Institut de veille sanitaire

European Project

A Harmonised Survey in Addition to Hospital Level Data Collection
"Harmonised-Survey"

Final report

This document constitutes the final report concerning the project:

"A Harmonised Survey in Addition to Hospital Level Data Collection"

which was awarded European grant 2002/203701 from the General Directorate for health and consumer protection (DG SANCO), by contract SPC.2002340, in the context of the 2002 injury prevention programme.

This project was carried out under the supervision of
l'Institut de veille sanitaire (France)

with the following partners:
Institut Sicher Leben (Austria)
EDUCA-SANTE (Belgium)
CEREPRI (Greece)
Instituto Nacional de Saude (Portugal)
Psytel (France)

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Objectives of the project

The project « **A Harmonised Survey in Addition to Hospital Level Data Collection** », **abbreviated to «Harmonised Survey»** is part of the health policy of the European Union, and more specifically forms part of the objectives of the 2002 programme intended to improve data in the area of injury prevention. This project had the following objectives:

- to update the cross-sectional surveys used by three of the Member States (Spain, Luxemburg and Germany) in the context of their participation in the former Ehlass system (*European Home and Leisure Accident Surveillance System*), which has been superseded in recent years by the ISS system (*Injury Surveillance System*).

- to examine the methodologies of the cross-sectional surveys used by other teams in the same or similar fields.

- to list the pros and cons of these two types of data reporting for the ISS system: continuous hospital data reporting and cross-sectional surveys, taking into account the fact that continuous hospital data reporting is viewed as the main reporting method.

- to propose a harmonisation of the methods, variables, and questionnaires used in cross-sectional surveys, so that the data they yield are sufficiently harmonized to permit comparisons with the data obtained by hospital data reporting.

Creating a common central core of questions would thus provide the States with a reference cross sectional survey in the field of home and leisure accidents (HLA), and provide the European Union with data that can be compared between one country and another. It would also allow a State to use the findings of cross-sectional surveys carried out alongside those obtained by continuous hospital data reporting.

Summary of the key information

Firstly, it has been confirmed that it is currently almost impossible to carry out comparisons of the epidemiology of home and leisure accidents in different European countries. This inability to provide a comparative, cross-country assessment of the numbers and risk factors of the onset of an HLA results from the lack of uniformity of the work done at the national level. The health-care systems that deal with accident victims differ, and we do not have the tools required to identify the cultural differences between countries in this regard.

All the experts (in the Injury Data Base network, IDB) acknowledge the advantage of achieving some ability to compare data from different countries, in order to develop European prevention and public health strategies that work synergistically with national strategies. In all countries it is difficult to convey to people how important home and leisure accidents are in public health, often more important than other health problems, and yet far fewer resources are devoted to dealing with them and they are less conspicuous amongst political concerns. They also have only a limited media profile. This means that it would be very useful to develop a harmonised cross-sectional survey that could facilitate such comparisons.

For the purposes of this project we have combined a technical approach (bibliography of existing surveys and practices, expert opinions) and the search for a consensus between the partners in order to balance the pros and cons of the various possible ways of carrying out a cross-sectional survey. This method led finally to the proposal of a cross-sectional survey applicable to all European countries.

General characteristics of the harmonised cross-sectional survey

These characteristics are detailed in the report and summarised in the conclusion.
We provide below a summary of the general characteristics of this survey:

- Scope of the harmonised survey: linked to home and leisure accidents. It is also possible to extend this in the future to all types of injuries.

- Definition of the injuries to be taken into account: WHO definition

- Aims of the harmonised survey
        To determine the incidence of home and leisure accidents.
        To constitute a representative sample of accidents.

- Type of survey: Telephone survey; interview of people between 15 and 74 years of age. If they are incapable of answering, the data can be obtained from a "referent" adult (legal guardian, or relative) in the household.

- Recall period: 2 months

- Selection of the accident to be taken into account in the survey: to report both the number of accidents that occurred during the period and specific details about the most severe.

- Seasonality and geography of accidents: In order to take into account the seasonality and geographical variation of accidents, the harmonised survey envisages several survey campaigns carried out at different times, and in different regions of each country.

- The items covered by the interviews of the subjects: a «basic list» must always be used in all countries; this is the minimum requirement to obtain data that can be compared between countries. A complementary list has been proposed for use if the financial and practical resources make it possible to carry out a broader survey.

- The main reference nomenclatures will be those of the ISS V2000 coding manual, completed by other specific nomenclatures.

- Account of the accident: the account of the accident should be retained, because it consolidates and completes the specific item-by-item report. It also helps the person carrying it out to describe the survey, helps the person being surveyed to understand the survey, and may help to select the type of accident. It should therefore be put at

the beginning of the questionnaire. The person conducting the survey should guide the person being surveyed so that the account at least includes the essential facts about the occurrence of the most severe accident during the recall period: the product responsible for or implicated in the accident, the activity being performed when the accident occurred, the location where the accident occurred, the mechanism of the accident («PALM»: Product, Activity, Location, Mechanism), and the injury/ies and body part(s) injured during the accident.

- Seriousness of the accidents to be taken into account: accidents that required at least one attendance at a health care facility (A&E service, GP, pharmacist, physiotherapist, nurse, etc.).

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- The severity of the accidents to be taken into account: This can be qualified objectively using (AIS or other scores), or subjectively, by putting a specific question to the person involved in the accident.

- Social profile: The social profile is established by three groups of questions covering:
    The educational level attained
    The employment situation
    Occupation
In the case of a child, these questions must be put to the child's legal guardians (usually the parents).

- Number of injuries: Up to two injuries can be described for the most severe accident during the recall period.

- Nationality: It was decided that for ethical reasons it was not possible to include nationality as a routine part of the harmonised survey. This is still an interesting option, and it is recommended for use in specific circumstances and for specific purposes.

- Residence: The variable of the postcode of the usual place of residence is included in the report. A basic question about the type of habitat: in rural, urban, suburban zones, etc. is recommended.

Practical guidelines and future prospects

The characteristics of the proposed cross-sectional survey should be read and taken on board and criticised by experts in all European countries, both in the countries involved in the project, and those from other European countries. This analysis should take into account the fact that before long the survey may soon be used throughout the European Union.

With backing from DG SANCO, Eurostat, and possibly other bodies involved at the European level, the protocol of the harmonised survey should be compiled on the basis of the information in this report on the one hand and of the comments of experts from all the countries in the Union on the other. This work of finalising and compiling the protocol could give rise to a call for tenders, to which scientific institutions or companies could respond.

In a second phase, after the survey protocol has been approved and it has been officially validated by experts from the Member States, a European reference guide will be compiled allowing the first survey conducted in all EU countries to be carried out.

Other developments are also possible: ranging from using nomenclatures that are more appropriate, and developing complementary features vis à vis hospital reports, to setting up a cohort to determine the fate of victims of serious accidents. The extension to all types of injuries could be done in the context of the current development of the ISS system towards a coding system for all injuries: this is the "Injury Data Base - All injuries" system, the detailed coding methods of which are currently under discussion. The present work could be repeated and amplified in this evolving situation, because most of the variables selected here are also included in the core of the «Home and leisure accident » section of the IDB-all injuries coding. To convert the harmonised survey into a harmonised «All injuries» survey to complement «IDB All injuries» hospital reporting, all that would have to be done would be to add the variables concerning the other modules (violence, self-inflicted injuries, and traffic accident modules).

Home and leisure injuries are a major public health problem: they are frequent, and severe, and many of them are avoidable. In the coming years it will viewed as increasingly unacceptable to die, or to become disabled, after an avoidable accident. This situation is common to all European countries. Conducting the cross-sectional survey described in this report in each country would cost little and be of great value for upgrading the epidemiological knowledge about injuries, including comparisons between countries. These results would provide a basis for a better regulation, information and prevention of avoidable injuries, and for reducing their severity.

Introduction

Objectives of the project

The project « **A Harmonised Survey in Addition to Hospital Level Data Collection »,
abbreviated to «Harmonised Survey»** is part of the health policy of the European Union, and
more specifically forms part of the objectives of the 2002 programme intended to improve data
in the area of injury prevention.

This project has the following objectives:
- to update the cross-sectional surveys used by three of the Member States (Spain,
Luxemburg and Germany) in the context of their participation in the former Ehlass system
(*European Home and Leisure Accident Surveillance System*), which has been superseded in
recent years by the ISS system (*Injury Surveillance System*).
- to examine the methodologies of the cross-sectional surveys used by other teams in
the same or similar fields.
- to list the pros and cons of these two types of reporting data for the ISS system:
continuous hospital data reporting and cross-sectional surveys, taking into account the fact that
continuous hospital data reporting is viewed as the main reporting method.
- to propose a harmonisation of the methods, variables, and questionnaires used in cross-
sectional surveys, so that the data they yield are sufficiently harmonized to permit comparisons
with the data obtained by hospital data reporting.

Creating a common central core of questions would thus provide the States with a reference
cross-sectional survey in the field of home and leisure accidents, and provide the European
Union with data that can be compared between one country and another. It would also allow a
State to use the findings of cross-sectional surveys carried out alongside those obtained by
continuous hospital data reporting.

This project is therefore intended to help to improve the quality of reporting of data concerning
home and leisure accident in Europe, with regard to the aspects of representativity
comparability and the amount of information.

The availability of the conclusions of the project, in particular the publication of the
methodology, the variables, and the questionnaire, will provide the community with added
value. It will contribute to the harmonisation of the data obtained from surveys in the various
Member States, and make it possible to compare data from different Member States and,
finally, to enhance the consistency and efficacy of the measures taken by the European
Commission in the area of combating home and leisure accidents.

Working method

Organisation of the project

The project was carried out between April 2003 and January 2005, under the supervision of Bertrand Thélot at InVS. At InVS, Marianne Perez worked as project assistant between April 2003 and June 2004; Emmanuelle Szego contributed to the investigation and to the bibliographical summaries between April and November 2003. The Psytel company (Marc Nectoux) was involved in all the phases of the project. The European participants in the project were Robert Bauer representing Sicher Leben in Austria, Alain Lévêque representing EDUCA–SANTE in Belgium, Nick Dessypris and Eleni Petridou representing CEREPRI in Greece, and Baltazar Nunes representing the Instituto Nacional de Saude in Portugal. They were called upon in various ways until September 2003, for bibliographical contributions concerning the systems for recording home and leisure accidents in their respective countries; in October 2003 for the working meeting organised in Paris to decide the directions to be taken by the project; and until December 2004, for contacts by e-mail and telephone, to provide their criticism and comments about the solutions proposed for a harmonised survey. Other representatives from these countries were sometimes also involved in carrying out the project.

The performance of the project followed the scheduled steps:

Step 1: Analysis of the existing Ehlass/ISS surveys
Analysis of the methodologies and the findings of the surveys carried out within the Member States using the cross-sectional survey procedure in recent years in the context of their participation in Ehlass/ISS: Germany, Spain, and Luxemburg. Analysis and comparison of the ways some other surveys in the field of home and leisure accidents have been carried out by other teams.

Step2: Pros and cons of the two methods of reporting
Compiling a list of the pros and cons of the two reporting methods used: representative survey of households and continuous hospital data reporting. Analysis of the possibility of complementary periodic surveys for hospital data reporting. Compiling an interim report.

Step3: Proposed harmonised cross-sectional survey
Proposed methodology, variables and questionnaire for a cross-sectional survey of home and leisure accidents: determination of the type of survey, the technical characteristics required, the size of the sample, its frequency, estimation of the costs; list of the recommended variables; model questionnaire (common core of questions) in order to harmonise surveys with one another and with continuous hospital data reporting.

Step 4: Validation by a group of experts
Validation of the methodology, the variables and the design of the model questionnaire by a group of experts. This assessment was used to make the final adjustments.

Step 5: Writing and distribution of the final report

The choice of the approach to the work

The ultimate goal of this project is to promote a «harmonised survey», the findings of which will be comparable with those of continuous hospital data reporting. It emerged from the preliminary discussions intended to «situate» the problem, and the prospects of the work that there were 3 possible approaches to developing this «harmonised survey»:

Approach 1
Should we develop a harmonised cross-sectional survey of injuries in Europe rather than using continuous hospital data reporting?

The European Authorities have expressed an interest in having a representative European survey carried out amongst households, similar to those carried out under the name of the «Eurobarometer» studies, which are described below. This survey would have the following advantages:
- it would provide data representative of the populations surveyed
- the methodology used, which would be the same in all the Member States (MSs), would make it possible to compare the findings for the different States
- it would doubtless cost less that the combined costs of hospital data reporting in all the MSs.
- It would have the effect of providing a good example for the Member States that often show little inclination to work towards preventing home and leisure accidents.

The advantages of cross-sectional surveys are well established. They also have some drawbacks, which have also been well rehearsed, and among which we could mention:
- the memory-related bias
- the selection bias, leading to the under-representation of some populations
- the difficulty of obtaining a reliable description of accidents involving young children, as well as aged people
- the record of medical data is less reliable than hospital data reporting
- the difficulty in obtaining some data about rare events

Should these cross sectional surveys be preferred to the point of abandoning hospital data reporting? It would seem to be very unwise to adopt this approach at the outset for many reasons that are described in greater detail further on in this report. We could mention their cost, the need for achieving harmonised nomenclatures and harmonising their use at the European level, the fact that they do not yield a «quantitative pool» of data about accidents, and this can be very useful for certain descriptions, etc.

It has not been possible to adopt this approach to this project, because it was very obvious that these two types of data collection cannot replace one another since they are in many respects complementary.

Approach 2
Should we develop a harmonised survey for use in all the Member States, regardless of whether they also use continuous hospital data reporting?

At present two methodologies coexist in the IPP programme: hospital data reporting in some countries, representative surveys in others. The States that carry out surveys, Germany (D), Spain (E), and Luxemburg (L), do not use the same methodology, or the same questionnaire. The periods surveyed are different, and the questionnaire has sometimes been changed during the interval between one survey and the next within the same State.

It would be possible to envisage organising the project solely around the attempt to harmonise surveys, using a common core of questions and the same nomenclature in the States carrying out these surveys, while trying to reach a consensus about a common methodology.

However, this approach appears to be too restrictive, and would not allow us to solve the main problems of how to compare data between the «cross-sectional surveys» States and the «hospital data reporting» States.

Approach 3
Should we develop a harmonised survey for use <u>alongside</u> hospital data reporting?

This is the approach that has actually been adopted.
It was in fact logical to develop a harmonised survey intended for use both by the States that usually carry out these cross-sectional surveys, and by those States that have maintained a system of continuous hospital data reporting. These latter States would have available to them the findings of the continuous reporting, with their advantages (more detailed medical data, case database, etc.) plus those of the harmonised surveys, which would make it possible to complete and correct the findings of hospital reporting, notably in terms of representativity, on the one hand, and, on the other, for the purpose of carrying out comparisons with the countries that only perform cross-sectional surveys.

This is how the project decided to approach its work so as to reach a consensus about the questions, the nomenclatures, and the method for the most appropriate «basic» cross-sectional survey to permit comparisons between countries and to complete the existing data.

The analysis of the existing surveys in the field of the home and leisure accidents in various European countries, and the review of cross-sectional surveys, carried out in France or in other countries, has made it possible to carry out a detailed review of the pros and cons of the two types of reporting. These technical phases led the expert group to the first proposals for a harmonised survey. These proposals have been discussed analytically, point by point, each criticism being used to review the pros and cons of the solutions proposed. The summary of the discussions led to the formulation of the final proposals contained in this report.

In view of the amount of information available, it was decided that for the purpose of this final report we would provide a succinct record of the main steps, and to append the detailed documents.

The different types of data collection systems

The surveys carried out in Europe in the context of the Injury Surveillance System (ISS)

The development of the Ehlass system

Home and leisure accidents (HLAs) are a major public health problem. They are a major cause of death, in both the developed and developing countries, and many of these deaths appear to be avoidable [1-3]. This situation first began to be recognised in the 1970s, particularly in Europe, and this awareness led to the setting up of Ehlass (*European Home and Leisure Accident Surveillance System*) in the 1980s. When this system was set up, the Member States of the European Union fell into two categories with regard to the prevention of HLAs. One group of countries, the majority, had not so far taken any concrete measures with regard to the prevention or epidemiology of these accidents; the other countries, of which there were only a few, had already begun to set up a system for recording data in order to determine the scale, the distribution in time and space, and the risk factors associated with the occurrence of home and leisure accidents. Measures to prevent HLAs were already being implemented in the second group of countries, but also in a few countries in the first group, such as France for instance. The studies published internationally at the end of the 1970s clearly demonstrated that HLAs were numerous, often severe and often avoidable. There was, therefore, no need to wait for national epidemiological reporting systems to be set up before introducing prevention measures.

The methodology used for the Ehlass reports was that of a complete hospital survey in each country. Indeed, there were so few sources of HLA data that it seemed justifiable to start with a descriptive survey of the HLAs that were probably the most serious, since they had resulted in the involvement of hospital accident and emergency (A&E) departments. For reasons related to cost, in most countries this survey was limited to a few hospitals. The fact of having to record data exhaustively throughout the year implied the need for trained staff to be available on a permanent basis to do this reporting. It should also be noted that this Ehlass reporting was limited to reporting of home and leisure accidents. Other unintentional injuries (road accidents, occupational accidents), and intentional injuries (suicide, attempted suicide, physical assaults, violence, attacks, war) were excluded from these reports.

The HLA data recorded in Accident and Emergency (A&E) Departments in the hospitals taking part in the survey consisted of details about the person involved in the accident (age, sex), when (s)he was first seen (date and time of arrival in A&E, and admission if they were hospitalised), the immediate nature of the accident (how and where it happened, the activity involved, the type of injury, which part of the body was injured), the products (agents, other items) that had caused or contributed to the accident. Finally, a brief description of the accident was recorded in the form of free text. Various nomenclatures have been recommended at the European level (known as the V86 nomenclature), and a data reporting form was stipulated. However, no specifications were laid down for the quality control of the data. As a result, each country was free to organise the consolidation of its own data as it saw fit. The procedures by which it would ensure the quality of the data were not specified.

Funding from the European Union

The fact of complying with these specifications and undertaking to share the data collected with the European Union allowed the Member States taking part to receive EU funding. Funding was provided to cover up to 70% of the reporting costs in the hospitals.

From one point of view, this European policy was very successful: most countries did indeed begin reporting under these conditions. However, in practice Ehlass reporting was found to be very onerous. Initial and ongoing training of the people encoding the data had to be provided. The local organisation of high-quality, exhaustive reporting was difficult to achieve in every hospital, notably because the funding served mainly to pay the encoding staff, but not the doctors or other medical staff in A&E, who often provided the data. In an emergency medical consultation, it was possible to get some of the data required, on condition that there was a manual or computerised system available to record the data. Other data were also required: the «PALM», or products involved or linked with the HLA, the activity that was taking place when the HLA occurred, and the location and mechanism involved when the HLA occurred. In the context of seeing a patient in A&E, the doctors and other staff are above all concerned to take care of the patient, collecting PALM-type information is, quite properly viewed as being of secondary concern.

Impossibility of making comparison

This impossibility has had various consequences:
   - some of the countries provided only partial data, which were not exhaustive, poorly consolidated, did not comply with European specifications, and which were supplied only after considerable delay.
   - other countries had abandoned the attempt to carry out the survey in the form proposed, and consequently did not receive the corresponding funding. Some of the Member States in this group of did not record any data at all, thus abandoning this area of public health altogether, at least with regard to epidemiological surveys. Other Member States did carry out cross-sectional surveys in some years, thus providing a snapshot of the HLA population in their countries.

With this lack of uniformity in the recording of data, it was not possible for the European Union to compare the situation with regard to HLAs in the various Member States. Until the early 2000s, despite the pooling of data it was never possible to draw reliable comparisons. The differences between one country and another were considerable, not only with regard to the health-care structures, and differing patterns of health-care uptake, etc. but also the Ehlass recording. Given the absence of any harmonised and scientifically validated quality control procedure it was never possible to constitute a reliable European Injury Data Base (IDB).

This situation, which had been acknowledged for some years, gave rise to several attempts to correct it in the context of the Injury Prevention Programme (IPP) up to 2002, and then by the Injury Prevention Network (IPN), which replaced it from 2003 [4]. These attempts always ran into the major problem of maintaining permanent reporting by hospitals of sufficient uniformity and quality in all the countries to permit international comparisons. The cost and organisation required for such a reporting system had been underestimated.

Changes in the ISS system

Nomenclature changes contributed to the problems. V86 was succeeded by V96, and then by V2000, which had repercussions on the training of the encoders, and the usual consequences of discontinuous national data sets. The switch to the new nomenclatures occurred at different dates in different countries. The template of the data reports also changed format, the current format (ISS) having been introduced in 2002.

From the year 2000, the European Union wished to phase out the funding granted for data reporting. The reason given was that Europe should not replace the Member States for the reporting of data, since it is primarily the duty of the countries to comply with their obligations with regard to public health and the protection of their populations. In the discussions that surrounded this change of direction, it was pointed out that if no funding were to be available, it would no longer be possible for Europe to harmonise the various data reported with one another in order to end up with comparable data sets. This argument carried some weight, and since 2003 just 5% of the reporting costs to the Member States is still funded by the European Union. However, this is very little compared to the earlier funding levels or to the real cost of reporting. As a result, reporting has ceased in some countries

Some countries stopped reporting as soon as the European funding was withdrawn. Others continued, including Austria, Greece, the Netherlands, Portugal, and France, where reporting is funded by public funds from the French Ministry of Health. In recent years French reporting has undergone considerable changes, both in order to remain compatible with European specifications and in order to respond to a major criticism of previous years: the lack of reliability and in particular the impossibility of providing data representative of the general population. This reporting system, known as EPAC (Enquête permanente sur les accidents de la vie courante – the French permanent survey of home and leisure accidents) is described in Appendix III.

Continuous hospital reporting

The EPAC survey constitutes a good example of continuous hospital data reporting [5]. It records slightly more data that the minimum stipulated at the European level, in particular it attempts to take into account the «social profile» of accident victims. It has been designed to gather other data, for example the seriousness of the HLAs. It could be extended to other injuries when appropriate and if resources permit (finance, organisation and technical facilities). Appendix V provides a list of the variables required by the ISS system (format ISS V2000), and the current list of variables used in the EPAC system (format EPAC03).

Quality assessments have been carried out at least once a year since 2002 in every hospital in the EPAC network in order to ensure and take into account the exhaustive nature and reliability of the reporting. Days are randomly selected (at least one every three months) and the files of the patients attending A&E are examined in order to decide whether they should be included in the report, and then recoded under local conditions. Each assessment generates a report that is sent to the hospital, and which specifies in particular the conditions of access to the file, the exhaustiveness of the reporting for randomly selected days, and the completeness and accuracy

of the items. A specific method of estimating the incidence of the occurrence of HLAs is currently being set up. This method uses the hospitalisation reports already being collected from all French hospitals, and the degree of exhaustiveness of EPAC measured during quality assessments. It is based on the hypothesis that the attraction of hospitals are the same, for both A&E and hospital admissions. This makes it possible to provide rigorous estimations of the incidence, according to this method, on the basis of the EPAC continuous hospital data reporting [6, 7]. This is an essential point, since one of the weaknesses of continuous reporting, compared to cross-sectional surveys of the population, is that it does not usually provide these estimations of incidence.

The cross- sectional surveys developed in the context of the ISS system

As we pointed out earlier, some countries decided to develop cross-sectional surveys amongst the population, rather than using continuous hospital data reporting. Their contribution to the European IDB has therefore been quite different from that of the countries that have hospital data. In the context of this project, the analysis of these reports has been limited to three countries: Germany, Spain and Luxemburg. Appendix III provides information about the method, the variables, the questionnaires, and the regularity etc. of each of these surveys. It has been possible to obtain the documents concerning Germany, Spain and Luxemburg because of the presence of various correspondents in these countries.

Other cross-sectional surveys concerning HLAs

Other cross-sectional surveys have been carried out in the field of HLAs. They all share the same common features, advantages and weaknesses, which are analysed globally in the next section. Appendix III provides descriptions of some of these surveys. Most of the examples have been taken from France, where there is a wide variety of surveys [6-14]. They have been completed by a study carried out for this project by TNS-Sofres [15, 16], which is one of the big private companies carrying out surveys of this type on the most diverse topics in France and worldwide. Documentation has also been collected about the Eurobarometer surveys that have been carried out for the past 30 years at the European level [17-19], and on the surveys used by the Consumer safety Institute (CSI), which are based on a Minimum Data Set (MDS) and cover all sorts of injuries.

A summary and comparison of these aspects is given in the next section. In the end they have made it possible to propose a method, the variables and the questions for a «standard» or «basic» survey, which is described below. This summary owes a great deal to contributions from the European partners (Austria, Belgium, Greece and Portugal) who provided their documents and shared their constructive criticisms in 2003, in particular at the meeting organised in October 2003 (see Appendix VI), and during e-mail and telephone contacts in 2004, up to the telephone conference held in December 2004 (Appendix VII).

Comparison of the two methods of reporting

Continuous hospital data reporting versus cross-sectional surveys

Background

Two reporting methods existed alongside each other in the European Injury Surveillance System (ISS) for many years: hospital reporting versus cross-sectional survey of households. At present (2004), nine States including France are continuing with hospital reporting. In this section, we provide an overview of the pros and cons of the two methods, and demonstrate that they are in fact complementary.

The pros and cons of hospital reporting

Scope of reporting
Cases are selected when they come into contact with the hospital A&E department. As a result, some types of accidents are omitted: the most severe ones, which caused an immediate fatality, the most minor ones, which do not call for any care or are treated outside the hospital, and are probably the least severe (treated GPs, nurses, pharmacists etc.).
Data reported
The core of 20 basic variables that constitute the ISS system: administrative data, data about the circumstances surrounding the accident, data about the injuries sustained, data about the products (see form ISS V2000, appendix V).
Pros:
- Medical data reported by medical teams
- It is possible to get back to the source of the information
- The teams can be checked and monitored
- Exhaustiveness of the accidents in the emergency department
- There is no memory bias, and some detailed information can be collected

Cons:
- There is no guarantee that the data are representative even at the hospital level
- The exhaustiveness of the reporting depends on the teams in the field
- There can be considerable inter-hospital variability of reporting
- At the national level, this type of reporting is subject to the effects of the structures of the health-care system: accessibility, attraction, specialisation of the hospitals, etc.
- This form of reporting means that the number of questions has to be limited
- This method of collection is considered to be expensive

Furthermore, it is also difficult to improve this method (by adding variables, or by changing the coding tables), because an entire chain of reporting, checking and interpreting of data would have to be changed, involving a wide range of widely dispersed people.
Interpretation of the data
Pros:
- Builds up a pool of data including many cases of accidents

- Can be used in a several ways: by asking a specific question or carrying out a systematic search of the case database
- It is possible to «flag» unusual cases
- It is possible to go back to the case database to check a record
- Longitudinal survey: it would be possible to envisage setting up cohorts

Cons:

- Difficult to construct national descriptive epidemiological indicators due to the nature of the reporting (partial field, lack of representativity, lack of exhaustiveness, etc.)

Functional aspects

Pros:

- Builds up a network of correspondents and sources of information
- The cost per accident case reported is lower than that for the «survey» approach

Cons:

- This type of reporting demands continuous input from the teams on site, which can lead to loss of motivation and a decline in quality.
- The administrative management of a network of reporting sites can be rather onerous.

Pros and Cons of cross-sectional surveys amongst the general population

Scope of reporting

By means of a representative cross-sectional survey of households, it is theoretically possible to record information about all types of injuries, ranging from deaths to minor accidents.

Data reported

This form of reporting makes it possible to avoid being restricted to the 20 basic core questions, but also to deal with questions ranging, for instance, from sociodemographic data (social profile), to the seriousness of the accident, the possible sequelae, etc.

Pros:

- All sorts of accidents could be reported
- The method ensures that the data are representative
- It is possible to introduce questions about personal characteristics (sociodemographic data, etc.) or details of the accident (sequelae, causes, etc.)
- Centralised control of the work of gathering information
- The reporting is uniform
- It is easy to adapt the reporting in order to explore particular topics

Cons:

- A telephone survey can lead to biased recruitment (the elderly are under-represented, a process of self-selection: the households in which accidents have occurred are more willing to take part in the survey than other households)
- A survey by interviews about past events induces memory-related bias that can be considerable (for instance, minor accidents are easily forgotten)
- Medical data is reported by non-specialist staff
- It is not possible to refer back to the source of the information
- There is no way of getting back to the source of the data; possibility of bias depending on the person interviewed

- Difficulty of taking into account the seasonality, as well as collecting good data from specific subgroups (young and aged people)

Use of the data

Pros:
- Simple to construct national descriptive epidemiological indicators
- Basic information can be crossed with the other variables reported

Cons:
- Information is provided about very few accidents (about 1 accident per 10 interviewees): no large pool of cases is compiled, this makes it impossible to carry out a specific search or to surf a case database systematically.
- Impossible to issue a notification or warning
- Isolated information, there is no longitudinal follow-up
- Rare accidents may be missed (depending on the sampling rate)

Procedure

Pros:
- The administrative task is limited to the duration of the survey, and is usually subcontracted to an outside agency.

Cons:
- No network of correspondents or sources of information is built up.
- The cost per accident reported is higher than that of hospital reporting

Comparative Table

The comparative table below summarizes the pros and cons of the two methods:

	Cross-sect. survey	Hospital reporting
Methodology		
Scope of reporting	++	+
Representativity of the data	+++	+
Exhaustiveness	+++	++
Effect of the structure of the health-care system	0	--
Variability of practices between different teams	0	--
Follow-up of the reporting teams	+	++
Memory-related bias	---	0
Number of questions and adaptability	+++	+
Socio-demographic questions, ,... are possible	++	0
Data reported by a medical team	0	++
Possibility to get back to the source of information	0	+
Accuracy, specific characteristics of the accident	+	++
Use		
To construct a database of cases	+	+++
To construct indicators	+++	+
Continuous monitoring of accidents	0	++
Notifications and warnings are possible	0	+
Information about rare accidents	0	++
Procedure		
Builds up a network of correspondents	0	++
Continuous task for the teams	0	--
Administrative management of reporting	-	---
Reporting cost per case	---	-

The complementarity between the two methods

The two methods therefore have very different objectives and characteristics. They are not alternative but complementary methods. In order to grasp this complementary aspect more clearly, it is possible to define different «**levels of efficacy» of the information system for HLAs.** This makes it possible to distinguish between different approaches to knowledge in this field.

