

Regional Committee for Europe Fifty-fifth session

Bucharest, Romania, 12–15 September 2005

Provisional agenda item 6(d)

EUR/RC55/10 +EUR/RC55/Conf.Doc./6 22 June 2005 53666 ORIGINAL: ENGLISH

Injuries in the WHO European Region: Burden, challenges and policy response

In the European Region, injuries, irrespective of their intent or cause, are the third leading cause of death, after cardiovascular diseases and cancers, causing an estimated 800 000 deaths (8.3% of all deaths) in 2002. The burden is unequally distributed across the Region, both between and within countries, with economically and socially marginal groups being more susceptible to injuries and their consequences. Inequalities also exist between age and sex groups, and the largest burden is in children and young people under the age of 45.

Injuries have a very significant impact on health, on the health service which provides the care and support for victims, and on the economic and social development of Europe.

Injuries can be prevented and safety promoted, and there is a growing evidence base of effective strategies to prevent them, whatever their cause. These can be used to target whole populations or risk groups, and to reduce the occurrence and health consequences of both unintentional injuries and violence.

The health sector can play a key role in addressing this problem, not only by providing care and support for victims, but by ensuring that unintentional injury and violence prevention and advocacy are priority public health activities, and by engaging in partnerships with other sectors and across all levels of government and society in developing preventive plans. There is a need for a paradigm shift which recognizes safety as a priority area in health and social policy.

The aims of this document are: to highlight the burden and costs of injuries in the Region; to describe the main challenges faced and the health sector response; and to propose a way forward using a public health approach to decrease the burden from this largely preventable condition.

Contents

Page

Introduction	1
Aims of the document Methodology and process adopted for the development of this paper	
Burden and Trends	2
Burden	
Health care costs	
Societal costs	
Trends	4
Preventing injuries and overcoming challenges: the response of the health sector	4
Prevention	4
Health care	
Challenges	5
Coordinating prevention activities and the response to victims of unintentional injuries	
and violence	6
Existing political commitments	7
A framework for action	7
References	10

Introduction

1. Injuries, irrespective of their intent or cause, have a very significant impact on health and on the health service which provides care and support for victims (1). Injuries are a leading cause of premature death and disability in the Region and also result in high societal costs (2). The health sector can play a key role in addressing this major problem, not only by providing care and services to victims, but also by putting prevention and advocacy at the core of its public health activities, and by engaging in partnerships with other sectors and across all levels of government and society.

2. An injury is the physical damage that results when a human body is suddenly subjected to energy in amounts that exceed the threshold of physiological tolerance; it may also be the result of the lack of one or more vital elements. It is usual to define injuries by intent. The main causes of unintentional injuries are road traffic injuries, poisoning, drowning, falls and burns. Intentional injuries are caused by violence, although not all violence (e.g. threats) results in injuries (1). Violence is defined as the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, that results in either injury, death, psychological harm, maldevelopment or deprivation. Violence can be divided into: self-directed (as in suicide or self-harm), collective (in war and by gangs), and interpersonal (child, partner, elder, acquaintance, stranger) (3). For the purposes of this paper, the term "injuries" is used to refer to both unintentional injuries and violence.

3. In 2002, there were an estimated 5.1 million deaths from injuries in the world, constituting 9% of all deaths (1,2,3). In the same year, the number of injury-related deaths in the European Region was estimated at 800 000 or 8.3% of all deaths in the Region. Injuries disproportionately affect the young and are a leading cause of premature death and years lived with disability in people between the ages of 0 and 44 years.

4. Injuries can be prevented and their consequences mitigated. Many effective strategies exist, and these can be used to target different injury causes and high-risk groups and to reduce health consequences for victims. Programmes of safety promotion involving stakeholders from all levels of society can contribute to reductions in unintentional injury and violence and also improve individual and community perceptions of safety (4).

5. Despite their preventability, injuries are the third leading cause of death in the Region, after cardiovascular diseases and cancers. Coordinated public health action is needed to reduce the relentless daily loss of life, suffering and high societal costs in the Region.

