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Thematic Note



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Statistical Review of Occupational Injuries

GERMANY

2008 Data

Set of statistical data relating to **accidents at work** and **occupational diseases** in the European Union Member States



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comprendre les risques professionnels en Europe
understanding occupational risks in Europe

FOREWORD

This document sets out a descriptive synthesis of the main available statistical data about accidents at work, commuting accidents and occupational diseases of the considered EU Member State.

It comes from the use by EUROGIP of various official publications from Member States. The data have been translated and presented according to the EUROGIP's knowledge of the analysed insurance system. These data have not been reprocessed by EUROGIP. For any confirmation, one has to refer to the source which is systematically given.

Comments do not intend to give explanatory factors to the figures but only to describe the underlying system's characteristics in order to allow the reader to analyse them.

Furthermore, Eurostat (Statistical Office of the European Communities) publishes, at European level, harmonised accidents at work data according to the ESAW (European Statistics on Accidents at Work) methodology in implementation of the 89/391/EEC framework directive.

In order to complete national data, the last part of this document shows accidents at work structural indicators computed and published by Eurostat.

Acknowledgements

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1. Main characteristics of the German occupational injury insurance system

Statutory accident insurance is one of the five mandatory insurances within the German social security system. Employees are insured during their activities at the workplace. Pupils and students are insured for their activities from the nursery school till higher education institutes. Other groups, such as agricultural workers, domestic helps and voluntary workers are insured. The costs of this insurance are met by the employer or the State.

The German statutory accident insurance - DGUV (Deutsche Gesetzliche Unfallversicherung) is in charge of the occupational injury insurance. DGUV results from the merging on July 1st 2007, of the Federation of Institutions for Statutory Accident Insurance and Prevention of the industry, trade and services sector – HVBG (Hauptverband der gewerblichen Berufsgenossenschaften) with the Central Federation of Public Sector Accident Insurer - BUK (Bundesverband der Unfallkassen).

In 2008, DGUV insured 74,285,633 persons:

Industry, trade and services	46,627,927
Public sector	10,599,153
Pupils and students	17,058,553
Total	74,285,633

Data published within this document cover industry, trade and services as well as the public sector, all in all 57,277,080 persons or 36,259,598 full-time equivalent workers.

Accidents at work and commuting accidents statistical data derived from the Pupils Accident Insurance are excluded. These data are available, distributed by region, within the documents cited as reference. On the other hand, occupational diseases data are included in the macro-data. It is not possible to isolate them in each table. This will be specified whenever possible.

The system sets that companies of the industry, trade and services must affiliate themselves to a Berufsgenossenschaft (BG) according to their activity.

BGs are public law professional associations with an equal representation board. The BGs accomplish tasks falling

to them under their own responsibility. If they are independent for their management, they are financially interdependent. Prevention of occupational risks is one of the BGs' major tasks.

Consequences of accidents at work, commuting accidents and occupational diseases are insured by the BGs.

The funding is the sole responsibility of the employer within the framework of a contributory system.

BGs are gathered into 13 activity branches which can be found in the statistical tables. In 2008, the BG Precision engineering and electrical engineering merged with the BG Leather and textiles.

Public sector's equivalent to a BG is an UVTöH (Unfallversicherungsträger der öffentlichen Hand – Accident Insurance Fund of the Public Sector). UVTöH are also gathered under the DGUV umbrella association.

Usually there is one Accident Insurance Fund of the Public Sector per region. But several Insurance Funds for fire-services covering each several regions are in existence. On the other hand, the Insurance Fund for railway services and the one for postal services and telecommunications operate at national level.

These Accident Insurance Funds of the Public Sector insure the public sector and pupils and students, all in all roughly 28 million persons.

These two kinds of insurance bodies, BG and UVtöH, are labelled Insurance Fund within this document.

