



**Workshop on building capacity for
injury prevention through
improved injury surveillance**

**Antalya, Turkey
16 October 2012**



Helsedirektoratet

Norwegian Directorate of Health

OPENING

The workshop on building capacity for prevention through improved injury surveillance was organized by WHO Regional Office for Europe in collaboration with the Norwegian Directorate of Health and was held in Antalya (Turkey) on 16 October 2012. There were 65 participants, including 47 focal persons from 39 Member States. Larger delegations participated from Turkey and Norway as well as staff from the WHO Regional Office for Europe. The European Commission and nongovernmental organizations were also present. The format of the meeting was a series of key note lectures followed by group work¹.

Participants were welcomed by Dinesh Sethi (WHO Regional Office for Europe), Jakob Linhave from the Norwegian Directorate of Health and Hasan Irmak from the Public Health Agency of the Turkish Ministry of Health.

THE NORWEGIAN INJURY SURVEILLANCE SYSTEM

The first lecture focused on the Norwegian injury surveillance system and was delivered by Johan Lund (Norwegian Directorate of Health). A situation analysis of the country was presented which showed that there were 1800 fatalities per year and about 10% of the population required medical treatment due to injury, most of them treated as an out-patient in hospitals and by general practitioners. Falls are the most important injury-related cause of death and injuries at home, school and leisure dominates the scenario with exception of road traffic injuries which are the leading cause of death for the 15-24 year age group. The components of an injury surveillance system, several data sources for injury data and the main WHO publications on injury surveillance were presented. An advanced and detailed injury surveillance system established in Norway between 1990 and 2002 was demonstrated; this was then discontinued due to its high financial costs. Given an ideal data collection system is one characterized by high representativeness and detailed information on causation, the previous Norwegian model was half-way between a continuous registration of a minimum dataset and a system based on periodic sample with depth studies on a smaller number of cases, but which was not sufficiently representative and without enough details. From that experience a new model – a two-step model - emerged in 2005 based on the following points:

- a minimum data set need to be routinely registered in all hospitals, at no extra-cost;
- the registration should take a maximum period of one minute;
- data registration must be done by receptionists and not by physicians;
- data needed to be integrated in the patient-administrative system;
- political and administrative will are essential;
- collaboration with other authorities, especially from the transport and labour sectors, is needed; and
- periodic in-depth-studies of a small but reasonably representative sample of those injured.

Details on the variables collected in the registry are given in the attached presentation.

Lessons learned where the following:

- it is difficult to develop a software, if it is not considered a high priority;
- registration started before the software was fully developed: too much time was required for registration, this caused frustration of the personnel and several registrations were skipped;
- there was too little feedback to personnel: they often do not know why the registration is necessary and this causes lack of motivation and, again, frustration;
- registration functioned well in hospitals where management was motivated, especially when they were able to use data in their local community, media; and

¹ The present report, which summarizes the results of the meeting, has been written by Francesco Mitis and Dinesh Sethi (WHO Regional Office for Europe) and was reviewed by Rupert Kisser (Kuratorium für Verkehrssicherheit), Stefan Enggist (WHO Regional Office for Europe) and Joao Breda (WHO Regional Office for Europe).

- it was important that registration was mandatory, but a follow-up was absolutely needed in order to get sufficient data quality.

In the final part of the presentation the EU INTEGRIS project and disability weights were described and particular attention was dedicated to the critical role of the health sector in providing injury data and in advocating for multisectorial action.

Groups were asked to discuss their injury surveillance system compared to the Norwegian one and potential room for improvement. Rapporteurs presented the results of the discussion to the plenary. Except Latvia and Slovenia, no country from eastern Europe has the injury database (IDB) extended system fully implemented yet (in the Czech Republic it is used for children aged 0-19 only, because of financial constraints), though its core module is used or its incorporation is in progress in most of the countries; some countries are waiting for a new law to implement IDB, some use it only for unintentional injuries, some would like more data on violence in the IDB system. Albania is still using ICD IX classification. The general discussion of the group stressed the need for funds and political support, for better motivation, above all for people in charge to ensure that the data modules are filled, for intersectoral collaboration and for legislation that allows the implementation of the IDB. In the group of countries belonging to eastern part of the European Region, progress was presented: in Kazakhstan, injury registration is under the responsibility of a multisectoral commission, in Azerbaijan, where electronic registration is in place since three years, in Georgia, where a uniform system for data registration is in progress (even though statistics do not cover the whole population) as well as in Armenia where an intersectoral commission with representatives of educational system, legal bodies and Ministry of Health is developing a uniform integrated reporting system, while in the Republic of Moldova registration is done at the Ministry of Health. A major need is the creation of a uniform system at intersectoral level. It was suggested that policies and documents should be translated from local languages into English so that strengths and weaknesses can be shared and mentoring within the network with the exchange of experience conducted. The third group stated that the two-steps system presented by the Johan Lund is the ideal one and presented several experiences and data collection systems of different kinds: the Netherlands has 14 hospitals that have the full dataset and there is a huge interest in understanding cost and consequences of injuries; Estonia uses a minimum dataset and; Denmark has registration with record linkage allowing data from different sectors to be analysed.