The macro-accidentological approach
The survey methodology can only be used to record information about at most a few hundred accidents per country. However, it does provide a global picture of all accidents, making it possible to carry out calculations of the incidence rates and a sociodemographic approach to high-risk populations: this is the macro-accidentological approach.

The micro-accidentological approach
The method of continuous reporting in hospital A&E Departments provides data about several tens of thousands of accidents. Reporting the data in the hospital setting in principle ensures that medically-reliable data about the victims of accidents is obtained. Reporting data in this

way will thus made it possible to identify and pinpoint the high-risk populations, situations, behaviour patterns or products linked to <u>the occurrence of specific injuries</u>: this is the micro-accidentological approach.

The pico-accidentological approach
In an approach based on identifying high-risk products, it is not usually very important to know the exact incidence. The absolute number of cases of an accident in which a given product is implicated (rather than its relative incidence) and the seriousness of these accidents is all that is needed to decide the potential danger posed by the product (for example: aerosols, shopping trolleys, etc.). It is not important to know whether a given product leads to 0.00X% or 0.00Y% of a representative sample of accidents. All that we need to know to realise that the product calls for reassessment, a detailed investigation and possibly a modification of the standards applied to its manufacture or use is that it has led to at least N reported severe accidents. It is obvious that neither of the methods investigated in this project will provide any certainty about very rare accidents, such as those that occur with very specific products (a brand, a serial number in a given manufacturing process etc.). In this situation, epidemiology is of little use and specific studies on a case-by-case basis will usually be required to provide the information sought.

The <u>degree of efficiency</u> of an information system (IS) can be determined depending on the approach and methodology used:

Degree of efficiency of the IS depending on the approach	Reported by cross sectional survey	Reported by Hospital units
Macro-accidentological	**High**	Low
Micro-accidentological	Low	**High**
Pico-accidentological	Very low	Low

In the end, both the following statements are interesting
- (1) in a reliable fashion (according to the Spanish report, [20]) the number of home and leisure accidents for the year 2002 in Spain is estimated to have been 2,013,000, 44.2% of which consisted of falls,
- (2) there were 142 accidents in 2001 involving shopping trolleys (out of 41,470 cases reported in France in 2001, [21]), of which 120 (84%) involved falls by children under 5 years of age, leading to the specific reporting of more than 20 head injuries. These facts could lead us to take a closer look at the behaviour of adults, and/or the stability of these appliances.

These statements are both interesting, but they are not equivalent, and once again, neither can be used as a substitute for the other. They correspond to two points of view regarding the prevention of home and leisure accidents. The coordinator of the French ISS system (the EPAC system) cannot provide information of the first type, since in France reporting is not representative (unless a particularly sophisticated method is used to calculate the incidences [6, 7]); whereas the Spanish coordinator cannot make pronouncements of the second type, because the small number of accidents involving trolleys means that they cannot be expected to emerge from the Spanish cross-sectional survey. If the aim is to identify high-risk products and focus prevention, the second type of approach appears to be more suitable, whereas if the aim is to

obtain an epidemiological determination of the numbers of accidents, then the first type of approach is more appropriate.

This means that representative cross-sectional surveys, which provide macro-accidentological information (which is very useful for establishing pertinent public health indicators) and hospital reporting, which provides us with a micro-accidentological picture (which is very useful for determining the typology of accidents, carrying out studies of specific topics and preparing specific preventative actions in order to enhance consumer safety), are in fact complementary. Combining these two methods within a single approach makes it possible to take full advantages of their respective strengths, as the diagram below shows:

Macro-accidentological level:
- National view
- Indicators
=> Public health

Representative cross sectional survey

Micro-accidentological level:
- Typology of accidents
- Pool of data by topic
=> Consumer protection
   objectives of focused prevention

Permanent hospital reporting

Combination of the 2 types of approach is desirable

Interface between the two methods desirable

To reap the full benefit of this combined use, we can suggest the following approach:

1- **Include both reporting methods in a system for following up injuries,** with permanent hospital reporting plus a complementary regular representative survey (the frequency of which needs to be considered, probably every 2 to 4 years)
2- **harmonise the 2 methods** using a common core of questions and the same nomenclature
3- **this makes it possible to cross the data obtained by the two reporting methods,** hospital reporting and cross-sectional surveys

In the next section we provide some guidelines for the choice of variables, questions and methods for the harmonised cross-sectional survey intended to provide complementary data comparable to those provided by hospital reporting.

Proposed harmonised survey

1 - Variables, templates and nomenclatures

The choice of variables and nomenclatures for the harmonised survey has been based on information from five main sources:

Variables and nomenclatures of the harmonised survey				
V2000-HLA Home and Leisure Accidents coding manual (European ISS reporting) [22]	**ICECI** International Classification of External Causes of Injuries (WHO) [23]	**ISG** Injury Surveillance Guidelines (WHO-CDC) [24]	**MDS-Is** Minimum Data Sets on Injuries (CSI - NL) [25, 26]	**EPAC** Enquête Permanente sur les Accidents de la vie Courante (InVS - F) [5]

Procedures and criteria for choosing the variables and nomenclatures

Choosing variables and nomenclatures that will make it possible to interface with the existing ISS reporting system using the current V2000 coding implies using the common core of the ISS coding system and prioritising the variables and nomenclatures that are currently used in this system. Some consideration is called for to complete this core of variables by adding «useful» variables in order to provide focused epidemiological information and prevention.

Other criteria for choosing variables and nomenclatures were also involved: when it was possible to choose between several nomenclatures for a variable that did not exist in the ISS coding system, we tended to opt for a nomenclature used at the international level (ICECI or ISG-WHO), and then national nomenclature systems (MDS-Is or EPAC). For some new variables (status with regard to employment, for instance), only one coding system was available for the performance of this task (coding system used in EPAC).

The table on the next page summarises a first attempt to establish a list of variables to be proposed, either as obligatory variables (in bold type) or as variables considered to be optional (in fine type). The table indicates whether the variable proposed belongs to the current ISS V2000 coding system; a brief commentary on the usefulness of the variable; whether the type of variable (numerical or alphanumerical and how many characters it consists of); the nomenclature recommended from amongst the nomenclatures available.

List of variables and nomenclatures
proposed in the harmonised survey

Variables proposed	ISS	Comments	nb char. Format	Nomen-clatures
Country of collection	**X**	Makes it possible to identify the country of origin of the case in a European perspective	*2 char.* **Num**	ISO
Date of collection		Date the information was reported	*8 char.* *YYYYMMDD*	sans
Identifier	**X**	Help zone for the processing of the cases collected (problem of duplicates). However, anonymity must be maintained.	*10 char.* alphanum.	sans
Intent/Type of injury		For the identification of the unintentional injury	*2 char.* **Num**	ICECI
Age of injured person	**X**	Basic variable for the characterisation of the victim	*3 char.* **YYY**	none
Sex of injured person	**X**	Basic variable for the characterisation of the victim	*1 car.*	1-M, 2-F
Activity	**X**	Basic variable for describing the accident	*2 char.* **Num**	V2000
Date of injury	**X**	Date the accident occurred	*8 char.* *YYYYMMDD*	none
Time of injury		Time the accident occurred	*2 char.HH*	none
Date of the contact with a care service	**X**	Pivotal data about contact with health service (pharmacist, doctor, A&E, etc.)	*8 char.* *YYYYMMDD*	none
Time of attendance	**X**	Time of contact with health service	*2 char.HH*	none
Type of contact		Specifies the of first contact with health service	*2 char.* **Num**	Irdes
Place of occurrence	**X**	Basic variable for describing the accident	*2 char.* **Num**	V2000
Nature of injury	**X**	Basic variable for describing the injury	*2x2 char.* **Num**	V2000
Body part injured	**X**	Basic variable for describing the injury	*2x2 car.* **Num**	V2000
Mechanism	**X**	Basic variable for describing the accident	*2 char.* **Num**	V2000
Sports	**X**	Basic variable for describing the accident	*3 char.*	V2000
Follow-up/ Treatment/ disposition	**X**	Variable describing the consequences of the injury	*1 char.* **NUM**	V2000
Length of stay	**X**	Variable describing the consequences of the injury if hospitalised	*3 char.* **DDD**	No rules
Discharge status		Variable describing the patient-s exact status when discharged from hospital	*1 char.* **NUM**	1-Alive 2-Dead 9-Nsp
Severity (objective)		Variable describing the initial clinical seriousness of the injury	*2x1 char.* **NUM**	AIS
Severity (subjective)		Variable describing the seriousness of the injury. Subjective appreciation by the injured person.	*2x1 char.* **NUM**	None
Country of residence		Makes it possible to identify the country of residence, and thus to distinguish tourists	*2 char.* **NUM**	ISO

Level of education		Provides information about the level of education of the injured person (> 16 years)	*1 char.* **NUM**	EPAC
Employment status of injured person		Provides information about the employment status of the victim (> 16 years)	*1 char.* **NUM**	EPAC
Profession of injured person		Provides information about the occupation of the victim (> 16 years)	*1 char.* **NUM**	EPAC
Level of education of the legal guardian 1		Provides information about the level of education of the legal guardian 1 (if the victim <17 years)	*1 char.* **NUM**	EPAC
Employment status of the legal guardian 1		Provides information about the employment status of the legal guardian 1 (if the victim < 17 years)	*1 char.* **NUM**	EPAC
Profession of the legal guardian 1		Provides information about the occupation of the legal guardian 1 (if the victim < 17 years)	*1 char.* **NUM**	EPAC
Level of education of the legal guardian 2		Provides information about the level of education of the legal guardian 2 (if the victim <17 years)	*1 char.* **NUM**	EPAC
Employment status of the legal guardian 2		Provides information about the employment status of the legal guardian 2 (if the victim < 17 years)	*1 char.* **NUM**	EPAC
Profession of the legal guardian 2		Provides information about the occupation of the legal guardian 2 (if the victim < 17 years)	*1 char.* **NUM**	EPAC
Alcohol use		Suspected or known alcohol abuse before the accident by the victim or any other person involved in the accident	*1 char.* **NUM**	1-SuspV 2-SuspA 9-No inf
Other psycho. subst. use		Suspected or known abuse of a legal or illegal psychoactive substance before the accident by the victim or any other person involved in the accident	*1 char.* **NUM**	1-SuspV 2-SuspA 9-No inf
Mode of transport of injured person		Would make it possible to extend the survey to traffic accidents	*1 char.* **NUM**	MDS-Is
Prod. involved in the acc.	X	Makes it possible to identify products involved in the accident, if any (consumer safety approach)	*5 char.* **NUM**	V2000
Prod causing the injury	X	Makes it possible to identify products that have caused the injury (consumer safety approach)	*5 char.* **NUM**	V2000
Other product	X	In the (unusual) situation in which some other product is involved in the accident	*5 char.* **NUM**	V2000
Narrative (circumstances)	X	Very useful for: 1- selecting cases using key words in free text (e.g.: champagne cork – there is no specific product code); 2- obtaining a more detailed description of the circumstances of the accident. Text structured in terms of "PALM": products – activity – location - mechanism	*120 char.* alphanum	None
Narrative (products)		If the cause of the accident could be a product, this zone makes it possible to describe in greater detail the type of product (identification of the brand, etc.) and/or the cause of the accident (incorrect use, lack of information, etc.)	*120 char.* alphanum	None

The V2000 nomenclatures are given in reference [22]. The EPAC nomenclatures for the education level, the occupational situation and the profession are given in appendix IX and reference [5]. The ICECI nomenclatures are given in reference [23]. The specifications of the MDS-Is are given in references [25, 26]. The Irdes list of the types of contacts is given in reference [8]. The AIS classification is given in reference [27]. The measurement of the initial severity can be made using the AIS established for the traffic accident surveys, or using other clinical scales; these scales may be have to be adapted for the Home and Leisure accident. The subjective appreciation of the severity by the injured person can be registered with the answer to the question: in the 48 hours following the accident, were you disabled in your usual activities? With three possible answers: no; yes, disabled; yes, severely disabled.

Proposed harmonised survey (cont.)

2 - Methodology

Type of survey

To determine the prevalence of home and leisure accidents, a *representative* survey is required. A small fraction of the population is selected that has the same characteristics as the whole population with regard to certain variables (the «control variables»); this makes it possible to obtain data that are just as reliable, but can be obtained more quickly and at less cost.

In this context, the telephone survey method is both the most widely used and the easiest to carry out. It involves asking people over the telephone about home and leisure accidents that have occurred «in recent months » («that are spontaneously reported», and then using «assisted reporting»). The other survey methods (face-to-face interviews and self-administered surveys) are difficult to envisage, either for reasons of cost and the time taken (face-to-face), or because of a predictably low response rate (self-administered postal survey).

The advantages of telephone surveys are as follows (based on [11]):
- the fact that there is a relatively high quality survey base (the 'phone directory)
- a reasonably good predicted participation rate, especially if the potential interviewee is sent an information letter before being contacted
- automated processing of the interviews (CATI: Computer Assisted Telephone Interview method).
- the fact that the survey interviewer is not physically present, something that can influence the answers
- it is possible to check how the questionnaire has been administered and the survey performed.
- it is possible to interview people who have problems with reading or writing.

The drawbacks of this survey method are as follows:
- the cover provided by the «'phonebook» survey database is deteriorating with the development of mobile phones with no fixed subscription (and in France with the end of the state monopoly of the telephone system). In 2000, 5% of the population had no fixed 'phone line. About 23% of subscribers have «ex-directory» numbers. The sociodemographic profiles of the people who do not have a fixed 'phone line, or who wish to be ex-directory do not match those of the general population. These telephone surveys are therefore subject to recruitment bias (no fixed 'phone line, an ex-directory number, but also the omission of people who are difficult to contact because they live in an institution, the homeless etc.), and this has to be allowed for and corrected, by over-representing certain groups in the randomly selected sample, by corrections made after the survey has been completed, or by carrying out complementary surveys.
- other types of bias should be noted: bias in the subjects' statements, as in any survey based on statements (tendency for the subject questioned to hide or distort some information deliberately or otherwise). Specific memory-related causes of bias affect indirect respondents, when for instance the interviewee is asked for information about other members of his/her household. The occurrence of memory-based bias depends on

when the subject is questioned. They also depend on the seriousness of any accident that may have occurred. What time scale should be used? The period over which the subjects are asked to report their HLAs varies from one survey to another, which leads to a memory-based bias which also varies: the shorter this period, the higher the proportion of accidents is reported [28]. A few studies have measured the reduction in response rate with the increase in the period covered by the survey. One study carried out in Ghana [29] showed that the annual incidence of accidents (for all types of accidents combined) had fallen by 72%: the annual incidence of accidents was 27.6% per year over a recall period of one month versus 7.6% per year over a recall period of 12 months. Another study carried out amongst children and teenagers in the United States [30] indicated a fall in the reported annual incidence of accidents, when the period surveyed was increased from one month to a year, from 24.4% to 14.7% per year, or a reduction of 40%. These two analyses also show that the degree of variation decreases with the seriousness of the accident: a retrospective duration of one year remains appropriate for the most severe accidents, whereas the less severe accidents are only reported if the period surveyed is restricted to three months.

- Some studies show that there is another type of bias, known as telescoping bias, which results from the fact that people surveyed tend to bring the date of an accident forward towards the date of the survey [28]. Thus people tend to report accidents that in fact took place before the period covered by the survey, in particular if this period is short. The telescoping bias is greater if the accidents reported are serious. To limit the impact of this bias, it is recommended to use periods of 1 to 3 months [28]. Beside the value of having large samples, another method recommended as a way of getting a better estimation of the annual incidences of accidents is to interview the subjects at least twice during the survey [29].

- Counting home and leisure accidents in surveys of this type is complicated by the difficulty experienced by the people surveyed to understand what is meant by "home and leisure accidents". Some occupational accidents, and some traffic accidents are likely to be reported as home and leisure accidents (and *vice versa*), if the question is not asked explicitly [10], which would make the survey more onerous.

- There is some seasonal variability in HLAs, and this has been estimated, for example, in the EPAC survey [21]: the ratio between the highest quarterly incidence of HLAs (in the spring) and the lowest (in winter) is equal to 1.2. To allow for some degree of seasonality in disorders and accidents, we should envisage carrying out surveys in the form of several campaigns carried out at intervals of several months.

The characteristics of this telephone survey, based on various telephone surveys already carried out in the past [8, 11-13, 16], could be as follows:

Population

Telephone survey of a representative sample of interviewees between 15 and 75 years in age, who speak the language of the country where the survey is taking place, with no distinction of nationality and who are living in the country at the time of the study. The questions of the survey refer to the whole household (all the people living at a given address).

With regard to the lower age limit: the accidents involving children under 15 years of age are reported indirectly by the person interviewed, to avoid any bias related to the ability to understand certain items (e.g.: injury, body part injured, etc.).

With regard to the upper age limit: a telephone investigation at the principal home of the individuals may not be representative of elderly populations (who are often in hospital, retirement homes etc.). In addition, problem of distrust, lack of interest and physical problems (poor hearing) had led us to limit the upper age of inclusion in the survey to 75 years. A special form of recruitment, and a face-to-face interview (rather than by telephone) should be envisaged to compensate for this under-estimation of accidents involving very elderly people in institutional care.

Randomisation

The cross-sectional survey would be carried out on a population in which a representative sample of housholds is randomly selected. A randomisation survey can be carried out by two methods: the probabilist method involving random selection; the empirical method using the quota method.

The survey proposed is based on a two-degree randomisation process, with unequal probabilities:

- 1ˢᵗ degree: random selection of the households
- 2ⁿᵈ degree: random selection of an individual in the household from amongst the eligible subjects .

Sample size

In view of the estimated approximate incidence of home and leisure accidents of about 10% and the desire to be able to «correct» the findings of the European IDB hospital reporting by the data from this survey, using the following descriptors:

- Age (4 classes)
- Sex (2 classes)
- Activity (5 classes)

4 x 2 x 5 = 40 subgroups consisting of at least 50 victims are envisaged, i.e. 2 000 victims. Given an accident rate of 10%, this implies that responses must be obtained from 2000 x (1/0.10) = 20 000 individuals, i.e. at least about 6000 households. It is also known that there is a big gap between households that are «contacted» and those that are «responders», with a ratio of the order of one to three in previous surveys. The survey base must contain something of the order of 20 000 households. This order of greatness corresponds to that used in the Enquête Santé et Protection Sociale ([8] and Appendix III). This calculation does not take into account the size of the national population. It can be considered to hold good for Member States with 40 to 80 million inhabitants. For the others, which often have a much smaller population, the

size of the sample can be reduced somewhat. It is not possible to go down below a minimum sample of 1500 households if the results are to have a sufficient degree of accuracy.

Degree of accuracy

Sample size	1500	6000
Fictional percentage	10.0%	10.0%
Accuracy	0.015*	0.008
Interval of confidence	8.5-11.5	9.2-10.8

* = $2 \times (0.10 \times (1 - 0.10)/1500)^{1/2}$

Other characteristics
Address database: telephone directory.
Find a way of contacting households with ex-directory numbers and for handling those that do not respond.
Selection of the respondent in each household using the method of selecting the next person to have a birthday.
Verification of the weight of the sociodemographic variables before and after correction. This correction will be carried out using the most recent population structure database.
To avoid responses that are overly subject to seasonal variations in the onset of the accidents, it should be proposed that the survey should be carried out in two campaigns, carried out alternately: one survey would consist of two campaigns conducted in the spring and autumn/fall, the next survey consists of two campaigns, conducted in the winter and summer.

Optimum frequency
To make it possible to interface data from the national type of survey and permanent hospital reporting, a methodological and financial decision has to be made between the number of hospitals included in the permanent IDB reporting, and the cost and utility of the national-type survey. The need to monitor the change in the prevalence and the main characteristics of accidents is another parameter to be taken into account.
The examples show that carrying out a survey every year would demotivate the people carrying it out, would only identify a few differences from one year to the next and, finally, would involve a high cost [32]. In contrast, a survey carried out every ten years [12, 13] would suffer from having a gap of 10 years between successive data, which is clearly too long. It emerges from these various experiments, and from discussions with the partners involved in the project that the best frequency for a survey of this type would be between 2 and 4 years. A survey carried out every 2 years would be suitable in countries that are «active» in the field; a survey carried out every 4 years being the absolute minimum for all Member States.

Proposal for the harmonised survey (cont.)

3 - Questionnaire

3.1 - General comments about the questionnaire

Whatever its form, its length or its content, the questionnaire must ensure that:
- contact is made with the person being surveyed,
- this person is identified,
- the characteristics of any accident(s) that (s)he has experienced during the recall period are reported.

The «**Making contact**» part must both validate the participation of the person selected for the survey (or account for his/her non-participation by explaining the reasons for his/her exclusion) and also start the dialogue with the person, by motivating him/her to take part in the survey. In this context, the person must be provided with and take on board the information about the bodies responsible for the survey, the legitimacy and legal nature of the survey, its compliance with current ethical regulations, the subject's right to refuse to take part in the survey, to correct the information that (s)he has provided, to gain access to indirectly nominative data about him/herself, his/her right to be informed about the findings of the survey.

All these aspects form part of any survey of this type. What is unusual in the present survey, is the need to make oneself understood by the person being surveyed. With regard to the definitions: before answering this person must have been correctly informed about what is meant by home and leisure accidents home and leisure accidents (or by injury, if the survey is extended to include injuries as a whole). It is therefore essential to give the person being surveyed a clear definition of accidents, which will allow him/her to distinguish between home and leisure accidents, and road or occupational accidents, etc.

It is also necessary to make clear to the person being interviewed the recall period to which the questions that (s)he is going to answer refer. Several studies have shown that memory-linked bias is considerable as soon as the recall period exceeds a few months. Apart from the fact that this point is an argument for basing the survey on a short recall period (see the Methods paragraph above), it is also important for the practical performance of the survey to minimize this risk of bias, and make it is as similar as possible in the various subjects surveyed.

The interviewers should be trained on the way to ask the questions and to collect the answers from the interviewed person. It is actually to guarantee a high level of accuracy and of homogeneity of the data. The interviewers should also perfectly know the thesaurus and nomenclatures used for the coding.

The **Identification** part is intended to describe the characteristics of the interviewee and of the household (sex, age, profession, the composition of the household, etc.). Various problems often arise in this part. The age and sex of the subject rarely pose any problem, however the

composition of the household can be difficult to describe, and it is not always easy to gain access one or more of the people in the household. The «social profile» of the people surveyed involves three levels of information: the highest level of education achieved, the type of occupation, and whether the person is currently employed. These items of information are sometimes difficult to obtain. They can seem to be prying; in the case of children they must involve each of the legal guardians of the child (often the father and mother); elderly widowed people, often women who have not worked, must provide information about their husband who may have been dead for many years, etc. In addition, it is adults who have to provide answers on behalf of children who are too young and we know that this can result in under-declarations that are particularly marked if children's' accidents have been less severe and occurred further back in time [33].

The **Accident** part describes the characteristics of any accident(s) that has/have occurred. The list of items to be recorded is conventional: the mechanism of the accident, the activity at the time the accident occurred, any products involved, the type of injury and the part of the body injured, etc. The same items always occur in this type of survey (see appended various examples of questionnaires used in France and in Europe). The difficulty arises here from the fact that the forms used to ask the questions and the nomenclatures, which will be used in the end to report and encode the information obtained from the person surveyed.

The forms can be very varied: each survey, so to speak, has its own form. One of the challenges of the present project is probably to provide a form that can be adopted by all European countries, not because it is better than the others, but because it is important that Europe should have a common form that will make it possible to carry out valid comparisons of data. However, because there is no divergence in the content, means that there can be convergence in the formulation of the questions. To sum up therefore, any formulation is valid, in the sense that it covers the same content everywhere. Here we have deliberately decided to propose the simplest possible formulations for each item.

To some extent, the nomenclatures pose the same problem. For home and leisure accidents, different nomenclatures can coexist, in order to make it easier to record and code the mechanisms, products, injuries, etc. However, here too there is no fundamental discrepancy, and we have decided here to propose retaining the most widely-used nomenclatures currently in use in Europe for reporting HLAs, i.e. the V2000 nomenclatures. This traditional position has the advantage of making it possible to start conducting a survey without waiting for a new nomenclature to be introduced. A second difficulty concerns the way nomenclatures are used: as mentioned above, the people carrying out the survey must be well trained in how to use them (as in the whole field of injuries and home and leisure accidents). So, for instance, when the person conducting the survey asks for a type of injury or a location of an accident, (s)he will have in mind the various categories of replies envisaged in the nomenclatures in order to use them and code the answer given by the person interviewed directly into the nomenclature. This is particularly true of the answers about products, of which the V2000 nomenclature is undoubtedly the best provided: if a product implicated in the accident, and cited in the survey, is not found as such in the nomenclature, then the person conducting the survey will have to find an equivalent during the interview, if necessary by asking the person being interviewed for further details about the product.

3.2 – Compiling the questionnaire

The steps described earlier in the report have made it possible to pool a large number of bibliographical documents about the practical aspects of surveys of home and leisure accidents. In particular, they have provided us with numerous questionnaires applied in various contexts, particularly in Europe. A large part of the work involved in this project has consisted of the intellectual integration and maturation of these various approaches, all of which are interesting and justified in the contexts in which they have been developed. The partners involved in the project have made it possible to get at documents that are difficult to access (because it is often part of a "grey" category of literature), and which were essential for the performance of the project. Contacts with partners have also made it possible to pool various points of view in order to construct a common questionnaire. This consideration continued until November 2004, when two key documents (shown in Appendix VIII) were sent to the partners:

- two lists of items proposed for a cross-sectional survey (CSS). One, a basic list, consisting of items classified initially as «inevitable» in any cross-sectional survey of home and leisure accidents and intended to provide data that can be compared across countries and with continuous hospital reporting. The second list consisted of items that were also interesting, which it was proposed to use for a more ambitious survey with a wider scope and for which we would have greater facilities.
- A proposal for the formulation of each item in the two previous lists, applying the option for simplicity described above.

The partners were invited to comment on these two documents, with regard to their use in a cross-sectional survey to be conducted of home and leisure accidents in several European countries, using a standard method such as that already described and using shared international nomenclatures such as V2000 used for continuous hospital reporting. The written comments are appended. They were used to prepare a telephone conference on 15 December 2004, during which all the problems were discussed again. The purpose of this conference was to reach a balanced consensus between all the participants, and to identify the acceptable features of a harmonized cross-sectional survey.

A report of this conference is provided in Appendix VIII. The results of this wider concertation finally resulted in the summary positions described in the next paragraph.

3.3 – Items to be included

List of the items to be included in all cross-sectional surveys

    Country where the data was collected
    Person interviewed
      Age
      Sex
      Postcode (Zip code) of their usual address
      Whether one or more accident(s) have **occurred** during the previous 2 months:
         If not: end of survey
         If so: **Number** of accidents within this period

Continue the survey for the most severe accident

Account of the most severe accident

The person being interviewed is invited to provide a free description of the most severe accident that (s)he has had during the two-month period. In particular, this allows the person doing the survey to check that this is indeed a home and leisure accident, and to record the main features that characterise it (products, activity, location, mechanism, injury, body part injured, subsequently included item by item in the continuation of the interview below).

Circumstances of the most severe accident

Location where it occurred

Activity when the accident occurred

If in the context of sport: **which sport**

Mechanism

Injury (nature of the injury)

Part of the body injured

Report up to two injuries and body parts injured

Products implicated in and /or responsible for the accident

Treatment

Type of health care received for this accident

List of secondary items to be included if the resources (time, money) devoted to the survey allow

Person interviewed

Nationality

Social profile

Educational attainment

Employment status

Occupation

Account of the most severe accident

Specific circumstances, including:

The consumption of alcohol or psychotropics,

The involvement of other people in the occurrence of the accident

The severity

Clinical measurement of the initial severity using the AIS scale

Subjective assessment of the severity by the victim of the accident

Treatment

If the treatment has been extended beyond the initial care, what has this follow-up entailed: duration of hospitalisation, re-admission to hospital, repeat surgery, follow-up, etc.

Conclusions

Summary of the key information

Some key information has been established as a result of this project.

Firstly, it has been confirmed that it is currently almost impossible to carry out comparisons of the epidemiology of home and leisure accidents in different European countries. This inability to provide a comparative, cross-country assessment of the numbers and risk factors of the onset of an HLA results from the lack of uniformity of the work done at the national level. The health-care systems that deal with accident victims differ, and we do not have the tools required to identify the cultural differences between countries in this regard.

This situation has not really been changed by the development of the Injury Data Base (IDB) network. However the existence and the functioning of the IDB network does have some very positive aspects. It has made it possible for experts on home and leisure accidents from different pays to get to know each other, and has given them opportunities to exchange their experience and expertise. They all acknowledge the advantage of achieving some ability to compare data from different countries, in order to develop European prevention and public health strategies that work synergistically with national strategies. In all countries it is difficult to convey to people how important home and leisure accidents are in public health, often more important than other health problems, and yet far fewer resources are devoted to dealing with them and they are less conspicuous amongst political concerns. They also have only a limited media profile. This shared situation means that we have convergent interests in developing tools for carrying out trans-national comparisons. Furthermore, the fact that common nomenclatures are already used in existing hospital reporting systems constitutes an essential basis for the development of future studies.

