.7	4 241	33.1	6.8
Between 10 and 49	27.4	5 195	27.0	6.3
Between 50 and 249	22.5	4 043	15.4	3.4
250 or more	17.8	2 943	12.5	2.7
of which between 250 and 499	6.8		4.1	
500 or more	11.1		8.3	
Total	100.0	4 229	100.0	5.3

The breakdown and incidence of accidents at work according to the size of the local unit for the EU and Norway are estimated from the available data for 10 Member States plus Norway (no information for Germany, the Netherlands, Portugal, Finland and the United Kingdom).

<sup>(1)</sup> Number per 100 000 persons in employment in the 9 common branches.

<sup>(2)</sup> Includes family workers except for paid employees of a family business.

<sup>(3)</sup> See the definition of "local unit" in the methodological notes on page 7.

## Major human and economic consequences

Preliminary information is provided on the seriousness of accidents at work in 1996. Of the total number of accidents in the EU and Norway, 95% resulted in less than 3 months' absence from work, divided equally between short absences of more than 3 days but less than 2 weeks and more serious cases lasting from 2 weeks up to less than 3 months. However, for 251 747 workers (5%), the disability was even longer (3 months or more) or was permanent. (Table 4)

Of course, the seriousness varied depending on the type of injury caused by the accident. Head injuries were mostly of a minor nature, since 63% resulted in an absence from work of less than 2 weeks; however, they also accounted for 28% of

fatal accidents. More than two thirds of accidents caused injuries to upper and lower limbs, but injuries to the legs and feet were more serious: in 52% of cases, disability lasted between 2 weeks and less than 3 months; in 6% of cases, it lasted 3 months or more, or was permanent. The most serious accidents involved multiple injuries or injuries to the whole body, with 11% resulting in absences of at least 3 months or permanent disability. They also accounted for one third of the deaths. (Table 4)

The minimum and maximum number of days lost following all accidents were 98.1 million and 193.9 million, estimated on the basis of the lower and upper limits of each length of absence from work. Taking the mean of these values (146 million), the total number of lost days' work for 1996 in the EU and Norway can be estimated for the 4 832 329 accidents at work resulting in more than 3 days' absence. The mean absence was therefore 30 days. However, this is compounded by the more serious accidents: the median (50% of accidents) was approximately 2 weeks (47%), and 62% of accidents caused less than 3 weeks' absence from work. (Table 4)

In addition, Eurostat has estimated the total direct costs for insurance schemes covering accidents at work (cost of all medical care, daily allowances, present and future compensation for cases of permanent disability and death in the year) at approximately 20 billion euro per year in the EU, basing this assessment on the data for some Member States. Two thirds of this amount is concentrated in the four high-risk branches (agriculture, manufacturing, construction and transport). It is divided up equally between the cost of the short-term effects of accidents (medical expenses and daily allowances) and that of the long-term effects of more serious cases (permanent disability and death).

Table 4: Accidents at work in the EU and Norway by part of the body injured and length of absence from work in 1996  
All branches of activity

	Percentage by part of body injured								Number of days lost <sup>(1)</sup>				
	Head <sup>(2)</sup>	Neck <sup>(2)</sup>	Back <sup>(2)</sup>	Torso <sup>(2)</sup>	Limbs <sup>(2)</sup>		Whole body <sup>(2)</sup>	Others <sup>(3)</sup> and not specified	Total	Total (1 000 000)			Mean per accident
					Upper	Lower				Minimum	Maximum	Mean	
<b>Accidents with more than 3 days' absence</b>													
<b>Breakdown by length of absence from work <sup>(1)</sup></b>													
Less than 2 weeks	63	44	48	45	48	42	42	41	47	13.3	23.4	18.3	8
From 2 weeks to less than 3 months	34	52	46	51	48	52	47	51	48 <sup>(4)</sup>	53.0	124.6	88.8	38
3 months or more, or permanent incapacity	3	4	6	4	4	6	11	8	5	31.8	45.9	38.8	154
Total	100	100	100	100	100	100	100	100	100	98.1	193.9	146.0	30
<b>Breakdown by part of body injured</b>	9	2	7	5	41	27	3	6	100				
<b>Fatal accidents (excluding Norway)</b>													
<b>Breakdown by part of body injured</b>	28	2	3	10	1	2	33	21	100				

