

Economically Active Active Population

**Work accidents and
illnesses module**

Second quarter of 1999



INSTITUTO NACIONAL DE ESTADÍSTICA

Madrid, 2003

1. Background

The Community Labour Force Survey (LFS) is performed coordinately throughout the scope of the European Union, in accordance with the terms envisaged in Council Regulation 577/98 concerning the organisation of a sample survey on economically active population in the Community (Official Journal of the European Communities L-77, of March 14th).

In the case of Spain, the LFS is included in the Economically Active Population Survey (EAPS). EAPS data has been adapted to the aforementioned regulation as from the first quarter of 1999.

This regulation states that in the second quarters of each year, the LFS should include a series of questions on specific issues linked to the labour market.

In the second quarter of 1999 the accidents and work-related illnesses have been researched with respect to that indicated in Commission Regulation 1571/98 of July 20th. Questions referring to accidents are aimed at employed persons and persons who left their last job one year ago or less and questions referring to illnesses are aimed at employed persons and persons who had a previous job (independently of the time elapsed since they left the job). The methodology applied is explained below.

2. Design of the survey and fieldwork

The ad hoc module for work-related accidents and illnesses has been performed together with the EAPS of the second quarter of 1999, therefore its sample design is the same as that of the EAPS. The most important features thereof are described below (for further details you can consult the Technical Manual and the Survey Description).

The EAPS is a continuous quarterly sample survey that deals with the whole country. It is aimed at the population residing in main family dwellings, in other words, those used as the regular, permanent dwelling during most of the year. The survey does not take into account group dwellings (hospitals, nursing homes, barracks, convents...) or secondary or seasonal dwellings.

The survey uses a stratified two-stage sampling, census sections being the first stage units and the family dwellings being the second stage units. Everybody living in the chosen dwellings is interviewed.

Sample size is made up of 3,484 sections with approximately 18 dwellings per section (22 in large provinces, that is, about 68,000 dwellings per quarter, although due to lack of response the final size is about 64,000 dwellings).

The sample has been spatially distributed following a compromise allocation between proportional and uniform allocation, aimed at providing estimates by provinces and by autonomous communities.

Conversely, the sample is distributed uniformly over the thirteen weeks that form each quarter, interviewing approximately 5,000 dwellings a week.

The sections sample is divided into 6 subsamples called rotation shifts and every quarter the dwellings of one rotation shift are replaced; with this mechanism each family is interviewed for six consecutive quarters and is replaced by another family of the same section at the end of the six quarter period.

Fieldwork is performed by National Statistics Institute interviewers in each one of its 52 delegations. The first interview is personal, by CAPI (Computer Assisted Personal Interview); second and subsequent interviews are over the telephone, except when the family does not have a telephone or prefers personal

interviews. At the delegation there is a weekly work system that basically has the following sequence:

- Week for interview
- Week for revision and refinement
- Week for sending the questionnaires to the Central services (by teleprocessing)

In the second quarter of 1999, fieldwork was performed between April 12th and July 10th of 1999, corresponding to the reference period of April 5th to July 4th of 1999.

The month of November 1998, EAPS supervisors in each one of the 52 delegations travelled to the Central Services in Madrid for a three-day training course in which they were explained the new Economically Active Population Survey (adapted to the new regulation of the Community Labour Force Survey and the ad hoc module of the second quarter of 1999).

The sample size and the lack of response are presented in table 1.

Table 1. Sample size and lack of response by interview order

	Total		First interview		Second to sixth interview	
	Absolute value	Percentage	Absolute value	Percentage	Absolute value	Percentage
Initial sample	68,827	100.00	10,795	100.00	58,032	100.00
Refusals	2,767	4.02	1,037	9.61	1,730	2.98
Absences	4,109	5.97	784	7.26	3,325	5.73
Unavailable	610	0.89	15	0.14	595	1.03
Total lack of response	7,486	10.88	1,836	17.01	5,650	9.74
Original sample interviewed	61,341	89.12	8,959	82.99	52,382	90.26

In line with the processing of events during fieldwork applied in the EAPS, the 1,037 households who refused to answer during the first interview were replaced by other households, who were selected randomly from the same sections. The final sample of interviewees amounted to 62,378 dwellings (61,341 original

dwellings and 1,037 substituted households who refused to participate in the first interview). The sample finally interviewed is summarised in Table 2