Please visit the DGUV web site: <http://www.dguv.de/inhalt/index.html#>

2. Statistical data sources

For Germany

Statistical data reproduced within this document come from DGUV. They can be found in a document called « DGUV Statistics 2008 – Figures and long-term trends » (PDF document in English) at the following web address:
<http://www.dguv.de/inhalt/zahlen/documents/dguvstatistiken2008e.pdf>

Other data (in German language) are available at the following address: <http://www.dguv.de/inhalt/zahlen/index.jsp>

The document entitled “Geschäfts- und Rechnungsergebnisse der gewerblichen Berufsgenossenschaften und Unfallversicherungsträger der öffentlichen Hand 2008 – Industry, trade and services accident insurance Funds and public sector accident insurance Funds statistical 2008 Yearbook” allows the reader to get a complete view of the financial and technological statistics. It is available in German language (PDF format) at the following address:
<http://www.dguv.de/inhalt/zahlen/documents/gur2008.pdf>

For Eurostat

Structural indicators on health and safety at work in Europe are available only for fatal accidents at work and accidents at work with more than three days away from work. Data are available under various formats: tables, maps and graphs, at the following web address:
http://epp.eurostat.ec.europa.eu/portal/page/portal/health/health_safety_work

The ESAW (European Statistics on Accidents at Work) aiming to provide harmonised data about accidents at work with more than three days away from work is available at the following web address:
http://circa.europa.eu/Public/irc/dsis/hasaw/library?l=/statistics_methodology/esaw_methodology/ke4202569_en_pdf/EN_1.0_&a=d

3. Main data

Number of insured workers / persons

Persons insured in the industry, trade and services sector	46,627,927
Persons insured in the public sector	10,599,153
Total	57,227,080
Number of insured full-time workers in the industry, trade and services sector	31,208,520
Number of insured full-time workers in the public sector	5,051,078
Total	36,259,598

The number of full-time workers is calculated by taking into account the average annual number of hours actually worked (1,610 hours in 2008). These figures include Non Governmental Organisations, the German Red Cross, voluntary firemen... and domiciliary care workers.

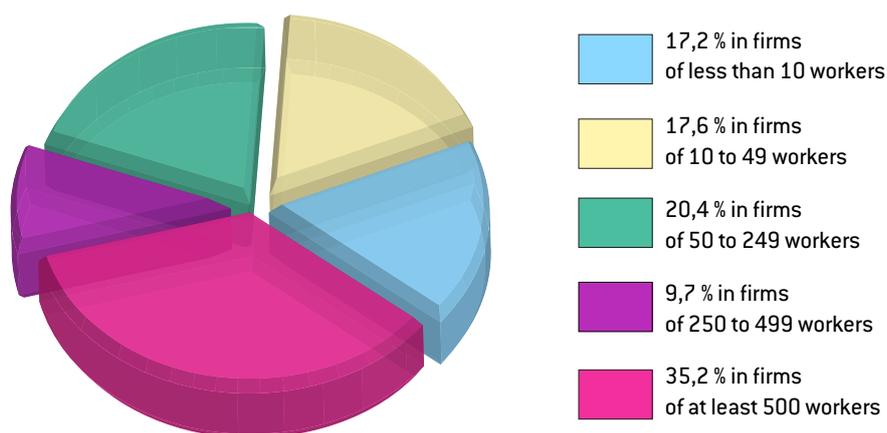
Number of insured companies⁽¹⁾

Companies of the industry, trade and services sector	3,027,321
Public sector	24,402
Total	3,051,723

(1) without private households and assistance companies

Distribution of workers (full-time equivalent) by company size

This chart is based on 32,536,246 full-time workers excluding those working in companies for which the number of salaried employees is not known and those working in private households and assistance companies.



Distribution of the full-time workers per activity branch and according to the company staff