<sup>(1)</sup> The breakdown of accidents at work by the length of absence from work and the corresponding number of days lost for all the EU and Norway are estimated from the data available for 10 Member States (no information for Denmark, Germany, Ireland, Portugal, Finland and Norway).

<sup>(2)</sup> Neck and back: include spine and vertebrae; torso: includes internal organs of the rib cage and abdominal area; limbs: include hands (upper limbs) and feet (lower limbs); whole body: includes multiple sites of the injured body.

<sup>(3)</sup> Including deaths having only a medical origin occurring at work in France (not applicable for all other countries), see methodological notes on page 7.

<sup>(4)</sup> Of which 15% for 2 weeks to less than 3 weeks, and 11% for 3 weeks to less than 1 month.

## Accidents on the journey to and from work

Table 5: Commuting accidents in the EU by sex and age

1996	Accidents with more than 3 days' absence			Fatal accidents		
	Number	% of the total	Incidence rate <sup>(2)</sup>	Number	% of the total	Incidence rate <sup>(2)</sup>
<b>9 Member States <sup>(1)</sup></b>						
<b>Total</b>	<b>412 308</b>	<b>100.0</b>	<b>489</b>	<b>1840</b>	<b>100.0</b>	<b>2.9</b>
Men	208 454	50.6	473	1420	77.2	3.7
Women	203 783	49.4	520	420	22.8	1.4
Not specified	71	.	.	.	.	.
18-24 years	76 850	18.6	869	362	19.7	5.1
25-34 years	117 173	28.4	489	546	29.7	2.9
35-44 years	90 513	22.0	385	410	22.3	2.3
45-54 years	74 355	18.0	380	309	16.8	2.3
55-64 years	39 807	9.7	444	157	8.5	2.5
Others, unspecified	13 610	3.3	.	56	3.0	.
<b>EU-15 total (estimate)</b>	<b>587 000 <sup>(2)</sup></b>			<b>2 900 <sup>(2)</sup></b>		

<sup>(1)</sup> For 1996, data on commuting accidents are available for Belgium, Germany, Spain, France, Italy, Luxembourg, Austria, Finland and Sweden.

<sup>(2)</sup> Number of commuting accidents per 100 000 persons in employment; this rate is calculated for the same 9 common branches of activity as for accidents at work.

<sup>(3)</sup> For the total reference population covered for accidents at work: 131.5 million persons in employment.

From 1996, harmonised results have been produced for "commuting" accidents for 9 Member States (Belgium, Germany, Spain, France, Italy, Luxembourg, Austria, Finland and Sweden). These are accidents occurring during the normal journey between the home, the place of work and, where appropriate, the place where meals are usually taken. These countries present a fairly representative picture of the situation in Europe.

In 1996, there were 412 308 commuting accidents with more than 3 days' absence in these 9 countries, giving a figure of around 587 000 (extrapolated) for the entire EU (these cases are not included in the 4 757 611 accidents at work proper). The incidence rate was 489 per 100 000, almost 9 times less than that of accidents at work. Like that of accidents at work, the rate for commuting accidents fell from 869 for the 18-24 age group to 380 for the 45-54 group, but rose again to 444 for those aged 55-64 (mean level for the 25-34). However, women were more seriously affected: 520 per 100 000, compared with 473 for men. (Table 5)

In the 9 countries, there were 1 840 fatal commuting accidents in 1996, approximately 2 900 for the entire EU. Proportionally, the incidence was much higher : 2.9, more than half that of accidents at work (Table 5). Most of these deaths were road traffic accidents or accidents on means of transport, which also represented one third of fatal accidents at work. The risks related to road traffic are therefore one of the major factors in death at work or on the way to or from work, since road transport and travel currently have a central socio-economic role in the activity of all companies.

