

Assessment of information needs in Italian traffic safety policy

This assessment report is part of a series of four information needs assessment reports of selected environment and health policies developed within a collaborative project on the establishment of an environment and health information system supporting policy making (ENHIS-2, Grant Agreement SPC 2004124, coordinated by the World Health Organization, Regional Office for Europe).

Information needs assessment covers the following phases in the policy process:

- 1. Science base**
- 2. Policy formulation and implementation**
- 3. Policy evaluation**

All assessment reports are available at www.enhis.org

Introduction

Urban growth and spread result in increased road transports in Italy because the population often necessitate extensive relocations to reach workplaces or recreational areas. Urban growth did not automatically bring systematic development of the road network; therefore roads can not always properly transmit a great number of vehicles. In addition, road safety has decreased due to improper driver's attitudes, such as speed excess, alcohol and drugs abuse during driving and incorrect use of mobile phones.

The high amount of road accidents and the consequent charge on health care system, highlight the road safety topic to policy makers. Despite this, the issue is submitted to a periodic but inconstant attention, because this topic is not considered a strategic political priority.

Two Italian traffic policy documents were evaluated among a group of policy makers, experts and practitioners, whose opinions collected through interviews, were used to write this document :

- National Plan for Road Safety (Piano Nazionale della Sicurezza Stradale – PNSS) and Annual Implementation Plans.

The Plan aims to create the conditions for a safe and sustainable mobility network with a system of guidelines to promote infrastructural interventions, measures for prevention and control. The ultimate policy purpose is to achieve a decrease of 50% of deaths and injured from road accidents.

- New Road Code (Nuovo Codice della Strada – C.d.S.)

Norms to implement National Plan for Road Safety are periodically modified according to new safety requirements. Modifications have been freshly added to the Italian Road Code, which are mainly of repressive character but also stimulate proper behaviour among drivers.

Science base

Increase of road circulation causes an increased risk of road accidents. According to ISTAT (National Statistics Institute) data, 224.553 traffic accidents causing 5.625 deaths were reported in 2004, while 316.630 people suffered from lesions of various severity rates. In Italy, every day approximately 614 accidents occur, where 15 people on average die, while 867 other persons are injured. The analysis of accidents' rates of the years from 1991-2004 demonstrate an increasing trend of the number of accidents and injured.

In 2003, an inversion of these trends has been noticed mainly as outcome of the latest changes in the New Road Code, in particular the introduction of the Score Driving Licence. This trend was confirmed in 2004. The mortality index (number of deaths / number of accidents x 100) has reached the value of 2,4, which is a strong decrease compared to 1991 (4,4). A lack of recent data availability refrains from assessment of the current situation. This problem mostly affects the monitoring and the follow-up of policies.

Information needs assessment

- i. National policies have to be clear and easy to apply. The interventions introduced in the normative should cover the problem in general, i.e. public awareness of the potential danger in road circulation, respect of other people's life, needs and priorities, the fining of incorrect attitudes in traffic. Secondly, particular problems or situations should also be taken care of.
- ii. The approach towards road accidents in Italy today emphasizes on the final phase (accident rate, morbidity / mortality), while the underlying causal process and risk factors are hardly ever individualized. Accident reconstruction would allow for identification of the risk factors and consequently result in targeted preventive actions. Figure 1 below explains the processes in accident reconstruction.

