

Report on the

**Regional consultation on injury prevention  
and the injury surveillance system**

Muscat, Oman  
16–18 May 2005



World Health Organization  
Regional Office for the Eastern Mediterranean

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## 1. INTRODUCTION

The regional consultation on injury prevention and injury surveillance system was held on 16–18 May 2005 in Muscat, Oman. The objectives of the consultation were to: develop guidelines for the preparation of a regional plan of action for road traffic injury prevention, taking into account the recommendations of the *World report on road traffic injury prevention* in eight priority countries (Egypt, Islamic Republic of Iran, Jordan, Lebanon, Oman, Pakistan, Saudi Arabia, and Yemen); develop region-specific guidelines for an injury surveillance system based on WHO injury surveillance guidelines; and guide Member States on identifying the research priorities for the Eastern Mediterranean Region in injury prevention with particular focus on road traffic injury prevention. The consultation was attended by temporary advisers from eight countries of the Region, and WHO staff from the Regional Office for the Eastern Mediterranean and headquarters.

Dr El Fatih El Samani, WHO Representative, Oman, welcomed the participants and delivered a message on behalf of Dr Hussein Gezairy, WHO Regional Director for the Eastern Mediterranean. In his message Dr Gezairy congratulated Oman on the leading role it had played in promoting the issue of road traffic injuries and on the impact of its initiative. He noted that in 2000, the number of people killed worldwide in road traffic accidents was estimated at 1.2 million, and the number of people injured at about 50 million. The risk of death due to road traffic accidents in the Region ranged from 8 per 100 000 population in Yemen to 24 per 100 000 in Oman. He highlighted the fact that road traffic injuries can be prevented, and that many developed countries had shown a decline in the figures for road traffic injuries by adopting specific strategies. WHO had endeavoured to tackle this problem in several ways, one of which was the publication of the *World report on road traffic injury prevention* on 7 April 2004. Dr Gezairy said that he expected that the consultation would assist Member States in developing a multisectoral plan of action for road traffic injury prevention.

H.E. Dr Mohammed Hassan Ali, Undersecretary for Planning Affairs, Ministry of Health, Oman delivered the keynote address. He highlighted the objectives of the consultation and the pioneering role of Oman in its efforts to address the burden of road traffic injuries. Statistics indicated that there were 13 000–17 000 road traffic injuries each year, of which 30%–45% needed hospitalization which was equivalent to 2%–3% of total hospitalizations. In addition, road traffic injuries had a detrimental impact on the quality of life of the victims, as well as on their family, especially as the majority of injuries occurred in the most productive age group of 15–44 years.

The agenda, programme and list of participants are included in Annexes 1, 2 and 3, respectively. Annex 4 includes the table that was used in the group work.



## **2. TECHNICAL PRESENTATIONS**

### **2.1 The global burden of injuries and a call for action**

*Dr Tami Toroyan*

Injuries are a global public health problem which account for over 5 million deaths every year. Road traffic injuries account for a quarter of all global injury mortality. The distribution of injury mortality globally varies from region to region but is higher in low- and middle-income countries.

WHO's Department of Injuries and Violence Prevention works on both intentional and unintentional injuries. Their work on intentional injuries focuses on violence prevention. Road traffic injuries are the Department's focus of unintentional injury prevention. World Health Day 2004 focused on road safety, with events held on this topic in many countries. The day was also used to launch the *World report on road traffic injury prevention*, an advocacy document that: highlights road traffic injuries as a public health issue; discusses the magnitude of the problem; outlines risk factors and effective interventions; and provides recommendations for reducing road traffic injuries in countries.

WHO's next steps in road safety are focusing on the implementation of effective interventions outlined in the report, i.e., increasing use of helmets, safety restraints, safe engineering, refraining from alcohol while driving, reducing excessive or inappropriate speed. It advocates that a multisectoral approach be used in which public health plays an important role. Part of this role involves the collection of data.

Accurate and reliable data on injuries are needed in order to measure the extent of the injury problem, help build political will and public support, plan appropriate interventions, and monitor and evaluate. Injury surveillance is one way of collecting data on injuries. It is an ongoing activity that can be built into day-to-day operations. A drawback is that surveillance systems are hospital-based, so they miss cases that do not present to hospital or that are very minor. Moreover, they cannot be used to calculate rates. Community surveys are an alternative way of capturing data on injuries. They are one-off events and can cover much more detail on injury events and risk factors involved than surveillance systems. They are population-based and so can be used to calculate rates. However, they can be costly, both in terms of human and financial resources. Both types of data collection systems are useful and should be considered as complementary tools towards providing accurate and complete data on injuries.

### **2.2 The situation in the Eastern Mediterranean Region**

*Dr Syed Jaffar Hussain*

There is an extremely high burden of death due to injuries in the Eastern Mediterranean Region, particularly as a result of road traffic injuries. Although the Region accounts for only 7% of global injury-related mortality, this is a result of its comparatively small population size relative to other regions. Indeed, when injury-related mortality rates are considered, this Region has the highest rates globally.

In high-income as well as in low- and middle-income countries in the Region, road traffic injuries are the leading cause of injury-related deaths, although 99% of the deaths are in low- and middle-income countries. Road traffic injuries also result in considerable morbidity and mortality in the Region, particularly among age groups that are the most productive in economic terms. Alarming, the trends over the past two decades suggest that the problem is set to worsen.

A number of reasons may explain the high number of road traffic injuries and fatalities in the Region. These include: poor emergency services and medical facilities; poor trauma management; low standards with regard to occupant protection, poor condition of vehicles, overcrowded vehicles, high pedestrian involvement, underreporting of accidents.

Road traffic injuries are a social and equity issue, disproportionately affecting poor households. This is true in all countries, in part as poorer people have limited access to post-accident emergency health care, in part as victims of road crashes are often from lower socioeconomic groups (eg. pedestrians, drivers of two wheeled vehicles). Pedestrians account for a high proportion of road traffic deaths: up to 60% in some countries. Road traffic accidents also exert a considerable economic toll, about 1% of gross national product (GNP) in middle-income countries and 2% in high-income countries.