Aims of the document

- 6. The aims of this document are:
- to draw attention to the magnitude of the burden and costs of injuries in the Region;
- to describe the main challenges faced and the health sector response; and
- to propose a way forward using a public health approach to decrease the burden from this preventable condition.

Methodology and process adopted for the development of this paper

7. The paper has been developed in consultation with the heads of World Health Organization (WHO) collaborating centres on injuries, experts from different countries, relevant programmes within the WHO Regional Office for Europe, and the Department of Injuries and Violence Prevention at WHO headquarters in Geneva. In addition, national focal points for violence and injury prevention in ministries of health, the secretariat and members of the Working Party on Accidents and Injuries of the

European Commission, and representatives of relevant intergovernmental and nongovernmental organizations have been invited to provide their comments. The draft document was also posted on the Regional Office's Violence and injury prevention website. Comments received by 31 May 2005 have been incorporated into the final document.

Burden and Trends

Burden

8. According to WHO data, of the nearly 800 000 deaths from injuries in the Region in 2002 (8.3% of all deaths), 534 000 were from unintentional injuries and 257 000 from intentional injuries or violence. Three leading causes account for nearly 50% of all deaths related to injuries: suicides (164 000), road traffic injuries (127 000) and poisoning (110 000). For every death due to injuries, there are hundreds of individuals who suffer non-fatal physical and mental disabilities, often for life. Yet, other than mortality data, information about the health consequences of unintentional injuries and violence is rarely collected systematically throughout the Region. This lack of information and visibility makes it difficult for countries to develop and implement appropriate plans of action. Some information on unintentional injury morbidity in the European Union (EU) before the accession of the 10 new countries in May 2004 is provided by the European Home and Leisure Accident Surveillance system, which estimates that each year between 1998 and 2000, there were 40 million unintentional injuries, of which 25 million occurred in the home or during leisure activities, 5 million people were admitted to hospital and there were 130 000 deaths (5). This further emphasizes the fact that injuries are an important health care issue as well as a public health problem.

The burden of injury is unequally distributed across the Region: low- and middle-income 9 countries, especially in the eastern part of the Region, show some of the highest mortality rates in the world, while high-income countries tend to report the lowest rates. This is especially true for some causes such as poisonings which are relatively less frequent in the high-income countries. However, even within high-income countries, there are marked differences, with economically and socially vulnerable groups being at comparatively greater risk. For example, in the United Kingdom, children from the lowest socioeconomic class are at 3.5 times more risk of road traffic injury deaths than those from the highest socioeconomic class (6). Similarly, inequalities exist between age and sex groups, and males suffer three quarters of all injury deaths. A disproportionately large burden is inflicted on young people under the age of 45, making injuries a leading cause of loss of productive life, high medical care costs and significant degrees of disability. Injuries are a leading cause of disability adjusted life years (DALYs) lost and account for 14% of all DALYs lost in Europe. Whereas violence may lead to fatal injuries (for example, homicide is the fifth leading cause of injury death in the Region), other forms of violence such as psychological and sexual violence (for example in child abuse, intimate partner violence, or violence against acquaintances or strangers) are more difficult to measure using routine surveillance, and the burden from these remains largely unmeasured, except where surveys have been undertaken (3). In the case of intimate partner violence, in addition to physical injury, surveys have shown a high prevalence of mental and reproductive health problems and negative health behaviours (7).

10. In 2002, about 26 000 children under the age of 15 lost their lives from injuries in the European Region. This is equivalent to about 70 deaths per day, or about 3 per hour. Children are particularly at risk: road traffic injuries are the leading cause of childhood mortality in children between the ages of 5 and 14, followed by lower respiratory illness, and drowning as the third leading cause, this being particularly prevalent in the low- and middle-income countries of the Region. Deaths are the tip of the iceberg; there may be long-term physical and psychological consequences in children, with serious repercussions for health in later life. These may be difficult to measure using routine information systems. Children are also vulnerable to violence, with the loss of nearly 3000 lives in the European Region every year. The health sector has a critical role in the early detection of violence in children. Child abuse, whether physical, sexual or psychological, may be difficult to detect, but its

consequences are nevertheless long-lasting (3). For example, exposure to child abuse is associated with a 4- to 12-fold increase in risk for alcoholism, drug use disorders, depression and suicide attempts in later life (8).

