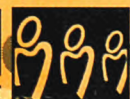


# European statistics on accidents at work

**Methodology**



EUROPEAN  
COMMISSION



THEME 3  
Population  
and social  
conditions



**eurostat** STATISTICAL OFFICE OF THE EUROPEAN COMMUNITIES

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## Introduction

The ESAW (European Statistics on Accidents at Work) project was launched in 1990 in order to draw up a methodology for the collection of comparable data in the European Union. The methodology has been developed in close co-operation with the Member States of the European Union. The ESAW Working Group was established in order to follow the work and give recommendations to the European Commission in developing this field of statistics. A Task Force with national experts has also been established in order to give technical advice to the Commission in developing a methodology which takes into account - as far as possible - , the extant reporting procedures and methodologies in the various Member States. The Task Force and the national bodies involved in the collection of ESAW data have contributed substantially in setting up the methodology and providing the data sets. The work in the Commission has been jointly co-ordinated by the Directorate-General Employment, Industrial relations and Social Affairs (Directorate Public Health and Safety at Work – DG V/F) of the Commission of the European Communities and EUROSTAT (E3 “Education, Health and other Social Domains” – Johnny Dyreborg and Didier Dupré).

From the reference year 1993 onwards data on accidents at work have been collected and published by Eurostat on an annual basis. From the reference year 1993 to 1995 the data have been collected in conformity with phase 1 of the ESAW project. From the reference year 1996 the data have been collected in accordance with ESAW phase 2.

The present publication describes the methods and definitions used for the collection of the ESAW phase 2 data (which includes ESAW phase 1) and the status of the implementation of the ESAW methodology in the 15 Member States and Norway. It also provides an outline of the results of the ESAW data for the reference year 1994. Finally, the classifications used for the ESAW phase 2 methodology are shown in Appendix B.

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## Background and aims for the ESAW project

### Background for ESAW project

The Framework Directive on Health and Safety in the Workplace<sup>(1)</sup> requested the Commission to proceed with the harmonisation of data on accidents at work. It specified that “... *the employer shall keep a list of occupational accidents resulting in a worker being unfit for work for more than three working days*” and “*draw up, for the responsible authorities and in accordance with national laws and/or practices, reports on occupational accidents suffered by his workers ...*”.

On this basis, the ESAW project was launched in 1990, aiming at harmonised data on accidents at work for all accidents entailing more than three days' absence from work. A “Methodology for the Harmonisation of European Occupational Accident Statistics” was published in 1992 by Eurostat and DG V/F<sup>(2)</sup>. The ESAW project has been an integral part of the framework programme for priority actions in the field of statistical information 1993 to 1997<sup>(3)</sup>.

In addition the Council Resolution 95/C 168/01<sup>(4)</sup> furthermore calls upon the Commission: “*to complete the work in progress on harmonising statistics on accidents at the workplace...*”. The Programme concerning Safety, Hygiene and Health at Work (1996-2000) also foresees the continuation of the implementation of this project.

Furthermore, the European Community Statistical Programme 1998-2002, which defines the main fields and objectives of the community statistics, foresees the establishment of consistent series of data on a European level in order to provide the means for the monitoring of health and safety at work and the efficiency of regulation in this field<sup>(5)</sup>.

### Aims of the ESAW project

The aim of the ESAW project is “*to collect Union-wide comparable data on accidents at work and establish a database.*” Comparable data on work accidents are a prerequisite for monitoring trends in health and safety at work in the Union and for promoting accidents prevention both at Community level and in the individual Member States.

The aims are to provide data on high-risk groups and sectors, and at a later stage indicators on either the causes and the social cost of accidents at work. Consistent series of data should be established to provide the means for the monitoring of health and safety at work and the efficiency of regulation in this field.

It is also an aim of the ESAW project to develop a methodology which is as far as possible comparable with other international statistics and to participate in the co-ordination of such work. The ESAW methodology is in accordance with the ILO Resolution of 1998 concerning “Statistics of Occupational Injuries: resulting from Occupational Accidents”<sup>(6)</sup>.

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<sup>(1)</sup> Council Directive 89/391/EEC of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at work, OJ L183, 29.06.1989. Hereinafter, Framework Directive (on health and safety at work).

<sup>(2)</sup> Office for Official Publications of the European Communities, Theme 3 Series E, ISBN 92-826-4100-7, Catalogue number CA-74-92-257-EN-C.

<sup>(3)</sup> Council Decision 93/464/EEC of 22 July 1993 on the framework programme for priority actions in the field of statistical information 1993 to 1997, OJ L219, 28.08.93.

<sup>(4)</sup> OJ C168 of 4.07.95, pp 1-2.

<sup>(5)</sup> Council Decision 99/126/EC on the Community Statistical Programme 1998-2002, OJ L42, 16.02.99.

<sup>(6)</sup> Adopted by the Sixteenth International Conference of Labour Statisticians, Geneva, 6-15 October 1998.

## Basic concepts and definitions

ESAW Phase 2 data are collected for the *reference period* 1996 onwards. The reference period is defined as the *year of notification* of the accident. All cases of accidents at work leading to an absence of more than three *calendar days*<sup>(7)</sup> are included in the ESAW data. In practice it means that an accident at work is included in ESAW if the person is unfit for work for *more* than 3 days even if these days include Saturdays, Sundays or other days where the person is not usually working.

An *accident at work* is defined as "a discrete occurrence in the course of work which leads to physical or mental harm". This includes cases of acute poisoning and wilful acts of other persons but excludes deliberate self-inflicted injuries and accidents on the way to and from work (commuting accidents). The phrase "in the course of work" means whilst engaged in an occupational activity or during the time spent at work. This includes cases of road traffic accidents in the *course of work*.

A *fatal accident* is defined as an accident which leads to the death of a victim within one year of the accident.

### Particulars concerning the definition of an accident at work

#### *Inclusions*

The following types of accidents are covered by the above definition of an accident at work (summary in Table 1).

#### Road (traffic) accidents and other transport accidents

The road traffic accidents in the course of work are included in the ESAW methodology. Road accidents concern not only persons whose occupational activity is exerted mainly on public highways, e.g., lorry or coach drivers, but also those occupational activities which frequently or occasionally imply journeys on public roads.

These occupational activities include, e.g., repairing, commercial activities or other service activities carried out at the premises of the customers. This includes also a car accident, say, of a manager who occasionally goes, in the course of work, from his office to an external meeting. Such an accident would still be considered as a work accident to be included in the ESAW methodology, even if the place belongs to his company or a client, another company or institution. Road traffic accidents as described above also include incidences in car parks and the internal carrier-ways at the premises of the enterprise.

The expression "*whilst engaged in an occupational activity or during the time spent at work*" should therefore be understood in broader terms. Thus, other types of *accidents on public highway or places* should also be included. This concerns, for example, slips on the pavement or falls on staircases, or even aggressions from other persons, provided that the victim is still in the course of work.

This will also apply to *accidents on board any means of transport*, e.g., underground train, tramway, train, boat, plane, etc. This includes also accidents in the arrival and starting points of any means of transport, e.g., stations, airports, ports, etc., provided that the victim is still in the course of work.

It should be noted that commuting accidents, i.e., road accidents during the journey between home and the workplace, are not included in the ESAW methodology<sup>(8)</sup>.

<sup>(7)</sup> The Framework Directive (Article 9) speaks about *working days*. However, it has been decided for ESAW methodology to follow the most common practice in the Member States, which is to use *calendar days* in calculating the number of days with an absence from work.

<sup>(8)</sup> Nevertheless, an additional data collection on Commuting Accidents has also been set up using the same methodology as the ESAW project. The specification for this data collection, which only involve 8 Member States for the time being, is shown in Annex C.

## BASIC CONCEPTS AND DEFINITIONS

### Other accidents outside the company

Accidents that have occurred *within the premises of a company other than the one that employs the victim* should also be regarded as an accident at work. Such activities include all kind of meetings and services which takes place outside the premises of the company provided that the victim is still in the course of work. This includes also the following examples: Accidents that occur in the course of meetings or visits out of the company; accidents during the delivery of goods on customers' premises (company or private individual) or while carrying out other services such as repairing, maintenance, errands, etc. on clients' premises; more *permanent secondments* in another company, or during activities at home which are in the course of work; accidents caused by other work activities not related to the course of the victims work activities, etc. .

In summary, all the accidents corresponding to all risks the employed person is exposed to in the course of his/her work are included in the ESAW methodology. This applies not only to the specific risks he is exposed to in the premises of the employer, but also the risks outside the premises which he can be exposed to in the course of work, for example on public highways, means of transport or risks caused by third parties. This is irrespective of whether or not his employer can prevent or reduce partially, the level of these risks outside his own premises.

**Table 1- Types of accidents included / excluded in the ESAW methodology**

Type of accidents	Included YES / NO
<b>Definition:</b> "A discrete occurrence in the course of work which leads to a physical or mental harm".	
The phrase "in the course of work" means "whilst engaged in an occupational activity or during the time spent at work".	
Acute poisoning	YES
willful acts of other persons	YES
Accidents in public places or means of transport during a journey in the course of work:	YES
Road traffic accidents in the course of work (public highways, car parks, internal ways inside the premises of the enterprise)	YES
Other accidents (slips, falls, aggressions, etc.) in a public place (pavement, staircases, etc.) or in the arrival and starting points (station, port, airport, etc.) of any mean of transport, during a journey in the course of work	YES
Accidents on board of any mean of transport used in the course of work (underground railway, tram, train, boat, plane, etc.)	YES
Accidents occurred within the premises of another company than that which employs the victim, or in a private individual, in the course of work	YES
Deliberate self-inflicted injuries	NO
Accidents on the way to and from work (commuting accidents see Annex C)	NO
Accidents having only a medical origin in the course of work	NO
Members of public, outside any occupational activity	NO

### Exclusions

The following types of accidents are not covered by the above definition of an accident at work (summary in Table 1).

#### Members of the public

Accidents to *members of the public* are not included in the ESAW methodology. Even if such an accident is due to a work activity within a company it should not be regarded as an accident at work under the ESAW methodology. This includes accidents contracted by employed persons who are not at work and who carry out activities which are not in the course of their work, for example, visit to a shop, an administration, a bank, insurance, station, telecom, hospital, post office, port, airport, etc. Family members of an employee or employer present within the company who are victims of an accident are considered as members of the public and are excluded from the ESAW methodology. This applies also to children in, for example, the nursery in the company.



**Accidents from strictly natural causes**

Accidental injuries *from strictly natural causes* are also excluded from the ESAW methodology. This applies to, for example, cardiac or cerebral incidents, or any other sudden medical disorders, which have occurred during work, but having a *priori* no link with the occupational activity of the victim and the injury being only related to the medical disorder.

Nevertheless, such cases should only be excluded if there is no other work-related causal element identified. For example, if a bricklayer felt faint (medical cause) and fell down from scaffolding (work-related causal element), the accidental injury should be included in the ESAW methodology. This is the case, even if the fall would not have occurred without the discomfort of the worker, because the gravity of its consequences was sharply increased by the presence of the person on scaffolding, which is a purely work related causal element.

**Accident at work with more than 3 days' absence from work**

The Framework Directive retained the concept of "absence from work of more than 3 working days".

However, as a large number of Member States can not make a distinction between working days or not, because the work stops are prescribed in calendar days, the concept of "3 calendar days", i.e. more simply "3 days", was retained for ESAW.

The concept of "more" than 3 days of absence from work has been implemented in the following way in the ESAW methodology (summary in Table 2):

Only full working days of absence from work of the victim have to be considered *excluding* the day of the accident. Consequently, "more than 3 days" means "at least 4 days", which implies that only accidents with a *resumption of work not before the fifth day after the day of the accident or later* should be included.

Following on from this, the " number of days lost " has to be counted beginning with 4 days lost if the resumption of work takes place the fifth day following the day of the accident, 5 days lost if the resumption of work takes place the sixth day, etc..

**Table 2 - Concepts of "accidents with more than 3 days' absence from work" and of numbers of counted "days lost" in the ESAW methodology**

Resumption of work the:	same day of the accident	First to fourth days after the accident	fifth day after the accident	Sixth day after the accident / or beyond
Accident included in ESAW	NO	NO	YES	YES
Number of days lost	not included	not included	4	5 / or more

**Fatal accident at work**

The definition adopted by the ESAW project is that of "accidents at work leading to the death of the victim within a year (after the day) of the accident". In practice the majority of the Member States send the cases of fatal accidents at work counted in their national statistics.

In fact, the majority of the accidental deaths occur either immediately at the time of the accident, or within a few days or a few weeks after the accident.

## Variable characterisation

Each case of an accident at work, which meets the above mentioned criteria, is included in the ESAW methodology and will be analysed according to the types of variables given in Table 3. The corresponding classifications and formats are specified in Appendix B. A short definition of each of the variables is provided below.

Table 3 - Record structure for the ESAW phase 2 data

Variable	Number of characters	Starting position	Character format	Variable type
Case Number	11 characters	1	Numeric	Numeric
Economic Activity of the Employer	2 characters	12	Numeric	Classification
Occupation of the Victim	2 characters	14	Numeric	Classification
Age of the Victim	2 characters	16	Numeric	Numeric
Sex of the Victim	1 character	18	Numeric	Classification
Type of Injury	3 characters	19	Numeric	Classification
Part of Body Injured	2 character	22	Numeric	Classification
Geographical Location	5 characters	24	Alphanumeric	classification
Date of the Accident	8 characters	29	Numeric	Numeric
Time of the Accident	2 characters	37	Numeric	Numeric
Size of the Enterprise*	1 character	39	Numeric	Classification
Nationality of the Victim*	1 characters	40	Numeric	Classification
Employment Status of the Victim*	1 character	41	Numeric	Classification
Days Lost*	3 characters	42	Alphanumeric	Numeric / Classification
Record length	44 characters			* Additional variables included in Phase 2

### Case Number

A unique case number must always be supplied when case-by-case data are transmitted. This is required by Eurostat to identify each individual record, and for the Member State to ensure that each record represents a separate accident at work to avoid double counting. The case number is also necessary in order to answer any queries which involve the retrieval and correction of a single record. The format for the case number is determined by the Member State, although, the chosen case number must be prefixed by the 4 digits of the year where the accident is notified to the authorities. It should be noted that the year of notification, which is also the reference period for the ESAW data, is not necessarily the same as the year when the accident occurred. For that reason, the first two digits of the case number represent the *reference year* for the collected data.