WHO's road safety response has been under its 5-year strategy and includes its *World report on road traffic injury* and other documents on surveillance. It advocates a multisectoral approach to road safety in which public health plays an important role, for example, in injury surveillance and data collection, research, advocacy, provision of services, policy formulation, and evaluation of performance and intervention implementation. Integral to its approach is the need to address the user, the vehicle and road environment in a systems approach; this involves addressing education, engineering, enforcement and emergency.

### **2.3 Framework for injury prevention and control**

*Dr Syed Zulfiqar Ali*

It is very important for all countries to have an integrated policy and plan of action for injury prevention at national level. *A Practical guide for multisectoral plans of action, surveillance and research* was prepared by the WHO Regional Office team based on several documents developed by WHO headquarters. The guide includes detailed steps for the development of a national policy and multisectoral plan of action for injury prevention. In all countries of the Region, as in other parts of the world, laws and regulations addressing issues related to intentional and unintentional injuries already exist, and some activities are under way. However, these initiatives are often fragmented and inadequate and overall awareness about the magnitude of the problem may be low. The reasons for developing a national policy on injury prevention are to raise awareness of the problem, build consensus around possible solutions and to develop a coherent, effective response involving all partners.

A surveillance system for injuries is also important. Surveillance data should be used for the design of appropriate interventions, advocacy and coordination and to monitor results and assess impact. The steps in developing a surveillance system were briefly described.

More research on the subject of injury prevention is needed, especially as injuries have recently become the focus of attention. The different means for advancing research in injury prevention were mentioned. The attention of the participants was drawn to identifying key areas of research in the field of injury prevention. Some issues that required research were also suggested for consideration by the consultation.

#### **2.4 Importance of health education in road traffic safety and accident prevention**

*Dr A.H. Joukhadar*

Teachers have the responsibility not only to ensure the security of their students, but also to foresee and provide appropriate safety and injury prevention education, particularly road safety education. Road traffic prevention education aims to provide children with appropriate means to participate fully in ensuring their own security on roads. Children should preferably walk to school; by promoting this, we are promoting security, health, physical activity and environmental awareness. Danger perception and assessment is learnable; parents have a paramount role in this learning process. They should be involved as early as possible. According to road safety specialists, a child should not be unaccompanied on the road before the age of 7 years, and certainly not before the child is aware of road traffic risks. Parents should regularly accompany their young children on the way to and from school and review with them road traffic dangers before letting them out alone. Before a child starts to walk or ride a bicycle to school, parents should assess the difficulties that the child might encounter on his/her route and render it difficult or particularly dangerous (walkability and bikability assessment). Local authorities or municipalities should establish school travel plans so as to improve road security, encourage children to walk to schools and limit as much as possible the use of private cars to transport children. Each age group has a different type of road traffic risk. Access to scooters and motorbikes from the age of 14 onwards contributes to a substantive increase in road traffic accidents, injuries and deaths among adolescents who are prone to risk-taking behaviour and speed driving. A significant number of adolescents are also victims of road traffic accidents as passengers in a friend's car. Excessive speed, alcohol and drug use, fatigue and inexperience, and using mobile phones while driving are the main causes of accidents, in addition to not wearing a seat belt. Special educational efforts, drawing on road traffic risk assessment and surveillance, should target children and young people so as to improve road traffic safety and security.

In addition to walkability and bikability assessment implemented by parents and teacher-parent associations, the global school-based student health survey (GSHS) can contribute to awareness as it includes a module on violence and unintentional injuries, including road traffic injuries.

### **3. COUNTRY PRESENTATIONS**

#### **3.1 Roles and responsibilities of stakeholders in a multisectoral plan of action for road traffic injury prevention in the Islamic Republic of Iran**

*Dr Ali Raza Moghisi*

Injury-related mortality is the second most common cause of death in the Islamic Republic of Iran. It is the leading contributor to burden of disease, accounting for 26% of the national burden of disease. Traffic-related deaths account for about 50% of injury-related deaths and 17% of the burden of disease. Motorists account for 51.7% of traffic-related deaths. The Islamic Republic of Iran loses almost 5% of its total GDP on road traffic crashes and associated deaths.

The National Road Safety Commission consists of 14 organizations, ministries and agencies. A statement with the goal of reducing deaths due to road traffic accidents by 50% by 2006 has been prepared and is awaiting approval by parliament resolution. There was a 17% increase in deaths from road traffic injuries from 2002 to 2003 reduced to an increase of 1.4% from 2003 to 2004. During the 15 days of Nowruz (Iranian New Year), injuries decreased by 12% compared with the previous year. These results show that injuries can be both predicted and prevented.

#### **3.2 Steps in development of a multisectoral plan of action for road traffic injury prevention in Yemen**

*Dr Ali Sariyah*

In Yemen there are 9 road traffic accidents per 100 000 population, and there has been a slow but significant and continuous increase of road traffic accidents in the past decade. Prompt action is needed to deal with the problem in order to save lives and prevent permanent disabilities.

The existence of emergency medical services reflects the political commitment towards the important and basic needs of the population. It is necessary to highlight the importance of a multisectoral approach in any plan of action for road traffic injury prevention. The role of the health sector in reducing road traffic accidents is through: advocacy and promotion, the development of a national strategy; surveillance and research; improvements in the delivery of health care, the strengthening of partnerships between sectors.

A national conference on road traffic injury prevention was conducted on World Health Day, 7 April 2004, and the recommendations of this conference were adopted by the Cabinet by Decree 111/2004. The Ministry of Public Health and Population sought WHO support in developing the multisectoral plan. In October 2004, two WHO consultants visited Yemen to review the current situation; develop guidelines towards a comprehensive strategy for the prevention of road traffic injuries; develop an action plan for road traffic accidents prevention; and hold a two-day workshop with 30 participants from different sectors. A road traffic accident prevention plan for 2006–2010 was developed and has been adopted by and integrated into the activities of the Ministry of Public Health and Population.