Branch of activity	Number of companies with full-time workers(1)					Total number of companies(2)	Staff by branch(2)
	< 10 workers	10 to 49	50 to 249	250 to 499	> 500 workers		
Mining	86	45	63	20	33	247	66,892
Pit and quarry	11,621	2,533	980	138	78	15,350	294,596
Gas, district heating and water	5,126	965	527	57	45	6,720	155,878
Metal	69,189	45,842	20,131	3,278	3,263	141,703	3,594,342
Electrical and precision engineering, textile, leather	129,469	19,830	5,166	766	626	155,857	2,361,788
Chemicals	7,535	3,628	2,199	373	297	14,032	884,920
Timber	44,036	6,209	1,145	127	57	51,574	432,147
Paper and printing	550,514	4,778	1,717	272	155	57,436	587,768
Food	316,932	26,118	3,543	309	87	347,005	1,822,191
Construction	271,777	27,105	3,678	298	180	303,038	1,790,663
Commerce and administration	1,025,312	113,404	23,182	3,201	2,598	1,170,589	11,966,164
Transport	177,114	17,659	3,352	312	177	197,676	1,557,016
Health services	500,298	37,956	7,143	946	811	565,094	3,661,544
Total: industry, trade and services	2,609,009	306,072	72,826	10,097	8,407	3,027,321	29,175,909
Public sector	8,772	8,530	4,470	1,193	1,309	24,402	3,460,711
Total	2,617,781	314,602	77,296	11,290	9,716	3,051,723	32,636,620

(1) One full-time worker is equivalent to the number of hours actually worked (1,610 in 2008 and 1,590 in 2007) on average by a full-time employee in industry and is therefore a reflection of the period of exposure to the risk of industrial accidents.

(2) In some cases the size of companies is not available. So summing up does not always coincide with the column. Without private households and assistance companies.

4. Accidents at work and commuting accidents

The following data cover notified and after assessment by the Insurance Funds recognized accidents with at least three days away from work. The employer is not legally bound to notify accidents at work with less than three days away from work. This information is not available in the technological statistics.

Recognized accidents at work in absolute value

Year	Accidents at work	Commuting accidents	Total
2005	931,932	185,146	1,117,078
2006	948,546	191,186	1,139,732
2007	959,714	167,067	1,126,781
2008	971,620	176,608	1,148,228

Fatal recognized accidents at work in absolute value

Year	Fatal accidents at work	Fatal commuting accidents	Total
2005	656	552	1,208
2006	711	535	1,246
2007	619	503	1,122
2008	572	458	1,030

Incidence and frequency rates for the overall number of recognized accidents at work and for fatal accidents (excluding commuting accidents)

Incidence rate is the ratio of the number of accidents at work to 1,000 workers (full-time equivalent employment).

Frequency rate is the ratio of the number of accidents at work to 1 million hours worked.

Year	Incidence rate of accidents	Frequency rate of accidents	Incidence rate of fatal accidents	Frequency rate of fatal accidents
2005	27.08	17.25	0.019	0.012
2006	26.95	17.06	0.020	0.013
2007	26.81	16.86	0.017	0.011
2008	26.80	16.64	0.016	0.010

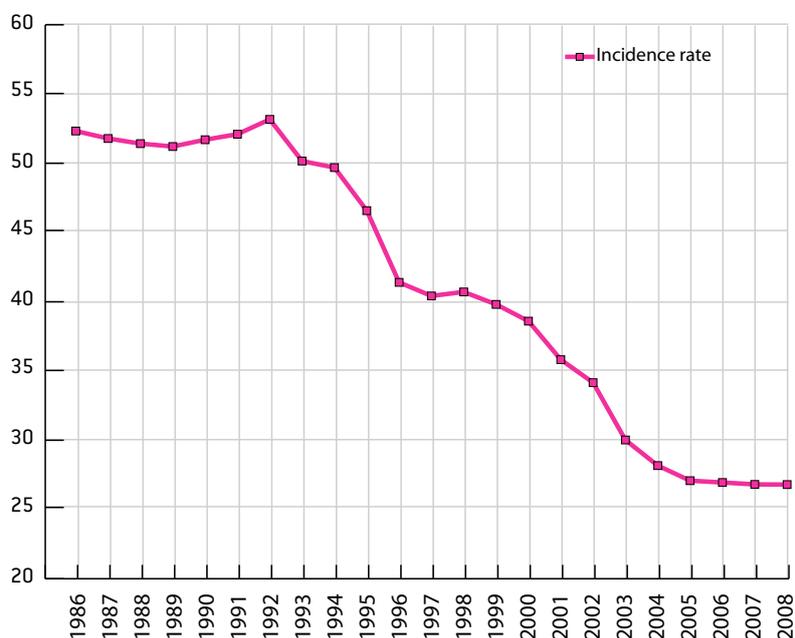
Distribution of recognized accidents at work per branch of activity with more than three days away from work - fatal accidents included

