European Home and Leisure Accident Surveillance System: Evaluation of the classification and reporting system

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The European Commission (EC) has created a harmonised system of information on home and leisure injuries. This system is called European Home and Leisure Accident Surveillance System, EHLASS. First of all I will go into the way EHLASS operates. After that, I will tell you about a study to evaluate EHLASS. This study has been conducted by the CSI and Statistics Netherlands.

1 EHLASS
About fifteen years ago, in 1981, the Council of Ministers of the European Union (EU) adopted a proposal to launch a pilot study to implement a data collection system for home and leisure injuries at Accident and Emergency (A&E) departments in all Member States. In 1986 the data collection started.

Information is collected on home and leisure injuries for which medical treatment is given. For most EU Member States the basic data is collected at A&E departments of a selected number of hospitals. Germany, Spain and Luxemburg collect the information by means of household surveys.

The variables included in EHLASS in all Member States are the same since the start in 1986:
- country code
- patient identification number
- sex of the patient
- age of the patient
- follow-up treatment
- number of days of admittance
- accident mechanism
- activity at the time of the accident
- hour of attendance
- date of attendance
- location of the accident
- type of injury
- part of body
- product causing the accident
- product causing the injury
- other products involved
- accident description.

The classification and related codes are harmonised and laid down in the official EHLASS coding manual.

The number of cases reported every year differs a lot per Member State. In 1994 information on about 350,000 home and leisure injuries treated at the A&E departments of 54 hospitals was recorded by EHLASS (see Table 1). At present the total number of hospitals participating in EHLASS is 65.
Table 1  Number of reported accidents in 1994 and number of participating hospitals

<table>
<thead>
<tr>
<th>Member State</th>
<th>Number of reported accident (rounded figures)</th>
<th>Number of hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Luxemburg</td>
<td>(900)</td>
<td>-</td>
</tr>
<tr>
<td>Ireland</td>
<td>10,000</td>
<td>2</td>
</tr>
<tr>
<td>Denmark</td>
<td>69,000</td>
<td>5</td>
</tr>
<tr>
<td>Greece</td>
<td>7,000</td>
<td>2</td>
</tr>
<tr>
<td>Belgium</td>
<td>14,000</td>
<td>4</td>
</tr>
<tr>
<td>Portugal</td>
<td>30,000</td>
<td>9</td>
</tr>
<tr>
<td>Netherlands</td>
<td>58,000</td>
<td>7</td>
</tr>
<tr>
<td>Spain</td>
<td>(3,200)</td>
<td>-</td>
</tr>
<tr>
<td>France</td>
<td>42,000</td>
<td>7</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>114,000</td>
<td>11</td>
</tr>
<tr>
<td>Italy</td>
<td>12,000</td>
<td>7</td>
</tr>
<tr>
<td>Germany</td>
<td>(2,000)</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>54</strong></td>
<td></td>
</tr>
</tbody>
</table>

In 1995 three countries joined the EU: Austria, Finland and Sweden. They also planned to collect information on A&E departments.

The actual procedures for recording at A&E departments differ from one country to another. This is mainly due to differences in the organisation of the health care system. As well medical and nursing staff as specialised administrative clerks interview the victim. Usually the coding of the information is performed at the hospitals. Data are then sent to the national coordinating body.

Up to some years ago, the Member States sended the data collected on magnetic tape to the EC. The Commission was responsible for managing and analysing the data. However, the data accumulated without being used effectively. The databank was only accessible to EC staff.

In 1993 the EC decided that every year the Member States had to submit to the EC an annual report containing standardised information instead of having a central database. The EC summarised all national reports of 1990-1992 into a report at community level.

The EU provides financial support for the collection of data from A&E departments of selected hospitals in the Member States. This support is available up to 1997. In 1996 the EC needs to have finished an evaluation report, including new rules for the classification and the definitions of the data collected, and the presentation of the national reports. Based on this report, the EC has to decide in 1996 on the continuation of the project.

2 The evaluation study

Since the start of EHLASS in 1986 the classification has not changed. And as we all know, a classification is not a static product, but should be the result of a dynamic process. Products that are introduced into the market, new trends in activities, may give birth to the introduction of new codes. So, it is really time to update the classification.
As I already told you, the data is presented to the Commission by means of national annual reports, because a centralised database didn't work out. An important complaint, especially from the Commission, is that the specific information they need, is often not included in the reports. So, the Commission wanted to find out how the annual reports could meet more to their requirements.

This led to the evaluation of EHLASS, which has two objectives:
- to suggest new rules concerning the classification of EHLASS; and
- new rules for the presentation of the national annual reports.