### Economic Activity of the Employer

The term economic activity of the employer covers *the main "economic" activity* of the *local unit* of the enterprise of the victim. The local unit of an enterprise means the geographical location of a business, professional practice, farm, manufacturer, public corporation, etc., (see below). The main activity is defined here as the most important kind of activity in terms of *highest number of employees*. It is classified according to a short version (2 digit level) of the NACE Rev.1.

### Occupation of the Victim

The victim's *occupation at the time of the accident* is classified according to a short version (2. digit level) of the ISCO-88 (COM).

### Age of the Victim

Age should be represented by the age of the victim *at the time of the accident*. Values below 10 must be entered with a leading zero, i.e., 7 years must be entered as 07.

**Sex of the Victim**

Sex is a simple categorical variable.

**Type of Injury**

The variable type of injury describes the *physical consequences* for the victim e.g. bone fracture, wounds etc. The 3 digit version of the ESAW classification for 'Type of injury' should be used for encoding of information on this variable. The current classification is a new one used from the ESAW 1997 data, in accordance with the ILO recommendation mentioned above.

**Part of Body Injured**

This variable describes the *part of the body injured*. The current 2 digit version of the classification of "part of body injured", introduced from the reference year 1995, should be used. It is on the whole in accordance with the ILO recommendation mentioned above. The classification allows only one choice, i.e. only one code can be chosen to describe the injured part(s) of the body. In cases where several parts of the body have been injured, the site which has been most seriously injured should be chosen e.g. an amputation precedes bone fracture, which precedes wounds etc. In other cases a code for *multiple sites* should be used at the appropriate level of the classification, e.g., broken hand *and* foot. In cases where larger parts of the body have been affected, e.g., injuries caused by burns or skalds, a code for multiple sites should be used as well.

**Geographical Location of the Accident**

The variable geographical location is considered to be the *territorial unit* where the accident has occurred. The specified level for the NUTS classification in Appendix B should be used (NUTS 95 version, including the 1998 revision). This classification describes the country in question and the defined regions in this country.

**Date of the Accident**

This variable describes the *date when the accident occurred*. This is a numeric variable which is defined as year, month and day (YYYYMMDD).

**Time of the Accident**

This variable describes the time of the day *when the accident occurred*. This is a numeric variable describing whole hours (HH), e.g. 2 p.m. gives 14 which covers the time from 2 p.m. to 2:59 p.m. .

**Size of the Enterprise**

The size of the enterprise is defined here as the *number of employees* (full time equivalents) working at the *local unit* of the enterprise of the victim. For a specification of the local unit please see below.

**Nationality of the Victim**

This variable is defined as the *country of citizenship*. If a person has more than one citizenship, the citizenship of the country where the person has notified the accident should be used. An aggregated format is used for this variable<sup>(9)</sup>.

**Employment Status of the Victim**

This variable concerns the employment status (*professional status*) of the victim, for example employee, self-employed, family worker, etc.<sup>(9)</sup>.

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<sup>(9)</sup> The variables Nationality and Employment Status are included on a pilot basis and the reliability of these variables will be the subject of an evaluation.

## VARIABLE CHARACTERISATION

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### Days Lost

The variable days lost means the *number of calendar days* where the victim is *unfit for work* due to an accident at work. This number is provided using a 3 digit level format. When this information is only available using classes of days lost, 6 classes with codes A01 to A06 should be used. Nonetheless, the number of days lost will be considered to be in accordance with the ESAW methodology, which means that only cases of accidents at work where the person is unfit for work *more than three full calendar days* should be included. Specific codes should be used to define permanent incapacity (997) and fatal accidents (998). In that case the days lost before the recognition of the permanent incapacity or death are not considered.

### Definition of the Local unit of an enterprise

*This definition has relevance for the variables "Economic Activity of the Employer" and "Size of the Enterprise". If the following concept of "local unit of the enterprise" is not directly applicable in a country, the national definition should be used as a proxy.*

The "local unit" to be considered is a *geographically identified location* where the job is mainly carried out or can said to be based. If a person works in more than one place (transport, construction, maintenance, surveillance, peripatetic work) or at home, the local unit is taken to be the place from where *instructions emanate* or from *where the work is organised*.

Normally, it consists of a single building, part of a building, or, at the most, a self-contained group of buildings. The local unit of the enterprise is therefore the group of employees of the establishment who are geographically located at the same site.

A geographically identified place must be interpreted on a strict basis: two units belonging to the same enterprise at different locations (*even if these local units are very close to each other*) must be regarded as two local units. However, a single local unit may be spread over several adjacent administrative areas. Moreover, the boundaries of the unit are determined by the boundaries of the site, which means for example that a public highway running through does not interrupt the continuity of the boundaries.

## Indicators and methods of standardisation of data

### Incidence rates

The ESAW methodology considers 2 main types of indicators on accidents at work: the numbers of accidents and the incidence rates. Obviously, the numbers of accidents have to be related to the reference population of persons in employment (persons exposed to the risk of accident at work) in order to establish the incidence rates (frequency).

The *incidence rate* is defined as the number of accidents at work per 100 000 persons in employment. It can be calculated for Europe, a Member State, or any sub-population breakdown according to one or more of the variables above characterising the victim of the accident (economic activity, age, etc.). It can be established for all accidents or breakdowns according to one or more of the variables above characterising the accident (part of body injured, etc.). Separate incidence rates are calculated for fatal accidents and accidents leading to more than 3 days' absence.

Furthermore, an additional incidence rate is calculated for fatalities at the European level, which *excludes road traffic accidents*, in order to provide comparable incidence rates for all Member States. This is due to the fact that road traffic accidents in the course of work are not recorded as accidents at work in a few Member States. Fatalities caused by road traffic accidents represent an important share of the number of fatal accidents. For this reason, comparisons of national incidence rates for fatalities would introduce a serious bias without this adjustment of the rates. This applies also to accidents *on board of any means of transport* during a journey in the course of work, which are also excluded from this adjusted rate of fatalities.

It should be noted that only this adjusted incidence rate on fatalities is used for the breakdown by Member States

The standard formula is the following:

$$\text{Incidence rate} = \frac{\text{Number of accidents (fatal or non-fatal)}}{\text{Number of employed persons in the studied population}} \times 100\,000 .$$

### Correction factors and standardisation methods

#### Correction

For the Member States where the accidents at work with more than 3 days' absence are only partly reported, reporting levels are estimated mainly by breakdowns by branches of economic activity for these Member States. On the basis of these reporting levels Eurostat correct the submitted data on the accidents and deduce from it an estimate of the number of accidents at work occurred.

#### Standardisation

It is a fact that the frequency of work accidents is much higher in some branches compared to others. For this reason the industrial structure of a country will influence its total frequency of work accidents depending on the share of high risk sectors. For example, a country where high risk branches like agriculture, construction or transport represent a higher share of the total workforce compared to another Member State, but with the same frequency of accidents for each branch, the first Member States would have a higher total national incidence rate.

To correct for this effect a "*standardised*" number of accidents at work per 100 000 persons in employment is calculated per Member State by giving each branch the same weight at national level as in the European Union total ("*standardised*" *incidence rate*). This standardisation method is used in current ESAW publications on accidents at work.

## INDICATORS AND METHODS OF STANDARDISATION OF DATA

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It is considered to improve this standardisation method in the future. Depending on the reliability and coverage of the information provided by the Member States the following improvements could be implemented:

- standardisation of the industrial structure by sector (NACE sub-section or division) and not only by the aggregated NACE branches (section); indeed, the relative weight of the sectors inside the major branches also differ from one country to another while the risk levels vary distinctly between sectors;
- standardisation according to working time and therefore to the time of exposure to the risk (part-time work, short term contracts, legal length of work, etc.), which varies from one country to another.

## Data collection

### Reporting procedures in the Member States

#### Insurance and non-insurance based systems

Eurostat receives the ESAW data from the Member States' national registers or other national bodies responsible for the collection of data on accidents at work. The ESAW data are *occurrence-related* and based on *administrative sources* in the Member States. Compared to surveys the harmonisation prospects of ESAW data therefore depend on the operative reporting procedures, the possibility of modifying these or adapting their data to ESAW concepts and specifications.

Mainly, two types of reporting procedures can be identified in the various Member States of the European Union. The *insurance based systems*, which can be found in 10 Member States, have reporting procedures mainly based on the notification of the accidents to the insurer, public or private according to the case. On the other hand the reporting procedures of the five other Member States (Denmark, Ireland, the Netherlands, Sweden and the United Kingdom) are mainly based on the legal obligation of the employer to notify the accidents to the relevant national authorities, which is often the *National Labour Inspection Service*. Norway, which also provides data to Eurostat, belongs to the latter group.

In the insurance based systems, the supply or the refunding of care benefits and the payment of benefits in cash (daily subsistence allowances, rents where applicable, etc.) resulting from accidents at work, are conditioned in its report to the public or private insurer. Additionally, in a number of these countries, the benefits thus paid under the accidents at work insurance legislation are higher than in the case of non-occupational accidents. Thus, there is an *economic incentive* for the employer and the employee to notify an accident at work in the insurance based systems. Due to these various factors, the reporting levels for accidents at work are in general very high in the insurance based systems and considered to be about 100 percent.

The five other Member States and Norway have in general a system of universal social security "coverage". In such systems the benefits provided to the victim of an accident at work are not depending on a preliminary reporting of the accident, except for the specific benefits paid for the most serious accidents (rents for permanent disability, etc.). Consequently, the economic incentive for notifying accidents at work is not very strong in the non-insurance based systems. Nevertheless, there is a legal obligation for the employer to notify an accident at work. In practice only a part of work accidents are actually reported and the systems based on the employers liability to notify work accidents to the authorities have only a medium reporting level usually ranging from 30 to 50 percent on average for all branches of economic activity taken together.

#### Evaluation of national reporting procedures

The initial evaluation of the data sources is a prerequisite for a correct interpretation of the data received from the various Member States. This is in particular important taking into account the differences in the national reporting procedures as mentioned above. A detailed evaluation is carried out by the way of an evaluation questionnaire. The national replies to this questionnaire are submitted to Eurostat together with the annual ESAW data.

The main issues covered by the evaluation questionnaire are the following:

- definition of an accident at work
- coverage of groups
- reporting levels

The *definition* of an accident at work, in particular the *categories* of fatal and non-fatal accidents reported, can vary slightly from country to country (Tables 4 and 5). For example, for some reporting procedures a fatal accident is only registered as fatal when the victim died within a certain time limit after the accidental injury. In some Member States all non-fatal accidents are covered irrespective of whether the victim was absent from work or not. In this case it is important that the cases with more than 3 days' absence can be identified and that only these are submitted to Eurostat.

## DATA COLLECTION

It is also asked whether certain *types* of accidents are included or excluded from the data submitted, for example, road traffic accidents (Table 8) or accidents to members of the public.

Another part of the questionnaire concerns the *groups covered* by the national data (by professional status, economic activity and occupational groups). This information is very important in order to establish an adequate reference population for the calculation of frequencies (tables 6 and 7).

An estimation of the national *reporting levels* should also be provided to Eurostat by category of accident, economic activity, occupation, professional status and size of the enterprise (Table 9). Questions on the national concepts for the *local unit* of an enterprise are also covered by the questionnaire, but the results are not included in this publication.

The results of the evaluation of the current national reporting procedures are provided below.

## Definition of an accident at work

### Non-fatal accidents

The definition of what constitutes a notifiable work accident ranges from any work accident, whether it results in an interruption of work or not, to a minimum absence of more than three days. As can be seen from Table 4 below all Member States cover accidents with more than 3 days' absence from work, which is also the definition for the ESAW project.

It is considered that accidents with *more* than 3 days' absence from work have a higher reporting level than accidents with less than 3 days' absence from work. Only accidents with more than 3 days' absence (resumption of work the fifth day or later after the day of the accident) are considered by the ESAW methodology.

**Table 4 - Categories of non-fatal accidents at work reported in the European Union**

Accidents are notifiable in case of:	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	NO
No absence or resumption of work the same day of the accident <sup>(3)</sup>	Y	N	Y <sup>(1)</sup>	Y	Y	Y	N	N	Y	N	Y	Y	N	Y	N	-
Resumption of work the first, second or third day after the day of the accident <sup>(3)</sup>	Y	Y	Y <sup>(1)</sup>	Y	Y	Y	N	N	Y	N	Y	Y	N	Y	N	-
Resumption of work the fourth day after the day of the accident <sup>(3)</sup>	Y	Y	Y <sup>(1)</sup>	Y	Y	Y	Y	N	Y	N	Y	Y	Y	Y	N	-
Resumption of work the fifth day or later after the day of the accident	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y
Other																( <sup>2</sup> )

(<sup>1</sup>) D: The accidents with less than 4 days' absence are covered by the compensation system but are not included in the national statistics.

(<sup>2</sup>) NL: Only "serious injuries" are reported.

(<sup>3</sup>) Accidents without work absence or with a work absence of less than 4 days (resumption of work from the same day to the fourth day after the day of the accident) are not covered by the ESAW methodology.

Legend: Y = Yes, reported; N = No, not reported.

### Fatal accidents

Fatal accidents should in principle be notified in all Member States. However, some countries only register accidents as fatal if the victim died within a certain time limit after the accidental injury. The notification of an accident as fatal ranges from registration procedures where the accident is registered as fatal in the statistics when the victim died the *same day* (the Netherlands) or within 30 days after the accident (Germany) to cases *where no time limits are laid down* (B, GR, F, I, L and S). For the other Member States the time limit is within 1 year after the date of the accident (Table 5).