THE EUROPEAN INJURY DATABASE

The second lecture by Rupert Kisser covered the European Injury Data Base and described how most EU countries now had hospital emergency departments that collected the minimum data set on injuries. It was stressed why a focus on fatal injuries is not sufficient and how much the cost of non fatal injuries are important since, while deaths cover only around 255 000 cases in the EU27, non-fatal injuries cover 1 600 000, hospital admissions 7 200 000, outpatient treatments about 34 800 000 and all medical treatments together cover estimated 60 600 000.

Most of these events cannot be prevented if a clear picture about the circumstances in which the injury happened is not available as well as the place in which the injury occurred and the products and agents involved. This means that mortality and hospital statistics do not provide sufficient information for guiding prevention and that raising awareness, developing measures and targeted programmes and evaluating them need additional information about activities, circumstances, mechanisms and possible products. While this has been clear since a long time for road traffic injuries and occupational injuries, this has not been done for youth and childhood injuries, injuries of senior citizens and persons with disabilities, sport injuries, injuries related to products, buildings, paths and services, self-harm and interpersonal violence. All of these represent in EU27 something like 82% of non-fatal injuries and the main responsibility in guiding prevention for these injury areas is with the health sector.

The role of emergency departments in data collection is very important since circumstances and basic information can be captured on a large number of cases, at relatively low cost, without noteworthy burden for hospital staff and patients, at the moment of the arrival of the patient. Very few countries have national emergency department registers including external cause of injury; a number of countries have injury surveillance systems in a sample of hospitals (using IDB); almost all hospitals get basic information on external circumstances, but this information is rarely recorded electronically, processed and published. The solution suggested is the implementation of a minimum dataset for injury data collection at the emergency department (using the Joint Action on Monitoring Injuries in Europe (JAMIE) project protocol, initiative funded by DG SANCO) and collecting more detailed data from one or more voluntarily

participating hospitals (using full IDB data set). Details on the variables included in the two datasets can be found in the attached presentation.

A GUIDE TO USE WHO DATABASES

The third lecture was given by Francesco Mitis (WHO Regional Office for Europe) and was an introduction of the WHO mortality databases. More emphasis was put on the description of the WHO Health for All Mortality Database, whose structure and functions were shown during the presentation by delivering a quick analysis on test indicators, according to the chosen cause of death, age group, year(s) of interest, gender, country and/or group of countries, different kind of charts, maps and tables. It was shown how to quickly produce results and how to export them to user-friendly software to create additional charts or to use them directly for powerpoint presentations. Pros and cons of the database were illustrated, in terms of rigidity of the age group structure and data availability. The WHO detailed mortality database was also described as an alternative, but is less user-friendly but more flexible and powerful. It is more difficult to use but it allows: (i) to create meta-variables aggregating different kind of indicators, (ii) to build age standardized mortality rate aggregating several age groups; and (iii) to investigate ICD X codes to better understand circumstances and mode of deaths within the same cause. However this is available for a smaller number of countries and data are rarely available for the countries in the eastern part of the Region. Links to use online and to download the offline version of the databases were provided in the PowerPoint presentation, together with other links to useful but not well known WHO data sources namely the Global Burden of Disease Project and the Inequality Atlas, which provide, respectively, estimates for all the countries and subnational data for a group of selected countries.

Participants were split in three groups and asked to produce a small presentation on child maltreatment in the European region, on unintentional injuries in children and on road safety among the youth and to discuss the results in the plenary. Some participants were given an offline copy of the database and additional details on some functions that could not be dealt with during the 30 minutes presentation. Methods presented are described in detail in TEACH VIP 2 manual which contains one core lesson and three advanced lessons on surveillance systems. Participants were encouraged to use TEACH-VIP 2 and given a copy for use to develop capacity in surveillance and other areas of violence and injury prevention.