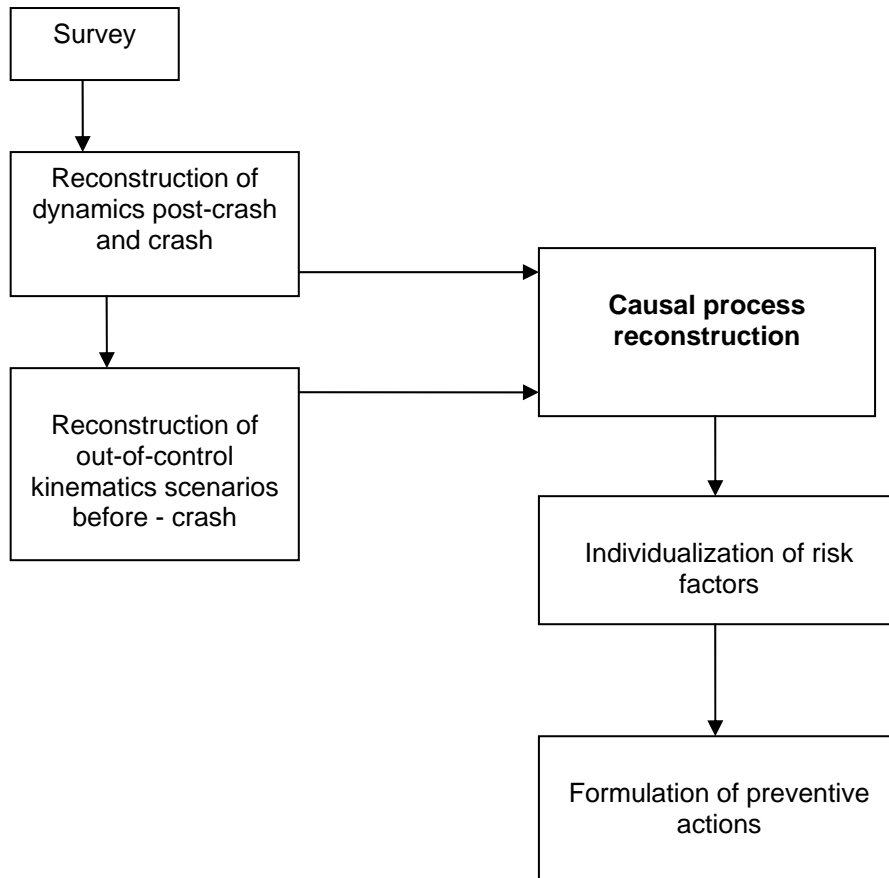


Figure 1 Accident reconstruction

To face the whole process of reconstruction up to the individualization of possible preventive actions would allow for more suitable interventions and it would avoid accidents to be repeated.

Policy formulation and implementation

In 1997 European Commission launched a second Programme for road safety improvement in Member States. The objective of this programme is a reduction of 40% road traffic deaths and injuries by 2010. In 2001 this goal was improved to 50% () and this proposal was endorsed by Member States in 2003, with the European Road Safety Action Programme.

In Italy, these EC initiatives were adopted through legislation in 1999 (L.144/99) with the establishment in 2000 of a National Plan for Road Safety (art. 32), and with the implementation of the New Road Code in 2003.

The overall aim of national traffic safety policies (PNSS and CdS) is a 50% reduction of death and injured from road accidents in 2010, as prescribed by EU. However, targeted guidelines for reduction of road accidents do not exist.

Road Safety prevention measures

The Italian Road Code is periodically modified to improve road safety. In 2003, the main amendments of CdS include:

- 1) The Score Driving Licence: 20 scores are assigned to every licence; for every violation 1 to 10 points are subtracted according to the type and gravity of the violation.
- 2) The driving licence for mopeds. Since 2004, moped drivers need to have a "certificate of driving suitability", in case they do not already have a drivers' licence.
- 3) Compulsory alcohol and drugs check applies to all persons involved in an accident.

The latest amendment of the Italian road code takes a precautionary approach, which include the promotion of road education in schools, night accident prevention programmes, a ban for owners and managers of nightclubs to sell alcoholic beverages after 2 a.m. and provision of voluntary alcohol tests and explanatory posters about the effects of alcohol abuse in nightclubs. Road education covers for example teaching in personal and social responsibility, knowledge and respect on the road.

In addition, higher sanctions for incorrect behaviours on the road are added.

Special attention to children is expressed in traffic safety policies that are trying to improve the knowledge of the norms and the risks in children's transport by car, the creation of protected walking routes in the home-school itinerary, the promotion of road training in schools. Box 1 and 2 illustrate the precautionary approach towards road safety.

The State Police, in collaboration with the Home Office, the Transports Ministry, the Board of Supervisors (Ministry of Education) and with support from UNICEF, promotes the annual ICARO project. The project aims to teach young people about the importance of rules, to promote a legality culture and to avoid dangerous behaviour, which is a major source of road accidents. The project initiatives are implemented in several Italian cities and involve students from elementary, middle and upper school.

Box 1 ICARO project

Several advertising campaigns on TV and radio were implemented throughout the past few years and the AMR2003 Survey evaluated their consequences and effectiveness. Questionnaires to high school pupils demonstrate that 82% of the participating boys was aware of the advertisements on road safety, while only 50.4% state that those messages have changed their driving behaviour.

Box 2 Effectiveness of advertising campaigns

Five subsequent steps, promoted by the Italian National Health Institute, could help to reach the goal for 2010:

- 1st step: maximization of the use of safety tools
- 2nd step: reduction of alcohol and drugs abuse during driving
- 3rd step: reduction of speed
- 4th step: improve road and vehicle status
- 5th step: improve cognition of road risks, especially among young people.

Authorities

The Ministry of Infrastructures and Transports in collaboration with the Ministry of Health, the Ministry of Interior and the Ministry of Education, establish general traffic safety rules and define the National Plan for Road Safety and submit them to the Parliament. The Ministry of Infrastructures and Transports defines the specific content (subject to three-yearly update) and establishes the Annual Implementation Programmes.

The Ministry of Interior, Road Police, Carabinieri (Policemen) and town police are responsible for implementation of the Road Code. The Ministry of Transports in concert with other competent Ministries, coordinates the proposals for changes of the Road Code and emanates regulations to implement the Code's dispositions and the European directives. The authorities responsible for verification of the observance of Road Code's norms are Road Police, Policemen, Financial Police (Guardia di Finanza) at national and provincial level and town police at local level.