Table 5 - Categories Of fatal accidents at work reported in the European Union

Accidents are registered as fatal when the victim died:	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Within a year after the day of the accident	Y	Y	Y <sup>(1)</sup>	Y	Y <sup>(2)</sup>	Y	Y	Y	Y	N	Y	Y	Y	Y	Y
At any time after the day of the accident	Y	N	Y <sup>(1)</sup>	Y	N	Y	N	Y	Y	N	Y	N	N	Y	N
After a prior recognition of permanent disability	Y	N	Y <sup>(1)</sup>	-	Y	N <sup>(3)</sup>	Y <sup>(4)</sup>	Y	Y	N	-	Y <sup>(4)</sup>	N	Y	Y <sup>(4)</sup>
Other			( <sup>1</sup> )							( <sup>5</sup> )					

(<sup>1</sup>) D: Only those within 30 days after the day of the accident are included in the national statistics and ESAW data.

(<sup>2</sup>) E: Fatalities are only compensated and thus included in the statistical data if the victim died within 18 months after the day of the accident.

(<sup>3</sup>) F: The deaths due to an accident at work but occurred after the recognition of a permanent disability are covered by the insurance if they are due to the occupational injury, but they are not included as fatal accidents in the statistics.

(<sup>4</sup>) IRL, P & UK: The deaths due to an accident at work but occurred after the recognition of a permanent disability are included in the statistics only if they occur within a year after the day of the accident.

(<sup>5</sup>) NL: Only " sudden deaths " are registered.

Legend: Y = Yes, reported; N = No, not reported.

## Groups covered by the national reporting systems

All groups or sectors should in principle be covered by national legislation or other statutory arrangements that require cases of accidents at work to be notified to the authorities, or to a private or public insurance body in accordance with the law. However, not all data are compiled for statistical purposes. Either the data are kept in a format that does not allow for statistical analyses or the data files are not for the moment available for the ESAW project. For this reason the term *coverage* in the following should be understood as *the coverage of the accidents data that actually have been sent to Eurostat* in accordance with the ESAW methodology.

### Coverage of self-employed and family workers

The coverage of groups varies from one Member States to another. Self-employed and family members are not covered by some national reporting systems. In particular the agricultural sector is affected by the lack of coverage of the self-employed. Furthermore, the coverage of the data for some Member States, which have a large group of self-employed as, for example, Greece, is affected by the exclusion of this group from the reporting and registration procedures. In Table 6 the groups covered by the national reporting systems by professional status are presented.

Table 6 - ESAW 1995 data: Professional status covered by the national reporting systems(<sup>1</sup>)

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	NO
Employees	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y <sup>(2)</sup>	Y	Y	Y	Y	Y <sup>(3)</sup>	Y
Self-employed	N	Y	P	N	P <sup>(4)</sup>	N	Y	Y	Y	N	Y	N	P	Y	Y <sup>(3)</sup>	N
Family workers	N	Y	P	N	P <sup>(4)</sup>	N	Y	Y	Y	N	P <sup>(4)</sup>	N	N	Y	Y <sup>(3)</sup>	P <sup>(4)</sup>

(<sup>1</sup>) The coverage by economic branches and sectors is indicated in Table 7.

(<sup>2</sup>) NL: 1994 data.

(<sup>3</sup>) UK: Except Northern Ireland.

(<sup>4</sup>) E, A & NO: Family workers are only covered in agriculture & forestry - NACE A - (also for self-employed and in fishing - NACE B - in Spain).

Legend: Y = Yes, covered; N = No, not covered; P = Partly covered.

**DATA COLLECTION**

**Sectors**

In general the private sector is covered by all national reporting systems. However, some important sectors are not covered by all Member States. Particularly parts of the Public Sector (in particular Public Administration), Mining and Quarrying and parts of the Transport, Storage and Communication branch are not or only partly covered by the national reporting systems. This includes also Education and Health and Social Work as these branches are partly public in most countries. Some high risk groups such as off-shore miners or police and firebrigades are not covered by all countries.

**Table 7 - ESAW 1995 data: Branches covered by the national reporting systems**

	B	DK	D	EL	E	F	IRL	I	L	NL <sup>(1)</sup>	A	P	FIN	S	UK <sup>(2)</sup>	NO
<b>Private Sector</b> (in particular NACE branches A, D, F, G, H, I - except sectors below -, J and K)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
<b>Branches including Public Sector (except public transports)</b>																
Public Administration (NACE section L)	P	Y	Y	P	P	P	Y	Y	Y	P	Y	N	Y	Y	Y	Y
Of which police and firebrigades (NACE classes 75.24 and 75.25)	N	Y	Y	N	Y	P	Y	N	Y	Y	Y	N	Y	Y	N	Y
Education (NACE section M)	P	Y	Y	P	P	P	Y	Y	Y	P	Y	P	Y	Y	Y	Y
Health and Social Work (NACE section N)	Y	Y	Y	P	Y	P	Y	Y	Y	P	Y	P	Y	Y	Y	Y
Electricity & Gas supply (NACE groups 40.1 and 40.2)	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
<b>Transport, Storage and Communication (NACE section I)</b>																
Maritime Transport <sup>(3)</sup> (NACE group 61.1)	Y	P	Y	N	Y	N	Y	P	Y	Y	Y	Y	Y	Y	P	N
Air Transport <sup>(3)</sup> (NACE division 62)	Y	P	Y	Y	Y	Y	Y	P	Y	N	Y	Y	Y	Y	P	P
Transport via Railways (NACE group 60.1)	N	Y	Y	N	Y	P	Y	N	Y	Y	Y	Y	Y	Y	Y	Y
Post & Telecommunications (NACE division 64)	N	Y	Y	N	Y	P	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Others	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
<b>Mining and Quarrying (NACE section C)</b>																
Off shore	Y	N	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	N	N
Others	Y	Y	Y	Y	Y	P	Y	Y	Y	N	Y	Y	Y	Y	N	Y

(<sup>1</sup>) NL: 1994 data.

(<sup>2</sup>) UK: Except Northern Ireland.

(<sup>3</sup>) DK, I, UK & NO: Working on high seas and aircraft crew in flight not covered.

Legend: Y = Yes, covered; N = No, not covered; P = Partly covered.

### Coverage of road traffic accidents

Some countries, Germany, Ireland, United Kingdom and Norway, are not in a position to provide data on road traffic accidents in the course of work (from 1996 ESAW data, Germany will cover this type of accidents). The lack of coverage for this type of accidents has a significant impact on the national numbers of fatalities and for this reason Eurostat makes an adjustment for this in the official statistics.

Table 8 - ESAW 1995 data: Coverage of road traffic accidents in the course of work

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	NO
Road traffic accidents in the course of work	Y	Y	N	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	N	N
Legend:	Y = Yes, covered;								N = No, not covered.							

### National reporting levels

As indicated above, the reporting levels of accidents at work with more than 3 days' absence are in some countries or sectors lower than 100%. The table below shows the differences in reporting levels for the national ESAW 1995 data. As explained previously, Eurostat corrects the submitted data on accidents on the basis of the reporting levels and deduces from it an estimate of the number of accidents at work *occurred*. For the mainly insurance based systems the reporting level is considered to be very close to 100%, i.e., all accidents to persons covered by the statistics are considered to be reported.

For the reporting systems which are mainly based on a legal obligation to notify, only a part of the accidents is reported. In this case estimates of the reporting levels are provided by the Member States, based either on an evaluation of the reporting procedures or on the basis of other data sources, e.g., surveys. In the table below only the minimum and maximum values for the main sectors are provided for each of those Member States which have not 100% reporting. Member States have provided more detailed information which is used for the estimates of the total number of accidents published by Eurostat.

TABLE 9 - ESAW 1995 data: National reporting levels for accidents at work with more than 3 days' absence from work

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	NO
100% reporting level for all sectors	N	N	Y	N	Y	Y	N	P <sup>(1)</sup>	Y	N <sup>(2)</sup>	Y <sup>(3)</sup>	Y	Y	N	N	N
Estimations of reporting levels for those countries which have not 100 percent reporting <sup>(4)</sup> :																
Minimum (%)	70 <sup>(5)</sup>	10		30 <sup>(5)</sup>			7			10 <sup>(5)</sup>				30 <sup>(5)</sup>	11	25
Maximum (%)	100 <sup>(5)</sup>	90		70 <sup>(5)</sup>			100			70 <sup>(5)</sup>				100 <sup>(5)</sup>	86	25

(<sup>1</sup>) I: The reporting level is less than 100 % only for the craft professions.

(<sup>2</sup>) NL: 1994 data.

(<sup>3</sup>) A: Except agriculture for which the reporting level is less than 30%.

(<sup>4</sup>) The reporting level for each sector is provided to Eurostat on the basis of national evaluations. The reporting level for the sectors representing respectively the lowest (minimum) and highest (maximum) percentage is shown.

(<sup>5</sup>) Provided using the classes: "low" < 30%; 30% ≤ "Medium" ≤ 70%; "High" > 70%.

Legend: Y = Yes; N = No; P = Partly.

## Reference population (based on LFS)

A reference population for the ESAW data is established in order to calculate incidence rates for accidents at work. The reference population is established from the data of the Labour Force Survey (LFS) and corresponds to the national coverage of the ESAW data in each country. The advantages of using the European Labour Force Survey are the comparability of this source and the possibility for establishing more detailed information on the national labour forces. However, this source does not provide information on employment in full-time equivalents. This is a problem for countries with a high share of part-time work and particularly for women. Also the LFS only covers persons aged 15 years or more, which makes it difficult to establish incidence rates for accidents occurred among children and young persons.

### Reference year

The reference year used for the extraction of the reference population from the LFS is the same as the reference year of the ESAW data.

### Establishment of filters

To calculate appropriate incidence rates, the reference population of persons in employment should cover the same field as the ESAW data on accidents. For that purpose, Eurostat establishes filters annually on the basis of the answers from the Member States to the questions of the Evaluation Questionnaire on the coverage of the data (by professional status, economic activity, occupational groups).

### Estimated reference population for 1994

The population of persons covered by the ESAW data, established from the LFS, was in 1994 almost 132 million persons in employment, which represented almost 90% of the total European workforce.

Nevertheless, the population included in the ESAW data of the different Member States does not cover the same economic activities or groups of workers (see previous section on coverage). Only 8 branches of activities were covered by the ESAW 1994 data of all the 15 Member States and Norway: agriculture, hunting and forestry - manufacturing - construction - wholesale and retail trade and repairs - hotels and restaurants - transport and communication - financial intermediation - real estate, renting and business activities (NACE sections A, D, F, G, H, I, J and K). However, the coverage is not yet complete for agriculture and transport: non-wage earners (the self-employed, family workers etc.) in agriculture and rail, sea and air transport are not covered everywhere. The ESAW incidence rates are then only calculated on these 8 branches where a European frequency can be considered. The total number of persons in employment covered by ESAW in these 8 "common" branches to all Member States and concerned by the calculated incidence rates, was in 1994 91,5 million, almost 70% of the total coverage of the ESAW data.

## Future developments

A last step of the ESAW project, ESAW phase 3 on the causes and circumstances of accidents at work, is being developed. Eurostat and the DG V of the European Commission are working together with the Member States until the end of 1999 in order to prepare the ESAW phase 3 methodology, specifications and schedule of implementation. This work is based on a project carried out jointly by the Institutions of 4 Member States (Denmark, France, Germany and Italy) led by Eurogip. The aim of the project is to set up a codification system of the causes and circumstances of accidents at work.

A progressive implementation of the causation variables is foreseen for the collection of the data on accidents at work in the Member States from the reference year 2001 to be submitted to Eurostat in 2003. Currently, a whole set of 8 variables has been defined, and draft classifications are being discussed. If necessary, priorities will be established for the implementations of the variables.

Moreover, an ad hoc module on Health and Safety at Work will be implemented in the 1999 Labour Force Survey (LFS), as a complementary data source to ESAW.

Finally, Eurostat and DG V/F, together with the Member States and Norway, will continue their efforts to improve the quality of the ESAW data and their comparability between countries.

## Definitions and classifications for the new variables in preparation

In ESAW Phase 3, eight new variables will supply additional information to identify where the accident occurs and especially how the accident occurs in order to design a prevention policy. The corresponding system of variables and classifications has been set up by a Group of Institutions of 4 Member States (Denmark, France, Germany and Italy) led by Eurogip. The list of new variables in ESAW phase 3 is detailed in Table 10.

The system is registering the chain of events with three sets of two variables. Usually an accident comprises a chain of events. Having prevention in mind, the description of this event cycle's moment where something went wrong and the description of what the victim was doing at the time of the accident is very important. The three levels of information are as follows :

- (a) Specific Physical Activity and associated Material Agent
- (b) Deviation and associated Material Agent
- (c) Contact - Mode of injury and associated Material Agent

Each level combines an action and an object. This gives a very flexible and very precise registration because the possible combinations are numerous without having to use huge classifications. At each level a Material Agent is coded, but the same classification of Material Agent is used for all three levels. This does not mean that the same Material Agent has to be coded three times. For most of the cases different codes for Material Agent will be used for each level. In this way the various Material Agents in the sequence of events will be identified.

**(a)** The « Specific Physical Activity » and its associated Material Agent tell what the victim was doing when the accident happened. This activity is very precise and thus differs from the « Working Process » which is giving the broad picture.

Ex. : while *cleaning* (Working Process) the victim was *climbing* (Specific Physical Activity) the *stairways* (associated Material Agent),

Ex. : while *manufacturing a piece of furniture* (Working Process), the victim was *lifting* (Specific Physical Activity) a *piece of wood* (associated Material Agent) in his hands.

**(b)** The « Deviation » and its associated Material Agent tell about the deviant event which led to the accident. The deviant event does not describe the causes or why the accident happened. It is just a description of the event. One has to look for what occurred in an abnormal way, or when there is a chain of abnormal events, what is the last element of this chain.

Ex. : the victim was *falling* (Deviation) on the *stairs* (associated Material Agent),

Ex. : the victim *lost control* (Deviation) of a hand held *screwdriver* (associated Material Agent).

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(c) The « Contact - Mode of Injury » and its associated Material Agent tell about the way, the manner the victim came in contact with the Material Agent causing the injury. It describes how the victim was injured.

