

To date, most injury prevention efforts are concentrated in developed countries. Strategies such as the use of seat belts and child car seats, designated drivers, flame-resistant clothing, smoke detectors, and fencing around areas of water have proven to prevent injuries. Deaths and disabilities have declined markedly in countries where such prevention efforts are established. A host of strategies at the individual, family and community levels have also shown promise in reducing violence-related injuries. These include substance abuse programmes, family counseling and school-based violence prevention initiatives. Prevention efforts need to go global. There is urgent need to adapt lessons learned to local realities to develop appropriate, cost-effective measures.

WHO recognizes that injuries cannot be effectively addressed by one sector alone. With the public health sector acting as a convener, experts from the fields of medicine, education, transportation, sociology, criminology, justice, urban planning and communications can play a crucial role in creating safe and healthy communities. This requires a commitment at the international, national and community levels to document the problem; craft, test and evaluate comprehensive solutions; and disseminate lessons learned.

The WHO Department of Injuries and Violence Prevention (VIP) works with partners to collect, interpret and disseminate data and information on injuries and develop policies and programmes for injury prevention worldwide. Upcoming products such as the World Report on Violence and Health, the Strategy for Road Traffic Injury Prevention, and the Guidelines on the Medico-legal Response to Cases of Sexual Violence will

contribute to prevention efforts around the world. Together, we aim to create a world in which all people can live in a safe environment.

Questions

Q. What are injuries?

An injury is physical damage to the body. Amongst other causes, injuries result from road traffic collisions, burns, falls, poisonings and deliberate acts of violence against oneself or others. More technically speaking, injuries result from acute exposure to various kinds of energy – mechanical, thermal, electrical, chemical or radiant – in amounts that exceed the threshold of physiologic tolerance.³ Public health professionals divide injuries into two categories: “unintentional injuries,” that include most injuries resulting from traffic collisions, burns, falls, and poisonings; and “intentional injuries” that are injuries resulting from deliberate acts of violence against oneself or others.

Q. Why are injuries not referred to as accidents?

The word “accident” implies a degree of inevitability. The traditional view of injuries as “accidents” suggests that they are random events, an unavoidable part of the world in which we live. This has resulted in the historical neglect of this area of public health. During the past few decades, public health officials have recognized that injuries are preventable. Injuries have been taken away from the realm of chance and placed squarely in the realm of science where they can be studied and solutions for their prevention can be proposed.

Q. How many people are victims of injuries each year?

Globally, more than 5 million people die from injuries every year. Injuries kill more people than HIV/AIDS and malaria combined. In 1998, of the estimated 5.8 million people who died from injuries, approximately 1.2 million died from road traffic collisions and 2.3 million died from violence, including 948,000 by suicide, 736,000 from homicide and 588,000 from war.¹ The rest died from other injury-related causes, including falls, drowning, burns and poisoning. Many more people survive their injuries, and live with a permanent disability.

Q. What are some of the consequences of injuries?

In addition to death and disability, injuries contribute to a variety of other health consequences depending upon the type of injury incurred. These consequences include depression, alcohol and substance abuse, smoking, eating and sleeping disorders, and HIV and other sexually transmitted diseases. The consequences of these deaths and disabilities affect not only the victims, but also their families, communities and societies at large.

Q. What are some of the causes of injuries?

Injuries are caused by a complex interaction of various factors. At the societal level, they include low socio-economic status, cultural norms that support violence to resolve conflict and rigid gender norms. At the community level, factors include poor safety standards in the workplace, unsafe roads, and easy access to firearms. At the level of family relationships, factors include a

lack of care and supervision, physical abuse, and a ruptured family structure. Finally, at the individual level, factors include a history of aggression and alcohol and substance abuse.

Q. Can injuries be prevented?

Injuries are not random events. They are preventable. The use of seat belts; child car seats; helmets; designated drivers; flame-resistant clothing; smoke detectors; fencing around areas of water; and separate, locked storage of firearms and ammunition are among the measures that have contributed to decreasing injuries.

Q. Aren't prevention strategies expensive?

Prevention strategies need not be expensive. Some strategies that have proven to be cost-effective in high-income countries can be adapted in low and middle-income countries. Examples include passing and enforcing seat belt and motorcycle helmet laws, and promoting safety equipment such as protective eyewear for certain types of jobs. For violence-related injuries, examples include mentoring programs for youth at risk of violence, school policies which favor non-violence, and home visitation by community social activists. New strategies are also being devised in low and middle-income countries. These include the design and manufacture of motorcycle helmets appropriate to warm climates, the painting of bicycles in highly visible colors and the production of safer stoves and fuels.