11. An emerging issue is the high prevalence of injuries in the older population. Falls are a particular problem and older people who experience these, as well as other injuries, have longer hospital stays and a higher fatality rate because of their frailty. Although people over 60 years of age make up 18.6% of the population of the Region, 28.2% of all injury deaths occur in this age group. Estimates suggest that, by the year 2050, 28% of the European population will be 65 years old or more, implying that the problem is likely to increase (9).

Health care costs

Average figures from the Netherlands, Sweden and the United States suggest that, for every 12. injury fatality, an estimated 30 people are hospitalized and 300 require outpatient treatment in hospital emergency departments (10). Recent data show this ratio to be similar for Greece: 1 death for every 34 admissions and 340 emergency department visits (11). This results in high health care costs, making demands on already overstretched resources. Health care costs for injuries in the Region are not widely available. Estimates for the EU before the accession of the 10 new countries in May 2004 suggest that hospital admissions in 1999 for injuries arising in the home and from leisure activities cost about $\in 10$ billion. This was equivalent to 5.2% of total inpatient expenditure (12). When all injuries and violence in the Region are considered, the proportion of health care expenditure they represent is substantial. Rough estimates suggest that the health care costs of treating injuries that result in fatality would be in the order of $\in 1$ billion to $\in 6$ billion,¹ and those of non-fatal injuries between \in 80 billion and \in 290 billion (13).² The large range reflects the sensitivity analyses to allow for the uncertainty in attributing health care costs to injuries in the whole Region. In spite of these methodological limitations, the data show that the health care costs for treating injuries are very high and the benefits of using efficient strategies of prevention would save costs to the health sector, as well as to society at large. Most preventive strategies are multisectoral, and a societal perspective is required to appreciate the full extent of the benefits and costs of prevention programmes.

Societal costs

13. The economic costs of unintentional injuries and violence are vast and have only begun to be mapped out. These estimates are affected by important methodological issues, such as different monetary values being attributed to a life – this can vary by up to 10-fold between different countries in the Region. In spite of these limitations, estimates of economic costs are important for prioritizing injury prevention. For road traffic injuries, studies suggest that between 1% and 3% of the gross domestic product (GDP) of countries in the Region is lost to this cause (13). The estimated economic costs of motor vehicle traffic accidents were in the order of €180 billion (about 2% of GDP) in the EU before the accession of the 10 new countries in May 2004 while, in countries with economies in transition in central and eastern Europe, the average annual cost of road crashes was estimated to be in the order of 1.5% of gross national product, totalling about US\$ 9.9 billion (14). The majority of these costs are related to the injury, in which medical care costs and loss of productivity predominate. Some countries have made cost estimates for unintentional injuries that occur in the home. For example, in the United Kingdom, these were estimated to cost society $\in 36$ billion each year (15). When it comes to violence, data for the Region are scarce (16). In England and Wales, a study estimated total costs from crime to be US\$ 63.8 billion per year. Sixty-three percent of this amount, or US\$ 40.2 billion, is attributable to violence, including homicide, wounding and sexual assault. This tally includes both direct costs such as police, judicial system and health service costs, and indirect costs including

¹ Sensitivity analysis with estimated average cost of health care from $\in 1250$ to $\in 7250$ per fatal injury in the Region, calculated on the basis of 800 000 fatalities in the Region each year.

² Sensitivity analysis with estimated average cost of health care from \notin 4800 to \notin 12 000 per non-fatal injury in the Region, calculated on the basis of 16 million not fatal injuries in the Region each year.

foregone output and physical and emotional costs (17). Despite these startling figures, economic valuations underestimate the real cost paid by society, as they do not capture the suffering caused to families and social support networks of victims, to communities, workplaces and school classes. Additional research efforts will be needed to improve the economic valuation of unintentional injuries and violence.