Ex. : the victim *hits* (Contact - Mode of Injury) against the *floor* (associated Material Agent) when falling,

Ex. : the victim was *hit* (Contact - Mode of injury) by a falling *screwdriver* (associated Material Agent).

Table 10 - ESAW phase 1, 2 and 3 variables

PHASE	1	2	3	Classification used
<b>Year of submission</b>	1995	from: 1998	2003	(if specific for ESAW, Classification = ESAW)
<b>Reference year</b>	1993	1996	2001	
	number of digits:			
<b>Information on the employer</b>				
Economic Activity of the Employer	2	2	2 / 4	NACE
Size of the Enterprise		1	1	ESAW
<b>Information on the victim</b>				
Occupation of the Victim	2	2	2	ISCO
Age of the Victim	2	2	2	
Sex of the Victim	1	1	1	
Nationality of the Victim		1	1	(Country - EU - other)
Employment Status of the Victim		1	1	ESAW
<b>Information on the injury</b>				
Type of Injury	2	3	3	ESAW
Part of Body Injured	2	2	2	ESAW
Days Lost		3	3	ESAW
<b>Information on circumstances</b>				
Geographical Location	5	5	5	NUTS
Date of the Accident	6	8	8	
Time of the Accident	2	2	2	
Working Environment			2	ESAW - in development <sup>(1)</sup>
Working Process			2	ESAW - in development <sup>(1)</sup>
<b>Causation detailed information</b>				
Specific Physical Activity			2	ESAW - in development <sup>(1)</sup>
--> Material Agent of the Specific Physical Activity			2	ESAW - in development <sup>(1)</sup>
Deviation			2	ESAW - in development <sup>(1)</sup>
--> Material Agent of the Deviation			2	ESAW - in development <sup>(1)</sup>
Contact - Mode of Injury			2	ESAW - in development <sup>(1)</sup>
--> Material Agent of the Contact - Mode of Injury			2	ESAW - in development <sup>(1)</sup>
<b>Case number</b>	9	11	11	Year + 7 digits
<b>Total number of digits</b>	33	44	60 / 62	

<sup>(1)</sup> On the basis of the system of codification of the causes and circumstances of the accidents at work elaborated by a group of Institutions of 4 Member States (Denmark, France, Germany and Italy), led by Eurogip.

The definitions established by the Eurogip Group for these ESAW phase 3 causation variables are the following ones.

#### **The Working Environment**

The type of working area where the victim was present or was working just before the accident. This is the place of work, general area, work premises, where the accident happened.

#### **The Working Process**

The main type/kind of work, task (generic/broad activity) done by the victim at the time of the accident. This describes the main type of work done by the victim at the time of the accident. This is not the occupation of the victim, neither the victim's precise Specific Physical Activity at the moment of the accident. This concerns the description of the task, work, broadly speaking, undertaken by the victim during a period of time ending at the instant of the accident.

#### **The Specific Physical Activity**

The activity being done by the victim just before the accident. This is the Specific Physical Activity the victim was doing at the very moment of the accident. One must consider exactly what the victim was doing at the time of the accident. The activity may be undertaken for a very short period of time.

#### **The Material Agent of the Specific Physical Activity**

The principal Material Agent associated/linked with the Specific Physical Activity of the victim just before the accident. The Material Agent associated with the Specific Physical Activity is describing the tool, the object, the agent used by the victim when the accident happened. The Material Agent may be or may not be implicated in the accident.

#### **The Deviation**

The last deviant event from normal which leads to the accident. This is the description of what occurred in an abnormal way. This is a deviation from the normal way of working, from the normal process. The Deviation is the event leading to the accident. If there are several connected events, the last deviation must be recorded (the closest deviation, in time, to the Contact - Mode of Injury).

#### **The Material Agent of Deviation**

The principal Material Agent associated/linked with the deviant event. The Material Agent associated with the Deviation describes the tool, the object, the agent linked to the abnormality of the process, linked with what occurred in an abnormal way.

#### **The Contact - Mode of Injury**

The contact that injured the victim. It is describing how the victim was hurt (physical or psychological contact) by the Material Agent that caused the injury. If there are several Contacts - Modes of Injury, the one causing the most serious injury must be recorded.

#### **The Material Agent of the Contact - Mode of Injury**

The principal Material Agent associated/linked with the contact that injured. The Material Agent associated with the Contact - Mode of Injury describes the object, the tool, the agent the victim came into contact with or the psychological Mode of Injury.

## Ad hoc module on Health and Safety at Work in the 1999 LFS

To have a broader view on Health and Safety at work, it has been decided to insert an ad hoc module on Health and Safety at Work in the 1999 Labour Force Survey (LFS), as a complementary data source to ESAW. This module will bring an important added value to the information already collected by the ESAW project on the accidental injury and the victim. The LFS data enable Eurostat to link information on the accident with information on the situation of the persons on the labour market, the characteristics of their job, their working conditions or training. Additionally, it will allow to compare figures between Member States on the basis of the same data source, contrary to the problems of comparability related to the two different types of sources (insurance and non-insurance based system) used for the ESAW data.

The Commission Regulation (EC) No 1571/98 of the 20/07/1998<sup>(10)</sup> indicates in its Annex III the detailed list of information to be collected in the 1999 ad hoc module on Health and Safety at Work ("Accidents at work and occupational diseases"). The specifications provided in this Regulation for the 1999 ad hoc module in the LFS are as follows:

1. All Member States are covered except Belgium, France and Austria.
2. Germany can provide Eurostat with data concerning accidents at work and work related health problems for a period of reference of 4 weeks. The variables that can be provided are: accidents at work, time off work due to the work accident, existence of a work related health problem and time off work due to the work related health problem.
3. The variables will be coded as follows.

Table 11 – 1999 LFS ad-hoc module on accidents at work and occupational diseases – list of variables

Column	Code	Description	Filters/remarks
<b>ACCIDENTS AT WORK HAPPENED TO PERSONS HAVING WORKED IN THE LAST 12 MONTHS</b>			
209		<i>Accidental injury(ies), apart from illnesses, occurred during the past 12 months, at work or in the course of work</i>	(Col.24 = 1,2) or (Col.64 = 1 and Col.65/68 and Col.69/70 is not prior to one year before the date of the interview)
	0	None	
	1-8	Number of accidental injuries	
	9	Not applicable (Col.24 = 3-9 and (Col.64 ≠ 1 or (Col.65/68 and Col.69/70 is more than one year before the date of the interview, or is blank )))	
	blank	No answer	
210/211		<i>Month when the most recent accidental injury occurred</i>	Col.209 = 1-8
	00	Current month	
	01-12	Month - 2 digits (accidents occurred before the current month)	
	99	Not applicable (Col.209 = 0, 9, blank)	
	blank	No answer	
212		<i>Type of the injury caused by the most recent accident (code only the most serious type of injury)</i>	Col.209 = 1-8
	0	Contusion, bruising	
	1	Burn, scald, frostbite	
	2	Cut, laceration, severed nerves or tendons	
	3	Amputation	
	4	Broken bone	
	5	Sprain, strain, dislocation	
	6	Poisoning, gassing or asphyxiation	
	7	Infection by virus, bacteria or contact with infected materials	
	8	Other types of injury	
	9	Not applicable (Col.209 = 0, 9, blank)	
	blank	No answer	

<sup>(10)</sup> Commission Regulation (EC) No 1571/98 of the 20.07.1998 implementing the Council Regulation N°577/98 on the organisation of a labour force sample survey in the Community - OJ L 205 of 22.07.1998.



Column	Code	Description	Filters/remarks
213		<i>Work status after the most recent accidental injury</i> Person has started work again	Col.209 = 1-8
	1	- Resumption of usual work activities	
	2	- Change of work or workplace because of the accidental injury	
	3	- Part time work or on reduced hours because of the accidental injury	
		Person has not started to work again	
	4	- Person has not yet recovered from the accidental injury and is not working at the date of the interview	
	5	- Person expects never to do paid work again because of the accidental injury	
	6	- Other reasons	
	9	Not applicable (Col.209 = 0, 9, blank)	
	blank	No answer	
214		<i>Date when the person was able to start to work again after the most recent accidental injury</i>	Col.213 = 1-3, 6, blank
	0	On the same day as the accident or on the first day after the accident	
	1	From the second to the fourth day after the accident	
	2	From the fifth to the seventh day after the accident	
	3	From one week but before two weeks after the accident	
	4	From two weeks but before one month after the accident	
	5	From one month but before three months after the accident	
	6	Three months or later after the accident	
	7	No time off work	
	9	Not applicable (Col.213 = 4, 5, 9)	
	blank	No answer	
215		<i>Job done when the accidental injury occurred (code first that applies)</i>	Col.209 = 1-8
	1	Main current (first) job	
	2	Second current job	
	3	Last job (person not in employment)	
	4	Job one year ago	
	5	Some other job	
	9	Not applicable (Col.209 = 0, 9, blank)	
	blank	No answer	

**WORK-RELATED HEALTH PROBLEMS SUFFERED DURING THE LAST 12 MONTHS (apart from accidental injuries)**

216		<i>Illness(es), disability(ies) or other physical or psychic health problem(s), apart from accidental injuries, suffered by the person during the past 12 months (from the date of the interview) and that was (were), caused or made worse by the work</i>	(Col.24 = 1,2 or Col.64 = 1)
	0	None	
	1-8	Number of different complaints	
	9	Not applicable (Col.24 = 3-9 and Col.64 ≠1)	
	blank	No answer	

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Column	Code	Description	Filters/remarks
217		<i>Type of the most serious complaint caused or made worse by work</i>	Col.216 = 1-8
	0	Bone, joint or muscle problem	
	1	Breathing or lung problem	
	2	Skin problem	
	3	Hearing problem	
	4	Stress, depression or anxiety	
	5	Headache and/or eyestrain	
	6	Heart disease or attack, or other problems in the circulatory system	
	7	Infectious disease (virus, bacteria or other type of infection)	
	8	Other types of complaint	
	9	Not applicable (Col.216 = 0, 9, blank)	
	blank	No answer	
218		<i>Number of days off work due to the most serious complaint caused or made worse by work during the last 12 months</i>	Col.216 1-8
	0	Less than one day	
	1	One to three days	
	2	Four to six days	
	3	At least one week but less than two weeks	
	4	At least two weeks but less than one month	
	5	At least one month but less than three months	
	6	Three months or more	
	7	Expects never to do paid work again due to this illness	
	9	Not applicable (Col.216 =0, 9, blank)	
	blank	No answer	
219		<i>Job that caused or made worse the most serious complaint (code first that applies)</i>	Col.216= 1-8
	1	Main current (first) job	
	2	Second current job	
	3	Last job (person not in employment)	
	4	Job one year ago	
	5	Some other job	
	9	Not applicable (Col.216= 0, 9, blank)	
	blank	No answer	
220/221		<i>Economic activity of the local unit of the job that caused or made worse the most serious complaint (when not defined in another part of the survey)</i>	Col.219= 5, blank or (Col.219= 3 and the person did not work within the last 8 years)
		NACE Rev.1 (2 digits)	
	00	Not applicable (Col.219= 1-2, 4, 9 or (Col.219= 3 and the person last worked within the last 8 years))	
	blank	No answer	

The corresponding explanatory notes for this ad-hoc module on Health and Safety at Work are as followings.

#### **Accidents at work happened to persons having worked in the last 12 months**

*Col.209: Accidental injury(ies), apart from illnesses, occurred during the past 12 months, at work or in the course of work*

Only those accidents occurred *at work* or *in the course* of the work of the interviewed person are considered. All other types of accidents, as accidents occurred in the course of travelling between home (usual place of meals also) and the workplace (commuting accidents), home and leisure accidents or road traffic accidents in the course of private activities are excluded. Occupational diseases or illnesses are also excluded.

The term "in the course of work" means "whilst engaged in an occupational activity or during the time spent at work". Any accident occurred during working time, even if it has not occurred during the usual work or in the usual workplace of the person, has to be taken into consideration, including cases of acute poisoning and willful acts of other persons. However, deliberate self-inflicted injuries are excluded. From this follows that all types of accidents in a public place or means of transport, either if it is the usual workplace or during a journey in the course of work, should be considered as an accident at work and are included.

This apply also to the following types of accidents: road traffic accidents in the course of work; slips, falls, aggressions, etc., in public places (pavement, staircases, etc.) or in the arrival and starting points (station, port, airport, etc.) of any means of transport occurred in the course of work; accidents on board of any means of transport used in the course of work (underground railway, tram, train, boat, plane, etc.) and accidents occurred within the premises of another company than the one which employs the victim, or in a private individual in the course of work. Finally, accidents at lunch time, or any other break, inside the premises of the enterprise should also be included. All cases of accidents corresponding to these examples are also considered as "accidents at work".

The last 12 months are taken into consideration from the date of the interview (ex: accidents between the 15 April N-1 and the 14 April N for an interview the 14 April N).

When the person suffered more than one accident of this type during the last 12 months, the total number of accidents has to be indicated.

Finally, it should be noted that the filter (Col.24=1,2 or (Col.64=1 and ...)) induced that are only covered by the module people aged 15 years or more, but on the opposite there is no limit of age for old people.

*Col.210/211 Month when the most recent accidental injury occurred*

If the person suffered more than one accident at work during the last 12 months, only the most recent of these is considered for this and the following variables in the section on "accidents at work".

The date (month) when this accident occurred will be useful to link to other variables of the survey and to breakdowns of the data by month from the European Statistics on Accidents at Work. It will also be useful for adjustments concerning memory recall problems.

In the example above (column 209), the accident could have occurred between the 15 April N-1 and the 14 April N date of the interview. It is then necessary to distinguish the month of the interview (April N in the example) from the same month of the previous year (April N-1) when the accident could also have occurred. Consequently, the code '00' indicates that the accident occurred in the same month as the interview (current month), and the codes '01' to '12' correspond to the month of the accidents occurred before the current month.