PANEL DISCUSSION

The meeting ended with a panel discussion on the next steps to be done in the European Region and on how to use data to inform policy makers. Focal persons from Austria, Azerbaijan, Norway, United Kingdom together with representatives from DG SANCO and WHO joined a panel discussion which stimulated debate among participants.

The following priorities needs were identified:

- implement uniform but inexpensive surveillance systems;
- improve coding, particularly for injuries due to violence;
- focus on non-fatal injuries and dealing with their gravity;
- introduce better (and more uniform) surveillance systems in the eastern part of the Region;
- continue exchanging international data, experiences and solutions;
- motivate personnel dealing with data collection in the hospitals; and
- achieve better coverage of external causes in order to guide targeted prevention actions and to monitor the eventual impact of such targeted actions.

CONCLUSIONS AND POINTS FOR ACTION

1. The implementation of ICD in data collection for mortality, hospital discharge, and ED statistics remains a critical priority.
2. The WHO databases (MDB, HFA-DB) provide applications for quick and user-friendly access and analyses of data, which can be used for many reporting purposes.
3. Emergency departments are encouraged to collect information on external causes in routine situations and a minimum data set based on a few straightforward questions is appropriate.
4. WHO should work with Member States to build capacity to develop such data collection systems, especially in the Eastern part of the Region. .

5. The health sector is in a unique situation to collect data on causation and consequences of injuries at low costs, and should share this information with other policy sectors which bear responsibilities for the prevention (e.g. transport sector for the prevention of RTIs, police and welfare for the prevention of violence, labour sector for workplace safety).

ANNEX 1: LIST OF PARTICIPANTS

Albania

Maksim Bozo, Ministry of Health of Albania
Gentiana Qirjako, University of Tirana

Armenia

Lilit Avetisyan, Inspectorate of Ministry of Health
Ruzanna Yuzbashyan, Ministry of Health

Austria

Rupert Kisser, Kuratorium für Verkehrssicherheit

Azerbaijan

Rustam Talishinskiy, Scientific Research Institute of Traumatology and Orthopaedics
Vagif Verdiyev, National Research Institute of Traumatology and Orthopedy

Belarus

Leonid Lomat, Republican Scientific and Practical Centre for Traumatology and Orthopedics

Bulgaria

Rumyana Dinolova, National Centre of Public Health and Analyses
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Croatia

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Czech Republic

Veronika Benesová, University Hospital Motol

Denmark

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Finland

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Georgia

Kakha Kheladze, Ministry of Labour, Health and Social Affairs

Germany

Wiebke Flor, Federal Ministry of Health

Hungary

Jozsef Vitrai, National Institute for Health Development

Italy

Maria Giuseppina Lecce, Ministry of Labour, Health and Social Affairs

Kazakhstan

Nurlan Batpenov, Ministry of Health
Nurlan Kidirbaev, Ministry of Health
Galina Jaxybekova, Ministry of Health

Kyrgyzstan

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Latvia

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Lithuania

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Republic of Moldova

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Galina Morari, Ministry of Health

Romania

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Russian Federation

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Serbia

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Slovakia

Martin Smrek, University Children's Hospital

Slovenia

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María Villar Librada, Ministry of Health and Social Policy

Switzerland

Marie-Claude Hofner, University Institute for Legal Medicine, Lausanne

Tajikistan

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The former Yugoslav Republic of Macedonia

Fimka Tozija, Institute of Public Health

Turkey

Tuba Atila, Ministry of Health

Fazil Inan, Ministry of Health

Ugur Sahin, Ministry of Health

Yesim Simer Berber, Turkish Public Health Agency

Asli Sungur, Turkish Public Health Agency

Hakan Yaman, University of Akdeniz

Ukraine

Volodymyr Yurchenko, Ministry of Health

Mykhaylo Komarov, Board of tertiary treatment

United Kingdom of Great Britain and Northern Ireland

Mark Bellis, Liverpool John Moores University

Uzbekistan

Alisher Iskandarov, Tashkent Paediatric Medical Institute

REPRESENTATIVES FROM OTHER INTERNATIONAL ORGANIZATIONS

European Commission (EC) Directorate-General for Health and Consumers (DG SANCO)

Natacha Grenier

WORLD HEALTH ORGANIZATION

Regional Office for Europe

Dinesh Sethi, Programme Manager

Francesco Mitis, Technical Officer

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WHO Country office, The former Yugoslav Republic of Macedonia

Dimitrinka Jordanova-Pesevska, National Professional Officer

WHO Country office, Turkey

Serap Sener, National Professional Officer

Engin Uçar, Road Safety 10 in Turkey

ANNEX 2. SCOPE AND PURPOSE

Every year injuries cause a significant number of deaths and human suffering in the WHO European Region, and pose a threat to the Region's economic and social development. Unintentional injuries are responsible for two-third of all injury deaths, accounting for some 500 000 deaths and 15 million disability adjusted life years (DALYs) lost.