Trends

14. Injury mortality has shown a downward trend since the 1990s in the 15 countries of the European Union before May 2004 and the countries of south eastern Europe. In contrast, the trends for the Baltic countries and the Commonwealth of Independent States (CIS) show a marked peak between 1990 and 1994, followed by a downward trend and then an alarmingly upward trend again from 1999. The upward trends in some of these countries in transition are thought to be due to a variety of factors, including the increase in motorized road transport, the increase in inequalities in wealth, unemployment, decreases in social capital, the liberalization of alcohol availability and poor regulatory and enforcement mechanisms *(18)*.

Preventing injuries and overcoming challenges: the response of the health sector

Prevention

15. Injuries can be prevented, and there is a large and growing evidence base of proven and promising effective strategies for both unintentional injuries and violence that can be used to target injury causes of concern and high-risk groups.

In the area of road traffic injuries, effective preventive strategies have been documented in the 16. World report on road traffic injury prevention and in Preventing road traffic injury: a public health perspective for Europe, and include: speed control and provision of safer conditions for vulnerable road users, safer road infrastructures, the compulsory use of motorcycle helmets, seat belts and child seats in cars, and the setting and enforcing of legal blood alcohol concentration limits (13,19). Further, sustainable transport and urban policies need to be developed to incorporate both road safety and a shift to alternative modes of travel such as walking, cycling and public transport. These will not only reduce exposure to crashes, but will also act to reduce the other important public health effects of overdependence on motorized transport, such as noise, air pollution, and physical inactivity, a leading cause of obesity. For other unintentional injuries, effective interventions include: child-resistant containers and safer storage to prevent poisonings; poison control centres for better post-event management; prevention of the production of, and access to, impure alcohol products to prevent poisoning in adults; home modification to eliminate hazards, and exercise, to prevent falls in the elderly; appropriate ground surfacing in playgrounds, window bars and stair guards to prevent falls in children; fencing of pools and other water areas and the provision of lifeguards and water flotation devices to reduce the risk of drowning; smoke detectors, flame-resistant clothing and cooking surfaces at heights to ensure burns prevention (20). The implementation of these cost-effective interventions would lead to substantial reductions in mortality and morbidity. They could be better prioritized if more detailed information were available on the precise nature of, and degree of exposure to, hazards in the home, workplace and other settings. More detailed information on the activity being undertaken when injured would also be helpful.

17. Violence is often seen as an inevitable part of human life, caused by events which are responded to, rather than prevented. The *World report on violence and health* challenged this notion and showed that violence can be predicted and is a preventable health problem. In the area of violence prevention, effective strategies have been documented: individual-level interventions such as preschool enrichment or life skills training programmes, and incentives to complete secondary schooling; at the relationship level, home visitation, parent training and mentoring; at the community level, reduced

alcohol availability, and improved institutional policies in schools, workplaces, hospitals and residential institutions; and at the societal level, public information campaigns, reduced access to means (such as firearms), reduced inequalities and strengthened police and judicial systems (3).

18. The health sector can play an important role not only in providing care and support services for the victims, but also in primary prevention, including by advocating evidence-based strategies. For example, the British Medical Association, the Casualty Surgeons Association, the Royal College of Surgeons, the British Paediatric Association and the Child Accident Prevention Committee (now Trust) all had a key role in the coalition that eventually helped to introduce the mandatory use of front seat-belts into the United Kingdom's Transport Act 1981(21).

19. It is important to highlight that the implementation of cost-effective interventions can often result in quick and visible gains in reducing mortality and morbidity. An example from France is the 34% reduction in road traffic injury deaths over a two-year period (2002–2004) resulting from the implementation of preventive measures (traffic slowing, seat-belt use and control of drink-driving). This required strong political leadership, and the health sector played an important contributory role (22).

Health care

20. In the case of both unintentional and intentional injuries, the health sector provides care for the victims. This includes primary health care and, for more severe injuries, emergency care by ambulance staff in the prehospital phase, acute care in emergency departments and hospitals, and victim rehabilitation and reintegration. Evidence from some high-income countries suggests that improvements in trauma care have led to decreases of around 30% in mortality from trauma (23). There is little documentation of similar improvements in other countries of the Region, and there would be much to gain from a more evidence-based approach to trauma care.