### **3.3 The significance of high-level leadership in Oman for health promotion and injury prevention**

*Dr Wahid Al Kharusi*

Road traffic injuries, their consequences and their impact on the country's economy, coupled with their disastrous effects on people's lives, makes them not only a public health problem but a priority. Political will is necessary to achieve proper implementation of a road traffic accident reduction strategy.

Oman has spearheaded bringing the issue of road traffic accidents, injuries and their prevention to the United Nations, resulting in three UN resolutions over 14 months. Locally, the population has been active and helped to achieve the objectives of the injury prevention programme. Raising public awareness and educating the decision-makers are important elements in reducing mortality and morbidity of road traffic crashes and injuries.

### **3.4 The role of law enforcement and public awareness in the promotion of road safety in Pakistan**

*Mr Pervez Rathore*

In 1997, a service-oriented officer-based motorway police force was formed for law enforcement to raise awareness on a new 360 km long, fully-fenced motorway. The per capita expenditure on this widely-praised force is high but the results are encouraging. In its jurisdiction, in addition to providing help to 2000 road users daily, the motorway police have reduced accidents by 70% and highway crime by 85%. The basic administration unit is a 'beat' measuring 40–50 km. Services include: ambulance with paramedics; ten wireless-fitted patrol vehicles equipped with a first-aid box, foldable stretcher, road safety search light, etc.; mobile workshop with mechanics; recovery vehicle and helpline have made road journeys safer and enjoyable. Because of their success, the motorway police have been entrusted with the policing of 1700 km of the longest road in Pakistan, the Grand Trunk Road. Policing of the 7000 km federal trunk road will follow in a phased programme.

### **3.5 The role of the nongovernmental sector in providing emergency care for road traffic accidents**

*Mr Faisal Edhi*

The Edhi Foundation is one of world's most active and organized social welfare organizations. It is the largest organization in Pakistan providing a large range of services to alleviate the suffering of vulnerable people. It was started by Abdul Sattar Edhi, who established, almost single-handedly, a national welfare network based in Karachi. The Foundation maintains ambulances which drive around the city regularly helping the destitute to find shelter, care for the victims of road traffic accidents and take homeless children to orphanages. Edhi Foundation teams are often present at accident sites to help the injured and bury the dead.

The Foundation's activities include:

- 24-hour emergency service across the country through 250 Edhi centres which provide free shrouding and burial of unclaimed dead bodies;
- shelter for the destitute, orphaned and people with disabilities;
- free hospitals and dispensaries;
- rehabilitation of drug addicts, services for people with disabilities handicapped,
- maternity services;
- relief efforts for victims of natural calamities in addition to providing;
- shelter for the mentally ill;
- hospitalization of sick persons;
- many other services.

The Edhi Foundation strongly adheres to the principle of self-help. The mission of the Edhi Foundation is to motivate the people of Pakistan and other developing countries to solve their social and other problems on a self-help basis. The Edhi Foundation is run entirely with the help of volunteers. Thousands of volunteers participate on a full-time or part-time basis. All contributions come from individuals living in Pakistan or abroad and from business. The Foundation accepts contributions of money, clothing, food, medicines and technical contributions from nongovernmental agencies.

### **3.6 Best practices in injury surveillance systems**

*Colonel Jameel Ali Saleem*

Jordan began its modern development in the 1970s, and the development of the transportation sector, particularly road infrastructure, has shown substantial growth. There are 14 fatalities per 100 000 population, and this has been a fairly constant figure for the past 5 years. The material cost of road traffic accidents for 2003 alone was estimated to be US\$ 270 million, or 3% of gross domestic product (GDP).

The traffic accident injury surveillance system in Jordan consists of: data collection, entry and analysis and reporting of results. The police are responsible for recording and investigating all traffic accidents irrespective of the severity of the accident, and all information collected by the police is entered in an electronic database. Once the data have been analysed, a report of the accident is produced.

### **3.7 Current injury prevention and surveillance initiatives in Oman**

*Dr Wahid Al Kharusi*

Road traffic accidents and injuries are easily forgotten and do not attract the attention of the media even though accidents are pandemic. It is necessary to understand and appreciate the crash sequence in order to direct a community-based preventive programme.

In Oman, injury preventive initiatives have been developed through awareness-raising at community level and with decision- and policy-makers. Through various local stakeholders,

different initiatives are in place under the National Committee of Safety created in 1997 by a Royal Decree and headed by the Inspector-General of Police.

Surveillance initiatives and monitoring systems are in place and are supported by stakeholders and endorsed by the state. The development of a trauma registry which is locally tailored, inclusively holistic and able to identify the economic impact of accidents in Oman is ready to be implemented. It is comparative and able to be used regionally. This system is user-friendly and adaptable.

### **3.8 Information-based decision-making process for injury prevention in the Islamic Republic of Iran**

*Mr Mohammad Raoufi*

Cities with populations of more than 500 000 have to undertake comprehensive transportation and traffic studies, as approved by the Higher Council for Urban Traffic Coordination, to have a reliable information base for informing decisions in applying comprehensive policies. The results of the studies are now providing better and more reliable information on different issues related to traffic, including traffic-related injuries. Policy-makers are able to make decisions based on these results and direct change based on the available information.

### **3.9 Global research priorities and experience**

*Dr Abdul Ghaffar*

Injuries have become an important public health problem, because they are one of the leading causes of death and disability globally as well as in the Region. Injuries not only cause death, disability, pain and suffering, but also lead to significant financial losses to society and represent a substantial burden on the national health systems.

Research plays a vital role in providing evidence for improved management decisions. Unfortunately, not enough is spent on research, particularly in developing countries. It is important in generating new knowledge, but there is also a need to synthesize the available information and test the proven effective interventions in local settings. Sociocultural sensitivities need to be taken into account, as well as other issues, such as the mix of traffic. There is, thus, an urgent need to conduct research in the Region.