For the purposes of this project we have combined a technical approach (bibliography of existing surveys and practices, expert opinions) and the search for a consensus between the partners in order to balance the pros and cons of the various possible ways of carrying out a cross-sectional survey. This survey is intended to complete the continuous hospital reporting where this is carried out and to substitute for it where it is not. All the arguments have been discussed, leading finally to the proposal of a cross-sectional survey applicable to all European countries, the characteristics of which are described above.

We provide below a summary of the general characteristics of this survey.

General characteristics of the harmonised cross-sectional survey

Scope of the harmonised survey
The harmonised survey concerns injuries linked to home and leisure accidents.
It is also possible to extend it in the future to all the types of injuries.

Definition of the injuries to be taken into account:
WHO definition [24]
«An injury is a physical damage that results when a human body is suddenly or briefly subjected to intolerable levels of energy. It can be a bodily lesion resulting from acute exposure to energy in amounts that exceed the threshold of physiological tolerance, or it can be an impairment of function resulting from a lack of one or more vital elements (i.e. air, water, warmth), as in drowning, strangulation or freezing. The time between exposure to energy and the appearance of an injury is short.».
Note: it is possible to envisage an extension to other types of injury (road accidents, occupational accidents, violence, etc.), by adding specific modules.

Aims of the harmonised survey
To determine the incidence of home and leisure accidents.
To constitute a representative sample of accidents.
Note:
The incidence involved is the two-monthly accident rate. The annual accident rates are obtained by multiplying the results of the survey over a recall period of 2 months by 6.
The estimation of the annual rate of accident victims will require the introduction of correction factors obtained by specific surveys [10].
The sample must be big enough to make it possible to calculate the incidence rates for the main groups of accidents.
Rare accidents cannot be investigated, and will require specific topic-by-topic investigations.

Type of survey
Telephone survey
Interview of people between 15 and 74 years of age.
If they are incapable of answering (absent, bad health status), particularly in the case of children or an elderly person, the data can be obtained from a "referent" adult (legal guardian, or relative) in the household.
Note:
Face to face surveys, which are much more onerous, are excluded from the standard procedure for the harmonized survey for the 15 to 74 year age group.
In view of the bias of telephone surveys, particularly as a result of the increasing number of mobile phones that are replacing fixed-line phones, corrections will have to be applied, the methodology for this will be based on that used by the companies that conduct surveys of this type.
To be extended to people aged 75 years or more, a face-to-face survey will have to be envisaged.
To be extended to subjects under 15 years of age, it will be necessary to have a specific protocol in which the legal guardian always answers on behalf of the child.

<u>Recall period</u>
> 2 months

<u>Selection of the accident to be taken into account in the survey</u>
> Option adopted: to report both the number of accidents that occurred during the period and specific details <u>about the most severe</u>.
> *Note*
> *Some surveys concern the most recent accident during the recall period. Both options (enquiring about the most recent or the most serious) have advantages and drawbacks. Given the short recall period adopted it has been accepted that there is likely to be less distortion if information is obtained about the most serious accident.*
> *A more informative version of the survey could be carried out by recording data about all the accidents reported during the recall period.*

<u>Seasonality and geography of accidents</u>
> In order to take into account the seasonality and geographical variation of accidents, the harmonised survey envisages <u>several survey campaigns carried out at different times</u>, and their performance in <u>different regions</u> of each country. For instance, a data collection in two waves, in April – May and in October – November; regions are to be determined in each country.
>
> *Note: it is probably unrealistic to claim to be able to carry out a «representative» regional survey, given the level of geographical diversity.*

<u>The items covered by the interviews of the subjects have been listed above.</u>
> The «basic list» must always be used in all countries; this is the minimum level of reporting required to obtain data that can be compared between countries. A complementary list has been proposed for use if the financial and practical resources make it possible to carry out a broader survey.

<u>The main reference nomenclatures will be those of the ISS V2000 coding manual.</u>
> They can be completed by other specific nomenclatures (for example for the social profile of the accident victims, see above).
> *Note: it is envisioned to use the ICECI classification (International Classification of External Causes of Injuries, [23]) in the near future for all injury data.*

<u>Account of the accident</u>
> The account of the accident should be retained, because it consolidates and completes the specific item-by-item report.
> It also helps the person carrying it out to describe the survey, helps the person being surveyed to understand the survey, and possibly helps to select the type of accident. It should therefore be put at the beginning of the questionnaire. The person conducting the survey should guide the person being surveyed so that the account at least includes the essential facts about the occurrence of the most severe accident during the recall period:

product responsible for or implicated in the accident, the activity being performed when the accident occurred, the location where the accident occurred, the mechanism of the accident («PALM»: Product, Activity, Location, Mechanism), and the injury/ies and body part(s) injured during the accident.

Seriousness of the accidents to be taken into account

Accidents that required at least one attendance at a health care facility (A&E service, GP, pharmacists, physiotherapists, nurses, etc.).

The severity of the accidents to be taken into account

This can be qualified objectively using (AIS or other scores) or subjectively, by putting a specific question to the person involved in the accident (see above).

Social profile

The social profile is established by three groups of questions covering:
- The educational level attained
- The employment situation
- Occupation

In the case of a child, these questions must be put to the child's legal guardians (usually the parents).

A nomenclature for these questions is proposed, based on that used in the EPAC survey in France (see appendix IX and reference [5]). It has the advantage of being very simple, convenient to use and applicable in different countries. This question may, however, be subjected to specific examination by comparison with other nomenclatures that may be in use at the European level.

Number of injuries

Up to two injuries can be described for the most severe accident during the recall period.

Nationality

It was decided that for ethical reasons it was not possible to include nationality as a routine part of the harmonised survey. This is still an interesting option, and it is recommended for use in specific circumstances for specific purposes.

Residence

The variable of the postcode of the usual place of residence is included in the report.

A basic question about the type of habitat: in rural, urban, suburban zones, etc. is recommended.

Note: it will be necessary to have a nomenclature harmonised at the European level about the type of habitat to be make it possible to carry out comparisons between countries.

Practical guidelines and future prospects

The characteristics of the proposed cross-sectional survey should be read and taken on board and criticised by experts in all European countries: both in the countries involved in the project, and those from other European countries. This analysis should take into account the fact that before long the survey may soon be carried out throughout the European Union.

With backing from DG SANCO, Eurostat, and possibly other bodies involved at the European level, the protocol of the harmonised survey should be compiled on the basis of the information in this report on the one hand and of the comments of experts from all the countries in the Union on the other. This work of finalising and compiling the protocol could give rise to a call for tenders, to which scientific institutions or companies could respond.

In a second phase, after the survey protocol has been approved and it has been officially validated by experts from the Member States, a European reference guide will be compiled allowing the first survey conducted in all EU countries to be carried out.

Other developments are also possible: ranging from using nomenclatures that are more appropriate, developing complementary features vis à vis hospital reports, to setting up a cohort to determine the fate of victims of serious accidents. The extension to all types of injuries could be done in the context of the current development of the ISS system towards a coding system for all injuries: this is the "Injury Data Base - All injuries" system, the detailed coding methods of which are currently under discussion. The present work could be repeated and amplified in this evolving situation, because most of the variables selected here are also included in the core of the «Home and leisure accident » of the IDB-all injuries coding. All that would have to be done to convert the harmonised survey into a harmonized «All injuries» survey to complement «IDB All injuries» hospital reporting, would be to add the variables concerning the other modules (violence, self-inflicted injuries, and traffic accident modules).

Home and leisure injuries are a major public health problem: they are frequent, and severe, and many of them are avoidable. In the coming years it will viewed as increasingly unacceptable to die, or to become disabled, after an avoidable accident. This situation is common to all European countries. Conducting the cross-sectional survey described in this report in each country would cost little and be of great value for upgrading the epidemiological knowledge about injuries, including comparisons between countries. These results would provide a basis for a better regulation, information and prevention of avoidable injuries, and for reducing their severity.

Appendices

Apendix I

Initials and abbreviations

AcVC :   accident de la vie courante
CATI: computer assisted telephone interview
CnamTS :   Caisse nationale d'assurance maladie des travailleurs salariés
CSI: Consumer Safety Institute
CSS: Cross Sectional Survey
DG SANCO :   Direction Générale Santé et Protection du Consommateur
Ehlass :   European Home and Leisure Surveillance Accident System
ESPS :   Enquête Santé et Protection Sociale
HLA: Home and Leisure Accident
IDB: Injury Data Base
Inpes :   Institut national de prévention et d'éducation pour la santé
Insee :   Institut national de la statistique et des études économiques
InVS :   Institut de veille sanitaire
Irdes :   Institut de Recherche et Documentation en Économie de la Santé
IPP: Injury Prevention Programme (Programme de prévention des blessures)
ISG: Injury Surveillance Guidelines
ISS: Injury Surveillance System (Système de surveillance des traumatismes)
MDS: Minimum Data Set
OMS :   Organisation mondiale de la santé
SI :   système d'information
UE :   Union européenne
WHO: World Health Organization

European countries mentioned in the report:
            Austria: A
            Belgium: B
            France: F
            Germany: D
            Greece: EL
            Luxemburg : L
            Netherlands: NL
            Portugal : P
            Spain: E

Appendix II

Liste of participants

Institut de veille sanitaire (France)
      Bertrand Thélot, Marianne Perez, Emmanuelle Szego
Institut Sicher Leben (Autriche)
      Robert Bauer
EDUCA-SANTE (Belgique
      Alain Lévêque
CEREPRI (Grèce)
      Nick Dessypris
Instituto Nacional de Saude (Portugal)
      Baltazar Nunes
Psytel (France)
      Marc Nectoux

Work schedule

Etape 1 : Analyse des enquêtes existantes dans le domaine

- Mise en place en avril 2003 de l'équipe de travail et de la répartition des travaux :
      INSTITUT SICHER LEBEN - Autriche
      INSTITUTO NACIONAL DE SAUDE - Portugal
      UNIVERSITY OF ATHENS - CEREPRI – Grèce
      EDUCA-SANTE - Belgique
      PSYTEL - France
- Avril 2003 : Rédaction du projet de document « Calendrier / Tâches / Acteurs / Jours-hommes » décrivant le déroulement du projet (document Psytel).
- Avril 2003 : Prise de connaissance du contexte de l'étude et des objectifs.
- Avril-Mai 2003 : Organisation du projet : calendrier, tâches acteurs et jours-hommes.
- Mai – Juillet 2003 :Etude documentaire et bibliographique relative aux enquêtes en France.
- Juin 2003 : Prise de contact avec les responsables de ces enquêtes pour des complément.
- Juin - Juillet 2003 : Etude documentaire et bibliographique relative aux trois Etats utilisant la méthodologie d'enquête transversale dans le cadre du programme de Prévention des Traumatismes (Allemagne, Espagne et Luxembourg).
- Juillet 2003 : Contacts par mail avec ces équipes européennes.
- Août 2003 : Etude documentaire sur certains systèmes de recueil internationaux.

- Août 2003 : Analyse synthétique des méthodologies et des questionnaires des enquêtes en France.
- Septembre 2003 : Analyse synthétique des méthodologies et des questionnaires des enquêtes européennes.

Etape 2 : Avantages et inconvénients des 2 méthodologies

- Juin 2003 : Projet de plan pour le rapport intermédiaire, réponse à l'enquête Cost/benefit pour un projet de la Commission (documents Psytel).
- 15 et 16/07/2003 : Préparation et participation à la réunion de l'IPP Network où le projet est présenté.
- Août 2003 : Rédaction du projet d'agenda pour le meeting du 22 et 23 Octobre 2003 (document Psytel).
- Septembre/octobre 2003 : Préparation du 1er meeting à Paris. Documents à envoyer, rédaction de documents spécifiques et de transparents PowerPoint, organisation de la réunion.
- 01/10/2003 : Rédaction du document « La problématique du projet » (document Psytel).
- 11/10/2003 : Rédaction du document « Comparaison des variables entre les principaux systèmes d'information » (document Psytel).
- Réunion des 22 et 23 octobre 2003 à Paris.
Voir programme des journées de travail (Annexe)
- Fin octobre 2003 : Rédaction de la version n°1 du rapport intermédiaire destiné à la Commission et participation aux évolutions ultérieures du document envoyé le 30/10/2003 (document Psytel).

➔ Remise du rapport intermédiaire à la Commission (octobre 2003)

Etape 3 : Propositions méthodologiques

- Début novembre 2003 : Participation à la rédaction des minutes du meeting de Paris (chapitre conclusions).
- 11 et 12/12/2003 : Participation à la réunion du « Working Party Injuries » à Luxembourg.
- 10/02/2004 : Participation à la réunion à la TNS-SOFRES.
- Février 2004 : Rédaction du document « Eléments d'information recueillis lors de notre visite à la TNS Sofres » (document Psytel).
- Février-Mars 2004 : Rédaction du document : « Choix des variables de l'enquête type et des nomenclatures » et rassemblement des nomenclatures des différents systèmes internationaux (document Psytel).
- Mars-Avril 2004 : Prise en compte des éléments d'information issus des enquêtes européennes ISS (document Psytel).
- 05/04/2004 : Participation à une réunion à l'INED sur les comparaisons des non réponses dans les enquêtes européennes.
- Fin avril 2004 : Préparation du meeting de Luxembourg les 28 et 29 avril 2004 « Working Party on Accidents Injuries ».
- 20/04/2004 : Réunion à la SOFRES sur la méthodologie d'enquête.

Etape 4 : Validation auprès d'un groupe d'experts

- Participation au meeting de Luxembourg les 28 et 29 avril 2004 « Working Party on Accidents Injuries ».
- 18/05/2004 : Rédaction et envoi du document « Le nouveau codage ISS du CSI » (document Psytel).
- 24/05/2004 : Rédaction et envoi du document « Comparaison des deux méthodologies de recueil » pouvant constituer un chapitre du rapport final (document Psytel).
- Juin 2004 : Rédaction du document « Proposition de choix des variables de l'enquête type – formats et nomenclatures ».
- 14/06/2004 : Remise du document Psytel « Proposition de choix des variables de l'enquête type – formats et nomenclatures ».
- Juin 2004 : Rédaction du document « Préconisations méthodologiques pour l'enquête type - v1.
- 17/06/2004 : Envoi par mail du document « Préconisations méthodologiques pour l'enquête type v1 » (document Psytel).
- Juillet - Août 2004 : Conception et rédaction de la proposition de questionnaire.
- 27/08/2004 : Envoi par mail du document Psytel « Proposition de questionnaire pour le Projet Enquête –type » (document Psytel).
- Septembre - Octobre 2004 : correction et évolution du questionnaire initial, préparation d'une réunion téléphonique.

Etape 5 : Rapport final

- Novembre 2004 : Préparation du rapport d'activité pour l'InVS.
- **30/11/2004 : Remise du rapport d'activité de Psytel à l'InVS.**
- Réunion téléphonique avec les partenaires européens et Psytel pour la finalisation des positions sur les questions, méthodes et organisation de l'enquête.
- décembre 2004 – février 2005 : rédaction du rapport final du projet.

Réunions de suivi de projet de l'équipe française à l'InVS (généralement le mercredi matin tous les 15 jours) avec :
B. Thélot – InVS et M. Nectoux – Psytel pour toutes les réunions,
M. Pérez - InVS, E. Szego - Psytel, M. Darlot - Psytel pour certaines d'entre elles.

➔ **pour l'année 2003 :** 23/04, 07/05, 21/05, 04/06, 18/06, 02/07, 09/07, 24/07, 07/08, 03/09, 11/09, 17/09, 26/09, 09/10, 16/10, 20/11 (Tél.)

➔ **pour l'année 2004 :** 07/01, 21/01, 04/02, 25/02, 10/03, 24/03, 02/04, 26/04, 13/05, 02/06, 14/06, 28/06, 06/07, 21/07, 20/08, 08/09, 07/10, 10/11, 29/11, 15/12

Appendix III
Existing survey methods and questionnaires

1 - Continuous survey methods in the ISS system: The EPAC survey in France

There are only a few sources of epidemiological data about HLAs in France. Until the end of the 1990s, apart from a few specific surveys, little was available apart from three sources: the permanent and exhaustive system for reporting the causes of death; the surveys carried out in some regions between 1987 and 1995 by the CnamTS, the French National Health Insurance Fund for employed workers, and the survey carried out from the 1980s in the context of the European *Ehlass* system (*European Home and Leisure Accident Surveillance System*). This survey, which had long been receiving considerable funding from the European Union, was revised, and reported to the French National Council for Statistical Information (CNIS) in 2001 under the name of EPAC (Enquête Permanente sur les Accidents de la Vie Courante). At the European level, this survey now feeds into the *Injury Data Base (IDB)* system, and complies with IDB specifications with regard to the format of the data and use of the V2000 nomenclatures.

As in all the other European countries which use hospital reporting of this type (such as Austria, Greece, the Netherlands, Portugal, etc.), the EPAC report is based on the records of A&E service use for HLAs in some hospitals, with data about the person injured (age, sex, residence, social profile), the care they received (date and time they attended the A&E Department, treatment, whether they were hospitalised), the immediate characteristics of the accident (mechanism, location, activity, type of injury, part of the body injured), the products (agents, other involvement) which had caused or been implicated in the accident. Finally a short description of the accident is recorded in free text. The hospitals that collect data for EPAC volunteer to do so; they receive funding and therefore contribute, in accordance with the French Code of Public Health, to the National Public Health Network in France.

The data are collected in an exhaustive manner, and snt without delay to the InVS: the monthly data must be forwarded after being validated by the end of the month n+2 at the latest. Since 2002, assessments of data quality have been carried out at least once a year at each of the hospitals in the EPAC network in order to record the quality, exhaustiveness and reliability of the data recorded. The days are randomly selected (at least one per quarter) and the files of the patients attending A&E are analysed to decide whether they should be included in the record or not, and recoded under local conditions. Each analysis gives rise to a report that is sent to the hospital, which includes notably the conditions of access to the file, the exhaustiveness of the reporting for the randomly-selected days, the exhaustivity and accuracy of the items.

The EPAC survey includes all the Home and Leisure Accidents that led to attendance at the A&E Department of the hospitals taking part, regardless of the time of day (round the clock) or the day (all days throughout the year).

To ensure that the record is exhaustive, the various people at the hospital who are responsible for recording the cases must be completely familiar with the HLA inclusion criteria according to EPAC. These can be represented using the decision tree shown below:
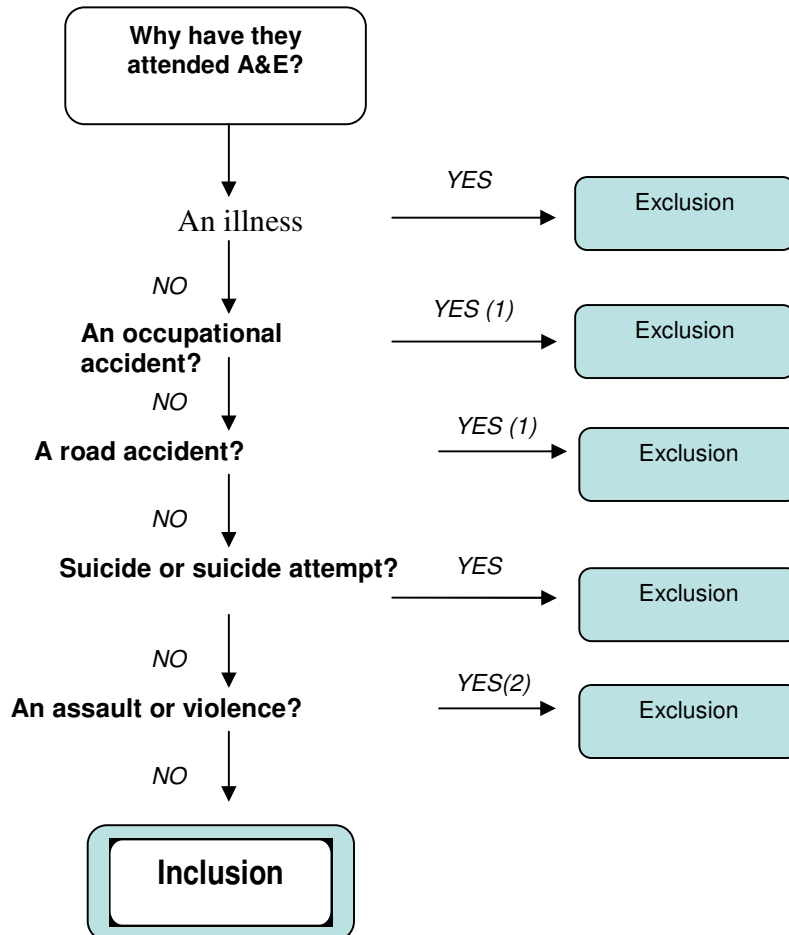
(1) : apart from accidents involving wheeled-vehicles with no motor (cycle, scooter, roller-skates, etc.)
(2) : except fights amongst children under 10 years of age

An occupational accident is an accident that at the time it is recorded gives rise to a notification of an occupational accident. A road accident is an accident recognized as such by the legal authorities.

A reference guide helps the encoders decide which cases should be included or excluded; if there is any doubt, a national council can be consulted [5]. See Appendix V for the list of the variables in the EPAC03 coding. The results are reported in terms of the annual data [21] and interpretations made on request, which are available on a website [34]. Estimations of the incidence of the occurrence of LHAs amongst the population have been compiled on the basis of the EPAC, using the hospitalisation reports and the findings of the exhaustivity analyses [6, 7].

2 – Cross sectional surveys in the ISS system

Germany

Extraits de [35]
**Structure of the study of home and leisure accidents in Germany
in the years 2000/2001**

On request of the Federal Institute for Occupational Safety and Health (FIOSH), NFO Infratest carried out a representative survey on home and leisure accidents. This project was the German contribution to the europe-wide campaign „Injury Prevention Programme" (IPP). The data of this German study was fed in the European network (Euphine Hiems).

The current study of home and leisure accidents in Germany is representative for the resident population. This means that the data to home and leisure accidents in Germany is collected within the scope of a representative household inquiry. In other EU-member states, however, the accident data is collected in selected hospitals. This kind of hospital inquiry is unrealisable in Germany, as more than 50 % of all home and leisure accidents would not be recorded this way; as a lot of victims are only treated by practitioner. Thus, through the representative structure of the study is ensured that

◆ the total resources at accidents in Germany can be estimated reliably
◆ a complete analysis of all home and leisure accidents takes place, not dependent on how the injuries were treated and
◆ trend developments compared to the previous studies can be observed based on a comparable methodology.

Within the scope of the current study data referring to 3,519 home and leisure accidents was ascertained, edited and analysed through representative household inquiries. These 3,519 home and leisure accidents are the base for the statistic analysis of the home and leisure accidents by the variables time of accident, place of accident, activity exercised at the moment of accident, sport exercised at the moment of accident, accident mechanism, injured body part, main injuries, products involved in the accident, medical treatment and length of stay in hospital as well as causes of accident (Chapter II, issue 2 to 10).

All 3,519 interviews were conducted by specially introduced interviewers. The open enders were coded uniformly by one person, then checked, weighted and analysed, which ensures a very high data quality.

For the assessment **of the number of home and leisure accidents in Germany** 206,661 first interviews (by phone and face-to-face) were conducted from December 2000 to December 2001, which were exclusively joint in nationwide representative household inquiries. In 10,366 households a home and leisure accident was recorded. 7,233 intended persons were willing to give a more detailed accident interview. For the further analysis the conducted first interviews were weighted by the categories federal state, size of the community and size of the household. Additionally, the contacts, which were not completely uniformly distributed over the period of

the study, were weighted in such a way that a monthly equilibrium of first interviews was simulated.

Before the projection of the total number of the home and leisure accidents a validation of the first interviews had to take place because it was not always the case that when a person described a home or leisure accident in an initial interview, there actually was an accident in the sense of the definition. Therefore, during the validation process, a check was done at the beginning of the accident interview, whether all the definition requirements of a home or leisure accident were actually fulfilled (compare app. 1).

For the extrapolation of accident frequencies only telephone studies are considered, because these offer the methodical advantage that the sample is not clustered. Unclustered samples report a minor confidence interval. Additionally, the coverage is higher and therefore also ameliorates the quality of the sample.

In these representative telephone studies altogether 129,917 first interviews were conducted from December 2000 to December 2001. The survey of these 129,917 households and the following validation resulted in 4,566 home and leisure accidents. This corresponds to a ratio of approximately 3.5 % of households with at least one home or leisure accident per interviewing quarter in Germany.

Applied to the 38.1 million private households in Germany (Mikrozensus, April 2000), the following estimate of the annual total number of home and leisure accidents in 2000 may be calculated by the following formula:

$$\frac{4{,}566 \text{ validated accidents x 38.1 million households}}{129{,}917 \text{ contact interviews}} \times \frac{12 \text{ months}}{3 \text{ months}} =$$

5.36 million accidents

The scope of survey of the current study is identically defined to the studies of 1988/89 and 1991/92 and of 1996/96.
Scope of survey: Home accidents, sports and leisure accidents
Conditions:
      - Medically treated or affected for at least 14 days
      - Accident occurred during the past three months
Exclusion from scope: Accidents on the road, at work, at assaults and suicide attempts

APPENDIX

Weighting and validation of first interviews
Weighting of first interviews
Altogether 206,661 first interviews (by phone and face-to-face) were conducted. In 10,366 households a home and leisure accident was recorded, whereof 7,233 intended persons were willing to give a more detailed accident interview. For the extrapolation of accident frequencies, however, only telephone studies were considered, as they offer the methodical advantage that the sample is not clustered. Unclustered samples report a minor confidence interval. Additionally, the coverage is higher and therefore also ameliorates the quality of the sample.

In these representative telephone studies altogether 129,917 first interviews were conducted from December 2000 to December 2001.By the following proceeding it is ensured that the results referring to home and leisure accidents, which were screened by other studies than the named, are representative:

    1 - Weighting of the representative first interviews by population structure in Germany
    2 - Check of this socio-demographic structure in the additional interviews
    3 - Adjustment to the structures of these results by weighting

The first interviews were weighted by the features federal state, size of the community and size of the household. Additionally, the contacts, which are not completely uniformly distributed over the period of the study, were weighted in such a way that a monthly equilibrium of first interviews was simulated (for the elimination of otherwise disturbing seasonal effects).

Validation of contact interviews – home and leisure accidents

The "validation of the first interviews" entails verifying whether those people who stated in the first interview that an accident had occurred had suffered an accident that fulfilled the definition criteria. This verification took place as part of the accident interview directed specifically to all definition criteria of an home and leisure accident.

It is not always the case that all persons who recorded in the first interview a home and leisure accident actually meet all criteria of the formulated definition. For an exact extrapolation it is therefore necessary to validate all indications referring to an accident which were made in the first and in the accident interview.

From the 129,917 households contacted by phone 7,779 home and leisure accidents were recorded. The validation of these home and leisure accidents led to following result:
(1) Households with at least one recorded home and leisure accident 7,779

In 2,373 cases the intended person confirms the occurrence of a home and leisure accident, but is not willing to give an accident interview:

(2) Non quality-based drop-out: 2,373 From the difference between (1) and (2) result

(3) Recorded home and leisure accident, about which the intended

person is also willing to give an accident interview 5,406

All representative first interviews by phone, which led to an accident interview that fulfils all required criteria, are counted among

(4) valid home and leisure accidents 2,766

In many cases it was only in the accident interview with a household, which recorded a home and leisure accident in the first interview, that it turned out that this accident does not meet the definition. Such accidents either happened in other spheres (job, school or traffic) or did not fulfil the criteria of the required gravity of the accident (visit to a practitioner or being affected at least 14 days) or did not happen in the period of the last three months. These accidents are counted among

(5) validated drop-outs 1,947

First interviews, in which a home and leisure accident was recorded, but which for various reasons did not lead to the accident interview (information was refused, the victim was not available for the interview or was mentally or linguistically not able to give an interview) are counted among

(6) non quality-based drop-outs from the accident interview   693

Accident frequencies and extrapolation of the annual home and leisure accident figures

The extrapolation of accident frequencies regarding home and leisure accidents cannot be related to the total number of accidents „recorded", because, as shown in the preceding chapter, a considerable number of these accidents does not meet all of the definition criteria.

Nor is it sufficient, however, to restrict the extrapolation to the valid accidents, since a large number of the accidents stated in the first contacts cannot be verified or falsified as home and leisure accidents.

These non quality-based drop-outs have to be considered in the extrapolation, because it is necessary to estimate the number of „valid" accidents included in the non quality-based drop-outs. This estimate is based on the assumption that the ratio of verified/falsified accidents can also be applied to non quality-based drop-outs.

On this basis the following shares result for home and leisure accidents:

$$\frac{\text{Validated home and leisure accidents}}{\text{(validated home and leisure accidents + validated drop-outs)}}$$

$$= \frac{2{,}766}{(2{,}766 + 1{,}947)} = 0.5868 = 58.7\%$$

A transfer of this ratio of 58.7% to the 2,373 non quality-based drop-outs of the first interviews and to the 693 non quality-based drop-outs of the accident interviews, leads to a figure of 1,393 + 407 accidents of the quality-based drop-outs. An addition of these 1,800 accidents to the 2,766 validated accident leads to an estimated

Total of 4,566 home and leisure accidents

Applied to the 129,917 first interviews this corresponds to a ratio of approximately 3.5 % households with at least one home and leisure accident per interviewing quarter in Germany

Applied to the 38.1 million private households in Germany (Mikrozensus, April 2000), the following estimate of the annual total of households with home and leisure accidents can be formulated:

$$\frac{\text{Validated accidents x number of households}}{\text{number of first interviews}} \quad x \quad \frac{12 \text{ months}}{3 \text{ months}}$$

$$\frac{4,566 \text{ x } 38.1 \text{ million}}{129,917} \quad \frac{\text{x } 12 \text{ months}}{3 \text{ months}} \quad = 5.36 \text{ million home and leisure accidents}$$

APPENDIX
Inquiry to home and leisure accidents
Guideline accident interviews

☞ *Veuillez impérativement*
indiquer votre numéro d'identification !