21. A number of problems have led to a suboptimal quality of care, particularly trauma care, for victims of injuries. These include: a) trauma care interventions having been very inadequately tested in comparison with interventions in other disease areas, such as cardiovascular disease or cancer (24); b) the inadequacy of evidence about the effectiveness of different approaches for the organization of trauma care (25); c) far too little research investment in relation to the size of the problem (26); and d) insufficient resource investment in developing services and human resources. Consequently there are variations in the practice and quality of trauma care in different parts of the Region (both within and between countries). Lives could be saved, and disabilities and long-term negative health impacts avoided if the quality of care were systematically evaluated and improved.

Challenges

22. Although injuries have a significant impact on public health and health services, the attention given to them historically does not match their magnitude. This failure to recognize the importance of injuries and to prioritize them in the health policy agenda has resulted in a number of weaknesses to be overcome:

- lack of awareness of the true magnitude of the problem;
- lack of awareness of the preventability of injuries;
- reluctance to take ownership and leadership in view of the multisectoral nature of the necessary response, which must also involve sectors such as transport, justice, education, social affairs and housing; and
- inadequate attention paid to evidence-based trauma care in the prehospital, hospital and rehabilitation phases.

- 23. As a result, there is:
- an overall lack of visibility of and political commitment with respect to the issue;
- inadequate allocation of financial and human resources to scale up the public health response to injuries, particularly in relation to prevention, safety promotion and working across different sectors;
- inadequate information collection to define the magnitude and consequences of non-fatal injuries and to evaluate the effectiveness of programmes; such information could be used to increase the visibility of problems and solutions to both policy-makers and the public;
- insufficient capacity to provide an effective response in terms of prevention, care and rehabilitation;
- a fragmented approach to violence and unintentional injuries that needs to be replaced by a coordinated strategy; and
- a need to optimize the quality of trauma care along the continuum from prehospital care, through hospital care to rehabilitation, by improving the evidence base, capacity and organization of trauma services.

Coordinating prevention activities and the response to victims of unintentional injuries and violence

24. An important strategic step in overcoming these challenges consists of addressing violence together with unintentional injuries. There are a number of reasons for this:

- a) the stronger potential for advocacy from highlighting the magnitude of the problems and the potential solutions to policy-makers;
- b) the opportunity to build on the synergy offered by common approaches to hospital surveillance and community surveys;
- c) the common underlying determinants (e.g. economic, social, political and environmental) and risk factors (e.g. alcohol and drugs), and the fact that these both disproportionately affect vulnerable groups in the population;
- d) the multisectoral approach required to develop programmes to deal with common risk factors, such as alcohol (this is a leading risk factor for the whole spectrum of unintentional injuries and violence);
- e) the public health approach with evidence-based interventions and evaluation that is common to both;
- f) the fact that both demand that ethical considerations such as social justice and equity be taken into account when considering vulnerable populations;
- g) the frequent involvement of the same provider in health service responses to victims of both unintentional injuries and violence; examples include emergency prehospital and trauma care, toxicology care for poisonings, whether unintentional or intentional, appropriate psychological support to deal with post-traumatic stress disorder, and rehabilitation services for victims, the organization of emergency services, and the development of institutional and technical capacity.

25. Regardless of the underlying cause of injury, the health sector is uniquely positioned to provide support for victims, identify and promote the implementation of evidence-based strategies, lead research and innovation, promote advocacy, and work closely with other sectors in addressing the

issue, including by helping to mainstream injury prevention across different policy arenas within and outside the health sector.

Existing political commitments

26. Unintentional injuries and violence are now regarded as largely avoidable, and prevention policies have been placed firmly on the public health agenda, as shown by the adoption of the following resolutions.