Activity branch	Accidents at work	Commuting Accidents	Total per branch
Mining	1,217	251	1,468
Pit and quarry	11,520	1,112	12,632
Gas, district heating and water	3,629	791	4,420
Metal	161,810	17,946	179,756
Electrical and precision engineering, textile, leather	48,630	10,473	59,103
Chemicals	12,997	4,229	17,226
Timber	28,337	2,046	30,383
Paper and printing	14,443	2,557	17,000
Food	88,907	12,821	101,728
Construction	120,605	9,405	130,010
Commerce and administration	256,179	57,767	313,946
Transport	62,220	5,976	68,196
Health services	55,696	24,227	79,923
Total: industry, trade and services	866,190	149,601	1,015,791
Public sector	105,430	27,007	132,437
Total	971,620	176,608	1,148,228

Accident rates' long-term trends

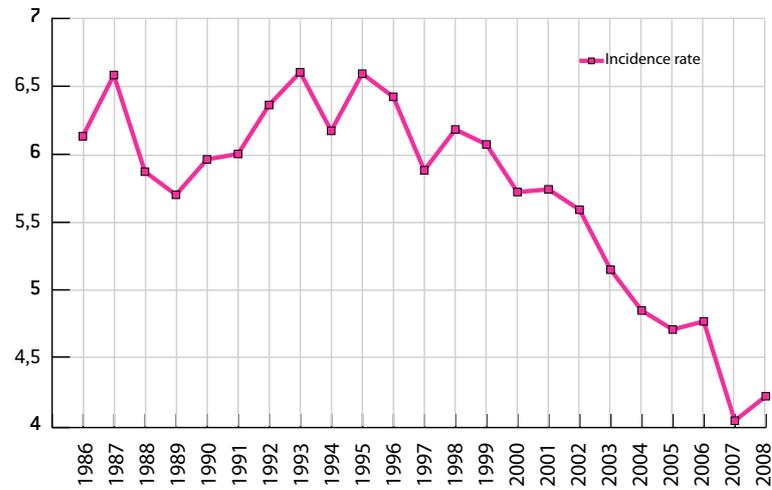
Incidence rate: ratio of the number of accidents at work to 1,000 workers (full-time equivalent employment)

Accidents at work



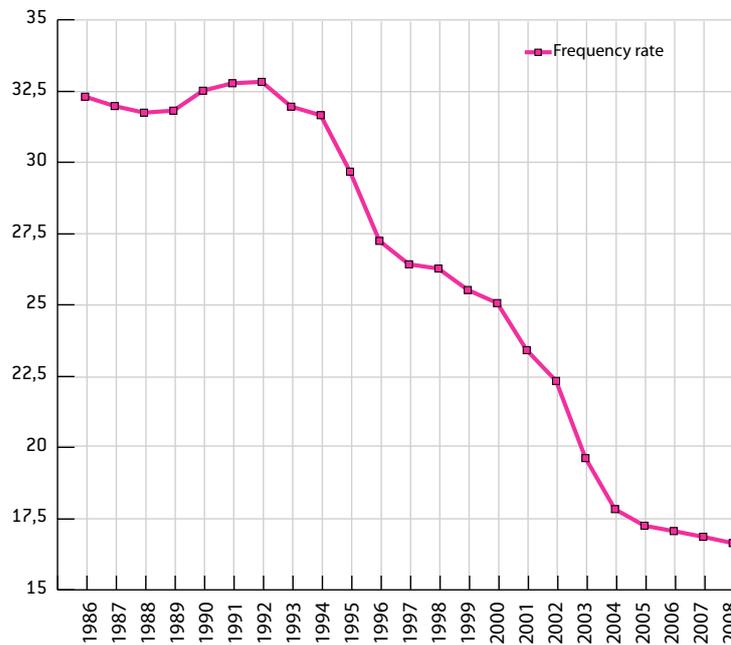
Incidence rate: ratio of the number of accidents at work to 1,000 weighted insurance relationships¹

Commuting accidents



Frequency rate: ratio of the number of accidents at work to 1 million hours worked

Accidents at work



[1] As for commuting accidents workers are considered individually; this is the number of insured workers (i.e. insurance relationships) that has to be considered.