Table 2. Interviewed sample by interview order

	Total		First interview		Second to sixth interview	
	Absolute value	Percentage	Absolute value	Percentage	Absolute value	Percentage
Sample interviewed	62,378	100.00	9,996	100.00	52,382	100.00
Original sample	61,341	98.34	8,959	89.63	52,382	100.00
Refusals substituted	1,037	1.66	1,037	10.37	0	0.00

On the other hand, the final sample from which the estimates are obtained exceeds the 62,378 households that appear in table 2; this is due to the fact that during automatic treatment of the information information is copied of households from the previous quarter (in this case the first quarter of 1999) that have been absent, that have refused or that have been unavailable during the second quarter but which were interviewed during the first quarter. The object of this procedure is to reduce the bias that may occur in the estimates due to lack of response. Table 3 shows the final sample according to interview number.

Table 3. Sample final by interview order

	Total		First interview		Second to sixth interview	
	Absolute value	Percentage	Absolute value	Percentage	Absolute value	Percentage
Final sample	64,329	100.00	9,996	100.00	54,333	100.00
Sample interviewed	62,378	96.97	9,996	100.00	52,382	96.41
Duplicated households	1,951	3.03	0	0.00	1,951	3.59

3. Instructions for filling out the questionnaire

Work accidents

This part of the module consists in six questions the main aim of which is to research work-related accidents (non-fatal) occurring in the last twelve months. Work-related illnesses are excluded.

1.- Between the *dd of mm of 1998* and the *dd of mm of 1999* Have you had any work-related accidents? (do not include diseases)

Employed persons and persons who left their last job one year ago or less must answer this question. If you have suffered more than one work-related accident, record the number of accidents.

Only accidents occurred when the person was working should be taken into account. Accidents occurring in transit to the workplace and work-related illnesses will be excluded. All accidents occurring **during the working day** will be included. Therefore, accidents considered as work accidents will be all those occurring **during the working day** in:

1. any building in which a work activity is carried out, both in the business itself and in buildings of other businesses.
2. work-related travel performed during the working day, both in private or in public transport, including that occurring in stations, seaports, airports...

Accidents occurring during work breaks (for lunch or any other reason) will be work accidents if they occur in company facilities.

Injuries due to attacks or aggression from other persons will also be considered work accidents (if they occur during the working day). In contrast, injuries deliberately caused by the interviewee will not be included in this concept.

2.- What month was it when you had your last work accident?

Indicate the month in which the last work accident occurred in numbers. If it occurred during the current month record it as 00.

3.- What type of injury did it cause?

Record only the most serious injury.

Code 2 *Burning or freezing*, includes all types of burns: Those produced by contact with fire or hot objects, chemical burns, corrosion, cauterisation and those due to electrocution. Code 8 *Infection by virus, bacteria or infected material* does not include superficial or localised infections of injuries caused by burns or cuts, which should be coded with Code 2 (burning or freezing) or 3 (cuts or laceration), respectively.

Finally, internal injuries, effects of radiation and electric shock are included in Code 9 *Other types of injuries*.

4.- Employment situation after the last accident?

Indicate the consequences the accident has had upon the person's work activity. Distinction is made mainly between three situations:

- a.- The interviewee has returned to work (Codes 1, 2 and 3)
- b.- The interviewee has not returned to work (Codes 4 and 5)
- c.- The interviewee believes that, due to injuries, he or she will not be able to work again (Code 6)

Code 1 will include all interviewees who have returned to work (with the same job they had before the accident or a similar one) without the work accident having implied a change in work conditions. Interviewees who after returning to work have changed jobs for some reason that is not directly related to the work accident, it will also be included in this Code.

Employed persons who as a consequence of the work accident have had to reduce their usual working day (in the same job) will be coded with Code 2. If they have had to change jobs (having reduced the usual working day or not) it will be included in Code 3.

If the interviewee has not returned to his job because he or she has not yet recovered from the consequences of the accident, but he or she intends to return to the job when they recover, record as Code 4. If the person has not returned to work for other reasons (for example, because the person's contract expired during convalescence or because they were dismissed or because the sick leave overlapped with the holiday period or with maternity leave...) use code 5.

When the interviewee cannot return or thinks that they cannot return to work as a consequence of accident injuries (permanently disabled for work) record as number 6.

