**Country update on Injury Surveillance: Norway**

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*Background*

In Norway, counting a population of about 5 million inhabitants, each year 1800 persons die and about 500.000 persons are treated by a medical doctor due to an accidental injury. These figures gave enough reasons for the Norwegian government to issue a national strategic plan for prevention of accidental injuries for the period 2009-2014, which was co-signed by eleven ministers. This strategic plan is covering the whole field of accidental injuries: traffic, occupational, poisonings, burns, injuries in kindergarten, schools, sports, and injuries related to consumer products.

This plan is the latest in a series of plans developed over the past 20 years. It started in the nineties with a governmental action plan on home and leisure accidents with four ministers signing. In the following years more and more ministers were involved in such plans. This latest plan, issued in 2009, is covering first time ever the entire field of accident prevention.

One of the main targets in this is to get an overview of magnitude and severity of medical treated accidental injuries in Norway. This is needed for enabling target setting for various categories of injuries covered by the respective ministries. A sound injury registration system for medically treated injuries is indispensable for setting such targets. Because this is still not achieved, the plan is now prolonged until 2018

*Methods*

Over the years 1985-2002 a national injury registration system (in- and outpatients) was in place involving hospitals in four towns across Norway. However, it was discontinued in 2003 due to financial constraints as the comprehensive data set recorded (NOMESCO) required extra resources for registration and analyses (about 7 Euro per injury).

A new system emerged in 2005. The design included a minimum data set (MDS) integrated in the patient-administrative system to be registered in the routine in all hospitals (N=60) at no extra cost. Such a task should require at maximum one minute and should be easy enough to be done by a receptionist. Through collaboration with other authorities, especially in the fields of traffic and occupational safety, a MDS was developed. The parliament decided in 2009 to have such a system becoming mandatory for all hospitals. A unique birth number is allowed to be included without permission form the patient. The data are sent to the National Patient Register (NPR) for analyses and dissemination. An report is made for each year since 2011.

The Minimum Data Set consists of following data elements:

* From the “regular” patient journal to be extracted: Personal data as sex, age, municipality of living, injury diagnoses (ICD 10).
* Additional MDS-elements to be collected from patient: Date and hour for injury; Type of intent: accident, violence, self-inflicted; Municipality injured; Place of occurrence, if street: traffic accident Yes/no, if yes: means of transport; Activity when injury occurred, if occ. acc.: type of industry; Injury mechanism; and Injury severity (AIS).

*Preliminary results*

About 300.000 patients are treated annually for an injury in the 60 hospitals as in- and out patients. In addition, about 250.000 patients are treated in the primary health system, consisting of about 4.500 general practitioners and 330 municipality AEDs across Norway.

A few of the hospitals have high completeness in registration of the MDS, but most not. Average completeness for all 60 hospitals is now 42 %. Reasons for low completeness are that most injury data elements are of non-medical nature, therefore seldom of great interest for the hospitals; IT-software is often hampering seamless registration during treatment; Insufficient capacity in NPR to give feedback to the hospitals and respective communities.

*Use of data*

We analysed the more severe injury diagnoses for 2010-14 for population in Vestfold, a county with14 municipalities among which nine are a Safe Community. The result of the analyses is promising in order to give the municipalities monitoring injury data to help them in their prioritizations.

There are some excellent examples of the use of injury data for prevention actions in local communities. A medical officer in a small municipality, Os i Østerdalen, has reduced fall and agricultural injuries by collaborating with local authorities and voluntary organisations based on injury registration of all injuries in the municipality. Hip fractures for instance were reduced by 50 % in Os in the winter by gravelling icy staircases and paths around their houses.

The same has happened in Harstad, a small city in the North of Norway, where fall injuries in the homes for 65+ were reduced by 26 % in the winter by 49% and burns in children treated as in-patients were reduced by almost 100 % over a couple of years-time. These two examples illustrate the potentiality for injury prevention based on injury registration.

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*IDB-related publications:*

[https://helsedirektoratet.no/publikasjoner/personskadedata](https://owa.certsure.com/OWA/redir.aspx?C=B6f7_9Dw-Eqx8gKeCvWLp6sUCZS8SdQI5GpIT2HWJC3E-k07cRfLfi2KStmcyZAGS4QuLhceS8I.&URL=https%3a%2f%2fhelsedirektoratet.no%2fpublikasjoner%2fpersonskadedata)

This link goes to the annual reports 2010-15 from the National patient register.

[https://helsedirektoratet.no/nyheter/flere-syklister-gir-tryggere-syklister](https://owa.certsure.com/OWA/redir.aspx?C=B6f7_9Dw-Eqx8gKeCvWLp6sUCZS8SdQI5GpIT2HWJC3E-k07cRfLfi2KStmcyZAGS4QuLhceS8I.&URL=https%3a%2f%2fhelsedirektoratet.no%2fnyheter%2fflere-syklister-gir-tryggere-syklister)

A one year in-depth study of bicycle injuries treated at the Oslo AED, a part of our national injury register, treating ab. 50 000 injuries a year.

[https://helsedirektoratet.no/nyheter/mange-smaskader-i-skole-og-barnehage](https://owa.certsure.com/OWA/redir.aspx?C=B6f7_9Dw-Eqx8gKeCvWLp6sUCZS8SdQI5GpIT2HWJC3E-k07cRfLfi2KStmcyZAGS4QuLhceS8I.&URL=https%3a%2f%2fhelsedirektoratet.no%2fnyheter%2fmange-smaskader-i-skole-og-barnehage)

A one-year in-depth study of injuries in kindergarten and schools, at the Oslo AED.

[https://www.fhi.no/publ/2014/skadebildet-i-norge-hovedvekt-pa-pe2/](https://owa.certsure.com/OWA/redir.aspx?C=B6f7_9Dw-Eqx8gKeCvWLp6sUCZS8SdQI5GpIT2HWJC3E-k07cRfLfi2KStmcyZAGS4QuLhceS8I.&URL=https%3a%2f%2fwww.fhi.no%2fpubl%2f2014%2fskadebildet-i-norge-hovedvekt-pa-pe2%2f)

Report on the Injury Pattern in Norway, made by the Institute of public Health.