In view of the competing priorities for scarce health research funds, priority-setting for health research is as critical as conducting the research itself. The commonly-used research priorities tools are: essential national health research, and the five steps and combined approach matrix developed by the Global Forum for Health Research.

### **3.10 Injuries statistics and the control programme in Egypt**

*Dr Hesham El-Sayed*

Injuries are the fifth leading cause of death in Egypt accounting for 16 000 deaths (4%) in 2002. Road traffic injuries are the leading cause of injury-related mortality and morbidity in

Egypt. Road traffic injuries affect more children and young people, as well as the most vulnerable road users, such as pedestrians and drivers of two-wheeled vehicles. Despite the availability of comprehensive data on injuries in Egypt from various sources such as the Ministry of Health and Population, the police and from epidemiological research, the data lack consistency in determining the specific causes of injuries and their risk factors.

Many activities have been undertaken for injury control in Egypt during the past 10 years due to increasing recognition of road traffic injuries as a priority public health problem. For improving the quality of the available data, the Ministry of Health and Population developed the injury registry system, in collaboration with the Regional Office in 2002. More stringent traffic laws have since been implemented. However, they still require greater enforcement. There is also a need to address the impact of urban development on road traffic injuries, and to improve the environment to protect vulnerable road users, such as pedestrians and drivers of two-wheeled vehicles and public transport. Furthermore, there is a need to offer better training for injury care among all workers in health facilities, such as emergency and primary health care physicians, nurses, and first-level respondents, such as policeman, teachers, etc.

There is an urgent need to coordinate the work of different sectors in charge of injury control, such as health, transport, police and the community. The establishment of a safety council is recommended to represent the different sectors to prepare and implement an efficient plan of action for injury prevention and control in Egypt.

### **3.11 Intersectoral collaboration in injury prevention and control**

*Dr Syed Jaffar Hussain*

Despite the fact that the highest burden of road traffic injuries is borne by the health sector, their prevention remains a shared responsibility. Many of the preventive strategies are outside the domain of the health sector, and hence a multisectoral approach is of crucial importance.

A multisectoral approach to the problem tends to minimize duplication and lead to judicious use of scarce resources. It also creates ownership by clearly defining the different roles and responsibilities of concerned parties.

A number of mechanisms are needed to ensure better coordination and functioning. An agency for injury prevention and control should be identified and given full legal and administrative authority. An efficient reporting system should be developed between the lead agency and different sectors. Yearly reports should also be issued. Programme managers and sector heads should meet at regular time intervals.

While clearly measuring and observing the roles and responsibilities of different sectors, no opportunity should be left for potential fragmentation of the programme. Any tendency towards the dilution of ownership should be avoided and all sectors need to abide by agreed preset protocols.

## 4. GROUP WORK

### 4.1 Group work: prioritization of injuries with the help of a ranking template

Participants were divided into three groups. Using a template designed for this exercise (Annex 4), each group ranked injuries by cause according to different factors such as mortality, morbidity, economic cost, political support, effectiveness, and availability of resources. Results are shown in the table below.

	Group 1 ranking	Group 2 ranking	Group 3 ranking	Average ranking
Road traffic crash	1	1	1	1
Poisoning	4	3	3	3
Fall	2	2	4	3
Fire	3	2	2	2
Drowning	5	3	5	4

It is clear that road traffic accidents were considered the most important cause of injury by all participants, and further action needed to be directed towards preventing road traffic injuries.

### 4.2 Development/improvement of surveillance system for injuries

On the second day, each of the three groups addressed issues in the development and improvement of the surveillance system for injuries. Each group listed the problems envisaged or already existing and suggested solutions for them. They also listed the agencies responsible, the resources needed and the time frame to solve these problems.

The problems put forward by the groups included:

- no comprehensive surveillance system for injuries exists at present;
- no standard definition of terms;
- lack of a central data collection agency;
- inadequate or inappropriate collection, poor quality and underreporting of data;
- lack of coordination between different data collection agencies;
- lack of resources in the form of trained human resources and finance;
- lack of monitoring and performance tracking.

The solutions to these problems were suggested as follows:

- Develop a comprehensive injury surveillance system in each country with a lead agency responsible for the collection of data.
- Form an intersectoral team to compile guidelines and recommendations for a surveillance system.
- Identify a focal person from relevant sectors and train human resources for data collection and evaluation.

- Formulate national policies and protocols with the help of national, regional and international experts and disseminate these protocols to all relevant sectors.
- Clarify and standardize various terms and definitions.
- Obtain political support and increase public awareness.
- Conduct national level surveys and research for baseline data about types of injuries.
- Allocate resources for injury surveillance.
- Include private sectors in data collection.
- Develop an inbuilt monitoring and evaluation system by developing regional guidelines for evaluation.

Responsibility for developing/improving the surveillance system was suggested as: the Regional Office, Ministries of Health, national governments, experts and the lead agency. The calculation of resources required ranged from US\$ 35 000 to 500 000. The timeline suggested ranged from three months to one year and ongoing.

### **4.3 Development of a multisectoral plan of action for injury prevention**

#### *Overview*

The participants were divided into four groups and each group reviewed the development of a plan of action for injury prevention in one country. See Annex 4 for the template used. The three phases in development of the plan were as follows.

- Phase 1: Designing and leading the policy development process, under which the recommended steps are assessing the situation, raising awareness creating advocacy about injuries, creating leadership and enlisting political commitment, integrating key stakeholders and creating ownership.
- Phase 2: Formulating the policy, under which the recommended steps are defining the broad framework, ensuring a systematic approach to injury prevention, ensuring that policy will lead to action by setting priorities, defining responsibilities and coordination mechanisms for implementation, identifying resource needs and defining mechanisms for monitoring and evaluation.
- Phase 3: Approval and endorsement, steps of which are approval from stakeholder groups, government approval and state endorsement.