As with accidents at work, men were more prone to fatal commuting accidents: 3.7 per 100 000. However, young people were also at a high risk: 5.1 for the 18-24 age group, as against 2.3 for those aged from 35 to 54. (Table 5)

### ➤ ESSENTIAL INFORMATION – METHODOLOGICAL NOTES

European statistics on accidents at work are produced on the basis of the Framework Council Directive 89/391/EEC of 12 June 1989 (on improvements in the safety and health of workers at work), in accordance with harmonised definitions and classifications following the recommendations of the International Labour Office. They cover all branches of activity and all professional statuses, those of salaried employees and self-employed persons.

An **accident at work** is a *discrete occurrence in the course of work which leads to physical or mental harm*. This definition includes accidents occurring during work but off the company's premises (at a customer's, in public places and on means of transport), even those caused by third parties. It also includes road traffic accidents (for lorry drivers or employees on business trips, for example). Finally, it includes acute poisoning, but excludes accidents having only a medical origin (such as heart attacks at work) and occupational diseases.

An **accident at work resulting in more than 3 days' absence from work** is an accident followed by a *resumption of work the fifth day or later after the day of the accident* (i.e. at least 4 days' absence). A **fatal accident at work** is an accident which leads to the death of the victim, in principle within one year.

A **commuting accident** is an accident which occurs *during the normal journey between the home, the place of work and the usual place where meals are taken*. It is not an accident at work. The journey to or from work can include normal activities (such as collecting children from school).

The **reporting level** is the proportion of *reported accidents resulting in more than 3 days' absence amongst those occurring*. The 9 Member States in which it is compulsory to report accidents at work in order to qualify for treatment under social security or insurance schemes record almost all accidents. In contrast, they are only partially recorded in Denmark, Greece, Ireland, the Netherlands, Sweden, the United Kingdom and Norway. For these 7 countries (and in part for Italy, Austria and Portugal), Eurostat **estimates the number of accidents**, adjusting the number of cases reported according to the reporting level.

The indicator of the level of risk of an accident at work to which employed persons are exposed is the **incidence rate** = *(the number of accidents at work occurred / number of employed persons in the studied reference population) X 100 000*. The incidence rates for fatal accidents are calculated separately. In addition, the structure of economic activities of a country influences the value of its total frequency; a "**standardised**" incidence rate is therefore calculated for each Member State by giving each branch the same weight at national level as in the EU total.

The source of the reference population is Eurostat's **Labour Force Survey** (except for Spain and Luxembourg, for which social security records are used). For 1996, the incidences are calculated for the **9 main branches of activity (NACE rev 1 sections) referred to as "common"** which are pursued in the 15 Member States and Norway and cover 71% of the total reference population. However, accident coverage is incomplete for certain specific sectors or professional statuses in the 9 common branches for 1996 (1995 data for Portugal and Norway, and 1994 data for accidents resulting in absence for the Netherlands) - Belgium, Greece, Spain, France, the Netherlands, Austria, Portugal, Finland and Norway: do not or do not fully cover employers, the self-employed and family workers, including agriculture (except for Spain, Austria and Norway); Belgium, Denmark, Greece, France, Italy, the Netherlands, the United Kingdom and Norway: do not or do not fully cover rail and/or sea and/or air transport; Ireland and the United Kingdom: excluding road traffic accidents and Northern Ireland.

The **local unit** is an enterprise or part thereof situated in a geographically identified place where the economic activity is carried out or can be said to be based.

# Further information:

## ➤ Reference publications

Title European Statistics on accidents at work - Methodology  
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