Codes 4 to 6 will not be admitted if the person answers that they have worked at least one hour during the reference week (1 in C.1 or in C.2, of the main questionnaire). If the interviewee does not have a job but worked less than one year ago, only Codes 4 to 6 are possible. A person with a job that they did not carry out during the reference week (1 in C.3 of the main questionnaire) can answer any of the options of the question except 6 (permanently disabled for work).

5.- When did you return to work (or when could you have returned)?

Persons who returned to work or who have recovered from the accident will answer the time lost as a result of the accident. All days will be counted, even non working days.

The days in which the person was really disabled for work due to the consequences of the accident must be taken into account; therefore, if the person has recovered from the accident but has not yet returned to work (Code 5 for the previous question) or returned to work after having recovered (Codes 1 to 3 of the previous question) take into account only the actual days that the person could not work. The days after having recovered from the consequences of the accident will not be included (even if the reason for the person not returning to work is related to the work accident). For example, one person was convalescent for two months and in that two month period decided to take care of a relative; 8 months later that person returned to work; in this case Code 7 will be recorded:

One or two months after the accident and not Code 8: *Three months or more after the accident*.

If the absence from work due to the accident was only a few hours and the employed person returned to work the same day of the accident Code 1 will be recorded.

If the person did not leave the workplace, being attended to in the business facilities, record with number 9.

6.- What occupation did the aforementioned accident occur in?

This question informs about the occupation of the interviewee when the accident occurred. Code 1 *Main occupation currently developed*, is only admissible if the person has declared to be employed in the EAPS questionnaire. Code 2 *Secondary occupation currently developed*, is only admissible if the person has declared a second employment in the EAPS. Code 3 *In the previous occupation*, refers to the employment described in section F. *Professional Experience* of the main questionnaire and, therefore, you can only record unemployed persons who left their job one year ago or less. Code 4 *In the job held one year ago*, refers to the employment described in section I. *Situation one year ago* of the main questionnaire, and therefore, you can only answer if the person responds in this section that they were working one year ago (I.3=1). Finally, Code 5 is reserved to people who had the accident in a job that is different to those mentioned above.

In the event that more than one answer is possible (for example, because current employment is the same as employment one year ago) record the lowest code.

Work-related illnesses

This part of the module consists of five questions the main aim of which is to know work-related illnesses (non-fatal) suffered in the last twelve months. Work accidents will not be included.

7.- Between the *dd of mm of 1998* and the *day of mm of 1999*; Have you had any illness (or physical or psychic problem) caused or worsened by your job? (do not include work accidents)

This question must be answered by employed persons and persons who had a prior job (independently from the time elapsed since they left it). Work-related illnesses recognised by the competent authorities will be considered as well as all those illnesses that the interviewee considers to be caused by or worsened by their job (current or previous).

Only the illnesses suffered in the last twelve months will be included, independently from the time elapsed since the interviewee left the job that caused them.

If the person had more than one disease or health problem record the number, adding diseases caused by the job and those worsened by it.

8.- What type of illness?

Record only the most serious illness, independently from it having been caused or worsened by work. The concept of *most serious* is subjective, although it will generally be the most painful illness and that which affected most greatly the development of normal activity for that person.

9.- Between the *dd of mm of 1998* and the *dd of mm of 1999*, how long were you absent from work due to the aforementioned illness?

Only the time that the person was absent from work during the last twelve months due to the most serious illness will be taken into account. Absences due to other diseases (work-related or non-work-related) or accidents, work-related or of other types (traffic accidents, domestic accidents...), are not included.

Absences before the mentioned twelve month period will not be taken into account either. For example, if the twelve month period ranges from 11 April

1998 to 11 April 1999 and the interviewee was ill from January 1998 to 26 April that year and returned to work on 27 April, the time that the interviewee was absent during the twelve months indicated was of 16 days: from April 11 to 26 of 1998 (Code 5 of the question: *Between two and three weeks*).

However, if due to the disease mentioned the person was absent from work during different time intervals in said twelve month period, all the intervals will be added up.

Persons who were still ill during the reference week will count the period from which the disease started until the end of the reference week. The time that the interviewee may continue to be ill from that date will not be counted.