Following two World Health Assembly (WHA) resolutions, injury surveillance and prevention has been given increased priority in the European Region. In line with these WHA Resolutions, Member States were invited to appoint National Focal Persons for injury prevention, with a view of facilitating the exchange of relevant information and experiences across the Region, and strengthening the regional and national capacity to advocate for injury prevention, promote evidence-based preventive strategies and develop cross-sectoral partnerships. There are around 50 countries with National Focal Points for injury prevention in the Region.

The WHO Regional Committee for Europe resolution EUR/RC55/R9 on the prevention of injuries in the European Region and the Recommendation of the Council of the European Union of 31 May 2007 on the prevention of injury and promotion of safety, have both placed violence and injury prevention on the public health agenda. Both these European policies emphasize the importance of surveillance as an integral first step to prevention. The 2010 report *Preventing injuries in Europe: from international collaboration to local implementation* shows that the resolution and recommendation have catalyzed action and that good progress is taking place. An increasing number of countries have developed national policies, strengthened their surveillance systems, and implemented evidence-based prevention programmes. The report highlights however a need for the health sector to commit to a more widespread and systematic approach to surveillance as a corner stone to underpin improved advocacy, policy development and evaluation.

In recognition that surveillance is an essential first step in the public health approach to prevention, the Norwegian Directorate of Health has developed an emergency department and hospital injury surveillance system which is being routinely used to monitor the burden of injuries and to evaluate prevention efforts. This is also fine tuned to also collate information on risk factors such as alcohol. In contrast many countries in the European Region do not have routine injury surveillance systems. WHO's TEACH-VIP curriculum has a module on injury surveillance in order to build health system capacity. Much would be gained by improving injury surveillance in these countries, and it is widely perceived that there is a need for the exchange of technical expertise and to ensure that capacity building actually takes place.

With this in mind, a one-day workshop on injury surveillance will be organized in Antalya, Turkey on 16 October 2012. This will use the TEACH-VIP injury surveillance modules and will incorporate injury surveillance expertise and technical know how from the Norwegian Directorate of Health. The programme for the day will consist of lectures and small group working using interactive exercises and databases. The small group work will be at sub-regional level, where efforts would be focused to take advantage of geographical proximity, similarities in context, potential for networking, the exchange of best practice and mentorship. Working in sub-regional groups such as the South Eastern Europe Health Network countries, Nordic-Baltic and Commonwealth of Independent States will be encouraged as there has been previous positive experience of working in sub-regions. The workshop will immediately precede the annual meeting for the national focal persons in order to maximise attendance. It is hoped that there will be an exchange of expertise between participants from low- and middle-income countries and high- income countries. Interpretation services will make the participation of countries in which

Russian is widely used possible. Participants will also discuss how injury surveillance can be mainstreamed into health professional training curricula.

Successful outcomes of the workshop would be to have a better institutional capacity for injury surveillance, with an improved understanding between sub-regional participants of the key advances being made in these areas, on how mentoring groups could be formed to facilitate capacity building and cross-country learning. The uptake of these lessons into health professional curricula will be a measurable project outcome which will be monitored in successive years.

ANNEX 3. PROGRAMME

8:30-09:30	Registration
OPENING SESSION	
09:30-10:15	Welcome of participants by WHO (Sethi)
	Welcome address by Norwegian Directorate of Health (Linhave)
	Welcome address by Ministry of Health, Turkey
	Introduction of participants (all)
	Logistics (Eriksen)
10:15-10:45	Key-note lecture: lessons from injury surveillance from Norway (Lund-Linhave)
10:45-11:00	Questions and answers session (all)
11:00-11:15	<i>Coffee break</i>
11:15-11:45	Break-out session in 3 sub-Regions: comparison of national injury surveillance with an ideal system- room for improvement (all)
11:45-12:15	Feedback from groups and discussion (all)
12:15-12:45	The JAMIE project (Kisser)
12:45-13:00	Questions and answers session (all)
13:00-14:15	<i>Lunch break</i>
14:15-14:45	WHO databases and how to use them (Mitis)
14:45-15:15	Hands on exercise with databases in 3 subregional groups (all)
15:15-15:45	Feedback from groups (all)
15:45-16:00	<i>Coffee break</i>
16:00-16:30	Round table: making the linkages- supporting better data for policy making (panel)
16:30-16:40	<i>Closing remarks</i>
19:00	<i>Lets get together – welcome drinks and social dinner</i>