- World Health Assembly resolution WHA49.25 on prevention of violence: a public health priority;
- World Health Assembly resolution WHA56.24 on implementing the recommendations of the *World report on violence and health*;
- World Health Assembly resolution WHA57.10 on road traffic safety and health;
- World Health Assembly resolution WHA57.12 on reproductive health: draft strategy to accelerate progress towards the attainment of international development goals and targets;
- Regional Committee resolution EUR/RC54/R3 on environment and health, which endorsed the Children's Environment and Health Action Plan for Europe (CEHAPE);
- Regional Committee resolution EUR/RC53/R7 on the health of children and adolescents in WHO's European Region;
- Regional Committee resolution EUR/RC51/R4 on the progress report on the European Alcohol Action Plan, including follow-up to the WHO Ministerial Conference on Young People and Alcohol;
- Regional Committee resolution EUR/RC49/R8 on the European Alcohol Action Plan third phase;
- Regional Committee resolution EUR/RC49/R4 on environment and health;
- United Nations General Assembly resolution 58/289 on improving global road safety.

27. In addition, there are other relevant commitments from the Council of Europe, the European Commission and United Nations Economic Commission for Europe, and related WHO European policies and strategies, such as the European Alcohol Action Plan 2000–2005, and the Mental Health Declaration and Action Plan for Europe, adopted at the WHO European Ministerial Conference on Mental Health (Helsinki, Finland, 12–15 January 2005). Moreover, the commitment to the Millennium Development Goals, in particular Goal 4 – to reduce under-five child mortality by two thirds by 2015 – will not be achieved unless sufficient attention is paid to reducing mortality from injuries.

A framework for action

28. Unintentional injuries and violence are major public health threats, and action is required. The recent World Health Assembly resolutions on violence and health (WHA56/24) and on road safety and health (WHA57/10) recognize the multisectoral nature of the approach required, encourage the health sector to take a coordinating role in the prevention of violence and road traffic injuries, and invite Member States to appoint national focal points and to engage in the development of national action plans. These resolutions are timely and provide leverage for policy development in the Region. Decreasing the burden from injuries will require political commitment across all government levels and, with this, the allocation of adequate resources to take these activities forward. It also requires a paradigm shift away from abrogating responsibility solely to individuals, and towards recognizing that safety and injury prevention are societal responsibilities. The creation of safer physical and social environments requires the organized efforts of society.

29. To support this change, there is a need to develop a comprehensive and coordinated policy response. The public health approach to injury prevention provides such a framework for action and identifies the main building blocks of a well integrated response. This approach consists of ensuring better surveillance to identify the burden of injuries and the underlying risk factors, finding and implementing cost-effective preventive programmes on a large scale, monitoring and evaluating such programmes and promoting cross-sectoral action and partnerships.

30. In this endeavour, the WHO Regional Office for Europe intends to work together with Member States in close collaboration and within the framework and approach followed at the global level. It will make available a range of tools and services which will be adapted to the specific needs and country contexts. The proposed steps forward are outlined below.

Promote the development of national injury prevention plans by formulating an overarching 31. vision and strategy, placing primary prevention at the core of activities, with the health sector playing a coordinating role in a multisectoral response. Such a strategy should focus on surveillance, the promotion of evidence-based, gender-sensitive practice for both primary prevention and emergency medical care, evaluation, monitoring and advocacy in order to meet the challenge of injuries, and provide a coherent framework for action across all government levels (national, subnational, local). The health sector should promote evidence-based preventive measures, lead research and innovation, and advocate the public health approach to prevention of violence and unintentional injuries. The evidence base of what works is growing, and more needs to be done by the health sector to develop and implement programmes of primary prevention. These may include a number of relatively low-cost measures that could result in high-impact gains in the short term. Whilst it is desirable to address unintentional injuries and violence together (see section on Coordination of prevention activities), it is important to note that, when individual types of injuries are considered, the interventions still need to be tailored according to the cause, target population and setting. The Regional Office will support Member States in these developments, including by making available and adapting guidance on developing national policies to prevent violence and injuries.