Enquête sur les accidents domestiques et de loisirs

Sont concernés par cette enquête tous les accidents **domestiques ou de loisirs au cours des trois derniers mois**, qui ont nécessité une **visite chez un médecin** ou entraîné un **handicap pendant une longue période, ou un préjudice pendant au moins 14 jours**. Les intoxications et les accidents survenus dans les transports en commun pendant les heures de loisir seront également pris en compte. En revanche, cette enquête ne traitera **aucun** accident de la circulation, du travail ou survenu dans l'enceinte d'un établissement scolaire.

Tous les accidents **domestiques ou de loisirs** qu'une même personne a eu au cours des trois derniers mois doivent être répertoriés. Remplissez un questionnaire par accident, en commençant par celui dont votre interlocuteur vous fait part de manière spontanée.

1. Date de l'accident (année, mois, heure)
2. Lieu de l'accident Précisez le lieu exact.
3. Déroulement de l'accident
Précisez les circonstances de l'accident.
4. Faits et gestes de la personne au moment de l'accident
Que faisait exactement la personne au moment de l'accident ? Qu'a-t-elle fait pour déclencher l'accident ? Pratiquait-elle un sport quand elle s'est blessée ? Si tel est le cas, quel type de sport ?
5. Connaissance des risques
Pratiquait-elle cette activité régulièrement et en tout confiance ?
6. Raisons de l'accident
Décrivez tous les éléments impliqués dans l'accident ou l'ayant provoqué (personne, animal, objet, produit chimique, etc.) Quelle est la relation entre l'accident et ce qui s'est passé ?
7. Appareils impliqués dans l'accident
Quel type d'appareil est à l'origine de l'accident ?
S'agit-il d'un appareil électrique ou manuel?
Quelle est son année de fabrication ?
Comporte-t-il une marque de contrôle ?
Comment l'appareil devait-il être manipulé ?
La notice d'utilisation était-elle complète et correcte ?
L'équipement était-il incomplet ou techniquement défectueux? Etait-ce lié à sa vétusté ? Dans quel état il ?
Son utilisation était-elle adaptée ?
Etait-il utilisé conformément aux instructions de sécurité ?
8A/8B Blessure
Quel est le type de la blessure ?
Quelle partie du corps est-elle blessée ?
Quelles sont les autres blessures ?
Quelles autres parties du corps ont été blessées ?
9. Traitement de la blessure
La blessure a-t-elle été soignée ?
Si oui, qui s'est occupé des premiers soins ?

Qui a ensuite continué à prodiguer les soins ?
Si un traitement hospitalier était nécessaire, combien de jours la personne interrogée a-t-elle été hospitalisée ?
10. Conséquence de l'accident (nombre de jours)

Pendant combien de jours la personne a-t-elle été incapable de poursuivre une activité normale suite à l'accident ?
Si elle était en activité, de combien de jours d'arrêt de travail a-t-elle bénéficié ?
11. Causes de l'accident
Comment l'accident est-il survenu ?
D'après la personne interrogée, quelles sont les circonstances de l'accident ?
Comment aurait-il pu être évité ?
Le lieu de l'accident présentait-il des particularités à l'origine de l'accident ? Le lieu de l'accident était-il exempt de défaut ? L'équipement était-il techniquement correct ? L'accident a-t-il impliqué une tierce personne ?
Comment la personne interrogée se sentait-elle avant l'accident ? Etait-elle par exemple fatiguée, stressée, épuisée ? Etait-elle indisposée ou souffrante ?
Etait-elle de bonne humeur ? Etait-elle calme, stressée/énervée ou pressée ? Etait-elle malade ? Avant l'accident, avait-elle pris des médicaments ou bu de l'alcool ? A quoi pensait-elle ? A-t-elle été perturbée ou dérangée d'une manière ou d'une autre ?
Etait-elle seule ou accompagnée d'autres personnes ? Si d'autres personnes étaient présentes, qu'ont-elles dit ou fait ?
12. Nombre d'accidents domestiques ou de loisirs

Précisez le nombre d'accidents au cours de ces trois derniers mois ?

Statistiques

Questionnaire sur les accidents domestiques/de loisirs

☞ *Veuillez impérativement reprendre votre numéro d'identification envoyé par SMS :* □□□□□□□
Numéro d'identification

1. Date de l'accident :
A. Année

2000	□
2001	□
Ne sait pas	□

B. Mois
(Jan. = 01, déc. = 12) □□
Ne sait pas □

C. Heure
De 6h à 12h00 □
De 12h à 18h00 □
De 18h à 0h00 □
De 0h00 à 6h00 □
Aucune indication □

2. Lieu de l'accident ◄ *Une seule réponse possible* ►

Dans les transports en commun	□
A domicile	□
Dans un atelier ou une unité de production	□
Dans un commerce ou une société de service	□
Dans un institut ou une administration	□
Dans un complexe sportif	□
Dans un parc de loisir	□
En plein air	□
En mer, dans les eaux continentales ou au bord d'un fleuve □	
Autres (à préciser)	□

Description :

_____
_____
_____
_____

3. Déroulement de l'accident ◄ *Précisez les circonstances de l'accident* ►

_____
_____
_____
_____
_____
_____
_____
_____

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4. **Faits et gestes de la personne au moment de l'accident**
❮ _Que faisait exactement la personne au moment de l'accident ?_ _Indiquez éventuellement la raison de l'accident._ ❯

L'accident s'est déroulé pendant la pratique d'un sport : ❮ _Indiquez quel type de sport_ ❯
_____
_____
_____
_____

5. Connaissance des risques :

Activité régulière ☐
Activité exercée souvent par la personne ☐
Activité rarement exercée/inhabituelle ☐
Aucune activité apparente ☐
Ne sait pas (par ex., cas où une tierce personne aurait déclenché l'accident) ☐
Aucune indication ☐

6. Raisons de l'accident
Au cas où des éléments déterminés auraient joué un rôle dans l'accident :

Indiquez les éléments (personnes, objets, animaux, etc.) impliqués dans l'accident ou l'ayant provoqué ❮ _Voir la liste_ ❯

Elément à l'origine de l'accident :
_____
_____
_____
_____
_____
_____

Elément à l'origine de la blessure :
_____
_____
_____
_____
_____

Autres éléments (il peut s'agir d'une personne ou d'un autre élément ayant déclenché l'accident ou étant à l'origine de la blessure)
_____
_____
_____
_____
_____

7. Si un objet ou un appareil est impliqué dans l'accident : ◄ *Décrivez l'objet ou l'appareil concerné* ➤

_____

_____

_____

_____

Type d'appareil :

Electrique   ☐
Manuel   ☐

Année de fabrication :

Inconnue   ☐
Moins d'un an   ☐☐ mois
1 an ou plus   ☐☐ ans

Marque de contrôle : ◄ *Plusieurs réponses possibles* ➤
Ne sait pas   ☐
Aucune   ☐
Marque de contrôle GS   ☐
Marque de contrôle VDE ☐
Label vert (ou label écoproduits)   ☐
Marque de contrôle CE   ☐
Autres (par ex. TÜV, DIN, etc.)   ☐

Manipulation de l'appareil :

Simple   ☐
Trop détaillée   ☐
Difficile   ☐
Le cas échéant, commentaires :
_____

Instructions sur l'utilisation de l'appareil :

Ne sait pas   ☐
Non disponibles   ☐
Plus disponibles   ☐
Disponibles mais non consultées   ☐
Claires, mais incomplètes   ☐
      •   Sur les risques éventuels   ☐
      •   Sur la manipulation   ☐
Difficilement compréhensible   ☐
Peu claires et incomplètes   ☐
      •   Sur les risques éventuels   ☐
      •   Sur la manipulation   ☐
Incompréhensibles   ☐
Rien à signaler   ☐

Etat de l'appareil :

Ne présente pas de défaut   ☐
Défaut dû à l'usure   ☐
Défaut dû à des influences extérieures ☐
Défaut dû à une erreur de configuration ☐
Défaut non déterminé   ☐

Utilisation conforme à son affectation :

Oui   ☐
Non   ☐
Utilisation conforme aux instructions de sécurité :

Oui   ☐
Non   ☐

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8A Type de blessure : ◄ *Plusieurs réponses possibles*►

	1ère blessure	2ème blessure
Commotion	☐	☐
Contusion	☐	☐
Ecorchure	☐	☐
Plaies ouvertes (y compris coupures et déchirures)	☐	☐
Fracture	☐	☐
Luxation/dislocation	☐	☐
Entorse, claquage, foulure	☐	☐
Lésion nerveuse	☐	☐
Lésion des vaisseaux sanguins	☐	☐
Tendinites et blessures musculaires	☐	☐
Syndrome d'écrasement (écrasement des organes internes, comme par ex. le foie, les reins)	☐	☐
Amputation (membres arrachés, etc.)	☐	☐
Intoxication	☐	☐

	1ère blessure	2ème blessure
Brûlures (thermiques)	☐	☐
Brûlure par acide, corrosion (chimique)	☐	☐
Electrochoc, secousse électrique	☐	☐
Radiolésion (par ex., lors d'une exposition au soleil, aux rayons X, aux UV, etc.)	☐	☐
Engelures	☐	☐
Arrêt respiratoire de courte durée, phénomène d'étouffement y compris en avalant des produits alimentaires, produits (asphyxie)	☐	☐

Aucune blessure déterminée ☐

Autres types de blessure :

1._____

2._____

8B Partie du corps concernée :

	1ère blessure	2ème blessure
Tête et visage		
Cerveau (par ex. commotion cérébrale)	☐	☐
Crâne (hors visage)	☐	☐
Oreille	☐	☐
Globe oculaire, paupière	☐	☐
Nez	☐	☐
Dents	☐	☐
Joue	☐	☐
Lèvres et cavité buccale	☐	☐
Tête ◄ *autres parties* ►		
_____☐		
_____		☐
Tête (non précisé)	☐	☐
Nuque et gorge		
Nuque	☐	☐
Pharynx, partie interne	☐	☐
Vertèbres cervicales	☐	☐
Nuque, gorge ◄ *autres parties* ►		
_____☐		
_____		☐
Nuque et gorge(non précisé)☐		☐

	1ère blessure	2ème blessure
Thorax/Partie supérieure du tronc		
Poitrine (externe)	☐	☐
Côtes et sternum	☐	☐
Colonne dorsale	☐	☐
Poumons, bronches	☐	☐
Cœur	☐	☐
Partie supérieure du tronc ◄ *autres parties* ►		
_____☐		
_____		☐
Partie supérieure du tronc (non précisé)	☐	☐
Partie inférieure du tronc, fessier, vertèbres lombaires et partie inférieure du dos, bassin		
Organes internes (par ex., intestin, foie, rein)	☐	☐
Abdomen (extérieur)	☐	☐
Colonne vertébrale inférieure (lombes et sacrum) ☐		☐
Fessier, coccyx	☐	☐
Hanche, os du bassin, pubis (pelvis)	☐	☐
Organes génitaux	☐	☐
Partie inférieure du tronc, ◄ *autres parties* ►		
_____☐		
_____		☐
Partie inférieure du tronc (non précisé)	☐	☐

☞**Page suivante**

	1ère blessure	2ème blessure

Membres supérieurs

	1ère blessure	2ème blessure
Clavicule	☐	☐
Epaule, omoplate (scapula)	☐	☐
Partie supérieure du bras, humérus	☐	☐
Coude	☐	☐
Articulations (de la main)	☐	☐
Main (sauf les doigts)	☐	☐
Doigts	☐	☐

Membres supérieurs ⋖ *autres parties* ⋗
_____☐

_____☐

Membres supérieurs (non précisé)	☐	☐

Plusieurs blessures portant sur différentes parties du corps/sur tout le corps

	1ère blessure	2ème blessure
Tout le corps	☐	☐
Au moins deux parties du corps	☐	☐

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	1ère blessure	2ème blessure

Membres inférieurs

	1ère blessure	2ème blessure
Hanche	☐	☐
Cuisse	☐	☐
Genou	☐	☐
Jambe	☐	☐
Cheville	☐	☐
Pied (sauf les orteils)	☐	☐
Orteils	☐	☐

Membres inférieurs, ⋖ *autres parties* ⋗
_____☐

_____☐

Membres inférieurs (non précisé)	☐	☐

Autres parties du corps
⋖ *Description* ⋗
_____
_____

Aucune partie du corps précisée	☐

9. Premier traitement et suivi du traitement : ❮ *Une seule réponse possible* ❯
Nombre de jours

<table>
<tr><td></td><td></td><td align="right">de traitement
hospitalier</td></tr>
<tr><td>Aucun traitement médical ou traitement par le patient</td><td>☐</td><td></td></tr>
<tr><td>Transfert dans un autre centre hospitalier</td><td>☐</td><td>➜</td></tr>
<tr><td align="center">☐☐☐</td><td></td><td></td></tr>
<tr><td>Examens en centre hospitalier n'ayant pas donné lieu à une prise en charge médicale</td><td>☐</td><td></td></tr>
<tr><td>Visite unique en centre hospitalier</td><td>☐</td><td></td></tr>
<tr><td>Première prise en charge en centre hospitalier, puis transfert vers un médecin généraliste</td><td>☐</td><td></td></tr>
<tr><td>Première prise en charge et traitement ambulatoire en centre hospitalier</td><td>☐</td><td></td></tr>
<tr><td>Première prise en charge et hospitalisation</td><td>☐</td><td>➜</td></tr>
<tr><td align="center">☐☐☐</td><td></td><td></td></tr>
<tr><td>Traitement uniquement pris en charge par le médecin de famille/médecin urgentiste</td><td>☐</td><td></td></tr>
<tr><td>Première prise en charge par le médecin de famille/médecin urgentiste suivie d'un traitement ambulatoire en centre hospitalier</td><td>☐</td><td></td></tr>
<tr><td>Première prise en charge par le médecin de famille/médecin urgentiste, suivie d'une hospitalisation</td><td>☐</td><td>➜</td></tr>
<tr><td align="center">☐☐☐</td><td></td><td></td></tr>
</table>

Autres ❮ *Préciser* ❯
_____

_____

_____

Aucune indication   ☐

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10. Conséquences de l'accident (nombre de jours) :

	Préjudice		Incapacité de travail (uniquement pour les personnes actives)
Aucun jour	☐		☐
Entre 1 et 3 jours	☐		☐
Entre 4 et 7 jours	☐		☐
Entre 8 et 14 jours	☐		☐
Entre 15 et 30 jours		☐	☐
31 jours et plus	☐		☐
Accident mortel		☐	
Ne sait pas	☐		☐

11. Causes et conditions de l'accident : ❮ *4 réponses maximum possibles* ❯
Indiquez les raisons de l'accident

_____

_____

_____

_____

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_____

12. Nombre d'accidents domestiques et de loisirs ayant occasionné un traitement médical ou un préjudice plus grave au cours des 3 derniers mois :

	un accident	**plusieurs accidents**
La victime de l'accident a elle-même déjà eu	☐	☐
De plus, une autre personne du foyer a déjà eu	☐	☐

☞ *Utilisez un questionnaire par accident.*

---

13. Description de l'accident :

_____
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Statistiques sur la personne accidentée

1. Sexe :   Masculin ☐   Féminin ☐

2. Date de naissance (jour, mois, année) : ◄ *L'âge doit être calculé en fonction de la date de naissance et de la date de l'accident* ➤

                              ☐☐   ☐☐   ☐☐☐☐
                              Jour   Mois   Année

3. Nationalité :   Allemande ☐   Etrangère ☐

4. Statut (au moment de l'accident) : ◄ *Une seule réponse possible !* ➤

Enfant non scolarisé   ☐
Ecolier   ☐
Etudiant   ☐
Homme ou femme au foyer   ☐
Retraité   ☐
En activité (temps plein)   ☐
En activité (en formation) à temps partiel   ☐
En activité (contrat horaire)   ☐
Au chômage   ☐
Autres (service militaire ou
service civil obligatoire)   ☐
Aucune indication   ☐

5. Diplôme :

Ecole primaire et collège
sans apprentissage et formation professionnelle ☐   Mittlere Reife (examens de fin d'étude - Realschule) ☐
Ecole primaire et collège **avec** apprentissage
et formation professionnelle ☐   Abitur (baccalauréat) ☐
Ecole d'enseignement secondaire court   Ecole spécialisée **avec** obtention de diplôme ☐
(Realschule) ou lycée (Gymnasium) ☐   Etudes en cours ☐
                                                   Aucune indication ☐

6. Profession : (exercée au moment de l'accident)

Fonction :
_____

Sans activité ou au chômage   ☐
Aucune indication   ☐

7. Nombre de personnes faisant partie du foyer :   Numéro de décompte

1 personne ☐   ☐☐ personnes   Date de l'entretien

8. Nombre d'enfants de moins de 14 ans au sein du   Je certifie que l'entretien
                                                    s'est déroulé normalement et
foyer familial : ☐☐ enfants   avoir pris connaissance de la déclaration
                                                     sur la protection des données personnelles :
                                                     _____

9. Code postal et lieu de résidence de la personne

interrogée :   ☐☐☐☐☐   CP

                                                       Signature de la personne interrogée

Lieu de résidence

Numéro de liste   Numéro courant

Spain

The Spanish survey in 2002 : "Red de detección de accidentes domésticos y de ocio" [20]

Main principles of the study :
- this survey is part of the Injury Prevention Programme to which European Member States adhere.

- each year since 1993, it addresses households in cities or towns of over 2000 people equitably distributed throughout Spain.

- the survey includes a home and leisure injury if it necessitated recourse to a health professional, and excludes :
  - traffic injuries
  - occupational injuries
  - injuries resulting from aggressions, muggings thefts…
  - suicides and attempted suicides
  - injuries resulting from illnesses

Data collection :
- the methodology is based on the collection of data in 2 ways :
  1. interview a random sampling pool of Spanish households in order to assess the frequency of home and leisure injuries
  2. obtain a sampling pool of HLIs in order to analyse their mechanisms, products, location…

- the data collection is done 3 times a year, and concerns HLIs occurred in the 4 preceding months $\Rightarrow$ reduces memory bias

- this survey is carried out in personal face-to-face interviews at home with people of legal age
  $\Rightarrow$ in 2002, over 108 000 contacts were made (36 000 households per wave)
  $\Rightarrow$ 6 750 injured persons were recorded and therefore completed questionnaires.

Why this methodology ?
- <u>1986 – 1991</u> : Data collection from 8 Emergency Department surveys
    $\Rightarrow$ series of administrative difficulties

- <u>1993 – present</u> : Data collected by National Consumer Institute through personal interviews
    $\Rightarrow$ focus on products and product safety

The household survey allows injuries which are not admitted in emergency departments to be taken into account.

These injuries may have presented themselves to other health professionals.
    $\Rightarrow$ limits loss of information
    $\Rightarrow$ limits deformations in territorial representativity
    $\Rightarrow$ circumvents administrative problems with hospitals

<u>Themes of the questionnaire :</u>
- perception of the causes and motives leading to an injury

- context of the injury

- change in behaviour as the result of an accident

- determine if circumstances of injury are related to medication or alcohol use

Luxemburg

L'ENQUÊTE HLA à Luxembourg : Les accidents domestiques et de loisir au Grand Duché de Luxembourg en 2000 [36]

Introduction
En ce qui concerne les accidents de la circulation et du travail, il existe des statistiques détaillées, mais au Luxembourg comme dans d'autres pays, les données sont rares concernant les accidents domestiques et de loisir. Une étude européenne à donc été projetée afin de recueillir des données pour permettre une estimation de la situation.

Le système européen de surveillance des accidents domestiques et de loisir (European Home and Leisure Accident Surveillance System -EHLASS) a été mis en place en 1986 dans 10 états membres sur proposition de la Commission Européenne dans le cadre des programmes de protection de la santé des consommateurs (DG XII). En 1999 ce programme change de direction de tutelle, pour être incorporé dans les programmes de la DG V. Il s'appelle alors HLA (Home and Leisure Accident).

Au début du projet les données ont été recueillies au Luxembourg pendant 3 années auprès des professionnels de la Santé d'un seul service d'urgence situé au nord du pays. Ce service utilisait la méthodologie commune aux différents pays de l'Union Européenne cependant, les donnés recueillies ne représentait qu'une faible tranche de la population luxembourgeois avec une forte majorité de touristes.

En 1993 le système de repérage des accidents domestiques et de loisir a été modifié. Le Ministère de l'Economie a été chargé de la réalisation du projet HLA au Luxembourg. Pour améliorer la représentativité des données recueillies (tant au niveau de la population qu'au niveau des types d'accidents) et en considération des particularités d'organisation et d'infrastructure des soins médicaux, le Luxembourg, l'Espagne et l'Allemagne ont décidé de recueillir les données concernant les accidents domestiques et de loisir par enquête téléphonique auprès d'un échantillon représentatif des ménages. Pour le Luxembourg, il était important d'essayer de recenser non seulement les accidents entraînant un recours aux soins hospitaliers, mais aussi ceux traités médicalement en dehors des services d'urgences hospitalières.

Depuis 1993 l'institut ILRES (Institut luxembourgeois de recherches sociales et d'étude de marché) a été chargé de la réalisation des enquêtes téléphoniques auprès des ménages.

Nombre de ménages enquêtés

	1993	1994	1995	1996	1997	1998	1999	2000
Nombre de ménages enquêtés	3782	3857	3849	4975	4279	4209	4495	3893

En 1996, la gestion administrative du projet a été confiée au Centre de Recherche Public Henri Tudor, chargé également de la diffusion des résultats sur Internet. En 2000, le projet HLA a été transféré au Ministère de la Santé (Division de la Médecine Préventive et Sociale). L'ILRES a réalisé les enquêtes de ménages et le Centre de Recherche Publique Santé (Centre de Ressources en Epidémiologie et Systèmes d'Informations Sanitaires (CRESIS)) est chargé de l'analyse de l'enquête et de la rédaction du rapport. L'intérêt d'une évaluation longitudinale permet d'obtenir des renseignements détaillés sur cet important problème de santé publique. Un des buts principaux de cette étude est de promouvoir des campagnes et des initiatives de prévention pour les accidents les plus fréquents et les populations les plus exposées.

Méthodologie

L'enquête a été réalisée auprès d'un échantillon aléatoire de ménages, représentatif de la population luxembourgeoise. La sélection aléatoire a été effectuée via l'annuaire téléphonique, en respectant une répartition proportionnelle des numéros dans différentes régions du territoire d'enquête. A partir de ces numéros, l'ordinateur a produit de nouveau numéros aléatoires en changeant systématiquement les deux derniers chiffres du numéro.

Questionnaire

L'ILReS en collaboration avec l'IAE (Institut d'Administration des Entreprises Pole Lorrain de Gestion) de l'Université de Nancy ont développé un questionnaire pour d'interview téléphonique, en se basant sur la procédure de codifier du manuel de EHLASS produit par l'IREQ (l'institut de recherches et d'études quantitatives) pour la commission européenne en 1991.
Le questionnaire comprend :
- des questions sociodémographiques (région d'habitation, nationalité, taille du ménage, age du chef de famille,…) ;
- des question concernant les victimes d'accidents (sexe, age, profession,…)
- des questions concernant l'accident (lieu, moment de la journée, mécanisme, partie du corps lésée, …)

Procédure de l'enquête

Les interviews ont été réalisées à partir du call center Telecontact à Luxembourg-Ville par des enquêteurs parlant le luxembourgeois et français. Ceux-ci, travaillaient directement sur ordinateur selon la méthode CATI (Computer Assisted Telephone Interviewing). Le logiciel dirige les enquêteurs à travers le questionnaire en lui présentant les instructions et les questions à poser. Les réponses sont alors directement encodées par l'enquêteur moyennant son clavier.
L'enquêteur est chargé de procéder comme suit :
1) déterminer la personne du ménage la plus adéquate pour répondre aux questions,
2) poser les questions d'ordre sociodémographiques pour établir les quotas de l'échantillon des ménages,
3) poser les questions pour mettre en évidence la survenue d'accident en 2000,
4) proposer éventuellement de reprendre un rendez-vous téléphonique si la personne interrogée ne se souvient pas des avènements produits durant l'année écoulée,
5) chaque accident cité et retenu selon les critères EHLASS reçoit un label (max. 4 accidents) et est décrit de façon détaillée.

Les accidents retenus pour l'enquête dépendent des critères suivants :

- nécessitant le recours à une aide médicale (qu'elle soit hospitalière ou non)
- ni de la circulation ni du travail
- ni agression, ni suicide

A partir de cette enquête, on peut estimer qu'il y a eu au Luxembourg en <u>1999 au moins 26 000 accidents</u> domestiques et de loisir. Au cours de la même année, le nombre des accidents de la circulation étaient de 1565 et ceux du travail (et de trajet) de 26 078 (sources Statec). L'enquête téléphonique « HLA 2000 » a pris en compte 3893 ménages soit 11 384 personnes dont 868 ont été victimes d'un accident domestique ou de loisir. Cela représente 7.6% de la population du pays.

<u>Considération méthodologiques</u>

1 - Malgré l'intérêt des enquêtes téléphoniques pour ce type d'estimation des accidents domestiques et de loisir, la représentativité de toutes les tranches de la population à risques n'est pas nécessairement vérifiée (par exemple : difficulté de recensement des personnes âgées vivant seules ou dans une maison de soins, hospitalisées ou décédées à la suite d'un accident domestique).

2 - Le choix du critère d'accidents « *nécessitant le recours à une aide médicale (qu'elle soit hospitalière ou non)* » engendre un biais. Le problème majeur de cette définition vient du fait que le recours à une aide médicale est un besoin ressenti qui dépend souvent du jugement d'une personne. Le recours à cette aide peut donc, pour une même gravité d'accident varier dans le temps pour une même personne, varier d'une personne à l'autre entraînant par là, des biais de sélection.

3 - D'autre part, il reste un éventuel problème de sous ou sur déclaration d'accidents : limite entre accidents du travail et accidents domestiques (cas des travailleurs non déclarés) ou entre accidents de la circulation et accidents de loisir (problème de la définition du lieu de l'accident de la circulation) etc.

Dues à ces différents biais qu'induit la méthodologie d'une enquête par téléphone, il serait souhaitable pour les études à venir d'adopter une méthodologie plus adéquate, tenant compte des différents biais énumères ci-dessus.

Comparison of variables

	Spain	Germany	Luxemburg
Country of collection	X	X	X
Identifier			
Intent/Type of injury	X	X	X
Injury$_2$			
Age injured person	X	X	X
Sex injured person	X	X	X
Activity	X	X	X
Date of injury	X	X	
Time of injury	X		
Date of attendance			
Time of attendance			
Place of occurrence	X	X	X
Nature of injury	X	X	X
Body part injured	X	X	X
Mechanism	X	X	X
Sports	X	X	X
Follow-up/ Treatment/ disposition	X	X	X
Length of stay	X		X
Discharge status	X		
Severity / death	X	X	X (death)
Nationality		X	X
Country of residence	X	X	X
Place of residence	X	X	X
Employment of injured / legal responsible	X	X	
Profession of injured / legal responsible		X	
External cause of injury		X	
Alcohol use	X		
Other psycho. subst. use	X		
Vehicle involvement			
Mode of transport		X	
Prod. involved in the acc.	X		
Prod causing the injury	X		
Other product			
Narrative (circumstances)	?		?
Narrative (products)			
Codification	V2000	V96 ?	V86

3 – Other cross sectional surveys

De nombreuses enquêtes transversales sont réalisées, dans tous les domaines, dont certaines en santé fournissent déjà des informations sur les accidents. On trouvera ci-après quelques exemples, surtout en France, avec quelques détails sur leurs méthodes et leurs questionnaires.

Enquête Santé et Protection Sociale (Irdes, France)

L'enquête ESPS est l'exemple typique d'une enquête transversale dans le domaine de la santé. Mise en place initialement en 1988, réalisée tous les deux ans sur un échantillon représentatif de la quasi-totalité des assurés sociaux en France, elle fournit des résultats de toute nature sur l'état de santé et la consommation de soins, y compris sur les accidents de la vie courante depuis 2000. Elle permet de répondre à des questions d'actualité intéressant les différents intervenants du domaine de la santé. Cette enquête est aussi intéressante de par les difficultés méthodologiques rencontrées dans sa mise en œuvre : problèmes liés aux populations non incluses ou non joignables, nécessité de procéder à des redressements sur les répondants, prise en compte des non réponses lors d'entretiens téléphoniques, formulation de questions claires pour obtenir des réponses fidèles et homogènes, influence des biais de mémorisation ou de sélection, à prendre en compte dans l'analyse des données, etc.

Les principaux thèmes abordés et les informations recueillies dans l'Enquête SPS concernent :
- les caractéristiques sociodémographiques
- la couverture sociale
- les questions d'opinions et de comportements
- l'état de santé : morbidité déclarée, incapacités, état de santé perçu, etc.
- la consommation de soins

L'ESPS comporte un questionnaire principal qui permet de relever les informations générales (âge, sexe, catégorie socioprofessionnelle,..) sur les enquêtés et leurs ménages [8-10]. L'enquête comporte d'autres questionnaires, parmi lesquels le questionnaire santé qui permet de repérer les affections présentées par un individu à un moment donné. On y trouve depuis 1998 une partie sur les accidents de la vie courante, composée de deux questions principales. La première permet de repérer les personnes victimes d'au moins un accident de la vie courante (avec un recours à un professionnel de santé) au cours des trois mois précédant l'enquête. La suivante décrit le dernier des accidents (si la personne en déclare plusieurs) sous forme de plusieurs sous questions, relatives : au type d'accident, à la blessure qu'il a provoquée, au type de recours aux soins utilisé, à la limitation d'activités entraînée.