ANNEX 4. EVALUATION QUESTIONNAIRE RESULTS

The 26 evaluation forms received back showed that almost all the participants (25 out of 26) assessed the meeting to be either good (7) or excellent (18) (they assessed the meeting as 4 or above, on a scale of 5) while one participant rated it with a score of three (Figure 1). All the respondents said that both the objective of the meeting were met. One participant said that the objective were met in term of increased awareness but not in term of improved capacity. All the participants said that the presentations met their expectations. Sixty per cent of the 25 respondents said that they will be “definitely useful” for their work, 36% found them “mostly useful” and only one participant found it “somewhat useful” for his/her work.

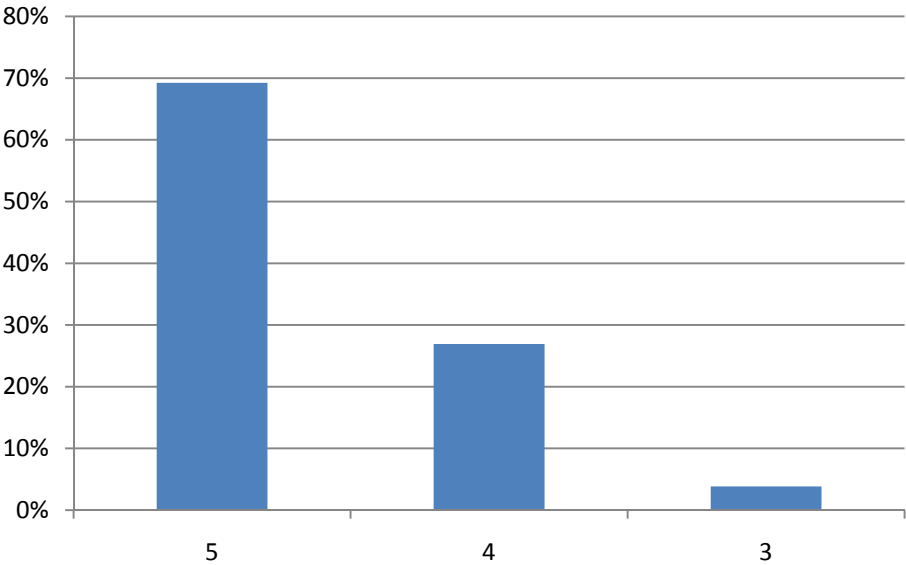
All the issues treated were appreciated but particular preference was given to the session in which WHO databases were explained. However, more time was asked for country examples and for group work. Participants wanted to discuss more and receive more practical examples.

One participant asked to have homework to be prepared before the meeting, concerning the existence of hospital admission data and the structure of injury surveillance system in his/her country, to be described with maximum ten sentences.

One participant asked methodology and a set of indicator to be shared so that a national injury registry could be easily created through mentoring. In addition to that the same participant asked to address the problems of injuries happening during mass events.

On the logistic side, everything was appreciated, organization and accommodation. Only one participant would have expected a more familiar and smaller environment.

Figure 1. What is your overall assessment of this meeting? (from 1=insufficient to 5=excellent)



Note: 26 respondents

The WHO Regional Office for Europe

The World Health Organization (WHO) is a specialized agency of the United Nations created in 1948 with the primary responsibility for international health matters and public health. The WHO Regional Office for Europe is one of six regional offices throughout the world, each with its own programme geared to the particular health conditions of the countries it serves.

Member States:

Albania
Andorra
Armenia
Austria
Azerbaijan
Belarus
Belgium
Bosnia and Herzegovina
Bulgaria
Croatia
Cyprus
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Denmark
Estonia
Finland
France
Georgia
Germany
Greece
Hungary
Iceland
Ireland
Israel
Italy
Kazakhstan
Kyrgyzstan
Latvia
Lithuania
Luxembourg
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Monaco
Montenegro
Netherlands
Norway
Poland
Portugal
Republic of Moldova
Romania
Russian Federation
San Marino
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