The method consisted of five phases:
1. A questionnaire was sent to all 15 EHLASS project leaders, to get to know more about their experiences.
2. An inventory of standard classifications concerning injuries which could be useful for the EHLASS classification.
3. Interviews with relevant people of the EC to get insight in their experiences and wishes.
4. A study of the annual EHLASS reports of the Member States.
5. Meeting of EHLASS experts to discuss proposals.

3 The new classification
We have drafted a new EHLASS classification scheme including a manual and definitions. General features of the new classification are:

- it is primarily developed for recording home and leisure injuries, but is also applicable for other types of accidents. The general scope of EHLASS is home and leisure injuries. However, in some countries information is collected on more accident categories. So, it is wise to link up with such developments.

- it is closely linked up with relevant international developments, like ICD-10 and the new WHO classification of external causes of injuries which is being developed at the moment.

- it is first of all meant for data collection at A&E departments and only at a later stage for household surveys.

- it has a hierarchical structure, which makes it easier to add new codes in a logical position.

- it meets the general demands for determining classifications, such as being aware of the information needed by (potential) users and the information available at A&E departments, the use of a coding manual, compatibility with the old EHLASS codes

We concluded that sharpenings of the formal definition of a home and leisure accident are necessary to improve the comparability. We have drafted a decision tree which lends a helping hand.

We concluded that all current variables should be maintained and extended with two new variables: 'date of the accident' and 'time of the accident'.

Another recommendation is to change the variable accident mechanism into injury mechanism. The variables place of occurrence, mechanism of injury, type of sports and products involved.
should be changed quite drastically. Other variables should be changed slightly or not at all.

The way the new classification is implemented and maintained is very important. Subjects that should be taken care of are for instance the formal acceptance of the classification, the translation into the different languages, and conversion tables.

It should be tried to have all Member States implement the new EHLASS classification from the 1st of January 1997.

As already mentioned, a classification is not a static product. The changes need thorough co-ordination. Efficient procedures and a corresponding infrastructure are necessary for the maintenance of the classification. Explicit recommendations are formulated.

4 The national annual reports

Although there are several ways to make EHLASS data accessible to the public and (potential) interested organisations the national annual reports are at the moment and in the near future the most appropriate way. There is a publication with standard rules for the creation of an annual report. This was an important step forwards to harmonising and uniforming the national reports. Unfortunately, we found out that almost no country sticks to these rules. Usually it is not because the information is not available.

It should be realised that an annual report of a database as large and diverse as the EHLASS database, can hardly contain information on issues with a relatively low frequency. For specific information the database needs to be consulted, or the individual Member States need to deliver extra (ad hoc) information. In our opinion, the national annual reports should be regarded as a kind of 'appetizer' for everybody (potentially) interested.

We advise the following global contents for the national reports:

- basic demographic information;
- background information on the design of the national surveillance system;
- general information about the organisation of the health care system which is relevant for the interpretation of the data;
- information about other data sources containing information on injuries including the most relevant figures;
- information on the national use of EHLASS data;
- more detailed information about at least one selection of accident; and
- an appendix with detailed information.

These contents are laid down in explicit guidelines.

An important recommendation is that the Commission should exert more pressure on the project leaders to follow the guidelines more strictly than so far.

Beside the annual reports, the accessibility of EHLASS should be improved. For example to disclose EHLASS information on Internet and other data transmission networks. It is also recommendable to have a standard procedure for getting information from individual Member States. It is difficult to get fast responses from the Member States.

Information technology is advancing, so the possibilities for an integrated database are improved and will improve in the future. We recommend to map the conditions for setting up a central
database in which EHLASS information from all Member States is stored.

5 Co-ordination needs
EHLASS has a considerable potential to make a substantial contribution to consumer safety in Europe. The previous conclusions and recommendations certainly underline the needs for co-ordination and support towards both the EC and the Member States.

From experience in the past ten years, it is evident that these co-ordination tasks can not be left to spontaneous initiatives of partners involved. Such co-ordination efforts need a clear structure and a budget. The co-ordination tasks should be entrusted to a secretariat established by the EC. This could be either inside the Commission's services or outside, for instance by establishing a clearinghouse in Brussels or in one of the Member States. One of the most important requirements is that the secretariat should be lean and mean, i.e.:

1. acting as a focal point for all information and expertise made available by the Member States under the contract with the EC;
2. ensuring full commitment of the project leaders and assisting them in increasing the system's agility and flexibility; and
3. carrying out the necessary technical work on behalf of the EC and in close collaboration with the project leaders.

This co-ordinating secretariat is urgently needed in order to fill the vacuum between EC and Member States that is present since the launch of EHLASS in 1986. These tasks easily fit into and European Agency for consumer safety.