L'échantillon

Le champ de l'enquête est celui des ménages ordinaires résidant en France métropolitaine dont un membre au moins est assuré à l'un des trois principaux régimes de Sécurité social. Les ménages collectifs (en maison de retraite, en communauté religieuse, en prison, etc.) sont donc exclus. L'inclusion dans l'enquête se fait par la sélection d'un « assuré principal » à partir d'échantillons constitués par les trois caisses de Sécurité sociale. Si cet assuré principal a plus de 15 ans et est présent dans le ménage, on enquête toutes les personnes vivant dans son foyer. Ces trois

échantillons sont représentatifs d'environ 95 % des personnes résidant en France métropolitaine. Ils ont été construits pour être représentatifs des assurés (et de leur ayants droit). Pour la réalisation de l'ESPS une année n, les enquêteurs contactent la moitié des assurés (assurés principaux) de l'échantillon de ménages. L'autre moitié est contactée au cours de l'enquête réalisée l'année n+2. C'est ainsi qu'en 2002, la seconde moitié de l'échantillon tiré en 2000 a été utilisée. Les critères d'exclusion sont : vivre dans un ménage collectif (maison de retraite, prison) ; ne pas disposer d'une résidence fixe ; être domicilié hors France métropolitaine ou à l'étranger ; faire partie d'un ménage dont l'assuré principal est décédé.

<u>Modalités de recueil, déroulement de l'enquête</u>

Toutes les informations relatives à la santé sont recueillies par des questionnaires auto-administrés, c'est à dire remplis par la personne concernée. Chaque membre du ménage doit remplir un questionnaire santé. Si ce n'est pas possible (ex : enfants), le questionnaire est rempli par un adulte du ménage. Ce questionnaire permet de repérer les affections déclarées par les individus. Lorsque la personne a été hospitalisée au cours des trois mois précédant l'enquête, elle remplit un questionnaire hospitalisation (pour chaque hospitalisation).

L'enquête sur le terrain est sous-traitée à une société de sondage. Elle est effectuée en 2 vagues : une au printemps, l'autre en automne. La répartition des individus dans les 2 vagues est aléatoire L'enquête associe l'interview standardisée directe (par téléphone ou en face en face) et l'envoi ou le dépôt de questionnaires auto administrés. C'est l'assuré principal qui est interviewé et qui répond aux questions concernant le ménage (questionnaire principal). Les différents membres du ménage remplissent eux-mêmes les questionnaires auto administrés lorsque c'est possible.

Les interviews sont effectuées au téléphone (CATI) pour les assurés dont le numéro de téléphone a pu être trouvé, et face à face pour les autres. L'enquête nécessite quatre contacts téléphoniques dans le premier cas et deux visites à un mois d'intervalle dans le second. Elle se déroule en deux vagues successives, une au printemps (entre mars et juin), l'autre en automne (entre octobre et décembre), afin de tenir compte de la saisonnalité de certaines pathologies. Depuis 2002, les ménages dont l'assuré principal est âgé de 70 ans et plus sont enquêtés en face-à-face, ce qui augmente la participation à l'enquête. L'enquête réalisée n 2002 a fourni les effectifs suivant

19 418 adresses d'assurés principaux
(extraits des échantillons permanents des 3 Caisses)

13 % inexploitables
(doublons, assurés décédés, ménages hors champs, adresses incomplètes,..)

16 848 adresses exploitées

33 % non joignables
(déménagement, absence de réponse,..)

11 248 adresses contactées

35 % refus ou impossibilités

7 338 ménages acceptent de participer
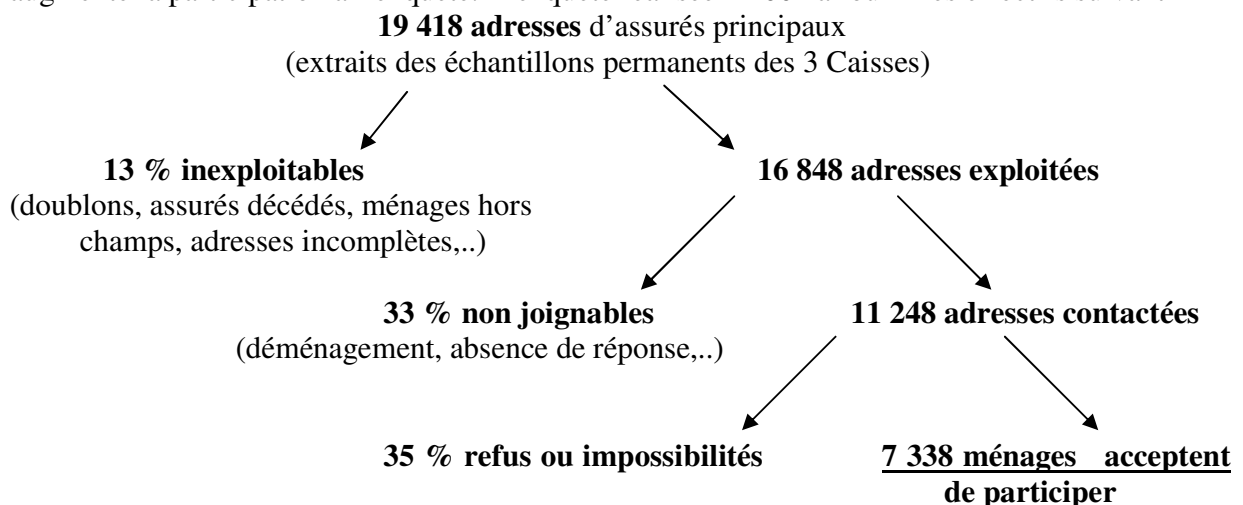
Seulement 38 % (7 338/19 418) des assurés tirés au sort ont accepté de participer à l'enquête. et ont donc au moins rempli le questionnaire principal. Les 7 338 ménages représentaient 20 830 personnes. Un redressement post enquête a été effectué sur l'âge, l'activité, la taille du ménage, la taille d'unité urbaine. Le calcul des pondérations a été fait sur les 7 338 ménages, tous les individus d'un même ménage ont eu la pondération du chef du ménage.

20 830 personnes acceptent de participer

PONDÉRATION

17 641 personnes ont rempli

le questionnaire principal

32 % ont un questionnaire

santé inexploitable

12 044 ont un questionnaire

santé exploitable

12 037 ont un questionnaire santé

exploitable et participent à toute l'enquête

3,5 % ne répondent pas

11 613 répondent aux

questions sur les AcVC
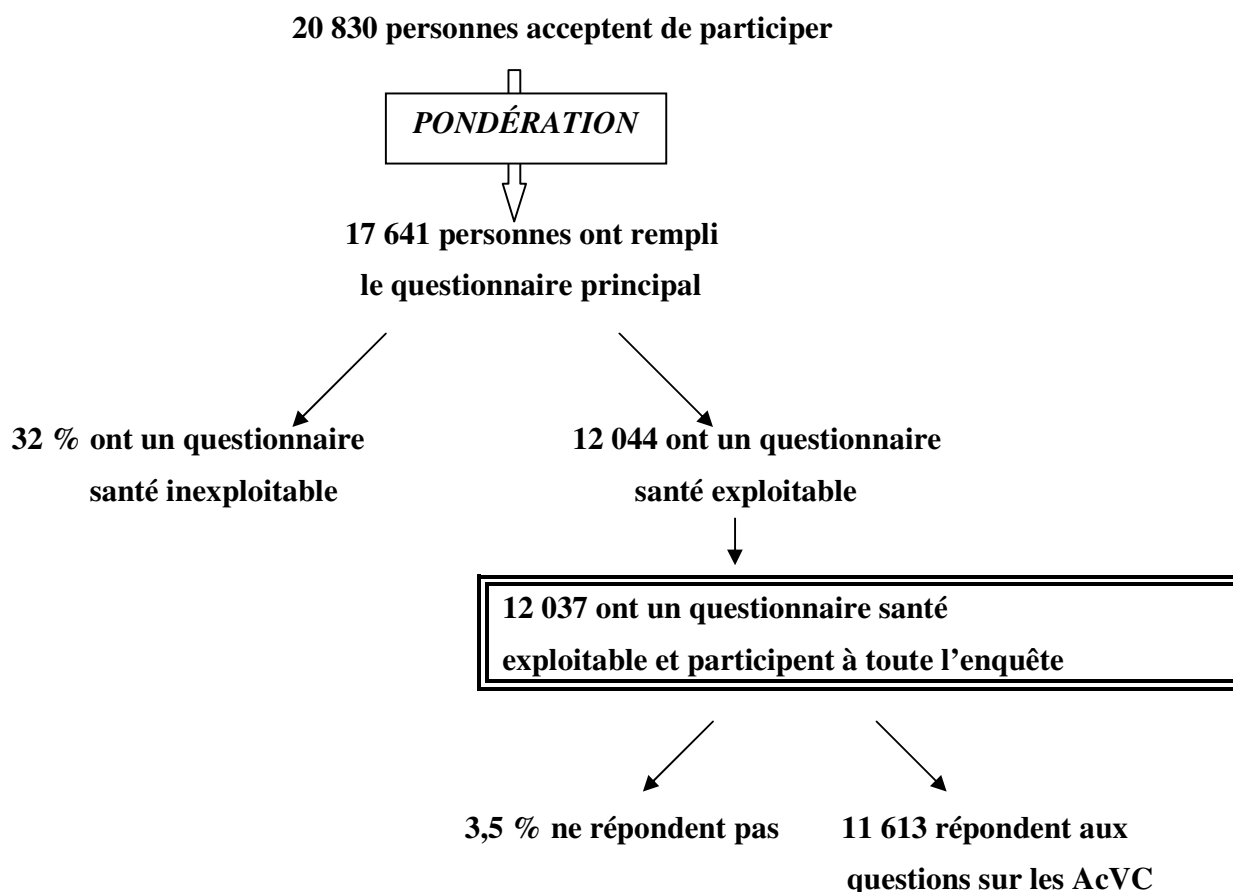
L'effectif redressé correspondant aux 20 830 personnes qui ont accepté de répondre à l'enquête est de 17 641 personnes. Parmi ces enquêtés, 12 037 personnes (68 %) ont un questionnaire santé exploitable, un âge connu et ont participé à toute l'enquête, dont 11 613 (92,6 %) ont répondu aux questions sur les AcVC dans le questionnaire santé. Ce sont enfin 613 personnes qui ont déclaré avoir eu au moins un accident de la vie courante dans les trois mois précédant l'enquête.

Les questions concernant les accidents de la vie courante :

– Au cours des 3 derniers mois, avez-vous été victime d'un ou plusieurs accidents de la vie courante ayant entraîné le recours à un professionnel de santé ? (tel qu'un médecin, un pharmacien, une infirmière, un kinésithérapeute…).
Les accidents de la vie courante ne comprennent pas les accidents de la circulation, ni ceux du travail, ni les agressions.

<div align="center">oui   non</div>

– Si oui :
Combien avez-vous eu d'accidents de la vie courante au cours de ces 3 derniers mois ?
………..
Le dernier accident a eu lieu ?   au domicile   à l'école
au cours d'une activité sportive
sur un lieu de loisirs
autre, précisez : …………………………………
Décrivez la blessure due au dernier accident : (brûlure, coupure, fracture…)
…………………………………………………………………………………….

Où était située cette blessure ? (tête, main, bras, cuisse…) ………………………………………
A quels soins avez-vous eu recours pour ce dernier accident ?
      soins de médecins : …………………………………   oui   non
      soins infirmiers ou de kinésithérapie…………………..   oui   non
      achats en pharmacie…………………………………   oui   non
      passage aux urgences d'un hôpital……………………   oui   non
      hospitalisation………………………………………   oui   non
      autres, précisez : ……………………………………………………….
Au cours des 48 heures qui ont suivi ce dernier accident, avez-vous été limité dans les activités que vous faites habituellement ? ……….. oui   non

Limites de l'enquête :
Les données recueillies dans ESPS sont déclaratives, elles peuvent donc manquer de précision, être affectées de biais de mémorisation, par exemple des omissions « volontaires » sur des sujets très personnels, des omissions involontaires lorsque des faits sont perçus comme n'étant pas importants, des imprécisions ou déformations (de certaines maladies…). Un effet liste conduit à une sous-déclaration spontanée des affections non proposées dans la liste initiale des maladies. La méthode de recueil en plusieurs étapes permet souvent de faire préciser l'information en demandant des renseignements complémentaires lors d'un contact ultérieur, et ainsi de corriger en partie les omissions involontaires.
Les individus les plus malades sont sous-représentés lorsqu'ils sont en institution ou en hospitalisation longue durée (donc hors champ de l'enquête). Les individus les plus malades, qui sont les plus grands consommateurs de soins, sont sous-représentés. En effet, d'une part, le champ de l'enquête ne comprend pas les individus en hospitalisation de longue durée ou en institution ; d'autre part, parmi les personnes incluses dans ce champ, les plus malades ou les plus âgées refusent plus souvent de participer que les autres.

La courte périodicité de l'ESPS en fait un outil d'aide à la décision, car on peut intégrer rapidement des thématiques qui nécessitent une exploration avant une prise de décision politique ou institutionnelle ou au contraire une évaluation après une prise de décision.

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Enquête Baromètre Santé (Inpes, France)

L'institut national de prévention et d'éducation pour la santé est une agence sanitaire dont un des rôles majeurs est d'organiser les campagnes d'information et de prévention en France dans le domaine de la santé. Cet Institut a développé depuis 1992 une enquête descriptive dénommée « Baromètre santé », dont l'objectif est d'observer les comportements, attitudes, opinions et connaissances des français en matière de santé, réalisée en vue de développer des programmes de prévention. L'intérêt de cette enquête pour le présent projet est double. D'une part elle fournit certains résultats dans le domaine des accidents de la vie courante, d'autre part la méthode employée, les variables et la formulation des questions peuvent aider à la mise en place d'une enquête type au niveau européen.

Présentation du Baromètre santé

L'objectif premier de la série d'enquêtes Baromètre santé est de concevoir et d'alimenter régulièrement une base de données sur les connaissances, les attitudes, les comportements et les opinions des Français en matière de santé. De nombreux sujets sont concernés : la prévention en général, mais aussi la consommation d'alcool, de tabac et de drogues illicites, les accidents de la vie courante, les vaccinations, l'usage de médicaments, le cancer, le sport, la nutrition, etc. Ces enquêtes sont répétées tous les deux ans entre 1992 et 1999, ce qui permet de suivre les évolutions des opinions, des comportements, et de certains indicateurs de santé. Elles permettent également de mieux définir les objectifs des programmes nationaux de prévention, d'orienter des études spécifiques quantitatives ou qualitatives, et d'engager, en matière de prévention et d'éducation pour la santé, des actions de terrain plus ciblées sur des types de populations ou dans certaines régions.

Choix de la méthode du recueil des données [11]

Le Baromètre santé est une enquête périodique de type déclaratif, utilisant la technique du sondage aléatoire par téléphone, assisté du système CATI (computer assisted telephone interview). La constitution de l'échantillon s'opère à deux niveaux de probabilité :
    1 - tirage au sort des ménages à partir de l'annuaire téléphonique
    2 - tirage au sort d'un individu dans chaque ménage parmi l'ensemble des sujets éligibles.

L'enquête est réalisée uniquement si les interviewés comprennent et parlent le français, et s'ils décrochent le téléphone dans leur résidence principale. Celle-ci se situe impérativement en France métropolitaine.

Les arguments en faveur de la méthode du téléphone :
- qualité de la base de sondage relativement exhaustive et régulièrement actualisée
- taux de participation relativement correct surtout si cette collaboration est motivée par l'envoi d'une lettre annonce
- gestion automatisée des interviews (CATI)
- l'absence physique de l'enquêteur limite l'influence au niveau des réponses ; surveillance de l'administration et de la compréhension du questionnaire
- possibilité d'interroger les personnes en difficulté avec l'écriture ou la lecture.

Les arguments en défaveur de la méthode du téléphone :
- temps de réflexion plus court pour répondre aux questions et dons possibilité d'oubli ou d'erreur dans certains domaines (biais de mémorisation)
- isolement de l'interviewé pour répondre aux questions pas toujours possible
- risque de biais de déclaration lorsque l'interviewé est peu enclin à la verbalisation à propos de sujets sensibles ou intimes ;

Dans la réalisation du Baromètre santé 2000, adultes et jeunes ont été interrogés dans la même enquête, ce qui a permis d'avoir un continuum d'observation des comportements de santé selon l'âge des individus (de 12 à 75 ans). La taille de l'échantillon a été augmentée en 2000, passant à 13 685 individus interrogés. La précision des estimations s'en trouve améliorée, et il devient alors plus réalisable de détecter des évolutions d'opinions ou de comportements. Par ailleurs, cinq suréchantillons régionaux ont été constitués, pour fournir des résultats régionaux..

Enfin, les abonnés sur liste rouge (à partir de l'annuaire inversé) ont été inclus dans la base de sondage, permettant ainsi un gain en terme de couverture de l'échantillon.

Le questionnaire du Baromètre santé

Le questionnaire du Baromètre santé s'inspire en partie des problématiques des campagnes d'information et de prévention réalisées par les organismes partenaires, ainsi que de certains travaux internationaux (OMS). La structure du questionnaire se compose de trois types de questions :
- des questions permanentes qui sont répétées à chaque enquête (noyau dur)
- des questions semi-permanentes
- des questions circonstancielles qui sont fonction des intérêts ponctuels ou conjoncturels de l'Inpes et de ses partenaires.

Les grands thèmes abordés concernent la perception de la santé, la qualité de vie, la vaccination, la consommation de tabac et d'alcool, la sexualité, la violence, la consommation de soins et de médicaments, les accidents.

Les questions concernant les accidents de la vie courante [12]
- Au cours des 12 derniers mois, combien d'accident avez-vous eu ayant entraîné une consultation chez un médecin ou dans un hôpital ?
- Parmi ces accidents au cours des 12 derniers mois, était-ce :
  • un accident de vélo
  • un accident de moto, mobylette, scooter
  • un accident de roller/patins à roulettes
  • un accident de skate
  • un accident de voiture
  • un accident de travail ou d'atelier
  • un accident de sport ou de loisirs autre que vélo, roller et skate
  • un accident domestique (à la maison ou autour)
  • un accident à l'école, au lycée, à l'université en dehors du sport
  • autres (bagarres, chutes, à préciser)

- NSP (ne sait pas)
- autre accident

Si accident de vélo :
- L'accident de vélo que vous avez eu au cours des 12 derniers mois, était-ce :
  - avec un VTT
  - avec un BMX
  - avec un autre vélo
  - NSP

Si accident de voiture :
- Lors de l'accident de voiture que vous eu au cours des 12 derniers mois, étiez-vous :
  - conducteur
  - passager
  - NSP

Si accident de vélo, de roller, de skate ou autre type d'accident de sport ou de loisirs :
- Le type d'accident que vous avez eu au cours des 12 derniers mois, a-t-il eu lieu :
  - à l'école, au lycée, à l'université
  - dans un autre lieu
- Au cours des 12 derniers mois, combien de fois avez-vous eu [accident considéré] * [lieu considéré]
- Au cours des 12 derniers mois, avez-vous fait :
  - de la moto, mobylette, scooter
  - du vélo
  - du roller, patins à roulette, skate
- La dernière fois, en faisant de la moto, de la mobylette, du vélo…., avez-vous porté un casque ?
  - oui
  - non
  - NSP
- Au cours des 30 derniers jours, avez-vous quelque chose de risqué pour le plaisir ou par défi ?
  - non
  - oui, 1 fois
  - oui, 2 fois
  - oui, 3 fois ou plus
  - NSP
- La dernière fois, qu'est-ce que c'était ?

Résultat de la participation au Baromètre santé 2000

Devenir des ménages tirés au sort en 2000

```
                    ┌─────────────────────────┐
                    │  Ménages tirés au sort  │
                    │        46 508           │
                    └─────────────────────────┘
                          ╱           │
                    ╱ ╱ ╱             │
┌ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ┐    ┌─────────────────────────┐
  - hors cible : 12 887       │  Ménages à enquêter     │
  - non francophones : 378    │        29 119           │
  - injoignables : 4 124      └─────────────────────────┘
└ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ┘        ╱           ╲
                                ╱             ╲
      ┌──────────────────────────┐    ┌──────────────────────────┐
      │ Non interrogés (car refus │    │ Personnes interrogeables  │
      │ ou âge ou non concernés   │    │        15 086             │
      │ par l'enquête)            │    └──────────────────────────┘
      │        14 033             │          ╱           ╲
      └──────────────────────────┘         ╱             ╲
              ┌──────────────────────────┐    ┌──────────────────┐
              │ Questionnaires non réalisés│    │ Questionnaires    │
              │ (car refus ou abandon)    │    │ réalisés          │
              │        1 401              │    │    13 685         │
              └──────────────────────────┘    └──────────────────┘
```
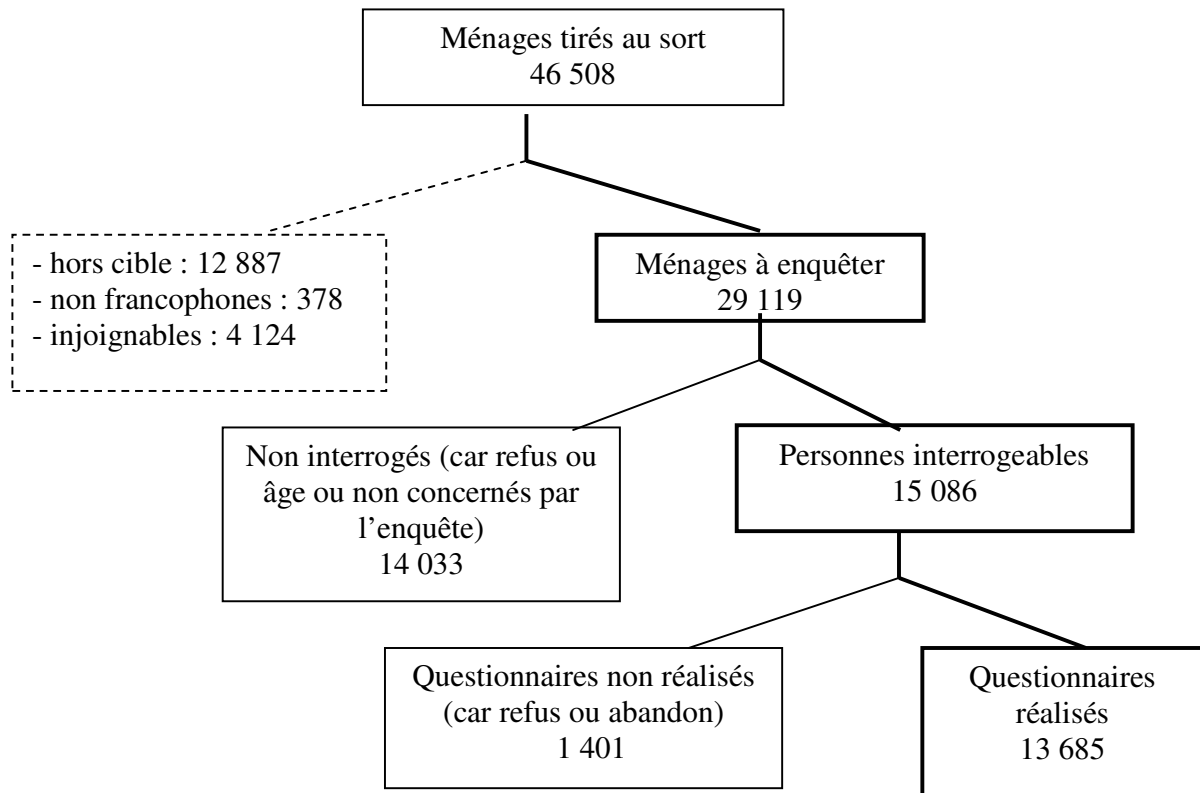
Enquête décennale santé (Insee, France)

Objectifs

L'enquête santé, ou enquête décennale santé, est réalisée sous la responsabilité de l'Institut national de la statistique et des études économiques (Insee) environ tous les dix ans. La dernière enquête a été menée en 2002-2003. Elle comportait trois objectifs principaux [13] :

1) Mesurer la santé des personnes enquêtées :
- recenser les maladies (problèmes de santé), y compris les handicaps, les incapacités et les déficiences, dont elles déclarent souffrir,
- recenser des situations susceptibles d'engendrer des problèmes de santé et/ou des consommations de soins (grossesse, stérilité etc.),
- mesurer la perception qu'ont les personnes de leur état de santé.

2) Mesurer les consommations de soins et de prévention des personnes enquêtées :
- décrire chaque type de consommation (sa nature et la 'quantité' consommée),
- lier chaque consommation aux motifs qui l'expliquent,
- estimer le montant des dépenses de santé qu'engendrent ces consommations.

3) Mesurer certains des déterminants de la santé :
- caractériser ses principaux déterminants sociodémographiques (age, sexe, taille du ménage et sa composition) et économiques (profession actuelle, profession exercée le plus longtemps, niveau d'éducation, revenus etc.),
- caractériser certains de ses déterminants individuels : habitudes alimentaires, pratique du sport, consommation de tabac, d'alcool, évènements au cours de la vie etc.

Protocole

L'enquête a consisté à interroger individuellement des adultes, indirectement des enfants issus des 15 000 ménages répondant, à partir d'un fichier de 25 000 adresses. Cinq vagues d'enquêtes ont été réalisées sur 1 an (entre septembre 2002 et octobre 2003). Chaque vague a duré deux mois et comportait 3 visites d'un enquêteur, à un mois d'intervalle, au domicile des personnes à interroger. Les questionnements CAPI étaient complétés par un carnet de soins pour le relevé des maladies et des consommations médicamenteuses entre deux visites d'enquêteur. Le fait qu'il y ait plusieurs visites permettait de relever la consommation de soins entre la première et la seconde visite (lors de la deuxième visite) et entre la première et la troisième visite (lors de la troisième visite).

De multiples questions ont ainsi été posées lors de cette enquête, concernant les conditions de vie des ménages, la protection sociale, les gênes et handicaps, les maladies, antécédents de santé, etc. Un module « accidents » a été introduit, ainsi lors de la deuxième visite on demandait si la personne avait eu un accident de la vie courante depuis la visite précédente (donc dans le mois précédant la question). Les limites sont semblables que pour l'ESPS : limites inhérentes à l'enquête transversale, absence d'utilisation de nomenclatures approuvées, difficultés à former les enquêteurs, réponses déclaratives, etc. L'enquête décennale santé fournit donc des informations sur les accidents de vie courante directement en population générale. Les données seront disponibles fin 2005.

Les questions posées étaient les suivantes :

Parmi les maladies et problèmes de santé cités pour X, y en a-t-il qui soient consécutifs à un accident ou un évènement violent (une agression, un attentat, une rixe) ?

> 1 oui
> 2 non

Si oui :

Quel est la maladie ou le problème de santé qui est lié à un accident ou événement violent ?

> S'il y a plusieurs accidents ou événements violents à décrire, l'enquêteur doit préciser à la personne que l'on parle maintenant du premier d'entre eux et que l'on parlera ensuite du ou des autre(s). Si plusieurs maladies ou problèmes de santé liés, choisir celui qui apparaît « le plus significatif » à la personne.

Cet accident ou événement violent est-il survenu ?

> 1 avant la première visite de l'enquêteur ==> aller en **A5C**
>
> 2 après ma première de l'enquêteur visite ==> aller en **A4CM**

SI L'ACCIDENT EST SURVENU AVANT LA PREMIERE VISITE

A5C **En quelle année ?**

> |__|__|__|__|

L'accident qui a eu lieu en ….   *(Année de l'accident)*

> **S'agissait-il :**
> **1** - d'un accident sur le lieu de travail (au bureau, à l'usine, à l'atelier, sur un chantier…)
> **2** - d'un accident de la circulation (y compris ceux considérés comme accidents du travail)
> **3** - d'un accident domestique (activités ménagères, bricolage, jardinage…)
> **4** - d'un accident lié à une activité sportive ou de loisirs sportifs
> **5** - d'une agression
> **6** - d'une rixe
> **7** - d'un autre type d'évènement violent

Si la personne occupe ou a occupé un emploi

L'accident qui a eu lieu en ….

> **Cet accident (cet évènement violent) a-t-il été reconnu comme un accident du travail ?**
> 1 oui
> 2 non

L'accident qui a eu lieu en ….

Cet accident (cet évènement violent) a-t-il donné (donne-t-il) lieu à des indemnisations ?

1 oui

2 non

SI L'ACCIDENT EST SURVENU APRES LA PREMIERE VISITE

A4CM **Quel mois ?**

|__|__|

Plus précisément quel jour ?

|__|__|

A2C **L'accident du ….** *(date de l'accident)*

Il s'agissait ?

1 d'un accident

2 d'une agression

3 d'une rixe

4 d'un autre type d'événement violent

Si la personne occupe un emploi

A10C **L'accident du ….**

Est-ce arrivé sur le lieu de travail de X ?

1 oui

2 non   ]

S'il s'agit d'un accident (A2c=1) ==> les questions A11c à A15c seront posées.
Sinon, on ira directement à la question A16c

A11C **Que faisait X au moment de cet accident ou traumatisme ?**

1 - Se déplaçait en voiture

2 - Se déplaçait en moto, mobylette, scooter

3 - Se déplaçait à bicyclette

4 - Se déplaçait en roller, patinette, patins à roulettes

5 - Marchait

6 - Courait

7 - Etait occupé à une activité ménagère

8 - Faisait du bricolage, des travaux de réparation

9 - Faisait du jardinage

10 - Pratiquait un sport (précisez lequel)   ==>   **A12C** De quel sport s'agissait-il ?

11 - Faisait de l'éducation physique à l'école   ==>   **A12C** De quel sport s'agissait-il ?