The five activity branches registering the highest number of accidents at work

Accidents at work in absolute value

Activity branch	Recognized accidents	% compared to total
Commerce and administration	256,179	26.37
Metal	161,810	16.65
Construction	120,605	12.51
Food	88,907	9.15
Transport	62,220	6.40
Others	176,469	18.16
Public sector	105,430	10.85
Total	971,620	100.00

Accidents at work incidence rate

Activity branch	Incidence rate
Construction	67.32
Timber	65.57
Food	48.79
Metal	44.94
Transport	39.96
Public sector	20.87
Total	26.80

Fatal accidents at work in absolute value

Activity branch	Fatal accidents at work	% compared to total
Construction	123	21.50
Commerce and administration	122	21.33
Transport	115	20.10
Metal	61	10.66
Electrical and precision engineering, textile, leather	27	4.72
Others	79	13.81
Public sector	45	7.87
Total	572	100.00

The five activity branches registering the highest number of commuting accidents

Commuting accidents in absolute value

Activity branch	Recognized commuting accidents	% compared to total
Commerce and administration	57,767	32.71
Health services	24,227	13.72
Metal	17,946	10.16
Food	12,821	7.26
Electrical and precision engineering, textile, leather	10,473	5.93
Others	26,367	14.93
Public sector	27,007	15.29
Total	176,608	100.00

Commuting accident incidence rate

Activity branch	Incidence rate
Chemicals	4.78
Metal	4.50
Commerce and administration	4.32
Health services	4.20
Timber	4.17
Public sector	4.88
Total	4.23

Fatal commuting accidents in absolute value

Activity branch	Fatal commuting accidents	% compared to total
Commerce and administration	129	28.17
Metal	53	11.57
Electrical and precision engineering, textile, leather	51	11.14
Construction	46	10.04
Health services	40	8.73
Others	93	20.31
Public sector	46	10.04
Total	458	100.00

5. Occupational diseases

Reference year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Change from 2007/8 in absolute value	Change from 2007/8 in %
Number of claims for recognition [1]	82,376	80,282	78,029	73,551	68,196	62,130	60,965	59,919	61,457	61,150	60,736	- 414	- 0.7
Number of decided cases [2]	83,386	76,870	75,060	72,306	70,649	68,452	66,316	63,909	61,059	59,643	59,468	- 175	- 0.3
Non recognized cases	55,072	49,616	49,166	46,864	44,707	43,575	41,374	38,887	38,040	35,980	36,440	+ 460	+ 1.3
Occupational causation confirmed:	28,314	27,254	25,894	25,442	25,942	24,877	24,942	25,022	23,019	23,663	23,028	- 635	- 2.7
- of which recognized cases of occupational disease	19,976	18,633	18,000	17,950	17,722	16,778	16,784	15,920	14,156	13,383	12,972	- 411	- 3.1
- of which new pensions [3]	6,072	5,693	5,304	5,503	5,443	5,085	5,021	5,459	4,781	4,123	4,312	+ 189	+ 4.6
- of which cases with absence of one additionally required insurance criteria [4]	8,338	8,621	7,894	7,492	8,220	8,099	8,158	9,102	8,863	10,280	10,056	- 224	- 2.2

[1] The number of notified cases includes all notifications made by doctors and employers who must notify these cases to the Insurance Funds. Other social bodies provide information to the Insurance Funds as well as insured persons.

[2] Combination of occupational causations confirmed and not confirmed.

[3] New pensions granted during the reference year: in Germany a pension is granted (accidents at work and recognized occupational diseases) only if the victim's capacity to earn his/her living is reduced (permanent disability rate) by 20 % or more for a minimum period of time of 26 weeks.