#### *Group A: Islamic Republic of Iran*

In phase 1, all stakeholders performed the situation analysis separately but consolidated situation analysis at the Higher Council of Health headed by H.E. the President of the Islamic Republic of Iran. Raising awareness and advocacy of injuries was also undertaken through the same council. Leadership and political commitment were created by the Road Safety High Commission at national and provincial levels. The same commission integrated key stakeholders and created ownership. The strengths of phase 1 were listed as:

- existence of High Health Council and similar structures at provincial and district level;
- the quality and commitment of leadership from different sectors;

- involvement of all stakeholders;
- availability of existing information/data;
- taking into account regional, national and international approaches, data and statistics;
- creation of a Road Safety Commission and Subcommittee at the provincial level.

The weaknesses of phase 1 were listed as weak coordination during the analysis phase, and inappropriate and unstructured approach from the community.

Suggested future actions included:

- low level of subcommittee cooperation;
- lack of the same committee at the district levels;
- standard and comprehensive form of collecting data;
- more effective involvement of community in data collection exercises;
- creation of safety commissions at the district levels;
- greater advocacy at the city council level.

In phase 2, all Road Safety High Commission members provided the inputs. The role of partners at each level was defined and priority was set according to means leading to tangible results, such as: speed limits, seat belts, helmets, emergency services, ticketing and enforcement of the law in major cities. Further, resource allocation was made by major sectors to achieve fixed objectives. The strengths of phase 2 were listed as:

- full participation of all sectors;
- all levels of government were involved;
- achievable and results-orientated
- online data collection was used for evaluation
- dissemination of data
- national surveys.

The weaknesses of phase 2 were listed as:

- weak community involvement;
- no clear role for city council, parliamentary group or community;
- ill-defined target groups;
- feasibility study not conducted;
- lack of infrastructure;
- lack of ongoing research.

#### *Group B: Jordan*

In phase 1, the situation was assessed in the following ways:

- An annual report on road traffic injuries which outlines the magnitude of the problem and contains information on risk factors. The Jordanian Traffic Institute collects data from police (on drivers, vehicles).

- A number of multisectoral workshops had been conducted involving police, nongovernmental organizations, universities and the Ministry of Health, (The Traffic Institute has annual conferences on road safety).
- There is cooperation with the Swedish International Development Agency to assess road safety situation, analyse results and make recommendations. The agency provided technical expertise as in addition to financial support, to be matched by the government.
- Workshops were conducted on emergency care services and coordinated by the Ministry of Health.

To raise awareness of injuries, workshops were conducted; radio briefings through nongovernmental organizations and television talk shows were aired. Further, the involvement of the King and Queen of Jordan raised the profile of traffic injuries. There were annual celebrations, a traffic day, an opportunity for all sectors involved in traffic to address the problem annually. Leadership and political commitment were created through the Higher Traffic Road Safety Council which was headed by the Prime Minister. This resulted in part because of nongovernmental organizations involvement, stakeholders, and pressure for such a body to be created. It was also a recommendation arising from technical advice from the Swedish International Development Agency. The council has an advisory role. Integrating key stakeholders was ensured as most stakeholders were represented in the council and there was input from different sectors in the development of an action plan e.g. from each Ministry. The strengths of phase 1 were listed as:

- workshops and greater awareness-raising;
- international funding;
- participation of different sectors;
- sharing other countries' experiences;
- follow-up for building the second phase of the project;
- multisectoral collaboration for traffic day, week on traffic safety;
- royal family involvement;
- responsiveness by media to broadcast issues of road safety;
- strong intersectoral involvement pressurizing for a safety council;
- public and private sector involvement;
- role of the council.

The weaknesses of phase 1 were listed as:

- insufficient government commitment for follow-up;
- lack of accurate data due to a lack of coordination between sectors; data from the health sector and data on roads are incomplete and not easily accessible;
- some areas lack specialists;
- lack of interest by participants as road safety is not considered a priority;
- focus on people and victims and not on politicians;
- ineffective media campaigns that lacked appeal and variety;
- large council of 30 members selected by the Prime Minister and Ministry of the Interior;
- lack of power or any legal authority of the Council, which reduced its ability to have its recommendations implemented;

- inadequate resources;
- lack of priority given to road safety by those agencies involved due to limited funds; as there is no incentive for people who form the council to work on the plan, this reduces the efficiency of the council as a whole.

Suggested future actions included:

- workshops that are more focused, without reducing or limiting participation;
- improvement and systematization of the flow of information to the Jordanian Traffic Institute; for example, the Ministry of Health is starting an injury surveillance system in hospitals, the information from which should be fed automatically to the traffic institute;
- awareness-raising targeted towards high level decision-makers;
- changes to the selection process and a decrease in the number of participants on the council;
- greater authority and legal power of the council;
- establishment of funding sources, e.g. from traffic fines, insurance companies
- greater funds for organizations.

In phase 2, the Jordanian Traffic Institute drafted a strategic plan to define the broad framework. This included objectives, a 3-year plan and a target to reduce fatalities. A workshop was held to discuss the plan with council participants and with stakeholders, including ministries. The plan was submitted to the council and was approved.

To ensure a systematic approach to injury prevention leading to action, the strategic plan was sent to all organizations involved to add their objectives and the activities that they would carry out to meet the overall objectives of the plan. For example, there was the stated goal of improving rescue services, so the plan went to the Ministry of Health for them to articulate how they would achieve this. Further, the council will ask organizations to put action plans and budgets forward for what they are proposing to achieve. The council has an executive office that is a small working group with representatives from the council who meet every few months. They are in charge of following up on implementation with all organizations involved.

The strengths of phase 2 were listed as:

- people allocated to work specifically on the development of the strategic plan;
- part of the second phase of the project was to develop a strategic plan. The Swedish International Development Agency provided technical support for this. As stakeholders from the various organizations were directly involved in articulating the objectives and actions, they were more likely to do them. The actions were more likely to be realistic and financially feasible due to the bottom-up approach;
- each organization had to report their activities, which means more complete data were collected.