## FUTURE DEVELOPMENTS

### Col.212 : Type of the injury caused by the most recent accident

Only the *most serious type of injury* suffered by the person due to this accident has to be encoded. The code '1' = "burn, scald, frostbite" includes all the types of burns: burns due to a contact with fire or hot objects, chemical burns, corrosion, cauterisation, as well as burns due to electrocution. The code '7' = "infection by virus, bacteria or contact with infected materials" does not include superficial or localised infections of the wound resulting from, e.g., a burn or a cut on the skin, which have to be classified respectively as '1'="burn, scald, frostbite" or '2' = "cut, laceration, severed nerves or tendons". Finally, the shocks (including electric shocks), the internal injuries and the effects of radiation are included in the group '8'="other types of injury".

### Col.213 : Work status after the most recent accidental injury

This variable provides information on changes (or not) of the victims work status which are exclusively caused by the accidental injury. The appropriate coding category is chosen in accordance with the victim's knowledge about the work status at the day of the interview.

Two main categories are distinguished:

— The victim has, at the day of the interview, *started work again* after the accidental injury, with three possible detailed categories:

'1': The person has resumed his/her usual work activities ("usual" means "similar to the activities before the accidental injury"); the cases of accidents without any time off work should also be included under this response category. This coding category also includes those cases where the victim, e.g., after the resumption of usual work activities, change work status for reasons not strictly related to the accidental injury.

'2': The person had to change to another type of work or another workplace after recovering from the accident, either he/she was transferred to another type of job in the same enterprise, he/she shifted to a new job in another enterprise or was made redundant and later started a new job in another enterprise. Only changes brought about by the *physical or direct consequences of the accident* have to be taken into consideration here (example: a bricklayer who lost a hand was transferred to administrative tasks).

'3': The person has still the same job in the same enterprise as before the accident, but is now working part time or on reduced hours. Only a real diminution of the time of work *because of the physical or direct consequences of the accident*, has to be taken into consideration here: if the person was already working part time at the same level of reduced hours, before the accident, the work status has to be coded '1'. In cases of persons transferred or shifted to a new work with fewer working hours than the previous work, the work status has to be coded '2'.

— The victim *has not*, at the day of the interview, *started work again* after the accidental injury, with three possible detailed categories:

'4': **The victim has not yet recovered from the accidental injury at the day of the interview.** After recovering from the accident, he/she expects to work again, or does not yet really know what will be his/her future work status, or even foresees that he/she will not work or have some difficulties to work again during at least some time (any one of the cases listed in '6' below), but he/she does not expect permanently to be unable to work, as in the case '5' below. The code '4' corresponds in particular to accidents occurred few days or weeks before the interview.

'5': **The victim expects never to work again for pay or profit (including family workers) because of the accidental injury.** In this case, the victim expects *never to recover* sufficiently from the injury to be able to work again: he/she has a *permanent incapacity to work*.

. '6': Other reasons = the victim *has not resumed work again at the date of the interview though he/she has already recovered from the accidental injury*, because of the physical or direct consequences of the accident or for other reasons, e.g. one of the following: he/she was made redundant; his/her job was of limited duration and ended before he/she recovered; he/she is in training, holidays, slack work, maternity leave, or is ill or retired, etc. Information on the reason for not having worked again is then provided either by column 25 ("reason for not having worked at all though having a job") or by column 71 ("main reason for leaving last job or business") as defined by the 1998 codification.

*Col.214 : Date when the person was able to start to work again after the most recent accidental injury*

This variable defines the number of days lost due to the accident for those cases where the victim either *has started work* or has *already recovered from the accidental injury*. All days when the person was unfit for work from the day of the accident until the resumption of work have to be taken into consideration (normal working days or not, including Sundays, bank holidays, etc.).

Only days lost strictly related to the *inability to work resulting from the accidental injury* have to be counted. Consequently, when the victim *has already recovered from the accidental injury but has not worked again at the day of the interview*, statement '6' of the column 213 above, or for the statements '1' to '3' if the person resumed work activities but *not as soon as he/she was able to do it*, only the days when the *person was unable to work* because of the accidental injury have to be counted. Days when the person was able to work but did not do it due to other reasons have *not* to be taken into consideration (even if the reason is linked with the accident). For example if the person was sick during 2 months due to the accident, but was made redundant due to the physical consequences of this accident, and found a new job only 8 months after the accident, the code is '5' = "from one month but before three months after the accident" (2 months). Finally, if there was an absence from work during only few hours with resumption of work the same day of the accident or the day immediately after the accident, the code is '0', and if there was no interruption of work (only medical aid inside the enterprise) the code is '8'.

Finally, it should be noted that the period off work considered in the variables 214 and 218 are the same, but variable 214 considers the date of resumption of work and variable 218 the number of days lost. That induces a difference of one day in the labels of the codes, but not in the period of absence considered. For example, for code '2', a resumption of work from the fifth to the seventh day after the accident, means a number of days lost between respectively four and six days.

Moreover the coding categories 1 and 2 are consistent with the definition used for the European Statistics on Accidents at Work of Eurostat, that consider the accidents "with more than 3 days' absence": "more" than 3 days means at least 4 full days, what corresponds to a resumption of work not before the fifth day after the day of the accident.

*Col.215: Job done when the accidental injury occurred (code first that applies)*

This variable provides information about the job that caused the accident at work. The aim is to be able to link the information about the accident with the characteristics of the corresponding job done when the accidental injury occurred, which are obtained by other variables of the survey.

The job can be the main current (first) job, code '1', that means the job described in columns 26 to 57 of the 1998 codification, or the second current job, code '2', described in columns 58 to 63. The job can also be either the last job if the person is not in employment (job described in columns 64 to 77), code '3', or the job one year before the survey (columns 114 to 117), code '4'. If the job is at the same time the last one and the job one year ago, the job has to be coded as the last one, code '3' ("code first that applies"), what allows to analyse if there could be a link between the accident and the main reason for having left this last job (column 71).

Finally, if the job is none of these, the answer is "some other job", code '5'.

## FUTURE DEVELOPMENTS

### Other work related health problems suffered during the last 12 months (apart from accidental injuries)

*Col.216: Illness(es), disability(ies) or other physical or psychic health problem(s), apart from accidental injuries, suffered by the person during the past 12 months (from the date of the interview) and that was (were), caused or made worse by the work*

The reference period is the 12 months prior to the date of the interview. This period includes the date of the interview (ex: complaint suffered at any moment between the 15 April N-1 and the 14 April N for an interview the 14 April N).

Any complaint suffered by the person during the 12 months reference period has to be included if the person considers this complaint to be caused or made worse by work. The work-related problems asked for should not be restricted to cases reported or recognised by the authorities, but all cases even those without time off work should be included provided the above criteria are satisfied.

Any work at any time, even years back in time, has to be taken into consideration. In the latter case, the onset of the health problem could have been more than a year before the interview, but this implies that the victim still suffered from this problem during the 12 months reference period in order to be taken into consideration. Therefore, if the victim has not suffered from the work-related health problem during the 12 months reference period the case should not be included.

In cases where the person suffered more than one illness, disability or other physical or psychic health problem during the past 12 months, that were caused or made worse by work, the total number of complaints, apart from accidental injuries, has to be indicated (cumulating complaints caused and complaints made worse by work, without distinction).

Finally, as mentioned above for Col.209, it should be noted that the filter (Col.24=1,2 or Col.64=1) induced that are only covered by the module people aged 15 years or more, but on the opposite there is no limit of age for old people.

*Col.217: Type of the most serious complaint caused or made worse by work*

In cases where the person suffered more than one work-related health problem during the 12 months reference period, only the most serious of these is considered for this and the following variables. In this assessment the distinction between complaints caused or made worse by work should not be taken into account. There is of course a subjective element in such an assessment of the "most serious" of the health problems related to work. Nevertheless, it should be the complaint most severe from a medical point of view, in general the complain which had the biggest implication on his/her activities.

The person has to indicate the type of the most serious complaint.

*Col.218: Number of days off work due to the most serious complaint caused or made worse by work during the last 12 months*

This variable concerns the number of days of work lost due to the most serious complaint related to work. All days in between the onset of the complaint and the resumption of work has to be taken into consideration (normal working days or not, including Sundays, bank holidays, etc.).

The variable only covers the days lost *strictly related* to the complaint. In particular, if there is more than one complaint, only the days lost due to the most serious one have to be taken into consideration. In the same way, all the other absences from work during the last 12 months, in particular due to any illness not related to work, or to an accident at work, or to any other type of accidents (home and leisure accidents or road traffic accidents not in the course of work), have to be excluded.

Only absence during the 12 months period prior to the date of the interview have to be included. If the person had time off work before this period, even if this absence was in continuous of the absence occurred during the period of the last 12 months, only the days off work during the 12 months reference period have to be counted as days lost. In the same way, if the person is off work at the date of the interview due to the complaint, only the days lost until this date are counted, even if the person already knows or foresees that this absence will continue in the next days. Additionally, if there were different absences from work due to the most serious complaint during the last 12 months, they have to be cumulated. For example, the interview takes place the 14 April N, and the person was off work because of the complaint from the 1st April N-1 to the 30 April N-1, from the 1 to the 20 September N-1 and from the 10 April N to the date of the interview, with a work stop prescribed until the 20 April N, the number of days taken into consideration is : 16 (only from the 15 to the 30 April N-1) + 20 (in September N-1) + 5 (from the 10 to the 14 April N only) = 41 days lost = code '5' = "at least one month but less than three months".

Moreover, if the person was not working at all during the whole 12 months' reference period, due to other reasons than the complaint, either he/she was in training, holidays, slack work, maternity leave, unemployed, ill or retired, etc., the days, if there were, when he/she was not able to perform normal activities due to the complaint, and consequently he/she was unfit for work during this period, have to be considered here as days lost and indicated in addition to the days actually off work if there were. For example the person worked the first half of the last 12 months, and was off work during 2 weeks due to the complaint, and then has been retired but was also unable to perform normal activities due to the complaint during 1 week in these last 6 months: the days (weeks) off to be considered are 2 + 1 weeks = 3 weeks = code '4' = "from two weeks but less than one month".

Finally, when the person expects, at the date of the interview, never to work again for pay or profit (including family workers) due to the most serious complaint, this variable has to be coded '7'="Expects never to do paid work again due to this illness", whatever the actual number of days off work due to the complaint during the last 12 months that otherwise would have been coded using one of the categories 0 to 6.

As mentioned above for Col.214, it should be noted that the period off work considered in the variables 214 and 218 are the same, but variable 214 considers the date of resumption of work and variable 218 the number of days lost. That induces a difference of one day in the labels of the codes, but not in the period of absence considered. For example, for code '2', a resumption of work from the fifth to the seventh day after the accident, means a number of days lost between respectively four and six days.

*Col.219: Job that caused or made worse the most serious complaint (code first that applies)*

This variable provides information about the job that caused or made worse the most serious complaint. The aim is to be able to link the information about this health problem, complaint, illness or disability with the characteristics of the corresponding job that caused or made it worse, which can be obtained by other variables of the survey.

The job can be the main current (first) job, code '1', that means the job described in columns 26 to 57 of the 1998 codification or the second current job, code '2', described in columns 58 to 63. The job can also be either the last job if the person is not in employment (job described in columns 64 to 77), code '3', or the job one year before the survey (columns 114 to 117), code '4'. If the job is at the same time the last one and the job one year ago, the job has to be coded as the last one, code '3' ("code first that applies"), what allows to analyse if there could be a link between the complaint and the main reason for having left this last job (column 71).

Finally, if the job is none of these, the answer is "some other job", code '5'.

*Col.220/221: Economic activity of the local unit of the job that caused or made worse the most serious complaint (when not defined in another part of the survey)*

In cases where the answer to the previous question Col.219 is equal to '5' = "some other job" or blank = "no answer", or is '3' = "last job" and the person left this job more than 8 years ago, information on the characteristics of this job can not be obtained by other variables in the survey. In that case, this variable allows to know the corresponding economic activity of the local unit.

### Improvement of data quality

Eurostat continues to identify and evaluate the various problems that currently still limit the comparability of the ESAW data between Member States. However, it should first be recalled that the importance and the added value of the ESAW statistics is to provide aggregated results at a European level. Obviously the quality of these aggregated figures can only be satisfactory if the provided national data are sufficiently comparable. Some of the principal problems that still persist are provided below on:

- coverage
- reporting levels
- inclusion/exclusion of specific types of accidents.

These three types of difficulties are all covered by the ESAW Evaluation Questionnaire which forms part of the ongoing process of improving the quality of the data.

The problems in focus are in particular the coverage of all groups in scope of the ESAW project, and to find an appropriate solution to the problem of underreporting of accidents at work even if they are covered by the employers legal obligation to notify them to the authorities. To this end it should be noted that the employer - pursuant to the Framework Directive, Article 9 "various obligations on employers", items 1 c) and d), has to:

- keep a list of occupational accidents resulting in a worker being unfit for work for more than 3 working days ;
- draw up, for the responsible authorities and in accordance with national laws and/or practices, reports on occupational accidents suffered by its workers ".

#### Coverage

Those Member States which have not full coverage of all employed groups should continue their efforts to cover, as far as possible, all economic sectors, all types of professional status and occupation. In particular the efforts should be concentrated on the coverage of the mining industries and of the public or private services as well as on the self-employed workers. However, the 1994 ESAW data already covered almost 90% of European workers.

#### Reporting levels

The evaluations of the reporting levels carried out by those Member States having levels lower than 100%, are in general based on recognised methods such as Labour Force Surveys or other surveys providing information on accidents at work. Nevertheless, difficulties and important bias remain. Moreover, it seems in view of the first analysis carried out, that these biases rather lead to an overvaluation of the reporting levels than the opposite. Finally the lack of homogeneity between the different methods does not guarantee the comparability of the resulting reporting levels and thus the comparability of the corrected ESAW data.

Accordingly, the Commission recommends highly that the Member States concerned, in greater details than now, evaluate the methods currently used in order to provide a more accurate evaluation of the reporting levels. In the absence of exact methods in the short-term, a better study of the biases induced, would allow for the appropriate corrections *a posteriori* to the reporting levels obtained. Preferably a quantitative approach to these biases should be made in order to estimate their magnitude.