12 - Avait une autre activité en milieu scolaire

13 - Avait une activité de loisirs, de jeu

14 - Avait une autre activité

15 - Ne se souvient pas

A13C **Où a eu lieu cet accident ou traumatisme**

1 - Au domicile : à l'intérieur du logement

2 - Au domicile : à l'extérieur du logement (dépendances, cour, jardin…)

3 - A l'école, au lycée, dans un lieu d'enseignement

4 - Dans un lieu de sport

5 - Dans un lieu de loisir

6 - Dans une rue, sur une route, un trottoir, un parking

7 - Dans un autre lieu hors domicile (commerce, gare, musée…)

8 - Autre lieu

9 - Ne se souvient pas

A14C **Comment X a-t-il été blessé ?**
    1 - Est tombé
    2 - A reçu un choc
    3 - S'est brûlé
    4 - A eu une coupure, une piqûre, une morsure, une pénétration de corps étranger dans le corps
    5 - A subi une intoxication (par ingestion, inhalation, autre…)
    6 - A été victime d'un étouffement, d'une noyade
    7 - A été victime d'une explosion
    8 - Autres mécanismes accidentels

A15C **Quels ont été le ou les principaux éléments impliqués dans cet accident ou traumatisme ?**
    1 - Elément de l'environnement extérieur (mur, trottoir, barrière…)
    2 - Structure de la maison (mur, pilier…)
    3 - Objet de décoration, mobilier, état du revêtement (du sol, du plafond)
    4 - Ustensiles de cuisine ou de blanchissage
    5 - Liquides chauds, vapeurs
    6 - Outils de bricolage ou de jardinage
    7 - Equipements de sport et de jeux
    8 - Véhicules ou accessoires
    9 - Animaux
    10 - Plantes
    11 - Débris, déchets
    12 - Autre élément
    13 - Ne se souvient pas
    14 - Pas d'élément impliqué

A16C **Dans les 48 heures qui ont suivi cet accident ou traumatisme, X a-t-il été limité dans les activités qu'il fait habituellement ?**
1 oui, sévèrement limité
2 oui, limité
3 non, pas du tout

Si la personne occupe un emploi
L'accident du ….
    Cet accident (cet évènement violent) a-t-il été reconnu comme un accident du travail ?
    1 oui
    2 non

D'autres maladies ou problèmes de santé de X sont-ils liés à un autre accident (ou événement violent) ?
    1 oui
    2 non

Cycle triennal d'enquêtes en milieu scolaire

Chaque année en France sont réalisées des enquêtes en milieu scolaire. Organisées sur le plan national, dans l'ensemble des lycées et collèges de France, elles consistent à faire poser des questions aux enfants scolarisés, avec l'accord de leur parents, en rapport avec leur santé. L'échantillon est titrés au sort au niveau national, avec une surreprésentation des « zones d'éducation prioritaires ». L'année N, ce sont les enfants de 6 ans qui sont enquêtés, l'année N+1 les enfants de 15 ans, l'année N+2 les enfants de 10 ans, et le cycle de 3 ans recommence.
Outre les données sociodémographiques habituelles, les questions posées concernent le statut pondéral, les habitudes alimentaires et de vie, la vision, l'audition, les pathologies chroniques, les vaccinations et depuis 2001-2002 les accidents de la vie courante.

L'avantage principal de cette enquête est qu'elle porte sur une population captive, dans la mesure où tous les enfants de moins de 16 ans sont scolarisés en France. Il n'y a donc pas, en principe, de biais de sélection. Cependant cette enquête très lourde à organiser, à laquelle participe de nombreuses institutions, dépend aussi beaucoup des capacités effectives des personnels de l'éducation nationale à recueillir dans de bonnes conditions des renseignements de santé.

Le questionnaire le plus abouti sur les accidents de la vie courante a été posé en 2003-2004, aux enfants de 15 ans. Il souffre des mêmes inconvénients que ceux des enquêtes précédentes. Il présente notamment l'inconvénient que le nombre de questions qu'il est possible de poser dans le contexte d'une enquête à plusieurs thèmes, avec des enquêteurs non formés au domaine des accidents de la vie courante, est nécessairement réduit. Les nomenclatures reconnues ne peuvent être utilisées, les produits en cause dans la survenue des accidents ne sont pas codés, les informations sur les séquelles sont en général rudimentaires.

As-tu eu un accident ou t'es-tu blessé depuis la fin de la dernière année scolaire   (depuis le 1er juillet 2003) ?

non ....□   oui : ....□ → combien d'accidents |__|__|

SI OUI, et pour l'accident « le plus grave » :

Etait-ce un accident de la circulation ?

non ....□   oui :...□ → préciser *(voiture, scooter, vélo, piéton, autre)* ………………….....

Qu'est-ce que tu as eu ? ………………………………………………………….

(Orienter la réponse pour obtenir une information sur la <u>lésion</u> et la <u>partie lésée</u>)

Où cet accident s'est-il passé ? *(lieu : plusieurs réponses possibles)*

Cadre scolaire …………………………………..	non □	oui □
Terrain de sport ou installation sportive…….	non □	oui □
Lieu de loisir…………………………………..	non □	oui □
Voie publique (rue, trottoir,parking)…………	non □	oui □
Domicile ………………………………………	non □	oui □
Autre ……………………………………………	non □	oui □

Quand cet accident est-il survenu ?

Pendant les grandes vacances scolaires (du 1/7 à la rentrée) ……... non ☐   oui ☐

Pendant d'autres vacances scolaires …………………………… non ☐   oui ☐

Pendant la période scolaire ……………………………………… non ☐   oui ☐

Préciser le mois de survenue : …………………………|_|_|

Qu'est-ce que tu faisais ? *(activité)*

Sport ………………………………………… non ☐   oui ☐

→ Sport organisé …………………. non ☐   oui ☐

→ Quel sport ? …………………………………………

Jeux, autres activités de loisir ………………. non ☐   oui ☐

Déplacements ………………. non ☐   oui ☐

Autres activité, préciser : ……………………………………

Comment est-ce arrivé (chute, choc, brûlure, coupure, etc.) ? *(mécanisme, voir liste)*

……….…………………………………………………………..

Conséquences :

Dans les 48 heures qui ont suivi cet accident, as-tu été limité dans tes activités ?
non …☐   oui, limité …☐   oui, sévèrement limité …☐

As-tu eu à cette occasion une dispense d'éducation physique et sportive ?
non ….☐   oui : … → combien de semaines |_|_|

Guide de remplissage

Question initiale

Un accident peut être considéré comme « tout évènement indépendant de la volonté de l'homme, caractérisé par la libération soudaine d'une force extérieure, qui peut se manifester par une blessure corporelle ». Dans cette enquête, sont considérés les seuls accidents ayant entraîné *d'être allé* à l'hôpital ou dans une clinique, d'être allé voir un médecin, ou à une pharmacie *pour se faire soigner*. Avoir eu un accident suppose donc ici : avoir eu une *atteinte corporelle*.
On inclut donc les accidents de la circulation*, à condition qu'ils aient entraîné une atteinte corporelle* pour l'adolescent. Les accidents de la circulation peuvent faire intervenir des véhicules à moteur, des véhicules sans moteur (accidents de vélo, de roller, de trottinette, …) ou être survenu sur un piéton (en général par choc contre un véhicule).
Compte tenu de la grande fréquence des AcVC chez les enfants de cet âge dans le domaine des activités sportives, du fait que l'enquête cherche notamment à rendre compte de la survenue des AcVC dans le cadre scolaire, et des grands risques de biais de mémorisation, il a été jugé préférable de se référer pour l'interrogatoire à *la date de début des grandes vacances précédant l'année scolaire, c'est-à-dire depuis le 1er juillet*. On inclut dans la question les accidents

survenus dans les grandes vacances, ainsi que les accidents survenus dans les autres vacances scolaires (Noël, …) par exemple aux sports d'hiver.

Question sur l'accident « le plus grave »

L'accident *le plus grave* est celui qui est *considéré comme le plus grave par l'enfant*.

Lésion et *partie lésée* :
Concernant *la lésion* : fracture, coupure, entorse, atteinte musculaire, brûlure, écrasement, électrocution, pincement, noyade, autre (préciser).
Concernant *la partie lésée* : crâne, visage, cou, tronc, poignet-main-doigt, membre supérieur (autre), membre inférieur, peau.
La retranscription de la réponse peut se faire en une seule expression. Exemples : fracture du poignet, coupure de la jambe.

Lieu :
Une case au moins doit être cochée. Plusieurs cases peuvent être cochées. Exemple : milieu scolaire et terrain de sport. Lorsqu'il s'agit d'un accident de sport pratiqué *dans un lieu appartenant au « cadre scolaire »* :
- cet item *« cadre scolaire »* ne doit être coché que lorsque l'activité en question se rapporte à l'éducation physique et sportive *dans le cadre contraint des horaires scolaires*.
- dans le cas contraire, c'est-à-dire si le sport est pratiqué *hors cadre contraint des horaires scolaires*, il faut cocher le lieu *« terrain de sport »*.

Activité :
Une case doit être cochée.
En cas d'accident de sport, préciser s'il était organisé ou non, et de quel sport il s'agissait. L'éducation physique et sportive en horaires scolaires contraints est considérée comme un sport organisé.
L'activité en récréation (entre deux cours) n'est pas considérée comme du sport.
Lorsqu'une activité peut être considérée comme du sport et du loisir, cocher sport. Exemple : une randonnée en vélo est une activité de loisir (promenade). Une course ou une randonnée avec notion de performance (vitesse, endurance, émulation, …) devra être considérée comme une activité sportive.

Mécanisme :
Liste indicative des mécanismes :
   est tombé,
   a reçu un choc,
   s'est brûlé,
   a eu une coupure, une piqûre, une morsure, une pénétration de corps étranger dans le corps,
   a subi une intoxication (par ingestion, inhalation, autre…),
   a été victime d'un étouffement, d'une noyade,
   a été victime d'une explosion,
   autres mécanismes accidentels.

Enquêtes TNS-Sofres

**Eléments d'information recueillis lors d'un entretien à TNS Sofres
(février 2004)**

Dans le cadre d'une enquête représentative auprès des ménages sur le thème des accidents de la vie courante avec recours aux soins, la méthodologie de l'enquête téléphonique par quota demeure la meilleure [15]. Il s'agirait d'interroger les personnes sur les accidents de la vie courante survenue dans les 12 derniers mois (« en déclaratif spontané », puis en « déclaratif assisté »).

A partir de 15 ans, une personne peut répondre elle-même à l'enquête. Il existe des procédures relativement sophistiquées de rappel des personnes absentes et de gestion des numéros sur « liste rouge ». Les biais d'une telle enquête sont assez bien connus.

Compte tenu d'un taux d'incidence de ces accidents autour de 10 % et de la volonté de pouvoir « redresser » les résultats du recueil hospitalier par les résultats de cette enquête, en utilisant les descripteurs :
- Age (en 4 classes)
- Sexe (en 2 classes)
- Activité (en 5 classes)

soit 4 x 2 x 5 = 40 sous-groupes d'un effectif minimum de 50 victimes => 2 000 victimes

2000 x 0,10 = 20 000 individus à contacter, soit environ 6000 ménages à contacter.

La grande partie du questionnaire (environ une trentaine de questions) comprenant un noyau de questions commun au recueil hospitalier (+ des variables sociodémographiques) serait constituée de questions fermées, utilisant une nomenclature proche de la nomenclature EPAC (recueil hospitalier français). La durée du questionnaire serait d'environ 20 minutes et s'appuierait sur le système CATI.

Nos interlocuteurs de la TNS-Sofres ont fourni des documents décrivant plus précisément la méthodologie à mettre en œuvre et ses limites, ainsi qu'une estimation financière du coût de réalisation d'une telle enquête [16].

Eurobarometer surveys

1- Présentation of the Eurobarometer

The Eurobarometer surveys ("Standard Eurobarometer surveys") have been carried out every spring and every autumn since the autumn of 1973 on behalf of the General Directorate for the Press and Communication of the European Commission, Public Opinion Section. They have included Greece since the autumn of 1980 (Eurobarometer 14), Portugal and Spain since autumn 1985 (Eurobarometer 24), the former Democratic Republic of Germany since autumn 1990 (Eurobarometer 34), Austria, Finland and Sweden since spring 1995 (Eurobarometer 43). The Eurobarometer website [17] can be found at http://europa.eu.int/comm/public_opinion/index_fr.htm. A recent example of the results is provided in reference [18]. Eurobarometer 49 also provides information about the safety of foodstuffs [19].

The same series of questions is put to representative samples of the population over fifteen years of age in all Member States. The samples used for the Eurobarometer standard survey consist of 1000 people per country, except in Luxemburg (600) and the United Kingdom (1000 in Great-Britain and 300 in Northern Ireland). In order to assess the impact of integrating the five new Länder into the unified Germany and into the European Union, 2000 people have been questioned in Germany since Eurobarometer 34: 1000 within the territory of the former East Germany and 1000 within that of the former West Germany.

In each of the fifteen Member States, the surveys are carried out by national institutions working in association with the European coordination office, the European Opinion Research Group, a consortium of agencies involved in market studies and public opinion, including INRA (EUROPE) and GfK Worldwide. This network of institutions was chosen on the basis of tenders. They all belong to the "European Society for Opinion and Marketing Research" (ESOMAR) and subscribe to its standards. The figures included in this report for each of the Member States are weighted for sex, age, region and size of the locality. The figures for the European Union as a whole are weighted to allow for the adult population of each country. In some cases, the total percentages reported in a table may not add up to exactly 100%, but to some figure very close to this (such as 99% or 101%); this is because the figures have been rounded. This total can also exceed 100% when the interviewee is allowed to give several answers. The percentages shown in the graphs may deviate from those in the tables by up to 1% as a result of adding percentages that have been rounded.

The present report, compiled by the General Directorate for the Press and Communication of the European Commission, Public Opinion Section (Section Head: Thomas Christensen), is an internal working document of the European Commission.

2- Types of Eurobarometer Surveys

The European Commission (General Directorate for the Press and Communication) organises the surveys of pubic opinion, from specifically targeted groups as well as from the general public.

The EC also organises qualitative studies (group discussions, in-depth interviews) in all the Member States and, in some cases, in other countries. There are four types of surveys:

Standard Eurobarometer (EB)
The Standard Eurobarometer was created in 1973. Each study represents about 1000 face to face interviews per Member State (apart from Germany: 2000, Luxemburg: 600, United Kingdom: 1300, with 300 in Northern Ireland). These surveys are carried out between 2 and 5 times per year, and the reports are published twice a year.

Special Eurobarometer (EB)
The special Eurobarometer reports are based on in-depth studies of specific topics conducted on behalf of the European Commission or other European institutions, and included in the survey campaigns of the standard Eurobarometer.

Eurobarometer in Candidate Countries (EBCC)
The first series was carried out in October 2001 in all 13 candidate countries. The methodology is virtually identical with that of the Standard Eurobarometer. A report is published annually, in addition to the special reports. This tool has replaced the Eurobarometer of Central and Eastern Europe (EBCEE).

Eurobarometer Flash (EB)
Telephone surveys on specific topics carried out occasionally in response to requests from the services of the Commission or other European institutions. The Eurobarometer Flash provides results fairly quickly and can be used, if necessary, to survey specific populations (doctors, small companies, etc.)

Qualitative studies
These studies survey the motivations, feelings, and reactions of selected social groups with regard to a given topic or concept, by listening and analysing their way of expressing themselves in discussion groups or in undirected interviews.

The results resulting from *ad hoc* topical surveys are the property of the person commissioning them, but any embargo cannot last for more than two years. The data from these surveys provide the Commission with working tools.

Apparent drawbacks
⇨ The sample for the standard Eurobarometer seems only to take into account people of 15 years or over
⇨ The size of the samples from each State (about 1000 people), is representative of the population, but does not produce a significant number of HLAs.

Thus, in the case of France for instance, if 1000 people are interviewed, there will be no more than 100 HLAs, about 70 of which will required treatment, and involved attendance at a hospital A&E Department in 38 cases. It will not be possible to correct the findings of the national EHLASS hospital reporting system on the basis on these 38 cases!

CSI-MDS Survey

Un travail a été mené, dans le cadre du Programme de prévention des blessures, par le Consumer Safety Institute (CSI), qui a mené à la publication en août 2001 d'un rapport en deux parties : « Development of Minimum Data Sets of Injuries : background report [25] et « Data Dictionary for Minimum Data Sets on Injuries [26].

Un résumé de présentation de ce travail est reproduit ci-dessous. Le tableau des variables (« necessary data elements per MDS-I », tableau 2 ci-dessous) correspondant à cette approche a été également reproduit dans l'annexe V.

Minimum Data Sets on Injuries (MDS-Is)

Introduction
Member States of the European Union, applicant countries, communities and other parties relevant to injury prevention are interested in injury information in different health care settings (e.g. ED attendances, hospital admissions, general practitioner attendances). An additional instrument for monitoring injuries in settings that have limited resources (time, money and/or information) and/or who start recording injuries would be a valuable development in the field of injury research. To prevent parties from having to re-invent the wheel and thus the chance of ending up with incomparable databases, an additional instrument is needed for monitoring injuries, either at a national, regional or local level, which takes into account the variety in objectives and settings and the availability of resources, and which is compatible to the most relevant existing classification systems. This was reason for developing Minimum Data Sets on injuries in the European Union (part of the European Commission Injury Prevention Programme). Minimum Data Sets on injuries or MDS-Is are lists of data elements including their permissible values.

Aim of MDS-Is
The MDS-Is are aimed at monitoring injuries in settings and/or countries with limited resources and/or which start recording injuries. But they are also suitable as a reporting format for comparing injury data from well-resourced EU Member States and/or settings.

Methods
The focus of the MDS-Is Europe is limited to the medically treated injuries: from very severe injuries leading to death or hospitalisation to less severe injuries treated at Emergency Departments and other health care settings, e.g. general practitioners. The MDS-Is are based on the following existing classifications: International Classification of External Causes of Injuries (ICECI: www.iceci.org), the International Classification of Diseases and Related Health Problems (ICD, tenth revision: www.who.int), and the classification of the European Home and Leisure Accident Surveillance System (EHLASS) which has been input for ICECI.
The MDS-Is were created by a stepwise procedure. After an inventory of current use and experiences with MDS-Is in Member States, applicant countries and other countries worldwide, the wishes and demands concerning MDS-Is in the injury field were formulated.

Based on these two activities the project team, together with a team of European experts, the "reference group", developed several draft MDS-Is for different settings and objectives. These draft MDS-Is were reviewed in 10 EU countries and field-tested in 7 EU countries. The testing results formed the input for the development of the final MDS-Is. The testing also resulted in the formulation of an implementation plan.

Results

The reference group agreed upon four levels of objectives and four different health care settings. This led theoretically to sixteen MDS-Is. The wish for as few MDS-Is as possible applicable in as many settings as possible, combined with the possibility of data collection in the specific health care settings led to the decision to develop only five MDS-Is. Table 1 shows the objectives, settings and MDS-Is.

Table 1 Health-care settings combined with objectives: 5 final MDS-Is

Objectives	Settings			
	Fatalities	Other health care attendances	Hospital admissions	Emergency Department attendances
1 Monitor the total number of injured persons in the specified setting	MDS-I-1			
2 Monitor the total number of injured persons by intention	MDS-I-2			
3 Monitor the total number of injured persons by major accident type, major type of violence and major type of intentional self-harm	MDS-I-3			
4 Monitor the total number of injured persons by specific categories	MDS-I-4		MSD-I-5	

To date the project resulted in two reports (both can be downloaded from the internet: www.iceci.org):
- A background report with information about how the MDS-Is were developed and tested.
- A Data Dictionary with lists of compulsory data elements and permissible values for four objectives and four health care settings.

The Data Dictionary presents all the data elements of the MDS-Is. Per data element a description is given of its definition, the arguments and discussion leading up to certain decisions, the guidelines for correctly using the data element and its permissible values. Most data elements have one simple list of permissible values (coding level 1). For some data elements however, we developed hierarchically structured lists of permissible values, with up to two levels of coding. Table 2 presents an overview of the necessary data elements per MDS-I, setting and objective.

The MDS-Is are not developed to replace existing injury monitoring systems. They represent a minimal necessary dataset for monitoring injuries in yet a meaningful way, while securing comparability of data with international classifications like ICECI and the possibility for more detailed monitoring systems like EHLASS.

Implementation of the MDS-Is

An implementation project has recently started, in which the current surveillance systems including injury data will be inventoried, including wishes and possibilities of implementing the MDS-Is. Tools will be developed for implementing the MDS-Is. The actual implementation

of the MDS-Is will be actively promoted, based on a promotion and communication plan and a selection of potentially interested countries/settings/target groups.

The final products of this project are:

- an overview of the possibilities for implementing MDS-Is per member state;
- a starters kit for each MDS-I; and
- a communication and promotion plan for implementing MDS-is in the EU.

Table 2 Necessary data elements per MDS-I

Data elements	All settings Objective 1 MDS-I-1	All settings Objective 2 MDS-I-2	All settings Objective 3 MDS-I-3	Fatalities / other health care attendances Objective 4 MDS-I-4	Hospital admissions / ED attendances Objective 4 MDS-I-5
General information					
Date	X	X	X	X	X
Injury[1]	X	X	X	X	X
Personal data					
Age injured person	X	X	X	X	X
Sex injured person	X	X	X	X	X
Country of residence	X	X	X	X	X
Injury event information					
Intent		X	X	X	X
Place			X	X	X
Activity			X	X	X
Vehicle involvement			X	X	X
Mechanism				X	X
Sports				X	X
Mode of transport injured person				X	X
Counterpart				X	X
Injury information					
Nature of injury	X	X	X	X	X
Body part injured	X	X	X	X	X
Follow-up					X
Other					
Narrative				x	x

[1] If no, the remaning data elements are no longer relevant

The aim of the implementation project is to co-ordinate the implementation and promotion of MDS-Is in settings which monitor injuries throughout the European Union and its applicant countries. The project aims at three levels of implementation of MDS-Is:

- As a reporting format: enabling the comparison and exchange of data between settings equipped with detailed injury monitoring systems. The main target groups will be injuries resulting in death, hospital admission or Emergency Department attendances.
- As a tool for improving the informative value of existing injury monitoring systems. The main target groups will be injuries resulting in death and those resulting in hospital admissions.
- As a registration system: providing settings with limited resources or with no experience in injury monitoring with a tool for collecting injury data. The main target group will be injuries resulting in Emergency Department attendance and other, small-scale health care attendance.

Appendix IV

The new coding proposed for the ISS system

Dans le cadre d'un projet IPP 2002, le Consumer Safety Institute (NL) a élaboré un manuel de codage dont le titre est « ISS coding manual - Developping a coding manual for an all-injury surveillance system at emergency departments ».

Ce manuel de codage est fondé sur des éléments issus de 3 sources :

```
┌─────────────────────────────────────────────────────────────────┐
│           ┌───────────────────────────────────────┐             │
│           │     Nouveau codage ISS (projet CSI)    │             │
│           └───────────────────────────────────────┘             │
│                                                                   │
│   ┌──────────────┐    ┌──────────────┐    ┌──────────────┐      │
│   │    ICECI     │    │   HLA V2000   │    │    MDS-Is    │      │
│   │ International │    │ Home and Leisure│   │ Minimum Data │      │
│   │Classification of│  │Accidents coding│   │Sets on Injuries│    │
│   │External Causes of│ │   manual     │    │    (CSI)     │      │
│   │ Injuries (WHO)│    │ (EU-Network) │    │              │      │
│   └──────────────┘    └──────────────┘    └──────────────┘      │
└─────────────────────────────────────────────────────────────────┘
```
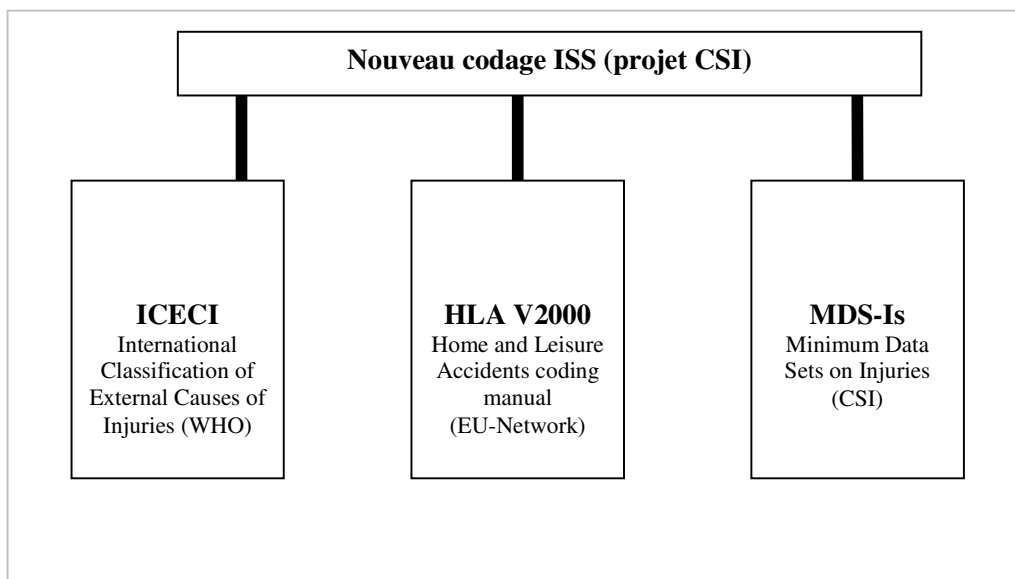
Ce manuel de codage inclut des variables du système de codage ICECI et d'autres éléments des codages HLA V2000 et MDS-Is:
- 1 variable provient du seul codage ICECI
- 10 variables ne font pas partie du codage ICECI mais proviennent du seul codage HLA V2000
- 5 variables font partie à la fois du codage ICECI et HLA V2000
- 2 variables font partie à la fois du codage MDS-Is et HLA V2000

HLA V2000:
     Country code, Hospital number, Case number, Age of the patient, Sex of patient,
     Date of birth, Date of injury, Time of injury, Date of discharge, Treatment and follow-up
ICECI: Intent
HLA V2000 and ICECI 1.1a:
     Place of occurrence, Mechanism of injury, Activity when injured, Type of sports/exercise
     activity,
HLA V2000 and MDS-Is: Type of injury, Part of the body injured
HLA V2000 and ICECI 1.1a: Object/substance producing injury
HLA V2000: Narrative
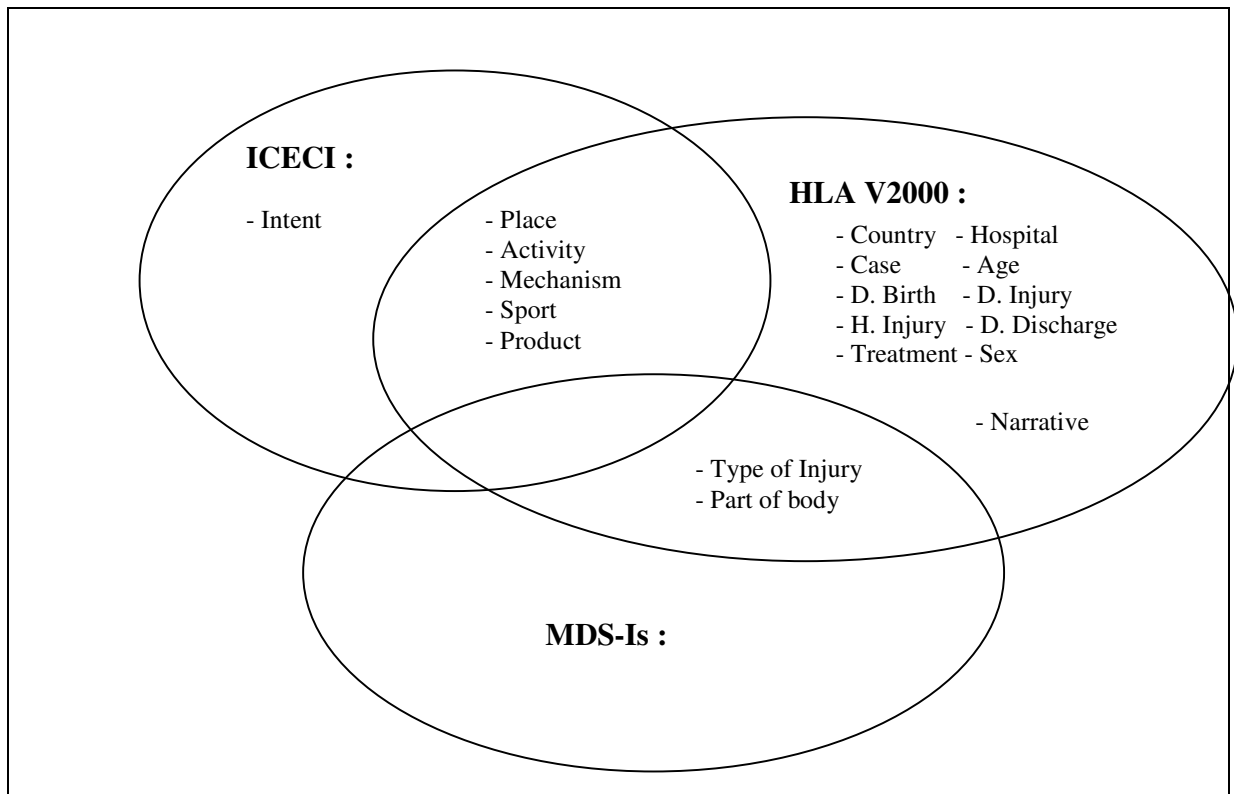
- La variable « Intent », informant sur la nature intentionnelle de la violence prend comme modalité :

- 1. Traumatisme non intentionnel
- 2. Violence auto-infligée
- 3. Agression
- 4. Autre violence
- 5. Intentionnalité non déterminée
- 8. Autre forme de violence intentionnelle
- 9. Non spécifié

Remarques :

R1. Dans le codage ISS, quand, pour une variable, un codage HLA V2000 est en concurrence avec un codage ICECI, c'est le codage ICECI qui prime.

R2. On remarquera que ce système de codage a été conçu par le CSI seul, sans collaboration extérieure. Il n'a pas fait l'objet d'une présentation officielle aux partenaires du programme IPP, ni reçu l'approbation du réseau. C'est pour le moment un projet d'une équipe.