The weaknesses of phase 2 were listed as:

- the council will have to integrate all the action plans from organizations and resolve any conflicts between submissions;

- the council has no authority to refuse suggested actions of participating organizations;
- the council discussed having a technical committee to work on the action plan but felt that it would not work if they told organizations what to do, particularly as there were no funds coming to organizations. Instead, organizations develop their own plans to be more realistically achievable;
- possibly the council should have been more specific with setting targets for the different organizations to achieve (e.g. instead of saying work on protecting pedestrians, they should have articulated “by reducing speed, or by improving pavements”);
- as there is as yet no budget for implementation, monitoring, or evaluation, each organization has to cover costs and may not be able to afford to take suggested actions or implement the recommendations of the council.

Suggested actions included budgetary allocation for the whole action plan from the government, distributed to various participants, and earmarking of money intended for the implementation of planned activities by the government for road safety before it is distributed to ensure that it is spent on planned activities.

In phase 3, approval from stakeholders was ensured by the fact that the action plan was developed by them and a final version of the plan will be sent to stakeholders for comment and to be revised and published. This will get endorsement after the council receives all action plans.

The strength of phase 3 was that the Council, which includes members of the government, will improve the uptake and endorsement. The weakness of phase 3 was that the plan was not going to be approved at a high government level.

Suggested actions included ensuring through parliament or a higher level of authority that the government is held accountable for plans and holding public hearings, seminars, etc. about action plans.

#### *Group C: Oman*

In phase 1 the situation was assessed through epidemiological assessment, stakeholder analysis and analysis of policy environment. A public awareness campaign was carried out through the media and the policy was formed following a royal decree. All stakeholders were involved, and provisions for continuing involvement were also included in the policy process. The strengths of phase 1 were listed as:

- multisectoral process;
- validation by a royal decree;
- headed by the Inspector-General of the Royal Oman Police;
- direct linkage with the cabinet and national leadership;
- ownership of multiple sectors.

The weaknesses of phase 1 were as:

- no private sector involvement;
- no nongovernmental organization involvement;
- no community involvement;
- varying degree of expertise in committees;
- occasional conflict of interest between different stakeholders.

Suggested actions included encouragement and increased involvement of the private sector; dedicated staff and budget for coordinating the development of the policy; and encouraging registration and role of nongovernmental organizations in the country.

Under phase 2, the group made the following comments:

- The policy has a vision, time-frame and principles and definition of roles and responsibilities of different stakeholders.
- Primary, secondary and most elements of tertiary care were provided for.
- A surveillance system was included.
- Priorities were set according to the significance of the problem and available resources. To reduce the number of road traffic injuries, the group suggested formation of a comprehensive emergency medical service (EMS), updating/renovation of emergency rooms in regional hospitals to Level 1, improving the quality of trauma care, creating public awareness, improving roads and minimizing black spots.
- Human resources and budget were identified
- The mechanisms for monitoring were included, although no specific plans were made for evaluation.

The strengths of phase 2 were listed as:

- local and international expertise;
- roles and responsibilities were clarified;
- approval, endorsement and agreement between stakeholders;
- comprehensive emergency medical and level 1 trauma services;
- excellent law enforcement provisions;
- policy has led to action.
- priority setting was undertaken based on data and information in view of the availability of resources and review;
- intersectoral committees were formed for creating policy, and technical and public awareness. All committees were at the central level and regional focal points/working groups;
- specific action plans designed;
- surveillance system for injuries was in place in the Ministry of Health and in the police;
- data used for monitoring and planning and advocacy.

The weaknesses of phase 2 were listed as:

- over-ambitious objectives;
- limited physical and psychological rehabilitation and lack of social rehabilitation.
- limitations in availability and accuracy of data;
- shortage of well-experienced staff;
- dedicated office for coordination not designated;
- government funding only;
- lack of enthusiasm of the private sector;
- lack of commitment from some of the stakeholders;
- lack of regular evaluation system.

Suggested actions included:

- review of the objectives and time frame for making the plan more realistic and achievable;
- improved rehabilitation services and compensation for victims;
- proper database through trauma registry;
- staff training;
- designated secretariat for coordination;
- other avenues encouraged for funding;
- development of national database for injuries;
- regular independent evaluations with an outside audit.

In phase 3, the plan was approved by all government partners in a national level meeting/committee. It was approved at the ministerial level and by the cabinet and the Sultan. The strengths of phase 3 were that all government sectors/ministries approved the plan. Further, under-secretaries as focal points also approved the plan and there was endorsement from the highest level to ensure continuity.

The weakness of phase 3 was listed as limited stakeholder involvement and official endorsement by stakeholders. It was therefore suggested that the plan should be shared with other stakeholders to get their inputs and endorsement.

#### *Group D: Yemen*

In phase 1, the situation was assessed in the following ways: available data sources were reviewed and relevant data was collected, key stakeholders were met, available legislation, plans and strategies were reviewed, public awareness efforts by the Ministry of Health, media and education were reviewed.

Awareness was raised and leadership and political commitment was created through World Health Day 2004; media involvement; one-day workshop on road safety involving key sectors and stakeholders; and other seminars and workshops to sensitize policy- and decision-makers. Integrating key stakeholders and creating ownership was achieved through: meetings with different stakeholders for situation and needs assessment; multisectoral national committee for road safety; and holding a workshop to develop a plan of action, involving key stakeholders.

The strengths of phase 1 were listed as:

- comprehensive assessment of the available data, legislation and plans;
- comprehensive coverage of stakeholders, policy and available programmes;
- strong coordination between the Ministry of Information and traffic authorities;
- presence of WHO collaborating centre;
- population programme with a strong and influential information component;
- consensus around the need for a systematic approach to tackle road safety issues;
- coordination for action planning.