In the future Eurostat would prefer to have more accurate breakdowns of the reporting levels for the various occupations and professional status.

In the long term, the ad hoc module on Health and Safety at Work in the LFS 1999 will make it possible to have for 12 Member States, but only in 2000-2001, information according to the "LFS" methodology. This will provide a benchmark for the reporting levels at European level and allow for a better estimate on the exact levels of reporting in the Member States. Moreover, the fact of having information according to the LFS also for countries having ESAW data resulting from the insurance based systems with a reporting level of about 100%, will make it possible to measure the possible difference between the 2 types of sources.



Furthermore, the LFS data could provide information on accidents at work for some sectors or groups not covered by the current ESAW data. This approach will thus provide a more complete picture of the number of accidents at work in the European Union and give an important correction factor for the ESAW data collected by national administrative procedures.

#### **Inclusion/exclusion of specific types of accidents**

Fatal *road traffic accidents* in the course of work make up an important share of all fatal accidents. As previously mentioned there is not full coverage of these fatalities in all Member States, even if they should in principle be included in national statistics. Comparable incidence rates for fatalities are established by omitting fatalities caused by road traffic accidents. However, in the long term Eurostat aims to produce incidence rates including these accidents, but it would imply changes in the reporting procedures in some Member States in order to collect the appropriate information.

On the other hand accidents having *strictly natural causes* should not be included in the ESAW data but are included for a few Member States. However, for the fatal accidents having only a *strictly natural cause* the number of these cases has been collected and deducted from the number of work-related fatalities.

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## APPENDIX A: ESAW 1994 data - Key Figures

The 1993 and 1994 ESAW data according to phase 1 of the methodology, have been already published<sup>(1)</sup>. The 1995 (phase 1) and 1996 (phase 2) data are in course of analyse in Eurostat and will be published in a near future. Two tables concerning the 1994 ESAW data are provided here. The first one provides figures by branch and sector of economic activity of the local unit of the enterprise of the victim. The second one indicates results by sex, age and part of body injured. More detailed information is provided in the Eurostat publication on "Accidents at work in the European Union in 1994".

Table 12: Accidents at work in the EU in 1994 by type of activity

NACE Rev. 1 section/subsection	Persons in employment in '000	Accidents with more than 3 days' absence		Fatal accidents <sup>(1)</sup>	
		Estimated number	Number per 100 000 persons in employment	Number	Number per 100 000 persons in employment
A Agriculture, hunting and forestry	5 613	348 309	6 496	770	14.0
D Manufacturing	30 147	1 515 556	5 071	1 330	4.6
of which <sup>(2)</sup> :					
Manufacture of food products; beverages and tobacco	2 947	215 798	7 360	257	9.2
Manufacture of wood and wood products	1 203	105 051	8 852	56	4.8
Manufacture of other non-metallic mineral products (glass, ceramics, construction materials)	1 117	72 155	6 518	99	9.1
Manufacture of basic metals and fabricated metal products	4 263	365 537	8 650	259	6.2
F Construction	10 249	858 129	9 014	1 457	14.7
G Wholesale and retail trade and repairs	19 549	487 656	2 552	519	2.8
H Hotels and restaurants	4 650	179 489	4 121	82	1.9
I Transport, storage and communication	7 003	421 133	6 139	917	13.7
J Financial intermediation + K Real estate, renting and business activities	14 270	225 828	1 638	298	2.2
<b>Total 8 common branches<sup>(1)</sup></b>	<b>91 480</b>	<b>4 036 100</b>	<b>4 539</b>	<b>5 373</b>	<b>6.1</b>
<i>of which fatal accidents excluding road traffic accidents and natural causes</i>				<b>3 413</b>	<b>3.9</b>
Others and unspecified	40 376	881 966		1 050	
<b>Total all branches of activity<sup>(1)</sup></b>	<b>131 856</b>	<b>4 918 066</b>		<b>6 423</b>	
<i>of which fatal accidents excluding road traffic accidents and natural causes</i>				<b>4 084</b>	

(<sup>1</sup>) Including road traffic accidents (except for Ireland & UK) and deaths from natural causes (for France & Spain only).

(<sup>2</sup>) Numbers and frequencies excluding Austria and Portugal.

(<sup>11</sup>) Eurostat - Statistics in Focus – Population and Social Conditions:

- N° 1997/2 – "Accidents at work in the European Union in 1993 – initial results" – Catalogue number CA-NK-97-002-EN-C;
- N° 1998/2 – "Accidents at work in the European Union in 1994" – Catalogue number CA-NK-98-002-EN-C.

**APPENDIX A: ESAW 1994 DATA - KEY FIGURES**
**Table 13: Accidents at work in the EU in 1994 by sex, age and part of body injured - All branches of activity**

	Accidents with more than 3 days absence			Fatal accidents <sup>(2)</sup>		
	Estimated number	% of the total number	Number per 100 000 persons in employment <sup>(1)</sup>	Number	% of the total number	Number per 100 000 persons in employment <sup>(1)</sup>
Men	3 845 114	78.2	5 960	5 549	86.4	8.2
Women	903 196	18.4	1 936	400	6.2	0.8
Unspecified (including the Netherlands)	169 756	3.5		474	7.4 <sup>(3)</sup>	
Under 26 years	1 109 327	22.6	5 802	678	10.6	3.8
26 - 45 years	2 537 326	51.6	4 374	2 639	41.1	4.7
46 - 65 years	1 202 320	24.4	3 952	2 416	37.6	8.3
Over 65 years	27 797	0.6	3 307	195	3.0	17.6
Age unspecified	41 296	0.8		495	7.7 <sup>(3)</sup>	
Whole body	138 104	2.8		1 923	29.9	
Head, neck <sup>(4)</sup>	848 836	17.3		1 809	28.2	
Torso <sup>(5)</sup>	345 133	7.0		954	14.9	
Upper limbs	2 077 833	42.2		Total of all other parts of body injured and part not specified:		
<i>of which hands, fingers</i>	1 567 474	31.9				
Lower limbs	1 366 178	27.8				
Unspecified	141 982	2.9				
<b>Total</b>	<b>4 918 066</b>	<b>100.0</b>	<b>4 539</b>	<b>6 423</b>	<b>100.0</b>	<b>6.1</b>

<sup>(1)</sup> 8 common branches.

<sup>(2)</sup> Including road traffic accidents (except for Ireland & UK) and deaths from natural causes (for France & Spain only).

<sup>(3)</sup> Includes certain road traffic accidents.

<sup>(4)</sup> Includes eyes, nose, mouth, ears and spine.

<sup>(5)</sup> Ribcage, abdomen and associated organs.

## APPENDIX B: Classifications and formats used for ESAW Phase 2

This appendix provides the classifications and formats which should be used for submission of data and for publications. The classifications used are coherent with the 1998 ILO Resolution on "Statistics of Occupational Injuries: resulting from Occupational Accidents".

### Classifications

The following classifications used for the description of the accident are classifications defined by the ESAW methodology and other classifications as the NUTS, NACE and ISCO classifications. The latter classifications have been published separately and the explanatory notes provided for these classifications should be consulted for a proper encoding of data.

VARIABLE:	CLASSIFICATION:	Format:
<b>Case Number</b>	<b>Numeric</b>	<b>Numeric</b> <b>No. of characters 11</b>

This format is composed of the last 4 digits in the year figure followed by 7 characters for the possible numbering of the case. Each case number should be unique, and should be numbered in succession for convenience. This allows the possibility of numbering up to 9.999.999 cases.

VARIABLE:	CLASSIFICATION:	FORMAT:
<b>Economic Activity of the Employer</b>	<b>NACE</b> <b>[NACE, Rev 1, level 2]</b>	<b>No. of characters 2</b>

Code	Label
------	-------

... Economic activity unknown

#### Section A Agriculture, hunting and forestry

- 01 Agriculture, hunting and related service activities
- 02 Forestry, logging and related service activities

#### Section B Fishing

- 05 Fishing, operation of fish hatcheries and fish farms; service activities incidental to fishing

#### Section C Mining and quarrying

- 10 Mining of coal and lignite; extraction of peat
- 11 Extraction of crude petroleum and natural gas; service activities incidental to oil and gas extraction excluding surveying
- 12 Mining of uranium and thorium ores
- 13 Mining of metal ores
- 14 Other mining and quarrying

#### Section D Manufacturing

- 15 Manufacture of food products and beverages
- 16 Manufacture of tobacco products
- 17 Manufacture of textiles
- 18 Manufacture of wearing apparel; dressing and dyeing of fur
- 19 Tanning and dressing of leather; manufacture of luggage, handbags, saddlery, harness and footwear

## APPENDIX B: CLASSIFICATIONS AND FORMATS USED FOR ESAW PHASE 2

20	Manufacture of wood and products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials
21	Manufacture of pulp, paper and paper products
22	Publishing, printing and reproduction of recorded media
23	Manufacture of coke, refined petroleum products and nuclear fuel
24	Manufacture of chemicals and chemical products
25	Manufacture of rubber and plastic products
26	Manufacture of other non-metallic mineral products
27	Manufacture of basic metals
28	Manufacture of fabricated metal products, except machinery and equipment
29	Manufacture of machinery and equipment n.e.c.
30	Manufacture of electrical and optical equipment
31	Manufacture of electrical machinery and apparatus n.e.c.
32	Manufacture of radio, television and communication equipment and apparatus
33	Manufacture of medical, precision and optical instruments, watches and clocks
34	Manufacture of motor vehicles, trailers and semi-trailers
35	Manufacture of other transport equipment
36	Manufacture of furniture; manufacturing n.e.c.
37	Recycling

### Section E Electricity, gas and water supply

40	Electricity, gas, steam and hot water supply
41	Collection, purification and distribution of water

### Section F Construction

45	Construction
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### Section G Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods

50	Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of automotive fuel
51	Wholesale trade and commission trade, except of motor vehicles and motorcycles
52	Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods

### Section H Hotels and restaurants

55	Hotels and restaurants
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### Section I Transport, storage and communication

60	Land transport: transport via pipelines
61	Water transport
62	Air transport
63	Supporting and auxiliary transport activities; activities of travel agencies
64	Post and telecommunications

### Section J Financial intermediation

65	Financial intermediation, except insurance and pension funding
66	Insurance and pension funding, except compulsory social security
67	Activities auxiliary to financial intermediation

### Section K Real estate, renting and business activities

70	Real estate activities
71	Renting of machinery and equipment without operator and of personal and house
72	Computer and related activities
73	Research and development
74	Other business activities

**Section L Public administration and defence; compulsory social security**

75 Public administration and defence; compulsory social security

**Section M Education**

80 Education

**Section N Health and social work**

85 Health and social work

**Section O Other community, social and personal service activities**

90 Sewage and refuse disposal, sanitation and similar activities

91 Activities of membership organisations n.e.c.

92 Recreational, cultural and sporting activities

93 Other service activities

**Section P Private households with employed persons**

95 Private households with employed persons

**Section Q Extra-territorial organisations and bodies**

99 Extra-territorial organisations and bodies.

<b>VARIABLE:</b> Occupation of the Victim	<b>CLASSIFICATION:</b> International Standard Classification of Occupation [ISCO 88 (COM), level 2]	<b>FORMAT:</b> No. of characters 2
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Code	Label
' _ _ '	<b>Occupation not elsewhere mentioned or unknown</b>
<b>10</b>	<b>Legislators, senior officials and managers without specification</b>
11	Legislators and senior officials
12	Corporate managers
13	General managers
<b>20</b>	<b>Professionals without specification</b>
21	Physical, mathematical and engineering science professionals
22	Life science and health professionals
23	Teaching professionals
24	Other professionals
<b>30</b>	<b>Technicians and associate professionals without specification</b>
31	Physical and engineering science associate professionals
32	Life science and health associate professionals
33	Teaching associate professionals
34	Other associate professionals
<b>40</b>	<b>Clerks without specification</b>
41	Office clerks
42	Customer service clerks

## APPENDIX B: CLASSIFICATIONS AND FORMATS USED FOR ESAW PHASE 2

<b>50</b>	<b>Service workers and shop and market sales workers without specification</b>
51	Personal and protective services workers
52	Models, salespersons and demonstrators
<b>60</b>	<b>Skilled agricultural and fishery workers without specification</b>
61	Skilled agricultural and fishery workers
<b>70</b>	<b>Craft and related trades workers without specification</b>
71	Extraction and building trades workers
72	Metal, machinery and related trades workers
73	Precision, handicraft, printing and related trades workers
74	Other craft and related trades workers
<b>80</b>	<b>Plant and machine operators and assemblers without specification</b>
81	Stationary-plant and related operators
82	Machine operators and assemblers
83	Drivers and mobile-plant operators
<b>90</b>	<b>Elementary occupations without specification</b>
91	Sales and services elementary occupations
92	Agricultural, fishery and related labourers
93	Labourers in mining, construction, manufacturing and transport
<b>00</b>	<b>Armed forces without specification</b>
01	Armed forces

<b>VARIABLE:</b>	<b>CLASSIFICATION:</b>	<b>FORMAT:</b>
<b>Age of the Victim</b>	<b>Numeric</b>	<b>Age format</b>
		<b>No. of characters 2</b>

The age of the victim at the time of the accident should be recorded in years. A numerical value should be entered in the range from '00' to '90' years (inclusive), except for the two codes 98 and 99. Ages below 10 must be entered with a leading zero to comply with the field width of 2 digits.