R3. Le nouveau système de codage ISS semble présenter les trois avantages suivants :
- une extension des possibilités de codage à tous les traumatismes
- une utilisation d'une codification plus internationale (issue de l'ICECI) pour les principales variables
- un transcodage possible des données codées en HLA V2000

R4. On remarquera cependant que ce nouveau système de codage voit le jour au moment où le système de codage HLA V2000 vient tout juste de se mettre en place dans certains Etats. En ce qui concerne la base européenne de cas IDB, elle est toujours pour le moment au format antérieur (V96). La mise en fonction de ce nouveau système de codage ISS est sans doute prématurée pour les équipes qui viennent juste d'adopter le système HLA V2000. En ce qui concerne les nouveaux Etats de l'UE et voulant entrer dans le système de recueil ISS, la question se pose de leur proposer d'adopter ou non directement ce nouveau système.

➔ **Pour le projet « Enquête - Type », les questions induites par ce nouveau système de codage ISS sont les suivantes :**

Q1. Le projet de questionnaire doit-il concerner tous les types de traumatismes ? Ceci impliquerait une très forte interrogation sur les modalités spécifiques d'enquêtes concernant les violences intentionnelles, quelles soient auto-infligées ou des violences envers les enfants, les adolescents et les femmes. Se limite-t-on à l'extension aux autres traumatismes non intentionnels (circulation + travail) ?

Ces points fondamentaux de méthodologies ne sont pas évoqués dans le document du CSI. Ce sont peut-être les meilleures pratiques de classification qui ont été retenues, c'est du moins ce que laisse entendre le document, mais les meilleures pratiques de recueil ne sont pas évoquées. Comment aborder la question du recueil des faits de violence dans un questionnaire général sur les traumatismes ?

Q2. Comment et en quoi le questionnaire de la méthodologie « enquête par questionnaire » se distingue-t-il du questionnaire appliqué en cas de recueil continu dans les services d'urgence ? Ce nouveau module ISS constitue-t-il en définitive le noyau commun de variables à partir duquel on doit ou on peut construire le questionnaire enquête - type ?

Q3. Le projet de nouveau codage ISS se situe dans une perspective de succession au codage HLA V2000. Le projet enquête - type s'inscrit-il dans la même perspective d'avenir, ou faut-il

plutôt privilégier la situation présente, c'est-à-dire conserver le codage HLA V2000 comme socle des nomenclatures que l'on conseillera d'utiliser ?

Q4. La comparaison entre les caractéristique des deux projets, CSI et enquête – type, put être schématisée de la manière suivante :

Projet ISS	**Projet Enquête - type**
En vue d'un recueil hospitalier	En vue d'un recueil par enquête adossé au recueil hospitalier
Caractéristiques du recueil hospitalier	Caractéristiques de l'enquête (représentativité, etc.)
Pb de classification uniquement Affichage « recueil multi-traumatisme »	Méthodologie et classification Prise en compte des pb spécifiques du recueil des violences
Projet d'une équipe	Projet de 5 équipes
S'adosse au codage ICECI	S'adosse au codage HLA V2000
Applicable à échéance de 2-3 ans	Applicable immédiatement

Appendix V

Comparison of the variables
Used in the international systems

1. Context

- In light of the development of a harmonised survey complementary to hospital data collection, we compare below the variables used by the main information systems in the field:

- **WHO-MDS** : these are the variables of the Minimum Data Set coding system suggested by the WHO in its report "Injury Surveillance Guidelines".

- **CSI-MDS-Is** : these are the variables of the Minimum Data Set coding system suggested by the CSI in its report "Data Dictionary for Minimum Data Sets on Injuries".

- **V2000** : these are the variables of the official coding system used at the European level in the framework of the IPP. The document in use is the Coding manual V2000 for Home and Leisure Accidents (August 2002).

- **EPAC03** : these are the variables of the coding system developed by the InVS complementary to the V2000 coding.

- **Harm. Survey** : these are the variables of the coding system which we would like to include in the framework of our "Harmonized Survey" project.

We discuss below the reasons we chose these variables, the suggested nomenclatures and the methodology of the survey.

Variables of WHO-MDS
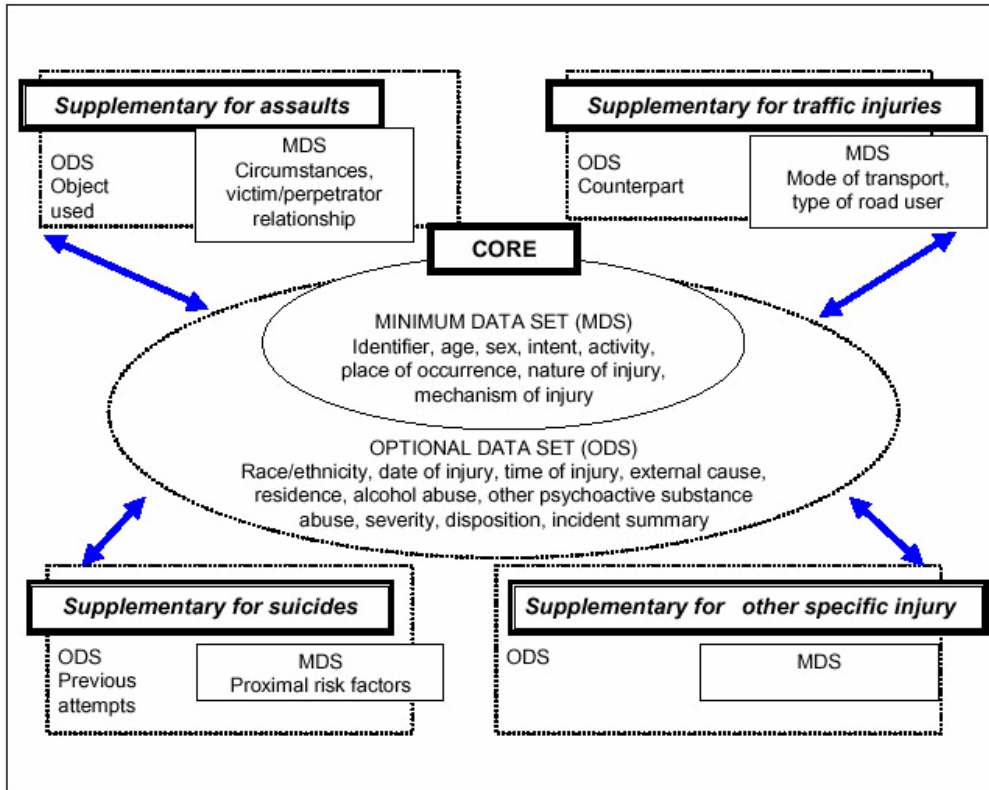
From : Injury surveillance guidelines p 26 – CDC / WHO - 2001

Variables of CSI-MDS

Necessary data elements and level of permissible values per MDS-Is

Objective 1 : Monitor the total number of injured persons in the specified setting
Objective 2 : Monitor the total number of injured persons by intention
Objective 3 : Monitor the total number of injured persons by major accident type, major type of violence and major type   of intentional self-harm.
Objective 4 : Monitor the total number of injured persons by specific categories

Data elements	All settings Objective 1 MDS-I-1	All settings Objective 2 MDS-I-2	All settings Objective 3 MDS-I-3	Fatalities / other health care attendences Objective 4 MDS-I-4	Hospital admissions / ED attendences Objective 4 MDS-I-5
General Information					
Date	Level 1	Level 1	Level 1	Level 1	Level 1
Injury[1]	Level 1	Level 1	Level 1	Level 1	Level 1
General Information					
Age inured person	Level 1	Level 1	Level 1	Level 1	Level 1
Sex injured person	Level 1	Level 1	Level 1	Level 1	Level 1
Country of residence	Level 1	Level 1	Level 1	Level 1	Level 1
Injury event information					
Intent		Level 1	Level 2	Level 2	Level 2
Place		Level 1	Level 1	Level 2	Level 2
Activity			Level 1	Level 1	Level 1
Vehicle involvement			Level 1	Level 1	Level 1
Mechanism				Level 1	Level 1
Sports				Level 1	Level 1
Mode of transport injured person				Level 1	Level 1
Counterpart				Level 1	Level 1
Injury Information					
Nature of injury	Level 1	Level 1	Level 1	Level 2	Level 2
Body part injured	Level 1	Level 1	Level 1	Level 2	Level 2
Follow-up					Level 1
Other					
Narrative				Free text	Free text

Injury[1] : If no, the remaining data elements are no longer relevant

From : Data Dictionary for Minimum Data Sets on Injuries p 14 – CSI – August 2001

Variables of ISS V2000

		No. of characters	Positions
COUNTRY CODE		2	1-2
HOSPITAL NUMBER		6	3-8
CASE NUMBER		10	9-18
SEX OF PATIENT		1	19-19
DATE OF BIRTH (YYYYMMDD)		8	20-27
DATE OF INJURY (YYYYMMDD)		8	28-35
TIME OF INJURY		2	36-37
DATE OF ATTENDANCE (YYYYMMDD)		8	38-45
TIME OF ATTENDANCE		2	46-47
DATE OF DISCHARGE (YYYYMMDD)		8	48-55
TREATMENT AND FOLLOW-UP		1	56-56
PLACE OF OCCURRENCE		2	57-58
MECHANISM OF INJURY		2	59-60
ACTIVITY		2	61-62
SPORTS		3	63-65
TYPE OF INJURY	Type 1	2	66-67
	Type 2	2	68-69
PART OF THE BODY INJURED	Part 1	2	70-71
	Part 2	2	72-73
PRODUCT INVOLVED IN THE ACCIDENT		5	74-78
PRODUCT CAUSING THE INJURY		5	79-83
OTHER PRODUCT		5	84-88
ACCIDENT DESCRIPTION		120	89-208

Bed-days are calculated as date of discharge minus date of admission. If the date of discharge is the same as date of admission the result is one bed-day.

From : Coding Manual V2000 for HLA – ISS Data base version 2002 p 23 – August 2002

Variables of EPAC03

	Nb of characters	Begin	End	Basic template
COUNTRY CODE	**2**	1	2	**X**
HOSPITAL NUMBER	**2**	3	4	**X**
CASE NUMBER	**10**	5	14	**X**
OPEN QUESTION 1	*6*	*15*	*20*	
SEX	**1**	21	21	**X**
DATE OF BIRTH (YYYYMMDD)	**8**	22	29	**X**
ZIP (POSTAL) CODE OF USUAL PLACE OF RESIDENCE	**5**	30	34	**X**
PATIENT'S EMPLOYMENT SITUATION	**1**	35	35	**X**
PATIENT'S PROFESSION	**1**	36	36	**X**
MALE LEGAL GUARDIAN EMPLOYMENT SITUATION	**1**	37	37	**X**
MALE LEGAL GUARDIAN'S PROFESSION	**1**	38	38	**X**
FEMALE LEGAL GUARDIAN EMPLOYMENT SITUATION	**1**	39	39	**X**
FEMALE LEGAL GUARDIAN'S PROFESSION	**1**	40	40	**X**
OPEN QUESTION 2	**5**	41	45	
INTENTIONAL NATURE OF THE INJURY	**1**	46	46	
TYPE OF INTENTIONAL INJURY	**1**	47	47	
TYPE OF ACCIDENT HLI	**1**	48	48	**X**
TRAFFIC	**1**	49	49	**X**
OCCUPATIONAL	**1**	50	50	
DATE OF INJURY (YYYYMMDD)	**8**	51	58	
TIME OF INJURY (HH)	**2**	59	60	
ZIP (POSTAL) CODE OF PLACE OF INJURY	**5**	61	65	
DATE OF ENTRY TO EMERGENCY DEP'T (YYYYMMDD)	**8**	66	73	**X**
TIME OF ENTRY TO EMERGENCY DEP'T (HH)	**2**	74	75	**X**
TREATMENT AND CARE IN EMERGENCY DEP'T	**1**	76	76	**X**
DATE OF HOSPITAL DISCHARGE (YYYYMMDD)	**8**	77	84	**X**
STATUS AT HOSPITAL DISCHARGE	**1**	85	85	**X**
LOCATION OF THE ACCIDENT	**2**	86	87	**X**
MECHANISM OF THE ACCIDENT	**2**	88	89	**X**
ACTIVITY AT TIME OF ACCIDENT	**2**	90	91	**X**
SPORT AT TIME OF ACCIDENT	**3**	92	94	**X**
TYPE OF LESION 1	**2**	95	96	**X**
INJURED BODY PART 1	**2**	97	98	**X**
SEVERITY 1	**1**	99	99	**X**
TYPE OF LESION 2	**2**	100	101	**X**
INJURED BODY PART 2	**2**	102	103	**X**
SEVERITY 2	**1**	104	104	**X**
TYPE OF LESION 3	**2**	105	106	
INJURED BODY PART 3	**2**	107	108	
SEVERITY 3	**1**	109	109	
OPEN QUESTION 3	*9*	*110*	*118*	
PRODUCT IMPLICATED IN THE ACCIDENT	**5**	119	123	**X**
PRODUCT HAVING CAUSED THE LESION	**5**	124	128	**X**
OTHER PRODUCT	**5**	129	133	**X**
DESCRIPTION OF THE ACCIDENT	**200**	134	333	**X**

From [5]

The different variable categories:

Through the different types of data collection, we can regroup the different variable categories:

Cat. 1 Variables for case identification:
- Country of data collection
- Case identification number

Cat. 2 Variables defining the type of injury:
- Type of injury (intentional/ non-intentional)
- Type of intentional injury
- Type of non-intentional injury

Cat. 3 Variables for summary description of the victim:
- Age
- Sex

Cat. 4 Dates and times :
- Date of birth (or age)
- Date of the accident
- Time of the accident
- Date of contact with health care facility
- Time of contact with health care facility
- Date of discharge from the health care facility (or length of stay)

Cat. 5 Variables describing the circumstances of the injury:
- Activity at the time of the accident
- Location of the accident
- Nature of the injury
- Injured body part
- Mechanism
- Sports
- Alcohol use
- Psychotropic substance use

Cat. 6 Variables of medical treatment and severity of the injury:
- Treatment or care
- Status at discharge of health care facility
- Length of stay
- Severity of injury

Cat. 7 Variables on other socio –demographic data of the victim:
- Race
- Country of residence
- Place of residence
- Profession of the victim or legal guardian
- Employment situation of the victim or legal guardian

Cat. 8 Variables describing products potentially linked to injury:
- Product implicated in the accident
- Product causing the lesion
- Other product

Cat. 9 Variable describing the accident:
- Description in the open question of the circumstances of the accident (in detail)
- Description in the open question of the product (in detail)

Comparison of variables

	WHO-MDS	CSI-MDS (1)	V2000	EPAC03 (2)	Harm. Survey
Country of collection			X	X	_X_
Identifier	X		X	X	_X_
Intent/Type of injury	X	X-2		X	_X_
Injury$_2$		X-1			
Age injured person	X	X-1	X$_1$	X$_1$	_X_
Sex injured person	X	X-1	X	X	_X_
Activity	X	X-3	X	X	_X_
Date of injury	X		X	X	
Time of injury	X		X	X	
Date of attendance		X-1	X	X	_X_
Time of attendance			X	X	
Place of occurrence	X	X-3	X	X	_X_
Nature of injury	X	X-1	X+X	X+X+X	_X+X_
Body part injured		X-1	X+X	X+X+X	_X+X_
Mechanism	X	X-4	X	X	_X_
Sports		X-4	X	X	_X_
Follow-up/ Treatment/ disposition	X	X-5	X	X	_X_
Length of stay			X	X$_4$	_X_
Discharge status				X	
Severity	X			X+X+X	_X_
Race/ethnicity	X				
Country of residence		X-1		X	
Place of residence	X			X	_X_
Employment of injured / legal responsible				X	_X_
Profession of injured / legal responsible				X	_X_
External cause of injury	X$_3$				
Alcohol use	X				
Other psycho. subst. use	X				
Vehicle involvement		X-3			
Mode of transport		X-4			
Prod. involved in the acc.			X	X	_X_
Prod causing the injury			X	X	_X_
Other product			X	X	
Narrative (circumstances)	X	X-4	X	X	_X_
Narrative (products)					_X_

(1) : X-**n** : variable appartenant au niveau **n** du CSI-MDS   X$_1$: date of birth, not directly "Age"

(2) : X+X+X : variable répétée 3 fois   **Injury**$_2$: identification of (suspected) injury cases

   X$_3$: ICD-10 Classification

   X$_4$: length of stay (in days) or date of discharge

Appendix VI
Contributions of the participants
(Extracts)

Austria

Le manuel de codage autrichien [37] reprend les définitions, variables et nomenclatures recommandées au niveau européen (système ISS). Les définitions fournies sont les suivantes :

Aufzunehmende Unfälle, Definitionen und Kriterien

Von grundlegender Bedeutung ist, daß alle Mitgliedstaaten die **gleichen Aufnahme- und Ausschlußkriterien** anwenden, die auf denselben Definitionen beruhen, damit eine optimale Vergleichbarkeit der Daten auf EU-Ebene gewährleistet ist. Bei Ihrer Aufgabe, die in Frage kommenden Unfälle auszuwählen, unterstützen wir Sie durch Definitionen, einen **"Entscheidungsbaum"** sowie eine **Liste erläuternder Beispiele** von aufzunehmenden bzw. auszuschließenden Fällen.

DEFINITIONEN
In EHFUÜS aufgenommene Unfälle lassen sich wie folgt definieren:

Alle Unfälle außer Verkehrsunfällen und Arbeitsunfällen werden als Heim- und Freizeitunfälle betrachtet und als solche im EHFUÜS-System erfaßt.

DEFINITION EINES UNFALLS
EHFUÜS hat die von der Weltgesundheitsorganisation verwendete Definition eines Unfalls angenommen:

Jedes vom menschlichen Willen unabhängige Ereignis, das durch die plötzliche Auslösung einer von außen einwirkenden Kraft gekennzeichnet ist, durch die eine körperliche Verletzung verursacht werden kann.

DEFINITION VON STRASSENVERKEHRSUNFÄLLEN
Für Straßenverkehrsunfälle verwenden wir die Definition der Wirtschaftskommission der Vereinten Nationen:.

Ein Straßenverkehrsunfall ist ein Unfall auf der Straße, an dem mindestens ein sich bewegendes Fahrzeug beteiligt ist und der eine Verletzung oder einen Eigentumsschaden verursacht hat.

DEFINITION EINES ARBEITSUNFALLS

Ein Arbeitsunfall ist ein Unfall, der sich während der Arbeitszeit im Zusammenhang mit einer entlohnten Beschäftigung oder einem selbständigen Unternehmen ereignet.

Projet européen : Harmonized Survey
Institut de Veille Sanitaire (InVS)
Département Maladies Chroniques et Traumatismes
12, rue du Val d'Osne
94415 Saint Maurice cedex
France

November 30, 2004-12-07

Partner Report on the European Union's Injury Prevention Programme 2002, the Directorate General for Health and Consumer Protection (DG SANCO) project entitled:

"A harmonized survey in addition to hospital level data collection in the frame of the new IPP/ HLA" (also known as "Harmonized-Survey")

Partner Country: Austria

Collaborators: Dr. Robert Bauer and Mathilde Sector, PT, MPH (mathilde.sector@sicherleben.at) from Institute Sicher Leben

Contents of Report:

Part 1: Austrian commentary in blue on the "Harmonized Survey" List of items
Part 2: Austrian commentary in blue on the "Harmonized Survey" Formulation of questions to be asked in the frame of a Cross sectional survey (CSS)

Project "Harmonized Survey"

List of items

1 – necessary in any Cross sectional survey (CSS)
2 – relevant in a more detailed CSS

*Suggestion: Add an **Introduction**, to state briefly the purpose of the questionnaire and the scope, as well as the target audience (proxy for all of household, direct to person only) and what info is needed (latest injury, most severe injury, recall time). Also state the preferred methodology: face-to-face or telephone.*

The country:
    1 - Country of collection

The person injured:
    1 - Age
       Sex
       Zip code of usual residence place

    2 - Nationality
       Social profile:
          Level of formation *(do you mean Level of highest education ?)*
          Occupational status *(what does status mean?? Employed, unemployed?)*
          Profession *(is this not the same as occupation ???)*

The injury:
*Suggestion: include two **filter** questions: was this injury intentional or unintentional ? was it a road-traffic, work, sport, leisure, school injury? And include definitions*

    1 - Place of occurrence
       Activity when the Injury occurred
            If sport: type of sport
       Mechanism
       Nature of injury (lesion)
       Part of body injured
       Product involved and / or cause of the injury

The severity and / or the treatment / follow-up
    1 - Type of health resource used for this injury
Suggestion: include the length of stay and number of visits variables

    2 - Clinical measure of the initial severity
       Subjective appreciation of the severity by the person injured

Narrative:
    1 - Circumstances of the injury (free text)
    2 – Specific circumstances including:
         Alcohol use
         Psychotropic use
         Intervention of other persons

Project "Harmonized Survey"

**Formulation of questions to be asked
in the frame of a Cross sectional survey (CSS)**

The person injured:
*What is your age? *(year of birth is less sensitive to ask)*
*(Are you a male or a female?)
*What is the code of your usual residence place?

*Of which nationality are you?
*What is your level of initial formation? *(do you mean highest level of education?)*
*What is your occupational status? *(what does status mean?? Employed, unemployed?)*
*What is your profession? *(is this not the same as occupation ???)*

The injury:
*Suggestion: include two **filter** questions: was this injury intentional or unintentional ? was it a road-traffic, work, sport, leisure, school injury? And include definitions*

*Were you injured during the last 3 months (90 days)?
Note: This is the best recall period but this will require a big sample size, is there the budget for it ?
    If yes, and for the ~~latest~~ most recent injury: *(or most severe ??)*
*Where were you injured?
*What was your activity when this injury occurred?
    In case of sport activity:
    which sport?
*Through which mechanism did the injury occur? *Is not understandable for a person without knowledge of injury terminology*
*What was the nature of the injury?
*Which part of the body was injured?
*Which product was implicated in the injury?
*Which product caused the lesion? *Is this not the same as nature of injury (in questionnaire above, you list both together: Nature of injury (lesion)*

The severity and / or the treatment / follow-up
*Following this injury, did you use a health resource? *Open-ended or a list*
    If yes:
*Were you treated outside of the hospital? Referred to a hospital *emergency room*? Admitted to a hospital?
*Would you say that the initial severity of this injury was: minor; moderate; serious; severe; critical; ~~maximum (is same as critical)~~ ?
*During the 48 hours after this injury, do you estimate you were limited in your daily activities? *Suggestion: After this injury, how many days do you estimate you were limited in your daily activities?*

Narrative: *(R. Bauer suggests placing this at the top, but M.Sector says to keep it at the end, once all of the shorter questions have been answered which are most important, in case patient breaks off the interview)*

*How would you describe the circumstances of the injury?
*Were the following elements present when the injury occurred?
        Alcohol use
        Psychotropic use
        Intervention of other persons
        Other

Belgium

1. Items à inclure dans CSS et comment les collecter ??

a) liste des items

Project "Harmonized Survey"

List of items
1 – necessary in any Cross sectional survey (CSS)
2 – relevant in a more detailed CSS

Préambule : le type de CSS n'est pas précisé. Je fais des commentaires en considérant qu'il s'agit d'une enquête transversale descriptive sur un échantillon représentatif de la population générale.

The country:

1 - Country of collection

Cette information n'est pas à inclure dans le CSS mais plutôt à ajouter lors de la compilation des données de l'ensemble des pays pour en faire une base de données européenne.

The person injured:

1 - Age

Ne serait-il pas plus opportun de travailler avec la date de naissance ? Si non, prévoir le fait que des trauma peuvent survenir avant l'âge de 1 an. Donc exprimé l'âge en mois, en années ?

Sex :

OK

Zip code of usual residence place

Zip code : Cela sous entend un niveau d'analyse utilisant le code postal. Ce serait intéressant mais est-ce réaliste au niveau des comparaisons européennes ?
D'un point de vue national, dès qu'une information aussi précise que le code postal est demandée, il est possible de lever l'anonymat des personnes (en effet CP + sexe + age + type de trauma = nom de la personne !) → d'où problèmes en perspective avec les lois sur la vie privée.
Usual residence place : Prendre attention au fait que pour les enfants, la résidence habituelle est parfois difficile à déterminer : 1 semaine chez le père, une semaine chez la mère,…

2 - Nationality

OK . Pour les enfants, nationalité père et mère

Social profile:
Level of formation
Occupational status
Profession

De nombreux traumatismes concernent les enfants !! Il faut donc prévoir de positionner ces enfants dans un contexte familial (nationalité, statut social) tant du père que de la mère (ou conjoint,…). Le questionnaire doit être construit de façon très explicite sur ce point car l'objectif est de mettre en relation ce statut social et la survenue de trauma ; cette caractérisation socio-économique doit donc être de très bonne qualité. Voir les nombreux travaux à ce sujet notamment le CREDES en France.

The injury:

L'enquête transversale va bien sûr considérer une période de rappel (3 mois, 6mois, 12mois ??). Durant cette période, une même personne peut avoir été victime de plusieurs accidents ! Va-t-on s'intéresser à tous ? Ne faut-il pas commencer par poser une question du type : nombre d'accidents pendant période de rappel ?? 0, 1, 2, plus de 2…Il faut ensuite décider si l'on s'intéresse au plus récent, au plus grave, à tous, à celui ou ceux qui ont nécessité une intervention d'un professionnel de la santé ??? Le choix est fait de prendre le dernier (dans document n°2) ? Est-ce le meilleur choix ??? A discuter !!

1 - Place of occurrence
   Activity when the Injury occurred

Je propose ici une question fermée avec des items proposes. Sinon problème non négligeable de codification par la suite.

If sport: type of sport

S'intéresser également au fait de savoir si le sport était pratiqué dans le cadre d'un club ou en dehors de tout encadrement.

Mechanism
Nature of injury (lesion)

Prévoir la possibilité de déclarer plusieurs lésions pour un même trauma.

Part of body injured

Prévoir la possibilité de déclarer plusieurs parties de corps blessées pour un même trauma.

Product involved and / or cause of the injury

The severity and / or the treatment / follow-up
1 - Type of health resource used for this injury

Nécessité de préciser ce que l'on entend par « health resource » ; prévoir plusieurs ressources pour un même trauma.

2 - Clinical measure of the initial severity

Mesure clinique : préciser par qui elle a été établie

Subjective appreciation of the severity by the person injured

Narrative:
1 - Circumstances of the injury (free text)

Une question ouverte sur les circonstances est intéressante mais probablement peu faisable dans le cadre d'enquête où la thématique « accident » n'est qu'une thématique parmi d'autres. Donc je me demande si cet item ne doit pas plutôt être en 2 ; quitte à affiner quelque peu les catégories proposées dans les réponses à la question sur les « mécanismes ».

2 – Specific circumstances including:
   Alcohol use
   Psychotropic use
   Intervention of other persons

b) formulation des questions

Project "Harmonized Survey"

Formulation of questions to be asked

in the frame of a Cross sectional survey (CSS)

The person injured:
*What is your age?
*(Are you a male or a female?)
*What is the code of your usual residence place?

Voir les remarques apportées au niveau des items

*Of which nationality are you?

Voir les remarques apportées au niveau des items

*What is your level of initial formation?
*What is your occupational status?
*What is your profession?

Voir les remarques apportées au niveau des items

The injury:
*Where you injured during the last 3 months (90 days)?

Période de rappel ??? 6 mois est probablement préférable. A discuter !

If yes, and for the latest injury:

*Where were you injured?

Question fermée avec des propositions de réponses (travail de traduction « standardisée »)

*What was your activity when this injury occurred?
In case of sport activity:
*Can you precise which sport?

Voir remarque dans partie « item ».

*Through which mechanism did the injury occur?
*What was the nature of the injury?
*Which part of the body was injured?

Voir remarque dans partie « item ».

*Which product was implicated in the injury?
*Which product caused the lesion?

The severity and / or the treatment / follow-up
*Following this injury, did you use a health resource?
If yes:
*Were treated outside hospital? Referred to a hospital? Admitted to a hospital?
*Would you say that the initial severity of this injury was: minor; moderate; serious; severe; critical; maximum?
*During the 48 hours after this injury, do you estimate you were limited in your daily activities?

Voir remarque dans partie « item ».

Narrative:

*How would you describe the circumstances of the injury?
*Were the following elements present when the injury occurred?
Alcohol use
Psychotropic use
Intervention of other persons
Other

De façon générale, je pense que sur chaque formulation de question il y a à compléter le travail par des propositions d'items pour les réponses (questions fermées) (dans les CSS il est difficile de travailler avec des questions ouvertes !!).
Il faudra aussi des propositions de traduction « adéquate » pour chaque pays dans la mesure où une des finalités de ces collectes est de comparer les données entre les pays d'Europe.

2. *data dictionary and recommended method*

b) reference methodology

Il est proposé d'utiliser la méthode CATI. Il est important de noter que cette méthode de tirage au sort des numéros de téléphones, suite à la diffusion très large de la téléphonie mobile et le changement de profil des abonnés, ne permet probablement plus (affirmation variable selon les pays) de tirer au sort des échantillons représentatifs de la population générale.

A discuter !!

Greece

30/11/04

Dear colleagues,

As the project "Harmonized survey" is coming to an end, we would like to express our satisfaction for the opportunity we had to participate in this project.

Through this project, useful results can be extracted, and we think that our role was important during the whole time period. More specific:

1) we had an active and constructive participation in the meeting(s)

2) we have provided our expertise in relation to household survey based on a study that we have performed. The aim of this study was to compare the data collected by a household survey with the routine collected data at the Emergency Departments of the Hospitals. The survey was run in two different time periods and 12932 people have participated. The two different methods of collection data have been compared and the results together with the limitations and the benefits of each collection method have been presented in the project participants as well as in a peer journal.

3) we have read and commented on all the distributed documents of this project.

4) Specific comments about the first step of the conclusions of this work.

♦ You must state whether the interview will be for individual persons or for their family. If it is for individual persons then data that will be collected will not have any deaths and the information about children, babies or very elderly will be very limited or unavailable.