The weaknesses of phase 1 were listed as:

- incomplete assessment of data quality;
- poor integration of various aspects of road safety in school curriculum;
- inadequate community involvement in awareness programmes;
- lack of sustainability of senior and high-level involvement and follow-up;
- insufficient commitment from stakeholders.

Suggested actions included:

- more in-depth evaluation of the available data;
- need for more efficient data collection systems, such as surveillance system and surveys;
- scanning and assessment of available research, and designing a research agenda;
- strengthening and empowerment of the national committee for road safety;
- allocation of sufficient funds.

In phase 2, while formulating the policy, the processes followed were:

- assessing available data, needs, available resources and setting priorities;
- involving key stakeholders through individual and collective meetings;
- consulting related WHO guidelines;
- adopting a multisectoral approach;
- taking heed of primary, secondary and tertiary prevention levels;
- looking into various road safety aspects in key sectors e.g. programmes/activities/dedicated resources (human, financial and other)/opportunities/weaknesses;
- respect for local sociocultural considerations and sensitivities while designing appropriate intervention mechanisms;
- identifying the need for a mechanism/protocol for monitoring and evaluation.

The strengths of phase 2 were listed as:

- realistic multisectoral coordination comprising workable interventions using scarce available resources to the best effect;
- taking key sectors into consideration;
- strengthening of the programmatic approach;

- comprehensive approach.

The weaknesses of phase 2 were listed as:

- academicians not sufficiently involved;
- inadequate participation of some sectors such as social services, civil defense, religious sectors, etc.;
- need for clear quantification of financial resources needed for implementation;
- need for a clear mechanism for monitoring and evaluation.

Suggested actions included:

- greater involvement of academicians and other key sectors;
- greater attention paid to quantification of required funds;
- provision of a clear operational mechanism for monitoring and evaluation.

In phase 3, the plan of action was formally approved by the Ministry of Health and other sectors were informally briefed. The plan has already been incorporated into the Ministry's strategic plan. After approval by the national committee, the plan will be presented for endorsement at state level.

The strengths of phase 3 were listed as: current involvement of the Ministry of Health; strengthening related programmes within the Ministry and increasing the level of commitment; and triggering similar activities with other related programmes.

The weaknesses of phase 3 were that it was not yet formally presented to other sectors, and there was no clear allocation of financial resources despite endorsement. Suggested actions included a national meeting to be formally organized by the Ministry of Health to seek approval of the national committee and other stakeholders, and endorsement, should be coupled with clear direction for designation of financial and human resources.

## **5. CONCLUSIONS**

The burden of road traffic injuries is a priority in terms of mortality, morbidity and cost. There is an urgent need to develop and improve good surveillance systems for injuries. The problems faced by the majority of countries have been identified as inadequate systems, lack of a common definition of injury, lack of skilled human resources and finance as well as under-reporting and inadequate data collection. There is strong need for a lead agency at the national level to coordinate and collect data from different sources. Furthermore, taking the example of countries, such as Jordan, the need for political will was expressed unanimously. Country-specific problems also have to be tackled, for instance, in Yemen, homicide is often not reported and in Egypt, injuries are often under-reported. In many countries the space required for child safety seats makes them a problem for large families, which are common in the Region.

The final step in the consultation was to develop a multisectoral plan of action based on discussions and review of the experiences of four countries who have already initiated road traffic injuries surveillance: Oman, Jordan, Islamic Republic of Iran and Yemen.

In Oman there was excellent political commitment since the policy was formed following a Royal decree. There is good discipline and coordination among stakeholders and excellent law enforcement. A comprehensive emergency medical service was established.

Similarly, in the Islamic Republic of Iran also there was good political commitment. The country has established a Road Safety Commission at national and provincial levels. The role of each partner was well defined and law enforcement took priority.

In Jordan the establishment of the Jordanian Traffic Institute and the participation of nongovernmental organizations and international funding helped to give a boost to their road traffic injury control. The involvement of the royal family promoted commitment of policy-makers and the public. Awareness was increased through the media and in celebration of traffic day.

In Yemen there was a comprehensive assessment of the available data, legislation and plans in order to take stock of the situation. Policy-makers were sensitized to the burden of road traffic injuries through seminars and workshops. They used a realistic multisectoral approach using scarce resources to the best effect.

## **6. RECOMMENDATIONS**

### *Member States*

1. Review national plans of action for injury prevention and control in light of the outcome of the consultation, and revise them as necessary. Countries without such plans should initiate the development of a national policy and plan of action for injury prevention and control.
2. Assign a 'lead agency' to coordinate the process of development, and the review and finalization of the national plan for injury prevention and control.
3. A national safety council or a similar body is an important part of a coordinating mechanism for injury prevention and control. Countries should establish such a body on an urgent basis.
4. Take steps to include all stakeholders in efforts aimed at injury prevention and control, including the private sector and civil society.
5. Initiate the design and implementation of a multisectoral surveillance system using the WHO surveillance guidelines. Countries that have surveillance systems for some types of injuries should review the systems for possible inclusion of further types of injuries and areas/units.

6. Countries should promote and support operational research to study various aspects of the causes of injuries and strategies for prevention of injuries.

*WHO*

7. Provide technical support in the area of injury prevention and control, including for the coordination of injury prevention and control efforts and the development of partnerships with national academic and research institutions for research in injury prevention.
8. Develop guidelines for the review and development of national multisectoral plans of action for injury prevention and control, and provide technical support as needed for the development and implementation of such plans.
9. Organize a regional consultation for the development of a framework and recommendations for establishing an injury surveillance system based on the injury surveillance guidelines.
10. Establish a regional expert panel for advocacy, awareness-raising and fund-raising for injury prevention.
11. Establish linkages with various organizations and mobilize resources to support research in injury prevention in the Region.
12. Develop monitoring and evaluation tools to assess the outcome of injury prevention programmes at the national and local levels.
13. Clarify and standardize the terms and definitions for use in the injury surveillance system and in monitoring.