Code	label
<b>00</b>	Less than 1 year
<b>01</b>	1 year old
<b>02</b>	2 years
...	..etc.
<b>10</b>	10 years
...	..etc.
<b>90</b>	90 years
<b>98</b>	Above 90 years of age
<b>99</b>	Age unknown

<b>VARIABLE:</b>	<b>CLASSIFICATION:</b>	<b>FORMAT:</b>
<b>Sex of the Victim</b>	<b>Categorical</b>	<b>No. of characters 1</b>

Code	Label
<b>1</b>	Man
<b>2</b>	Woman
<b>9</b>	Sex unknown



**APPENDIX B: CLASSIFICATIONS AND FORMATS USED FOR ESAW PHASE 2**

<b>VARIABLE:</b> Type of injury	<b>CLASSIFICATION:</b> ESAW classification system for Type of Injury	<b>FORMAT:</b> No. of characters 3
<b>Code</b>	<b>label</b>	
<b>000</b>	<b>Type of injury unknown or unspecified</b>	
<b>010</b>	<b>Wounds and superficial injuries</b>	
011	Superficial injuries	
012	Open wounds	
019	Other types of wounds and superficial injuries	
<b>020</b>	<b>Bone fractures</b>	
021	Closed fractures	
022	Open fractures	
029	Other types of bone fractures	
<b>030</b>	<b>Dislocations, sprains and strains</b>	
031	Dislocations and subluxations	
032	Sprains and strains	
039	Other types of dislocations, sprains and strains	
<b>040</b>	<b>Traumatic amputations (Loss of body parts)</b>	
<b>050</b>	<b>Concussion and internal injuries</b>	
051	Concussion and intracranial injuries	
052	Internal injuries	
059	Other types of concussion and internal injuries	
<b>060</b>	<b>Burns, scalds and frostbites</b>	
061	Burns and scalds (thermal)	
062	Chemical burns (corrosions)	
063	Frostbites	
069	Other types of burns, scalds and frostbites	
<b>070</b>	<b>Poisonings and infections</b>	
071	Acute poisonings	
072	Acute infections	
079	Other types of poisonings and infections	
<b>080</b>	<b>Drowning and asphyxiation</b>	
081	Asphyxiation	
082	Drowning and non-fatal submersions	
089	Other types of drowning and asphyxiation	
<b>090</b>	<b>Effects of sound and vibration</b>	
091	Acute hearing loss	
099	Other effects of sound and vibration	
<b>100</b>	<b>Effects of temperature extremes, light and radiation</b>	
101	Heat and sunstroke	
102	Effects of radiation (non-thermal)	
103	Effects of reduced temperature	
109	Other effects of temperature extremes, light and radiation	
<b>110</b>	<b>Shock</b>	
<b>120</b>	<b>Multiple injuries</b>	
<b>999</b>	<b>Other specified injuries not included under other headings</b>	

**APPENDIX B: CLASSIFICATIONS AND FORMATS USED FOR ESAW PHASE 2**

<b>VARIABLE:</b> Part of Body Injured	<b>CLASSIFICATION:</b> ESAW classification system for Part of Body Injured	<b>FORMAT:</b> No. of characters 2
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Code	Label
<b>00</b>	<b>Part of body injured, not specified</b>
<b>10</b>	<b>Head, not further specified</b>
11	Head (Caput), brain and cranial nerves and vessels
12	Facial area
13	Eye(s)
14	Ear(s)
15	Teeth
18	Head, multiple sites affected
19	Head, other parts not mentioned above
<b>20</b>	<b>Neck, inclusive spine and vertebra in the neck</b>
21	Neck, inclusive spine and vertebra in the neck
29	Neck, other parts not mentioned above
<b>30</b>	<b>Back, including spine and vertebra in the back</b>
31	Back, including spine and vertebra in the back
39	Back, other parts not mentioned above
<b>40</b>	<b>Torso and organs, not further specified</b>
41	Rib cage, ribs including joints and shoulder blades
42	Chest area including organs
43	Pelvic and abdominal area including organs
48	Torso, multiple sites affected
49	Torso, other parts not mentioned above
<b>50</b>	<b>Upper Extremities, not further specified</b>
51	Shoulder and shoulder joints
52	Arm, including elbow
53	Hand
54	Finger(s)
55	Wrist
58	Upper extremities, multiple sites affected
59	Upper extremities, other parts not mentioned above
<b>60</b>	<b>Lower Extremities, not further specified</b>
61	Hip and hip joint
62	Leg, including knee
63	Ankle
64	Foot
65	Toe(s)
68	Lower extremities, multiple sites affected
69	Lower Extremities, other parts not mentioned above
<b>70</b>	<b>Whole body and multiple sites, not further specified</b>
71	Whole body (Systemic effects)
78	Multiple sites of the body affected
<b>99</b>	<b>Other Parts of body injured, not mentioned above</b>

**APPENDIX B: CLASSIFICATIONS AND FORMATS USED FOR ESAW PHASE 2**

<b>VARIABLE:</b> Geographical Location of the Accident	<b>CLASSIFICATION:</b> "Nomenclature of Territorial Units for Statistics" NUTS	<b>FORMAT:</b> No. of characters 5
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The NUTS Classification (Nomenclature of Territorial Units for Statistics) is to be applied at the level specified below. It is the last NUTS version revised in 1998 with modifications at the levels used here by ESAW for Finland, Sweden and the UK.

**Belgium: NUTS 1**

BE000	BELGIQUE-BELGIË unspecified or unknown
BE100	REG. BRUXELLES-CAP. / BRUSSELS HFDST. GEW.
BE200	VLAAMS GEWEST
BE300	RÉGION WALLONNE

**Denmark: NUTS 5**

DK000	"DANMARK", unspecified or unknown
DK001	KØBENHAVN OG FREDERIKSBERG KOMMUNER
DK002	KØBENHAVNS AMT
DK003	FREDERIKSBORG AMT
DK004	ROSKILDE AMT
DK005	VESTSJÆLLANDS AMT
DK006	STORSTRØMS AMT
DK007	BORNHOLMS AMT
DK008	FYNS AMT
DK009	SØNDERJYLLANDS AMT
DK00A	RIBE AMT
DK00B	VEJLE AMT
DK00C	RINGKØBING AMT
DK00D	ÅRHUS AMT
DK00E	VIBORG AMT
DK00F	NORDJYLLANDS AMT

**Germany NUTS 1**

DE000	DEUTSCHLAND, unspecified or unknown
DE100	BADEN-WÜRTTEMBERG
DE200	BAYERN
DE300	BERLIN
DE400	BRANDENBURG
DE500	BREMEN
DE600	HAMBURG
DE700	HESSEN
DE800	MECKLENBURG-VORPOMMERN
DE900	NIEDERSACHSEN
DEA00	NORDRHEIN-WESTFALEN
DEB00	RHEINLAND-PFALZ
DEC00	SAARLAND
DED00	SACHSEN
DEE00	SACHSEN-ANHALT
DEF00	SCHLESWIG-HOLSTEIN
DEG00	THÜRINGEN

**APPENDIX B: CLASSIFICATIONS AND FORMATS USED FOR ESAW PHASE 2**

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**Greece: NUTS 1**

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GR000	ELLADA, unspecified or unknown
GR100	VOREIA ELLADA
GR200	KENTRIKI ELLADA
GR300	ATTIKI
GR400	NISIA AIGAIUOY, KRITI

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**Spain: NUTS 1**

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ES000	ESPAÑA, unspecified or unknown
ES100	NOROESTE
ES200	NORESTE
ES300	COMUNIDAD DE MADRID
ES400	CENTRO (E)
ES500	ESTE
ES600	SUR
ES700	CANARIAS

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**France: NUTS 1**

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FR000	FRANCE, unspecified or unknown
FR100	ÎLE DE FRANCE
FR200	BASSIN PARISIEN
FR300	NORD - PAS-DE-CALAIS
FR400	EST
FR500	OUEST
FR600	SUD-OUEST
FR700	CENTRE-EST
FR800	MÉDITERRANÉE
FR900	DÉPARTEMENTS D'OUTRE-MER

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**Ireland: NUTS 5**

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IE000	IRELAND, unspecified or unknown
IE001	BORDER
IE002	DUBLIN
IE003	MID-EAST
IE004	MIDLAND
IE005	MID-WEST
IE006	SOUTH-EAST (IRL)
IE007	SOUTH-WEST (IRL)
IE008	WEST

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**Italy: NUTS 2**

IT000	ITALIA, unspecified or unknown
IT100	NORD OVEST
IT110	PIEMONTE
IT120	VALLE D'AOSTA
IT130	LIGURIA
IT200	LOMBARDIA
IT300	NORD EST
IT310	TRENTINO-ALTO ADIGE
IT320	VENETO
IT330	FRIULI-VENEZIA GIULIA
IT400	EMILIA-ROMAGNA
IT500	CENTRO (I)
IT510	TOSCANA
IT520	UMBRIA
IT530	MARCHE
IT600	LAZIO
IT700	ABRUZZO-MOLISE
IT710	ABRUZZO
IT720	MOLISE
IT800	CAMPANIA
IT900	SUD
IT910	PUGLIA
IT920	BASILICATA
IT930	CALABRIA
ITA00	SICILIA
ITB00	SARDEGNA

**Luxembourg (Grand-Duché): NUTS1**

LU000	LUXEMBOURG (GRAND-DUCHÉ)
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**Netherlands NUTS 2**

NL000	NEDERLAND, unspecified or unknown
NL100	NOORD-NEDERLAND
NL110	GRONINGEN
NL120	FRIESLAND
NL130	DRENTHE
NL200	OOST-NEDERLAND
NL210	OVERIJSSSEL
NL220	GELDERLAND
NL230	FLEVOLAND
NL300	WEST-NEDERLAND
NL310	UTRECHT
NL320	NOORD-HOLLAND
NL330	ZUID-HOLLAND
NL340	ZEELAND
NL400	ZUID-NEDERLAND
NL410	NOORD-BRABANT
NL420	LIMBURG (NL)

**APPENDIX B: CLASSIFICATIONS AND FORMATS USED FOR ESAW PHASE 2**

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**Austria: NUTS 2**

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AT000	ÖSTERREICH, unspecified or unknown
AT100	OSTÖSTERREICH
AT110	BURGENLAND
AT120	NIEDERÖSTERREICH
AT200	SÜDÖSTERREICH
AT210	KÄRNTEN
AT220	STEIERMARK
AT300	WESTÖSTERREICH
AT310	OBERÖSTERREICH
AT320	SALZBURG
AT330	TIROL
AT340	VORARLBERG

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**Portugal: NUTS 2**

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PT000	PORTUGAL, unspecified or unknown
PT100	CONTINENTE
PT110	NORTE
PT120	CENTRO (P)
PT130	LISBOA E VALE DO TEJO
PT140	ALENTEJO
PT150	ALGARVE
PT200	AÇORES
PT300	MADEIRA

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**Finland: NUTS 2 (modified in 1998)**

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FI000	SUOMI/FINLAND, unspecified or unknown
FI100	MANNER-SUOMI
FI130	ITÄ-SUOMI
FI140	VÄLI-SUOMI
FI150	POHJOIS-SUOMI
FI160	UUSIMAA (SUURALUE)
FI170	ETELÄ-SUOMI
FI200	ÅLAND

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**Sweden: NUTS 2 (modified in 1998)**

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SE000	SVERIGE, unspecified or unknown
SE010	STOCKHOLM
SE020	ÖSTRA MELLANSVERIGE
SE040	SYDSVERIGE
SE060	NORRA MELLANSVERIGE
SE070	MELLERSTA NORRLAND
SE080	ÖVRE NORRLAND
SE090	SMÅLAND MED ÖARNA
SE0A0	VÄSTSVERIGE

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United Kingdom NUTS 2 (modified in 1998):

UK000	UNITED KINGDOM, unspecified or unknown
UKC00	NORTH EAST
UKC10	TEES VALLEY & DURHAM
UKC20	NORTHUMBERLAND AND TYNE & WEAR
UKD00	NORTH WEST (INC MERSEYSIDE)
UKD10	CUMBRIA
UKD20	CHESHIRE
UKD30	GREATER MANCHESTER
UKD40	LANCASHIRE
UKD50	MERSEYSIDE
UKE00	YORKSHIRE & THE HUMBER
UKE10	EAST RIDING & NORTH LINCOLNSHIRE
UKE20	NORTH YORKSHIRE
UKE30	SOUTH YORKSHIRE
UKE40	WEST YORKSHIRE
UKF00	EAST MIDLANDS
UKF10	DERBYSHIRE & NOTTINGHAMSHIRE
UKF20	LEICESTERSHIRE, RUTLAND & NORTHAMPTONSHIRE
UKF30	LINCOLNSHIRE
UKG00	WEST MIDLANDS
UKG10	HEREFORDSHIRE, WORCESTERSHIRE & WARCS
UKG20	SHROPSHIRE & STAFFORDSHIRE
UKG30	WEST MIDLANDS
UKH00	EASTERN
UKH10	EAST ANGLIA
UKH20	BEDFORDSHIRE, HERTFORDSHIRE
UKH30	ESSEX
UKI00	LONDON
UKI10	INNER LONDON
UKI20	OUTER LONDON
UKJ00	SOUTH EAST
UKJ10	BERKSHIRE, BUCKS & OXFORDSHIRE
UKJ20	SURREY, EAST & WEST SUSSEX
UKJ30	HAMPSHIRE & ISLE OF WIGHT
UKJ40	KENT
UKK00	SOUTH WEST
UKK10	GLOUCESTERSHIRE, WILTSHIRE & NORTH SOMERSET
UKK20	DORSET & SOMERSET
UKK30	CORNWALL & ISLES OF SCILLY
UKK40	DEVON
UKL00	WALES
UKL10	WEST WALES & THE VALLEYS
UKL20	EAST WALES
UKM00	SCOTLAND
UKM10	NORTH EASTERN SCOTLAND
UKM20	EASTERN SCOTLAND
UKM30	SOUTH WESTERN SCOTLAND
UKM30	HIGHLANDS & ISLANDS
UKN00	NORTHERN IRELAND

**APPENDIX B: CLASSIFICATIONS AND FORMATS USED FOR ESAW PHASE 2**

**Norway: Regions**

NO000	NORWAY, unspecified or unknown
NO001	OSLO OG AKERHUS
NO002	ØSTLAND SØNDRE
NO003	ØSTLAND NORDRE
NO004	AGDER OG ROGALAND
NO005	VESTLANDET
NO006	TRØNDELAG
NO007	NORD-NORGE

<b>VARIABLE:</b> Date of the Accident	<b>CLASSIFICATION:</b> Numeric	<b>FORMAT:</b> 'YYYYMMDD' No. of characters 8
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The date on which the accident took place is recorded using the 8-digit format 'YYYYMMDD', where 'YYYY' is the year, 'MM' refers to the month of the year, and 'DD' refers to the day of the month, e.g. 31 March 1997 would be coded as '19970331'. If the year is unknown 'YYYY' must be coded '0000', if the month is unknown 'MM' must be coded '00' and if the day is unknown 'DD' must be coded '00'.