32. **Improve unintentional injury and violence surveillance**, by improving the documentation of the different causes, risk factors, consequences and costs of injury. This is paramount to understanding the burden and its causes, targeting interventions, monitoring progress and evaluating specific programmes for prevention and care. A good starting point would be to improve mortality statistics in the Region with particular emphasis on improving reporting, not only on the type of injury, but also on the place of occurrence and activity involved, such as provided for in the *International Classification of Diseases*, tenth revision (27). To improve the recording of morbidity data, there are guidelines for injury surveillance in hospitals (10). Community surveys can be an efficient method of defining the magnitude of the injury problem and risk factors, and can also be particularly useful in determining levels and forms of violence that do not necessarily result in injuries (28). The Regional Office will provide technical assistance to Member States to implement these.

33. **Strengthen national capacity to respond to the burden of injuries**. This would take into account the diversity of the Region and would address the need to strengthen the role and capacity of the health sector, at both national and sub-national levels, in particular in the low- and middle-income countries of the Region, as highlighted through consultations with focal points at ministries of health. The Regional Office will provide technical assistance in building capacity through the TEACH Violence Injury Prevention curriculum (29).

34. **Strengthen national capacity for provision of services for victims of injuries** and seek to improve prehospital and hospital care and rehabilitation of victims. The role and response capacity of the health sector and health systems in the cost-effective care of injury victims needs to be strengthened by promoting an evidence-based approach to trauma care, in terms of both its organization and clinical interventions. Capacity-building in prehospital care and emergency trauma care is an area of concern. The Regional Office will provide technical assistance in building capacity and through the provision of guidelines as a useful starting point (*30,31*).

35. Advocate injury prevention activities and promote the implementation of effective preventive measures, such as those mentioned in the section on Prevention. This also would involve mainstreaming these activities into the policies of the health and other sectors. It can be achieved by highlighting the burden, making explicit the potential contribution of different sectors to preventive strategies, and identifying opportunities for synergy, thereby optimizing resource use. The Regional Office will support advocacy efforts by making available evidence on the magnitude of the injury problem and its preventability.

36. **Facilitate the exchange of knowledge and experience across the Region** by identifying and disseminating good practice and supporting the establishment and expansion of networks of national focal points for violence and unintentional injury prevention and other stakeholders. Other examples of such networks include the European Child Safety Alliance, the European Network for Safety Among Elderly, the European Network of Health-Promoting Schools, the WHO Healthy Cities Network, and the International Spinal Cord Society. In addition, the Safe Community Network promotes the "safe community" concept which recognizes safety as a "universal concern and a responsibility of all" *(32)*. The Regional Office will support the collection and dissemination of good practice, in particular by working closely with the network of national focal points for violence and unintentional injury prevention.

37. **Develop and strengthen partnerships** with stakeholders from different sectors, at local, national and international levels, to provide coordination and promote synergy in the response to injury and the use of available resources and competences. At the international level, this would involve developing collaboration, notably with the European Commission (through the Working Party on Accidents and Injuries), the Council of Europe, the European Conference of Ministers of Transport, the Organisation for Economic Co-operation and Development, the United Nations Children's Fund, the United Nations Economic Commission for Europe, the European Crime Prevention Network, and nongovernmental organizations and international financial institutions active in the Region.

38. Address local priorities, particularly in transition countries such as those of the Baltic countries, the CIS and south eastern Europe, to respond to the marked variation in injury patterns. This requires strong public health capacity for the implementation of cost-effective solutions locally, as well as strong political leadership across all levels of government. The Regional Office will prioritize collaboration with those Member States in transition, particularly with respect to advocacy, injury surveillance, developing national action plans and building technical and institutional capacity for responding to injury.

39. **Recognize the gaps in knowledge and prioritize research and development in injury prevention and trauma care**. This area of health research needs particular attention so as to close the historical gap and overcome the disparity between the amount invested in research and the existing and projected injury burden. Evaluative research is also needed when transferring interventions to different contexts, and to determine the optimal configuration of trauma services.

40. **Meet civil society's concerns about safety, and work with it to implement prevention programmes in different settings** (e.g. schools, workplace, home) especially for the benefit of the vulnerable and high risk groups. The Regional Office will further strengthen its collaboration with relevant nongovernmental organizations and civil society. This will consist of providing evidencebased material for advocacy and working in partnership to provide political support for injury prevention.

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