**Annex 1**

**AGENDA**

1. Inaugural session
2. Adoption of agenda and election of officers
3. The global burden of injuries and a call for action
4. The regional situation and priorities—what, how and when
5. Overview of the conceptual framework for injury prevention
6. Steps in development of a multisectoral plan of action for road traffic injury prevention
7. Roles and responsibilities of stakeholders in a multisectoral plan of action for road traffic injury prevention
8. Essential elements of the plan of action for injury prevention and control
9. The role of law enforcement and public awareness in the promotion of road safety
10. The role of the nongovernmental organization sector in providing emergency care to the victims of road traffic accidents
11. WHO injury surveillance guidelines
12. Information-based decision-making process for injury prevention
13. Global priorities and experience in research on injury prevention with particular focus on road traffic injury prevention
14. Intersectoral collaboration in injury prevention and control
15. Group work on:
  - guidelines for preparation of a multisectoral plan of action for road traffic injury prevention;
  - guidelines on regional specific injury surveillance system;
  - research priorities in injury prevention and control.
16. Recommendations and future actions
17. Concluding session

**Annex 2****PROGRAMME****Monday, 16 May 2005**

08:30–09:00	Registration
09:00–09:45	Opening Session <ul style="list-style-type: none"> <li>• Welcome address <i>Dr Al Fatih Al Samani, WHO Representative Oman</i></li> <li>• Regional Director's Message</li> <li>• Key note address <i>H.E. Mohamad Hassan, Under Secretary of Planning Affairs, Ministry of Health, Oman</i></li> </ul>
10:15–10:40	The global burden of injuries and a call for action, <i>Dr Tami Toroyon</i>
10:40–11:00	Objectives of the consultation, <i>Dr S. Jaffar Hussain</i> The Regional situation and priorities—what, how and when <i>Dr Syed Jaffar Hussain</i>
11:00–11:20	Framework for injury prevention and control <i>Dr Hala Sakr, Dr Syed Zulfiqar Ali</i> <b>Topic 1: Guidelines for the preparation of a multisectoral plan of action for road traffic injury prevention</b>
11:20–11:35	Sub-topic 1: State of the art in development of MSPA Importance of health education in a multisectoral plan, <i>Dr Abul Halim Joukhadar</i>
11:35–11:45	Roles and responsibilities of stakeholders in a multisectoral plan of action for road traffic injury prevention in the Islamic Republic of Iran, <i>Dr Ali Raza Moghisi</i>
11:45–12:00	Steps in development of a multisectoral plan of action for road traffic injury prevention in Yemen, <i>Dr Ali Sareyya</i>
12:00–12:15	Discussion Sub-topic 2: Important sectors and their effective involvement in road safety
12:15–12:30	Significance of high-level leadership support in Oman for health promotion and injury prevention, <i>Dr Wahid Al Kharusi</i>
12:30–12:45	The role of law enforcement and public awareness in the promotion of road safety in Pakistan, <i>Mr Pervez Rathore</i>
12:45–13:00	The role of non government sector in providing emergency care for road traffic accidents, <i>Mr Faisal Edhi</i>
14:00–14:15	Discussion
14:15–15:30	Group work
16:00–17:00	Group presentations and discussions

**Tuesday, 17 May 2005**

- 8:30–8:45 Recap
- Topic 2: Guidelines and experience sharing in injury surveillance system**  
Sub-topic 1: Means and mechanism of data collection
- 8:45–9:30 Best practices in injury surveillance system – example from Jordan  
*Colonel Jamil Ali Saleem*
- 9:30–9:45 Current injury prevention and surveillance initiatives in Oman  
*Dr Wahid Al Kharusi*
- 9:45–10:00 Sub-topic 2: Use of surveillance data in injury prevention  
Information-based decision-making process for injury prevention in the Islamic Republic of Iran  
*Mr Mohammad Raoufi*
- 10:00–10:15 Discussion
- 10:45–13:00 Group work
- 14:00–15:00 Group work presentation and discussion
- Topic 3: Research priorities in injury prevention and control**  
Sub-topic 1: Experience in research for injury prevention
- 15:00–15:30 Global priorities and experience, *Dr Abdul Ghaffar*
- 15:30–15:45 Major findings of research on injury prevention in Egypt  
*Dr Hesham El Sayed*
- 16:15–17:00 Plenary discussion on research for injury prevention and means of support

**Wednesday, 18 May 2005**

- 8:30–8:45 Recap
- 8:45–9:00 Intersectoral collaboration in injury prevention and control,  
*Dr Syed Jaffar Hussain*
- 9:00–9:15 Essential elements of plan of action for injury prevention and control,  
*Dr Syed Jaffar Hussain*
- 9:15–11:00 Group work on recommended outline for preparation of model national plans of action (4 groups)
- 14:30–15:30 Group presentation and discussion
- 15:30–16:00 Recommendations and follow-up
- 16:00–16:30 Concluding remarks

**Annex 3**

**LIST OF PARTICIPANTS**

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Ms May El Wardani, Secretary, WHO/EMRO



**Table 3. Group work 3: Process of development of multisectoral plan of action for injury prevention**

Phases in development of plan	Recommended steps	Process followed in the country	Strengths of the process followed	Weaknesses in the process followed	Suggested future actions
<b>Phase 1: Designing and leading the policy development process</b>					
	Assessing the situation				
	Raising awareness about injuries				
	Creating leadership and political commitment				
	Integrating key stakeholders and creating ownership				
<b>Phase 2: Formulating the policy</b>					
	Defining the broad framework				
	Ensuring a systematic approach to injury prevention				
	Ensuring that policy will lead to action Setting priorities Defining responsibilities and coordination mechanisms for implementation Identifying resource needs Defining mechanisms for monitoring and evaluation				
<b>Phase 3: Approval and endorsement</b>					
	Approval from stakeholder groups				
	Government approval				
	State endorsement				