[4] Number of cases whose occupational causation is confirmed but with an administrative requirement not met. It applies to some occupational diseases of the list (severe or recurrent skin conditions for instance) that to be recognized (and compensated) need to be so acute that the victim must avoid any activity that will or would generate the development, the worsening or the recurrence of the disease. The full recognition as an occupational disease may be granted afterwards when the missing administrative requirement is met.

Distribution per occupational diseases

Diseases giving rise to the greatest number of claims for recognition

Diseases	Claims	% compared to total
Severe or recurrent skin conditions	18,562	30.56
Noise-induced hearing loss	9,367	15.42
Discogenic conditions of the lumbar spine (lifting of loads)	5,273	8.68
Asbestosis or pleural condition	3,847	6.33
Lung or larynx cancer	3,587	5.91
Others	20,100	33.09
Total*	60,736	100.00

* Including occupational diseases of the Pupil Accident Insurance

Diseases most frequently recognized as occupational diseases

Diseases	Recognized cases	% compared to total
Noise-induced hearing loss	4,979	38.38
Asbestos or pleural condition	1,887	14.55
Mesothelioma	987	7.61
Lung or larynx cancer	764	5.89
Severe and recurrent skin conditions	631	4.86
Others	3,724	28.71
Total*	12,972	100.00

* Including occupational diseases of the Pupil Accident Insurance

Occupational diseases giving rise to the greatest number of new pensions during the year

Diseases	Pensions	% compared to total
Mesothelioma of the pleura	905	20.99
Lung or larynx cancer	707	16.40
Asbestosis or asbestos plaques	407	9.44
Noise-induced hearing loss	372	8.63
Chronic obstructive bronchitis - emphysema	282	6.54
Others	1,639	38.11
Total*	4,312	100.00

* Including occupational diseases of the Pupil Accident Insurance

Distribution per activity branches

Branches of activity recording the greatest number of claims for recognition

Activity branch	Claims	% compared to total
Metal	11,447	18.35
Health services	8,892	14.64
Construction	8,602	14.16
Commerce and administration	5,723	9.42
Food	4,647	7.65
Others	16,302	27.35
Public sector	5,123	8.43
Total*	60,736	100.00

* Including 112 claims for recognition to the Pupil Accident Insurance

Branches of activity recording the greatest number of recognized cases

Activity branch	Recognized cases	% compared to total
Metal	3,658	28.20
Construction	2,161	16.66
Mining	1,366	10.53
Electrical and precision engineering, textile, leather	1,035	7.98
Chemicals	811	6.25
Others	3,229	5.49
Public sector	712	24.89
Total*	12,972	100.00

* Including 16 recognized cases by the Pupil Accident Insurance

Branches of activity recording the greatest number of new pensions during the year

Activity branch	Pensions	% compared to total
Metal	1,096	25.42
Mining	781	18.11
Construction	575	13.33
Electrical and precision engineering, textile, leather	406	9.42
Chemicals	371	8.60
Others	925	3.66
Public sector	158	21.45
Total*	4,312	100.00

* Including 0 new pension during the year paid by the Pupil Accident Insurance

6. Financial data

Financial data cover the costs of accidents at work, commuting accidents and occupational diseases.

Expenditures of the occupational injuries branch (in million Euros)

Type of action (1)	2006	2007	2008
Prevention (see table below)	817	827	892
Compensation (kind and cash)	8,666	8,575	8,728
- part of which medical treatment + rehabilitation (see table below)	3,150	3,127	3,275
- part of which pensions, compensation, lump sum	5,516	5,448	5,453
Administration and procedure	1,247	1,211	1,277

(1) These amounts include Pupil Accident Insurance's spendings

Cost of Insurance Funds' prevention activity (in million Euros)

Detailed prevention expenditures	2006	2007	2008
Prevention regulations, publications, etc.	3.340	3.463	3.264
Advice to companies, inspections	467.937	475.254	518.940
Health and safety services, operation security, first aid	81.696	81.146	88.560
Training	134.589	136.315	135.590
Total	816.908	827.386	892.268

This table does not include the cost of the implementation of prevention measures by the Insurance Funds' member companies.