Finally, if the ill person did not work during any or part of the twelve months under consideration, for reasons different to those of the disease (due to vacations, training, maternity leave, dismissal...) the period that the person was disabled for work due to the most serious illness described above will be included. For example, one person worked the first 6 months of the 12 month period under consideration; then and for two weeks this person had an illness that prevented the person from working; at the end of the two weeks this person reached retirement age; however the disease would have prevented this person from working again until one week later. The time to consider for this question would be three weeks: the two weeks the person was on leave before retirement and the week needed in order to recover after retirement (Code 5 for the question).

Persons who worked at least one week during the reference week (1 in C.1 or in C.2) will not be able to answer codes 8 and 9 for this question, since they imply that the person has not returned to work.

10.- What occupation caused or worsened said illness?

In this classification we report on the occupation causing or worsening the illness. Code 1 *Main employment currently held*, is only admissible if the person is employed. Code 2 *Secondary occupation currently held*, is only admissible if the employed person has a second employment. Code 3 *In the*

previous occupation, refers to the employment described in section *F. Professional experience* of the main questionnaire and therefore recorded only by non-employed persons who have worked. Code 4 *In the job held one year ago*, refers to the employment described in section *I. Situation one year ago* of the main questionnaire, and therefore, you can only answer if the person responds in this section that they were working one year ago (I.3=1). Finally, Code 5 is reserved for persons whose illness was caused or worsened in a different job than those mentioned above: the main job, the secondary job or the job of one year ago.

In the case that more than one answer is possible that of the lowest code will be recorded.

11.- ¿Establishment activity?

If you answered 3 in the previous question (*occupation of previous employment*) and that job was left more than 8 years ago or if you answered 5 (*occupation of another job*), you must record the activity of the establishment you were working in when you had the illness.

4. Information processing

The information from the module is processed following a structure similar to the basic questionnaire in line with the following principles (for further information, check the *EAPS publication. Processing the Information*):

- It should not interfere in the processing of the basic questionnaire.
- Please be as general as possible, so the changes that must be performed next year are minimal.
- It is simultaneous or subsequent to the processing of the basic questionnaire.

In accordance with these principles, the processing stages applicable to the module are as follows:

1.- Monthly treatment

Each month they are filtered by automatic detection and manual correction of the identification variables of the basic EAPS questionnaire; This filtering is adapted, in the second quarters of each year, to that required by the ad hoc module.

Thus, the filtering of module's identification variables (quarter, province, section, dwelling and number of persons) is performed alongside that of the basic questionnaire.

2.- Quarterly treatment

The characteristic variables of the ad hoc module are quarterly filtered using the package developed by the Subdirectorate-General for Statistical IT, called DIA (Automatic Detection and Imputation).

In the second quarter of each year a new phase of the DIA is created in which the ad hoc variables are processed. This phase is executed once the final file of the basic EAPS questionnaire is obtained.

The basic file of the EAPS for the second quarter of 1999 has 165,147 records of persons 16 years of age and over. The module was answered by 121,684 persons 16 years of age and over and in 43,463 records there was no information from the module for one of the following reasons:

- Records corresponding to persons who have answered the basic questionnaire and do not have to complete the module (39,171 records)
- Mistakes in transmission from Provincial Delegations which forced manual filtering in order to recover the information(28 registers)
- Records that were copied from the first quarter of 1999 in the quarterly filtering phase for the basic EAPS questionnaire (4.264 records); of these 944 did not have to complete the ad hoc module and 3,320 did, thus appearing as *No data recorded* in the corresponding tables.

Of the 121,684 records of persons 16 years of age and over automatically filtered with the DIA, only 16 received an imputation in order to eliminate an inconsistency between variables. No flow errors were detected.

Once the variables are filtered the final file of the ad hoc module is obtained containing the identification variables, the raising factor, some important variables of the basic file and all the variables of the module. All retrospective series have been recalculated taking into account the reponderation applied to the elevation factors since 2002, in order to reduce decompensation due to lack of response and thus improve estimates. This reponderation process has also been applied to the module in order to be able to perform comparisons with the rest of the annual data.

An equivalence is applied to the file obtained and it is merged with the most basic file of the 2nd quarter Labour Force Survey (LFS) in order to generate the complete LFS file: the most variable basic LFS variables of the module.

The design of the part of the LFS register corresponding to the module is adapted to that specified in aforementioned Commission Regulation 1571/98 of July 20th.