<b>VARIABLE:</b> Time of the Accident	<b>CLASSIFICATION:</b> Numeric	<b>FORMAT:</b> 'HH' No. of characters 2
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The time of the accident is coded using the two digits of the 'HH' format which is defined as the following time interval:

Code	Label
00	00:00 to 00:59
01	01:00 to 01:59
02	02:00 to 02:59
.....	etc., to
23	23:00 to 23:59
99	Time of accident unknown

<b>VARIABLE:</b> Size of the Enterprise	<b>CLASSIFICATION:</b> Recommendation on SMEs Numeric	<b>FORMAT:</b> Size classes No. of characters 1
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Code	Label:	Specifications
0	0 employees	(Self-employed without employees)
1	1-9 employees	
2	10-49 employees	
3	50-249 employees	
4	250-499 employees	
5	500 employees or more	
9	Unknown size	



**APPENDIX B: CLASSIFICATIONS AND FORMATS USED FOR ESAW PHASE 2**

<b>VARIABLE:</b> Nationality of the Victim	<b>CLASSIFICATION:</b> LFS (Eurostat) definition Numeric	<b>FORMAT:</b> No. of characters 1
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Code	Label
0	Nationality unknown
1	National
2	Non-national from EU
3	Non-national outside EU

<b>VARIABLE:</b> Employment Status of the Victim	<b>CLASSIFICATION:</b> LFS (Eurostat) definition Numeric	<b>FORMAT:</b> No. of characters 1
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Code	Label	
0	Employment Status unknown	Please notice that the code "2" is not used to be coherent with the LFS classification that have 2 codes "1" and "2" for self-employed (with or without employees) and have the employees in code "3" and the family workers in code "4".
1	Self-employed	
3	Employee	
4	Family worker	
5	Trainee / Apprentice	
9	Other	

<b>VARIABLE:</b> Days Lost	<b>CLASSIFICATION:</b> ESAW classification system Alphanumeric	<b>FORMAT:</b> No. of characters 3
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The *number of days lost* due to an accident at work is provided using a 3 digit format in the range from 4 to 182 days (inclusive) for cases with less than 6 months' absence. A format for size bands for days lost (A01 - A06) has been provided as well in case the exact value can not be provided by a Member State. Finally, four additional code values are used for absences of 6 months or more and permanent incapacities, fatalities, others and unspecified cases. Furthermore, Please notice, that ESAW data include all accidents at work where the person is unfit for work for more than 3 full days even these days include Saturdays, Sundays, Bank holidays or other days where the person is not usually working. Only *whole days* should be entered in the ESAW data. In the ESAW methodology, it is considered that the person was unfit for work for *more* than 3 days when he/she was off work at least 4 full days beginning the day after the accident. That means that for the first value "004" the resumption of work took place the fifth day after the day of the accident. The remaining values correspond to the same definition, e.g. the value "009" would correspond to a resumption of work the tenth day after the day of the accident, etc. .

Code	Label
000	Number of days lost unknown
004 - 182	Number of whole days lost in numerical (less than 6 months' absence)
A01	4 - 6 days lost
A02	7 - 13 days lost
A03	14 - 20 days lost
A04	At least 21 days but less than 1 month lost
A05	At least 1 month but less than 3 months lost
A06	At least 3 months but less than 6 months lost
997	Permanent incapacity (to work) or 183 or more days lost (6 months' absence or more).
998	Fatal accident
999	Not elsewhere mentioned

## APPENDIX B: CLASSIFICATIONS AND FORMATS USED FOR ESAW PHASE 2

### Aggregated formats

These formats are used for transfer tables or for publications.

VARIABLE:	CLASSIFICATION:	FORMAT:
Age of the Victim	Numeric	Age format No. of characters 2

The age format is defined with the following intervals.

Code	Label
0	0-17 years
1	18-24 years
2	25-34 years
3	35-44 years
4	45-54 years
5	55-64 years
6	65 years or more
9	Age unknown

VARIABLE:	CLASSIFICATION:	FORMAT:
Type of Injury	ESAW classification system for Type of Injury	2 digit level No. of characters 2

Code	Label	Correspondance with the 3 digit classification
00	Type of injury unknown or unspecified	000
01	Wounds and superficial injuries	010-019
02	Bone fractures	020-029
03	Dislocations, sprains and strains	030-039
04	Traumatic amputations (Loss of body parts)	040
05	Concussion and internal injuries	050-059
06	Burns, scalds and frostbites	060-069
07	Poisonings and infections	070-079
08	Drownings and asphyxiations	080-089
09	Effects of sound and vibration	090-099
10	Effects of temperature extremes, light and radiation	100-109
11	Shock	110
12	Multiple injuries	120
99	Other specified injuries not included under other headings	999

**APPENDIX B: CLASSIFICATIONS AND FORMATS USED FOR ESAW PHASE 2**

<b>VARIABLE:</b> Part of Body Injured	<b>CLASSIFICATION:</b> ESAW classification system for Part of Body Injured	<b>FORMAT:</b> 1 digit level No. of characters 1
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Code	Label	Correspondance with the 2 digit classification
0	Part of body injured, not specified	00
1	Head	10-19
2	Neck, inclusive spine and vertebra in the neck	20-29
3	Back, inclusive spine and vertebra in the back	30-39
4	Torso and organs	40-49
5	Upper Extremities	50-59
6	Lower Extremities	60-69
7	Whole body and multiple sites	70-78
9	Other parts of body injured, not mentioned above	99

<b>VARIABLE:</b> Date of the Accident	<b>CLASSIFICATION:</b> Numeric variable	<b>FORMAT:</b> Month format. No. of characters 2
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Code	Label: Month of accident	Reference to classification 'YYYYMMDD' Date intervals
00	Date of accident unknown	
01	January	[1.1 - 31.1]
02	February	[1.2 - 29.2]
03	March	[1.3 - 31.3]
04	April	[1.4 - 30.4]
05	May	[1.5 - 31.5]
06	June	[1.6 - 30.6]
07	July	[1.7 - 31.7]
08	August	[1.8 - 31.8]
09	September	[1.9 - 30.9]
10	October	[1.10 - 31.10]
11	November	[1.11 - 30.11]
12	December	[1.12 - 31.12]

## APPENDIX C: Methodology for commuting accidents

### Introduction

A Sub-project on *commuting accidents* is included in the project on European Statistics on Accidents at Work (ESAW), from 1996 reference year. The objective is to cover more fully the field of accidents relating to work and to meet the demand for the development of harmonised data expressed in the Communication from the Commission, COM(97) 178 final of 14 May 1997, and the European Parliament and Council Decision concerning a Programme on Injury Prevention<sup>(12)</sup>.

In order to promote the development of this Sub-project and given the similarity of the subject and the reporting systems, a similar Methodology is used for commuting accidents as that for accidents at work in the ESAW project. For the same reasons, the co-operation with the Member States on this Sub-project is drawn up by the ESAW Working Group and Task Force.

Only 9 Member States (Austria, Belgium, Finland, France, Germany, Italy, Luxembourg, Spain and Sweden), in which this information is available, have sent data to Eurostat on commuting accidents from the 1996 reference year. Portugal will also send data from 1997 reference year and Greece from 1998.

The 4 remaining Member States (and for Portugal and Greece in the meantime) are nevertheless expected to participate in the evaluation questionnaire (see below) to allow Eurostat to know the situation of all national systems on commuting accidents in Europe, even when no data is available. It is also hoped that these 4 countries should be able to participate in the Sub-project in a second step.

### Methodology

#### Definitions

The term *commuting accident* means any accident which occurs during the normal journey between the home, the place of work and the usual place where meals are taken. This journey can include normal activities on the way to or from work, like for example picking one's children up from school. On the other hand, an accident is not considered as a commuting accident if it takes place during a journey different from the usual journey for specific reasons, which is considered as an accident during leisure time (including transport during leisure time). Are also excluded accidents which occur in the course of work even if they occur on the public highway or other public places (e.g., station).

As for accidents at work, the Sub-project covers all commuting accidents leading to an absence of more than three calendar days from work or the death of the victim.

#### Variables for 1996 data

The variables considered are the same as for accidents at work in the ESAW Project presented earlier in this publication. Consequently for the first reference year 1996, the variables are those considered for Phase 2 of the ESAW Project for accidents at work.

### Evaluation questionnaire

As for the accidents at work, some additional information is necessary to allow an accurate use of the data in Eurostat and a good validity and quality of the statistics. It is also important for Eurostat to have information on the national system on commuting accidents even if no data is available.

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<sup>(12)</sup> Decision 99/372/EC of the European Parliament and Council, OJ L46, 20.02.99

## APPENDIX D: National ESAW data providers

The list below indicates either Institutions that are the official national provider of the ESAW data to Eurostat, Institutions in charge of the elaboration of this data in the Member State and other national Institutions that participate actively in the ESAW project without elaborating nor providing data. For some countries it is the same administration. For other they are different. In this last case an "\*" indicates what is the Institution actually elaborating the main part of the national data.

### B - Belgium

Ministère du Travail et de l'Emploi  
Administration de la Sécurité  
51-53, avenue Belliard  
B - 1040  
BRUXELLES

\* Fonds des Accidents du Travail  
100, rue du Trône  
B – 1050  
BRUXELLES

### DK - Denmark

Direktoratet for Arbejdstilsynet  
(Danish Working Environment Service)  
Landskronagade 33-35  
DK-2100 København Ø

### DE - Germany

Bundesministerium für Arbeit Und Sozialordnung  
Rochusstrasse, 1  
D – 53123  
BONN

\* HVBG – Hauptverband der gewerblichen Berufsgenossenschaften  
Alte Heerstrasse, 111  
D – 53754  
SANKT AUGUSTIN

### EL - Greece

Ministry of Labour and Social Affairs  
Directorate of Working Conditions  
40 Pireos Str.  
GR - 101 82  
ATHENS

\* IKA - Social Security Institution  
Actual and Statistics Service  
Agiou Constantinou street, 16-18  
GR - 10241  
ATHENS

## APPENDIX D: NATIONAL ESAW DATA PROVIDERS

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### E - Spain

Ministerio de Trabajo y Seguridad Social  
Subdirección General de Estadísticas Sociales y Laborales  
Sección de Accidentes de Trabajo  
María de Guzmán, 52  
E-28071  
MADRID

### F – France

Ministère du Travail  
DARES  
Place de Fontenoy  
F – 75007  
PARIS

\* CNAMTS - Caisse Nationale d'Assurance Maladie des Travailleurs Salariés  
Direction des Risques Professionnels  
33, avenue du Maine  
B.P. 7  
F – 75755  
PARIS Cedex 15

MSA - Caisse Centrale de la Mutualité Sociale Agricole  
Direction du Financement, Gestion, Comptabilité  
Département Etudes Economiques et Financières  
8-10, rue d'Astorg  
F - 75413 PARIS Cedex 08

EDF - GDF / Electricité de France – Gaz de France  
Service Prévention et Sécurité  
Observatoire Statistique  
22-30, avenue de Wagram  
F - 75382 PARIS Cedex 08

### IRL - Ireland

Health and Safety Authority  
10, Hogan Place  
IRL -  
DUBLIN 2

### I - Italy

Ministero del Lavoro  
Servizio Centrale dell'Ispettorato del Lavoro  
Via Pastrengo, 22  
I - 00185  
ROMA

\* INAIL - Istituto Nazionale per l'Assicurazione Contro gli Infortuni sul Lavoro  
Consulenza Statistico  
Via Stefano Gradi, 55  
I – 00197  
ROMA

**L - Luxembourg**

Inspection du Travail et des Mines  
26, rue Zithe  
B.P. 27  
L – 2010  
LUXEMBOURG

\* Association d'Assurance contre les Accidents  
125, route d'Esch  
L – 2976  
LUXEMBOURG

**NL - The Netherlands**

Ministerie van Sociale Zaken en Werkgelegenheid  
Postbus 90804 Anna Van Hannoverstraat, 4  
NL – 2509  
LV DEN HAAG

**A - Austria**

Österreichisches Statistisches Zentralamt Hintere Zollamtstrasse,  
2b  
A – 1030  
WIEN

Bundesministerium für Arbeit, Gesundheit und Soziales  
Abteilung II/8  
Stubenring, 1  
A – 1010  
WIEN

\* AUVA - Allgemeine Unfallversicherungsanstalt Hauptstelle  
Adalbert-Stiffer-Str. 65  
A – 1200  
WIEN

BVA - Versicherungsanstalt der öffentlichen Bediensteten  
Versicherungsanstalt der österreichischen Eisenbahnen  
SVA d. Bauern - Sozialversicherungsanstalt der Bauern

**P – Portugal**

Instituto Nacional de Estatística  
Avenida Antonio José de Almeida, 5-9  
P – 1078  
LISBOA Codex

\* Ministério de Emprego e da Segurança Social  
Departamento de Estatística  
Rue Rodrigo Da Fonseca, 55  
P-1227  
LISBOA CODEX

## APPENDIX D: NATIONAL ESAW DATA PROVIDERS

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### FIN - Finland

Statistics Finland  
PL 5 B  
Työpajakatu, 13  
FIN – 00022  
HELSINKI

\* Federation of Accidents Insurance Institutions  
Bulevardi, 28  
FIN – 00120  
HELSINKI

### S - Sweden

Statistics Sweden  
Box 24300  
S – 10451  
STOCKHOLM

\* National Board of Occupational Safety and Health  
Ekelundsvägen, 16  
S – 17184  
SOLNA

### UK - United Kingdom

Health and Safety Executive  
Statistical Service Unit  
Daniel House Trinity Road, Bootle  
UK -  
MERSEYSIDE - L20 7HE

### NO - Norway

Direktoratet for Arbeidstilsynet  
Postboks 8103 Dep.  
N-0032  
OSLO





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