Cost of medical treatment and rehabilitation (in million Euros)

Detailed expenditures (1)	2006	2007	2008
Out-patient treatment and dentures	1,029.190	1,053.842	1,116.009
In-patient treatment and home nursing care	879.189	856.662	893.686
Injury allowance and special benefits	486.559	484.155	515.200
Other medical treatment expenditure	555.851	561.142	589.275
Benefits for participation in working life	199.205	170.983	161.166
Total	3,149.994	3,126.784	3,275.336

(1) These amounts include Pupil Accident Insurance's spendings

Insurance Funds' responsibilities encompass all rehabilitation services rendered necessary by occupational and commuting accidents as well as occupational diseases. Insurance Funds' control and co-ordinate these services. This entails the provision of medical treatment, including medical, occupational and social rehabilitation benefits, nursing services and cash benefits.

Number of pensions (stock of pensioners)

Pensions paid to:	2004	2005	2006	2007	2008
Insured persons	816,869	806,707	797,457	786,565	776,292
Widows/widowers	117,510	115,977	114,971	113,180	112,212
Orphans	18,774	18,236	17,243	16,522	15,376
Other claimants	95	87	72	70	54
Total	953,248	941,007	929,743	916,337	903,934

Out of the 776,292 pensions paid to insured persons in 2008, 671,252 are accident pensions and 105,040 occupational disease pensions. These pensions are paid when the disability rate is at least of 20 % (loss of earning capacity) for a minimum period of 26 weeks.

In case of death, the pension is paid to eligible parties. In 2008, 89,518 were accident pensions and 38,124 occupational diseases pensions.

7. EUROSTAT data

Structural indicators are available only for accidents at work. 2007 data are not available.

Index[*] of the number of serious accidents at work per 100,000 persons in employment (1998 = 100)

Serious accidents - Total	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
EU (27 countries)	:	:	:	:	:	100	96	88	84	80	78	76
EU (25 countries)	:	:	:	100	100	99	95	87	82	79	77	75
EU (15 countries)	104	103	100	100	100	98	94	86	81	78	76	74
Euro area (12 countries)	105	103	101	100	99	97	92	84	79	76	74	72
Germany	106	103	101	100	99	96	88	82	74	73	65	66

(:.) Not available

Index[*] of the number of fatal accidents at work per 100,000 persons in employment (1998 = 100)

Fatal accidents	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
EU (27 countries)	:	:	:	:	:	100	97	91	90	88	86	81
EU (25 countries)	:	:	:	100	88	87	85	80	78	75	72	72
EU (15 countries)	116	113	106	100	91	88	85	80	78	75	74	73(p)
Euro area (12 countries)	113	110	102	100	88	86	83	78	78	73	72	:
Germany	136	159	123	100	109	95	89	112	105	100	82	95

(:.) Not available

(p) Provisory

[*] The index shows the evolution of the incidence rate of fatal accidents at work in comparison to 1998 (= 100). The incidence rate = (number of accidents with more than three days away from work or number of fatal accidents at work that occurred during the year/number of persons in employment in the reference population) x 100,000. An accident at work is a discrete occurrence in the course of work that leads to physical or mental harm. This includes accidents in the course of work outside the premises of one's business, even if caused by a third party, and cases of acute poisoning. It excludes accidents on the way to or from work, occurrences having only a medical origin, and occupational diseases. Fatal road traffic accidents and other transport accidents in the course of work are also excluded.

Euro area (12 countries): Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain

EU-15: Euro area + Denmark, Sweden, United Kingdom

EU-25: EU-15 + Estonia, Latvia, Lithuania, Poland, Czech Republic, Slovakia, Hungary, Slovenia, Cyprus (without the northern part of the island) and Malta

EU-27: EU-25 + Bulgaria and Romania.



Founded in 1991, EUROGIP is a French organization, whose activities are organized around five areas: enquiries, projects, information-communication, standardization and coordination of notified bodies.

All have in common European aspects of the insurance or the prevention of accidents at work and occupational diseases.

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