♦ It must be clear that the survey is for all types of injuries, even the minor ones. To allow possible comparisons with the data of the existing IDB the information about the need for a contact with the ED of a hospital for the examined injury must be collected.

♦ Type of accident must be introduced as a variable. The categories of this variable can be HLA, Traffic, Occupational, Suicide, Homicide, Other violence, Unknown.

♦ Nationality or permanent residency must be classified as core variable.

♦ Nature of injury (lesion) as well as Body part must have two fields to cover the 1st and the 2nd (if any) injury and injured body part.

♦ Day of accident can be introduced as a variable. As it is possible that people will not remember the exact day of their injury then the limited information weekday-weekend can be collected.

♦ Time of accident can be introduced as a variable. As it is possible that people will not remember the exact time of their injury then the limited information early morning, morning, noon, afternoon, evening, late night can be collected.

♦ Based on the type of injury specific information must be collected for different types of injuries. Ex. for Road traffic injuries, the role of the injured person and the type of the vehicle must be collected. Similar for other types of accidents. Modules of ICECI coding can be a guide for these detail information.

Sincerely

Nick Dessypris
 Statistician
  CEREPRI

QUESTIONNAIRE OF INJURIES

Record number |__|__|__|__|__|__|__|__| Type of accident |__|

Name - Surname...|...

Address .... Area of residence ....……………………………………

Area of injury ....……………………………………

Telephone number |__|__|__|__|__|__|__|__| Way of transfer |__|__| Sex |__| Height |__|__|__| **cm.** Weight |__|__|__| **kg.**
Date of birth |__|__|__|__|__|__|__|__| Age |__|__|__| Nationality .... |__|__|

≥ 16 years old Occupation …………………..……|__|__|__|__| Education……………….…………….|__|__|

≤15 years old Maternal education .... |__|__| Paternal education ....……............................ |__|__|

Date of attendance |__|__|__|__|__|__|__|__| Date of accident |__|__|__|__|__|__|__|

Time of attendance |__|__|__|__| Time of accident |__|__|__|__|

Hospital |__|__| Department........................... Interviewer ....Transfer to other department(s) …......................…………

Hospitalization Record number |__|__|__|__|__|__|__| Date of discharge |__|__|__|__|__|__|__| Injury at the discharge..………………

Place of injury ……………………………………….................. Name of the place ……………….......................................

School-Kindergarden-Daycare: Public *(1)* or private *(2)*; |__| morning*(1)* or afternoon*(2)*; |__|

Playground : Playground of a building *;* |__| *(1yes, 2no)* Public *(1)* or private*(2)*;|__| playground's surface . …………………….

          Cause of injury: ……………………………………………….…………………………………….

Who was with the injured person: …………......................……………….|__|

Injured Body parts   1...…..…….. R, L, RL

GCS |__|__| 2..……...… R, L, RL

Type of injury   3...…...............................……...……....R, L, RL

1..

2..……………

3...…..

Mechanism of accident …………………………………………………………………………

Mechanism of injury ....…….........…..

Activity ....……

Product causing injury ....…...

Product involved in the injury.…………………………...

Other product ....

Treatment |__|__| Number of x-ray(s) |__| Immobilization |__|

First aid: ....…………………………..………………… keywords...……….....…………………………

Fall's height |__|,|__|__| **Fall's side: |__| ....……**
Use of protective equipment : 1.yes, 2.no If yes, what equipment; |__|__| ………………………………………

Other details of the accident (concussion, disability etc.) ……………………………………………………………………..…
Toys : Description: |__|__| Material: 1.wood,2.plastic,3.metal, 7.cloth, 98 other, specify………..……....…………|__|

Dog: ownerless*(1)* domestic*(2);* |__| Pedigree :………………………………………|__|__|

Leaflet |__| .... Problems at the interview |__| If yes, specify …….………….…………………
Accident description

_____

_____

_____

_____

Portugal

Information provided by the IT system   **Description:**

Health Unit (individual code)   In which national health unit did the assistance take place?
User (Individual number)   Victim's health system national identification number
                                       Logging number of the injury, as per registration in the
Episode (individual number)   assistance IT system
Gender   What is the gender of the victim?
Birth date   What is the birth date of the victim?
Date of emergency help   When did the assistance
Time of emergency help   At what time did the assistance take place?

Data collected by interview   **Question:**

Date of the Injury   When did the injury take place (date)?
Time of the Injury   At what time did the injury take place?
Location of the accident   Where (physically, not geographically) did the injury take place?
(sub-)Location of the accident   Where (physically, not geographically) did the injury take place?
Injury mechanism   What mechanism led to the Injury of the victim?
Injury (sub-)mechanism   What mechanism led to the Injury of the victim?
Activity during injury   What was the victim doing at the time of injury?
(sub-)Activity during injury   What was the victim doing at the time of injury?
Type of injury   What type of injury has the victim been inflicted with?
Body part injured   What part(s) of the body were injured in the accident?
(sub-)Body part injured   What part(s) of the body were injured in the accident?
                                       Did the injury require follow up (hospitalisation, repetitive
Follow-up   appointments, etc.) ?
Hospitalisation time   Duration of the hospitalisation period, when applicable

Free typing fields:

General description of the injury Please describe in short number of words what happened during the
                                   accident.

Instituto Nacional de Saude
Harmonized-Survey - Surveys in Portugal

National Health Survey
- **Responsible:** Observatório Nacional de Saúde, Instituto Nacional de Saúde Dr. Ricardo Jorge.
- **Objective:** To provide information on a number of major health problems
- **Frequency:** Entire country, 1987, 1995/96 and 1998/99. Conducted in the Lisbon area in 1989; North area in 1990; Alentejo area 1991; Algarve area 1993. The next survey is planned for 2004/2005.
- **Scope:** Multistage probability sample of 22.000 households covering noninstitutionalized persons living in the mainland of Portugal.
- **Collection method:** Interviewer-administered questionnaire
- **Data content:** Fixed "core data" component –
    - perceived general health,
    - prevalence of some chronic conditions,
    - disability,
    - general health care,
    - doctor visit,
    - health expenses and income,
    - physical activity,
    - tobacco consumption,
    - alcoholic beverage consumption,
    - child health,
    - and demographic and socioeconomics characteristics.

Supplementary component – varies with needs of information.
- **Availability of data:** Data files and main statistic tables are presented in publication (INS98/99).

ECOS – Watching Health at Home
- **Responsible:** Observatório Nacional de Saúde, Instituto Nacional de Saúde Dr. Ricardo Jorge.
- **Objective:** To provide rapid information on a number of major health problems
- **Frequency:** 2 a 3 surveys per year
- **Scope:** A sample stratified by health region with homogenous allocation, of households with telephone from the fixed net from the Portuguese mainland. The number of household is 1200 corresponding to 3600 individuals.
- **Collection method:** Computer Assisted Telephone Interview
- **Data content:** Varies with needs of information, some studies already complete:
    - Physical activity,
    - Satisfaction of the pharmacies clients,
    - Use of alternative medicines,
    - Influenza vaccination coverage 1998/99, 1999/00, 2001/02 and 2002/03,
    - Insomnia (1999),
    - Hysterectomies prevalence (2000),
    - Preventive care of the breast cancer (2001),
    - Alcohol consumption (2002),
    - The impact of cold on the health (2003),
    - The impact of the heat wave in population behaviour (2003)

Availability of data: Data files and short scientific reports are published

Psytel

Plan du rapport final de Psytel, en date du 30/11/2004

Contexte
Compte-rendu chronologique des travaux
Documents contributifs
    La problématique du projet
    Le nouveau codage ISS
    Informations sur les enquêtes Eurobaromètre
    Comparaison des 2 méthodologies de recueil : enquête et recueil hospitalier
    Eléments d'information recueillis à la TNS Sofres
    Proposition de choix des variables de l'enquête type, Formats et nomenclatures
    Préconisations méthodologiques pour l'enquête type
    Proposition de questionnaire pour l'enquête type
Conclusions
Annexes
    Proposition d'organisation du projet « Enquête-type »
    Programme de travail de la réunion de projet des 23 et 24 Octobre 2003
    Comparaison des variables entre systèmes internationaux
    Projet de plan du rapport intermédiaire (juin 2003)

Appendix VII
Meeting of 22-23 October 2003
Programme de travail

Project « 2002/IPP – Harmonised survey »
An harmonised survey in addition to hospital level data collection in frame the new IPP/HLA (2002/IPP/203701)

First Meeting
Paris, 22nd and 23th of October 2003
Location : Vacassy, Room ED-1
Institut de Veille Sanitaire

Draft Agenda (v1.0)

22nd of October 2003

10h	Welcome
	Bertrand Thélot - InVS
10h15 - 11h	InVS presentation
	Bertrand Thélot - InVS
11h - 12h30	Project Status
	Bertrand Thélot, Marianne Perez, Emmanuelle Szego – InVS
	Marc Nectoux – Psytel
	- Team
	- Overview of the project
	- Timetable
	- Tasks
	- The present state of affairs
12h30	Lunch in CESES Room
14h – 15h	Comparison : Surveys within IPP data collection : Spain, Luxembourg, Germany
	Emmanuelle Szego – InVS
15h – 16h	Surveys in our countries : Presentation by country
	Each partner
16h : Break	
16h – 18h	Surveys in our countries : Presentation by country (Suite)
	Each partner

France, Austria, Greece, Portugal

Dinner : Les Dix vins – 57 rue Falguière - 75015 Paris (Tel : 01 43 20 91 77)

23th of October 2003

9h30   Summary of the previous day
Marianne Perez - InVS

9h45 – 10h30 Methodology comparison : Hospital data collection / Survey
Emmanuelle Szego – InVS, Marc Nectoux – Psytel

10h30 - 11h30   Discussion about the orientation of the project
Emmanuelle Szego – InVS, Marc Nectoux – Psytel + all participants

An European survey (Eurobarometre type) / A national survey instead the hospital data collection / A national survey complementary the hospital data collection

11h30 - 12h   Structure of the final report
Marc Nectoux – Psytel

12h - 12h15   Next steps of the project
Bertrand Thélot – InVS

12h15 - 12h30 Any other business

Conclusions

12h30   Lunch in CESES Room

Please contact with any questions : Marianne Perez – InVS – m.perez@invs.sante.fr
Tel : +33 1 55 12 53 20

List of participants

Name	Institute	Country
Dr Baltazar Nunes	Ministerio da Saude	P
Dr Robert Bauer	Institute Sicher Leben	A
Dr Martine Bantuelle	Educa-Santé	B
Pr Eleni Petridou	CEREPRI	EL
Dr Bertrand Thélot	Institut de Veille Sanitaire	F
Marianne Perez	Institut de Veille Sanitaire	F
Emmanuelle Szego	Institut de Veille Sanitaire	F
Marc Nectoux	Psytel	F

INSTITUT DE
VEILLE SANITAIRE

Project « 2002/IPP – Harmonised survey »
An harmonised survey in addition to hospital level data collection in frame the new IPP/HLA (2002/IPP/203701)

First Meeting
Paris, 22nd and 23rd of October 2003
Location : Vacassy, Room ED-1
Institut de Veille Sanitaire

DRAFT OF MINUTES – 05.12.2003

Participants:
Alain Levêque (AL): EducaSanté, Belgium
Baltazar Nunes (BN): ONSA, Portugal
Bertrand Thélot (BT): InVS, France
Emmanuelle Szego (ES): PSYTEL, France
Marc Nectoux (MN): PSYTEL, France
Marianne Perez (MP): InVS, France
Nick Dessypris (ND): CEREPRI, Greece

BT welcomes the participants to the meeting and gives a brief overview of the Institut de Veille Sanitaire (InVS) and its functioning.

Rules of the meeting
Because of the multinational and multilingual character of this project, BT emphasizes the necessity of taking the time to make sure that all the participants understand what is said both linguistically (use of interpreters) and in terms of the project content.

Goals of the project
Questions
The aim of the project is to supply Member States of the European Union with methodological help by:
- assessing the cross-sectional studies used in some Member States (Spain, Luxemburg and Germany) as the official data collection tool for the former EHLASS system.
- examining cross-sectional survey methodologies used by other teams in the same field (for example in France: CNAMTS, INSEE, and CREDES studies)
- listing the advantages and disadvantages of the two types of surveys: continuous data collection (used by the majority of Member States) and cross-sectional surveys
- proposing a harmonisation of questionnaires and methods liable to allow for crossing and comparing of results coming from different studies.

This project will thus contribute to the improvement in quality and comparability of data collection.

Chosen procedure

Existing data collection in each country: survey vs. continuous

Analyse advantages/disadvantages → need more information on surveys in each country

As ND presented the case in Greece, it is clear that to estimate risk factors of injuries specific studies are very valuable and even necessary. Continuous data collection produces descriptive results which can only be the source of hypotheses for determining risk factors.

Questionnaire

BN: Is the objective to create a new questionnaire or to maintain the old ones?
BT: This is open to discussion. Are the present questionnaires sufficient?

Semantics and translation

How should questions be formulated?

Which languages should questionnaire be translated into? English, French, German, other?

Survey method: how to randomly select?, periodicity, means (telephone, mobile…)…

What is the process of random selection?

How often should survey be done? General agreement that every year is too often, but every 5 years not often enough. Perhaps every 3 or 4 years punctuated by thematic surveys

Issue of cost

Maximum length: ½ hour

Telephone surveys are becoming less representative because of increased mobile phone usage

Themes of discussion (see attached presentation by MN)

Which type of survey? For which use and which goals?

Type 1: Euro-Barometer-type survey on injuries in Europe

Type 2: Common Harmonized Survey for States using the "Survey" methodology

Type 3: Harmonized survey complementary to hospital data collection

Surveys in partner countries (see attached power point presentations)

Portugal

Continuous data collection for surveillance and detection of new cases

Hospitals that collect data are not subsidized

Data collection not very exhaustive (only about 50% of accidents collected)

For thematic phone survey (often considered as "quick and dirty"):

First contact by letter, followed by phone call. Takes on average 3-4 attempts before person is reached.

Only calls to land lines (no mobile phones)

Problems of representativity: poor, migrants and young are under-represented because the first two tend not to have land lines and the latter because they tend to use only mobile phones.

Greece

Household survey

Conducted in April and December 2000

Personal interviews

Asked about injuries that occurred in prior 1 month, 2-3 months, and 4-11 months

Asked about injuries for self and other members of household

Demonstrated biases: more likely to report own and more recent injuries

EDISS (EHLASS equivalent in Greece)

Continuous hospital data collection

CEREPRI sends own clerks to collect data in 4 participating hospitals

Used to compare data with household survey: The annual estimated incidence rates of injuries in Greece computed with the two sources (household survey and EDISS) are very different. See addendum below.

Thematic surveys

Essential in determining and evaluating risk factors

Public and private playgrounds

Heating devices

Other

Addendum: The annual number of the total estimated accidents in Greece is indeed about 1.530.000. This number includes as well the childhood injuries. The total number of injuries among adults is estimated to be around 1.241.000. So when one compares the estimated number of all injuries based on the two different ways of collecting data (household survey and routine data collection) it is only possible among ADULTS and the number is 525.000 for the household survey and 1.241.000 for EDISS (and not 1.530.000).

According to the Greek presentation, in the household surveys the percentage of minor injuries as well as the percentage of HLI is lower in comparison to the percentage from the continuous hospital data collection. This could be a consequence of the fact that hospital visits are very frequent for minor injuries.

Belgium

Country constituted of many communities (Flanders, Walloon, German-speaking population) unified under the authority of the King

EHLASS stopped in 2000 because not at all representative, only 3 hospitals participated in last years, too expensive, seen as not producing useful results.

Participation in WHO's "Health Behaviour in School-aged Children" (HBSC) survey

Sentry of general practitioners who voluntarily collect data on various diseases and health problems which could potentially be used to collect data on injuries.

Health interview survey in 1997, 2001, 2004 with some questions concerning injuries and dogbites.

France **(see attached documents)**

EPAC survey (EHLASS in France)

Various cross-sectional surveys:
        Enquête décennale santé
        Enquête santé protection sociale
        Cycle triennal d'enquêtes en milieu scolaire
Thematic surveys to be developed, including national survey on drowning incidents begun in 2001
Continuing difficulty in estimating incidence rates of injuries for example, the incidence rates from EPAC are 3 times weaker than the incidence rates estimated from the Enquête santé protection sociale

Spain

Survey of households located in cities with at least 2000 inhabitants

Preliminary contact by phone, followed by face to face interview

Injury counted if takes place at home or during leisure activities, if receives medical or paramedical treatment either at a hospital or other health centre

Problem in understanding size and selection of sampling pool

→ Underlined need for more specific information.

Germany

Definition of an injury: Medical care sought or regular activity limited or affected for at least 14 days.

School injuries excluded

Cross-sectional survey asking about injuries within 3 months prior to survey

Nearly 129 000 households interviewed

Question regarding costs

Luxemburg

Participated in EHLASS (1994-1999) through telephone surveys

Asked about injuries within last 12 months

Injury included if recourse to medical care

Under-representation of 1 person, single-parent, foreigner and elderly person households

Lethal injuries not included

For these last 3 countries, it is obvious that more methodological material is necessary to have an accurate understanding of these cross-sectional surveys.

Issues presented, discussion

The aim of the project is not to replace continuous hospital data collection by a European survey, but rather to complement national continuous hospital data collection with a cross-sectional population survey with certain optimal characteristics in order to eliminate weaknesses from the continuous hospital data collection. These weaknesses include representativity, need for more precise information on socio-economic status, etc. This point of view is shared by the partners.

Problems of representativity coming out of telephone surveys need to be addressed by consulting experts working in polling agencies, such as SOFRES, IFOP, etc. in France. The methodological solutions to readjust the bias of these surveys must also come under close financial consideration.

The Greek experience is particularly valuable since it allows for comparisons between the incidence rates in continuous hospital data collection and in cross-sectional surveys. Furthermore, it has been able to quantify the memory bias that occurs in surveys, i.e. more likely to report injuries within last 3 months. It also showed that own injuries are more often remembered than other's injuries within the household.

The Portuguese results indicate that in certain studies, like those on food security, women give different information than men. So when we want to get information about all the people in a household by proxy, i.e.

addressing the one member of the household about the others, the characteristics of that member were not independent from the response.

Within the framework of this project, we need to define more precisely the optimal characteristics of a cross-section survey in terms of : periodicity, boundaries, choice of variables, mode of data collection, used nomenclature, costs, etc. For example, if several injuries occur within the surveyed period, we have to define the rules on which injury or injuries will be chosen for further investigation (most recent, most severe etc.)

During the meeting, we came to an understanding on the following points for an efficient European information system:

- Continuous hospital data collection is of great value in determining the global characteristics of a great number of injuries. It also allows to have a micro-accidentological understanding for risky products and the most severe injuries.
- Cross-sectional surveys are better adapted to give a macro-accidentological view of HLIs and to contribute to the production of national and European indicators, one condition being that this survey should be coordinated with hospital data collection.
- National thematic surveys or ad hoc surveys remain necessary to explore risk factors. They also have to be done in conjunction with the other surveys.

Next steps
Developing questionnaire and study
Objectives of study?
Methodology: random selection, face-to-face or phone interviews, collection, validation and establishing results of the survey
Formulating questions
Recommended rhythm of cross-sectional survey
Comparing results with EHLASS continuous data collection

One of the goals of the project is to produce a questionnaire for specific injury surveys. The role of the partners in this process is essential at each stage.

Next steps of the project and meeting
By the end of February, we would like to have a complete bibliography on the different types of surveys in the field of injuries in each partner country. We are soliciting each partner for more information, including detailed questionnaires (and translation at least in English) of their own surveys.
The partners will also be asked to give feedback on the proposed questionnaires and their characteristics. (See above.)

In the coming months, the French team will conduct further research on data collection in Spain, Germany and Luxemburg in order to elucidate their methodologies. Any relevant information about methodologies that could be collected by the other partners is welcome.
Consultation with international experts on specific international information collection systems (WHO-MDS, CSI-MDS, ISS V2000) will contribute viable information to the project.
The partners are encouraged to forward any more information that may be gathered about surveys within their own countries.

We foresee a meeting in June or July 2004, after the Vienna conference on injuries and compatible with the various participants' constraints.

Attachments: Powerpoint presentations

Appendix VIII

Telephone conference of 15 December 2004

The basis of the discussion were the documents (below) on the list of items, and on the formulation of the questions that should be asked in a cross sectional survey. These documents were sent before the phone conference, and some written comments were already made by the partners.

The aim of the conference was to reach to a consensus between the different possible options.

Participants :
> Nick Dessypris (CEREPRI, Greece), Robert Bauer and Mathilde Sector (Sicher Leben, Austria), Baltazar Nunes (Instituto nacional de saude, Portugal), Marc Nectoux (Psytel, France), Bertrand Thélot (InVS, France) Alain Lévêque sent his comments before the meeting.

Project "Harmonized Survey"

List of items

1 – necessary in any Cross sectional survey (CSS)
2 – relevant in a more detailed CSS

The country:
1 - Country of collection

The person injured:
1 - Age
   Sex
   Zip code of usual residence place

2 - Nationality
   Social profile:
      Level of formation
      Occupational status
      Profession

The injury:
1 - Place of occurrence
   Activity when the Injury occurred
            If sport: type of sport
   Mechanism
   Nature of injury (lesion)
   Part of body injured
   Product involved and / or cause of the injury

The severity and / or the treatment / follow-up
1 - Type of health resource used for this injury

2 - Clinical measure of the initial severity
   Subjective appreciation of the severity by the person injured

Narrative:
1 - Circumstances of the injury (free text)
2 – Specific circumstances including:
      Alcohol use
      Psychotropic use
      Intervention of other persons

Project "Harmonized Survey"

Formulation of questions to be asked

in the frame of a Cross sectional survey (CSS)

The person injured:
   *What is your age?
   *(Are you a male or a female?)
   *What is the code of your usual residence place?

   *Of which nationality are you?
   *What is your level of initial formation?
   *What is your occupational status?
   *What is your profession?

The injury:
   *Where you injured during the last 3 months (90 days)?
      If yes, and for the latest injury:
   *Where were you injured?
   *What was your activity when this injury occurred?
      In case of sport activity:
   *Can you precise which sport?
   *Through which mechanism did the injury occur?
   *What was the nature of the injury?
   *Which part of the body was injured?
   *Which product was implicated in the injury?
   *Which product caused the lesion?

The severity and / or the treatment / follow-up
   *Following this injury, did you use a health resource?
      If yes:
   *Were treated outside hospital? Referred to a hospital? Admitted to a hospital?
   *Would you say that the initial severity of this injury was: minor; moderate; serious; severe; critical; maximum?
   *During the 48 hours after this injury, do you estimate you were limited in your daily activities?

Narrative:
   *How would you describe the circumstances of the injury?
   *Were the following elements present when the injury occurred?
            Alcohol use
            Psychotropic use
            Intervention of other persons
            Other

«Harmonised survey» Project

Record of the Telephone conference on 15 December 2004

Background

- The project team wanted to assess the progress of the work and in particular of the harmonized survey questionnaire project. A telephone conference seemed to us to be the most effective and appropriate way to have this discussion.

The following people took part in the telephone conference: R. Bauer and M. Sector (ISL – A), B. Thélot (InVS - F), M. Nectoux (Psytel - F), B. Nunes (INS – P), N. Dessypris (CEREPRI – EL).

Points dealt with

1. Scope of the survey: The project team specified that the harmonised survey is concerned solely with injuries linked to home and leisure accidents (HLA) and that the reference nomenclatures are those given in the ISS V2000 coding manual. The partners hoped that the final report would allude to the possibility of extension of the survey to other types of injury (traffic accidents, occupational accidents, violence??, etc.) by adding modules of questions concerning them.

2. Duration of memory: There is a close correlation between the memory-linked bias and the length of time during which the interviewee is expected to remember an accident that had occurred: the longer this period, the greater the memory-linked bias . In retrospective surveys this period can range between 1 month and 12 months. According to N. Dessypris, the optimum length of time is 2 months, according to the scientific literature published on the subject.
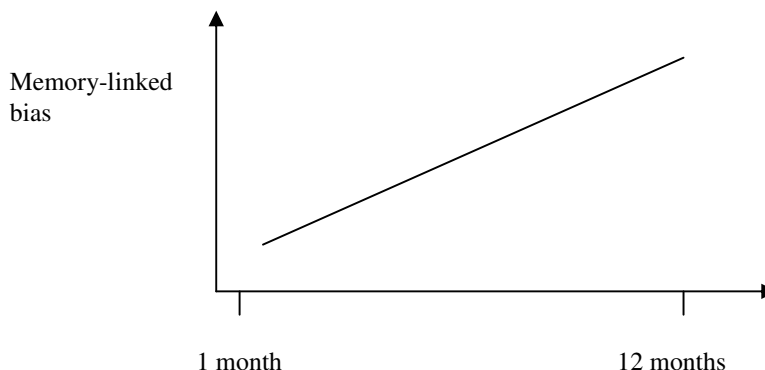
3. Aims of the harmonised survey: B. Nunes has suggested that we should explain the aims of the harmonised survey: is it to determine the incidence of HLAs or to obtain a representative sample of accidents? The Project Director does not think that these two objectives are incompatible. We have to chose a sample size that makes it possible to obtain a representative sample of accidents, linked to the hospital reporting and to deduce the incidences from it.

4. Definition of the HLAs to be taken into account: All the partners were agreed that the HLAs to be taken into account in the survey should be defined as accidents that have at least resulted in using the health-health service (A&E department, GP, pharmacist, etc.).

5. Seasonal aspects of the survey: R. Bauer reminds us that HLAs are seasonal in nature: the same accidents are not recorded in winter and in the springtime. B. Thélot points out that the geographical nature of these accidents is at least as important: mountaineering accidents, coastal accidents, etc. This means that it is necessary to combine good geographical representativeness with carrying out several successive survey campaigns at different times of the year.

6. Selecting the accidents to be taken into account in the survey: B. Thélot asked the partners which accident should be taken into account during the period under consideration: the most severe or the most recent? In their survey, The Greek partners opted for the most recent. R. Bauer specified that the Austrian?? team asked both how many accidents had occurred during the period, and for specific details of the most severe one.

7. Bias of the telephone survey method: B. Thélot pointed out that the increase in the number of mobile telephones rather than fixed-line 'phones is likely to bias the representative nature of telephone surveys. However, on the one hand, corrective methods are being introduced by the companies that carry out surveys of this type, on the other hnand, the face-to-face survey method constitutes a possible alternative. N. Dessypris mentioned the problems linked to contact with very elderly people and children. For the purposes of the harmonised survey, it is intended to interview people between 15 and 75 years of age.

8. The social profile: B. Thélot recalled the three questions linked to the social profile of the victim: the highest level of education reached, employment status, occupation. The partners are willing to add these questions to the survey. In the case of a child, these questions will have to be put to the legal guardians of the child (usually the parents). The question of the nomenclatures of these variables remains to be examined (EUROSTAT coding, NOMESCO coding, etc.).

9. The account of the accident: This is an important variable that must be left in the questionnaire. R. Bauer is in favour of its being introduced at the beginning of the questionnaire so that it would also be possible to select the type of accident on the basis of this description.

10. The number of injuries: The partners are all willing to introduce the possibility of describing two types of lesion and two injured body parts.

11. Nationality: at present it does not seem to be possible to introduce the Nationality variable. It is proposed to use the postcode variable instead of the usual place of residence. R. Bauer also suggests the possibility of introducing a question about the type of neighbourhood (rural, urban, suburban, etc.).

The remaining steps:

- Finalisation of the questionnaire and the methodology
- Translation
- Dispatch to partners
- Modifications
- Writing of the final report

Appendix IX
Nomenclatures of social profiles

The social profile of the people interviewed is established on the basis of three types of information:
- the educational level reached
- employment situation,
- occupation.

In the case of a child, these questions have to be put about the people legally responsible for the child (usually the parents).

The nomenclatures shown below, which are used for the EPAC reports in France, have the advantage of being simple, convenient to use and applicable for use in other European countries.

Educational level reached
1 = Primary, no qualifications
2 = Secondary school or «Collège», educated up to 16 years of age
3 = High school, up to baccalaureate or leaving certificate level
4 = Higher

Employment situation
1 = working;
2 = unemployed;
3 = at home;
4 = retired;
5 = receiving initial training (pupil, student);
8 = others and not applicable;
9 = not known

Coding using 1 digit. This item must be coded when the person involved in an accident is over 16 years of age, or if (s)he is between 14 and 16 years or age and receiving occupational training.

Details:
Workers receiving training should be coded: 1
Unemployed people who have previously worked should be coded: 2
People who have never worked are not classified as unemployed and should be coded: 8
People under 16 years of age, adolescents and young adults pursuing their primary training (pupils, students) who have never worked should be coded: 5

Occupation

    1 = farmer

    2 =craftsmen/women, tradesmen/women, heads of companies

    3 = manager or higher intellectual profession

(liberal professions, civil service managers, secondary school/higher education teachers, scientific, information, arts and entertainment professionals, administrative and sales managers, scientific and technical managers in companies)

    4 = intermediate professionals

(junior school teachers and similar, intermediate health and social workers, clergy, religious, intermediate administrative and civil service professionals, intermediate administrative and commercial professionals in companies, foremen/women, technicians)

    5 = employee

(in the civil service: civilians, police, military and other service employees; administrative company staff, commercial staff; front-of-office staff)

    6 = qualified workers

    7 = unqualified workers

    8 = not applicable

    9 = not known

1 digit. This item must be coded of the person involved in an accident is over 16 years of age, or if (s)he is between14 and 16 years of age *and* is receiving occupational training.

Further details

Unemployed people who have previously worked, people at home who have previously worked and retired people should be coded according to their previous occupation.

People at home who have never worked should be coded: 8

People receiving their initial training who are under 16 years of age, adolescents and young adults (pupils, students) who have never worked, people who have never worked should be coded: 8

People receiving ongoing training and who have therefore previously worked:

  if they have an occupation, are classified as working: code their occupation.

  if they are unemployed: code their previous occupation.

Appendix X
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