Information needs assessment

- i. Partners and institutions involved have to be clearly specified and their role must be unmistakable. Often, authorities involved are not well informed about their exact responsibilities and tasks and among authorities, functions seem to be overlapping. Consequently there is no good insight into who is doing what, and to what extent. A lack of coordination results in the absence of an integrated approach, an abundance of double work and loss of important information. For this reason, it would be appropriate to create integrated centres exclusively devoted to the improvement of road safety.
- ii. Themes related to excess of speed and alcohol abuse should be integrated into traffic policy programmes.
- i. From the prevention point of view, a suitable number of controls on the road would be useful, i.e. allocating a bigger amount of financial resources to road police, increasing the staff devoted to road controls: stimulating respect for speed limits, controlling alcohol abuse and safety belts use.

Policy evaluation

ISTAT annually publishes the statistics on road accidents. Road accident surveys that result in injuries or deaths are completed with a questionnaire, which is filled by the authority on spot (e.g. road police). They have to report on the location and the accident dynamics. The completed questionnaires are transmitted to ISTAT, which deals with the data processing, analysis and their publication. However, ISTAT receives data on road accidents from earlier years; for this reason the annual statistics published are not representing the current situation. The lack in recent data availability makes it impossible to verify the effectiveness of new policies.

The general trend of accidents is substantially positive, since the number of deaths from road accident is practically halved and the general severity of the accidents is decreased, although the policy reduction target of 50% is not reached yet. Unfortunately for young people among 14-29, no such trend is yet being reported.

The need for improved examination and monitoring of the accident rate has resulted in release of the DATIS project (Dati Incidenti Stradali - Road Accidents Data): a system that is oriented towards improvement of health surveying from road accidents. The project is

composed of research and development branches. The first one concerns the quality improvement of the death certificate and the Cards of Hospital Discharge (SDO), to correctly individuate the sanitary consequences of accidents. The other branch concerns the overseeing of the first-aid and rehabilitation centres for cranial and spinal trauma, for a reliable and actual valuation of admittances caused by road accidents. Finally, the project has organized the overseeing of the use of alcohol and drugs between drivers and of hazardous behaviour between young people (survey AMR 2003) and the overseeing of safety devices use (Sistema Ulisse – Ulisse System).

Information needs assessment

- i. Different sets of statistical data should be used in a more comprehensive way. Data on road accidents should be collected into one database. For this purpose, data collection methodology must be harmonized between traffic events and should consider all aspects of the road accident process. I.e. it would be very useful to link technical survey data with health data and relate them to the same event. Data should be centralised in one statistical institution, and delivered as quick as possible to observe the process and to avoid dispersion in the information flow that makes the regular verification very difficult.
- ii. Follow-up of health conditions of injured persons requires improved communication between public authorities and sanitary institutions. The current lack of collaboration might result in undervaluation of deaths caused by road accidents, defined as deaths until the thirtieth day after the accident.
- iii. It is important to monitor the effectiveness of preventive actions, such as advertising campaigns, training and informative actions, regulatory provisions.
- iv. Also data providing evidence on infrastructure failures have to be collected and related to accident data in order to highlight the problem and use it to alarm the accountable institution.
- v. To reduce the severity of post-crash risks, it would be necessary for well-experienced staff to teach medical and first-aid practices in driving schools and in public schools.

Authors: Ernesto Vocaturo, Silvia Giardina, Roberta Usala and Jessica Tuscano, APAT (Italian Environmental Protection Agency)

Date of publication: November 2007

Data source: The case report is based on document analysis of two Italian Traffic Safety Policies and expert opinions retrieved from Dr. Franco Taggi - ISS (National Health Institute); Dr. Marco Giustini – ISS (National Health Institute); Angelo Faedda – Ministry of Transport; Prof. Andrea Costanzo - SOC.I.TRA.S. (Italian Road Traumatology Association); Giordano Biserni – ASAPS (Supporters and Friends of Road Police Association) and Prof. Girolamo Boldi – Technical consultant of Road Victims Family Association and technical consultant for Brescia justice court.

Further reading:

Communication from the Commission to the Council, the European Parliament, the Economic and Social Committee and the Committee of the Regions - Promoting road safety in the EU: the programme for 1997-2001

White Paper - European transport policy for 2010: time to decide - COM/2001/0370 final

European Road Safety Action Programme (COM(2003) 311 final)

National Plan for Road Safety, available at:

<http://www.infrastrutturetrasporti.it/page/standard/site.php?p=cm&o=vd&id=902>

New road code, available at:

<http://www.infrastrutturetrasporti.it/page/standard/site.php?p=cm&o=vd&id=1550>

Last amendment of Italian road code (Law 2 October 2007 n. 160, available at:

http://www.giustizia.it/cassazione/leggi/160_07.html)