Q. Why are injuries a public health issue?

Anything that kills more than 5 million people every year is a major public health concern. In

Chart 1. Global burden of disease attributable to injuries, 1998 estimates

Source: World Health Report, 1999

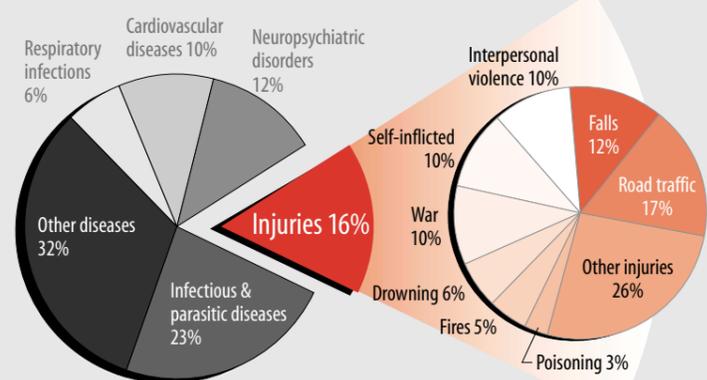
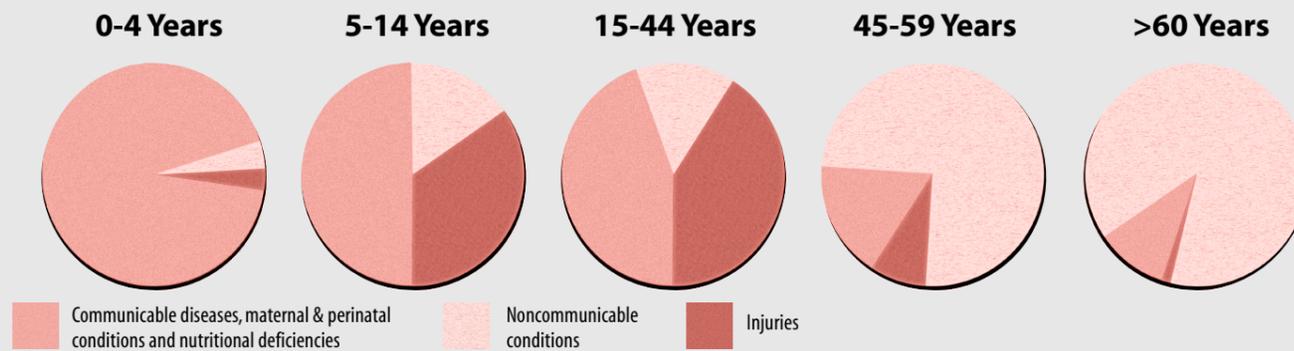


Chart 2. Leading causes of death, both sexes, 1998. Low and middle-income countries, by age.

Source: World Health Report 1999 Database



the years ahead, this figure is only expected to rise. By 2020, injuries will be the third leading cause of death and disability worldwide.⁴ In addition to killing people, injuries cause life-long disabilities and many other health problems with serious consequences for individuals, families, communities and health-care systems.

Injuries are also costly. Emergency room treatment, hospitalization, and long-term care often mean that scarce resources are diverted from other development priorities to treat injuries. Injuries are a public health concern not only because of their broad impact on societies, but also because public health can offer solutions to prevent injuries. Through a variety of measures targeted at individuals, families, communities and societies, the public health community has a vital role to play in this field.

Q. What value does WHO add to the research and practice of injury prevention?

WHO, as the world's leading public health agency, has access to a broad network of injury prevention partners at national and international levels. As such, it is well positioned to contribute to global prevention efforts and advocate for greater attention to the problem of injuries.

WHO's approach includes surveillance systems to collect, interpret and disseminate data and information on injuries; further research to determine which factors increase or decrease the risk for injury; design, testing and evaluation of potential prevention strategies; and implementation and dissemination of information on the most promising interventions.

Q. In view of the magnitude of the problem, has WHO set priorities?

Yes. While WHO compiles and disseminates information, promotes and supports the establishment of effective care systems, and advocates for prevention programs for all injuries, there are some priority areas. Priorities for research and the implementation of prevention strategies are based on the magnitude of the problem.

WHO is focusing its efforts on the prevention of road traffic collisions as they constitute approximately two-thirds of all unintentional injuries. In collaboration with a network of researchers from developed and developing countries, WHO has prepared a five-year Strategy for Road Traffic Injury Prevention. WHO will test and evaluate promising interventions for the prevention of

road traffic collisions and will then compile best practices on the topic for countries developing national injury prevention strategies.

WHO is also focusing its efforts on the prevention of interpersonal violence within the family and the community: violence against children, women and the elderly and violence among youth. Existing research on violence prevention is currently being compiled, notably through the production of the World Report on Violence and Health. The aim is to develop a framework of essential components that every country should include in a national violence prevention plan. Examples of violence prevention initiatives include collecting data on the profile of violence at the national level; improving the care and support provided to victims of sexual violence; and introducing violence prevention into the training of health, criminal justice and social welfare professionals.

References:

- 1 World Health Organization. Mortality Database.
- 2 World Health Organization. *Injury: A Leading Cause of the Global Burden of Disease*. Geneva: World Health Organization; 1999.
- 3 Baker SP, O'Neill R, Karpf RS. *The Injury Fact Book*. Lexington, Massachusetts: Lexington Books; 1984.
- 4 Murray CJL, Lopez AD. *The Global Burden of Disease*. Cambridge, Massachusetts: Harvard University Press; 1996.

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Une version française est également disponible sur demande.

Concept: Department of Injuries and Violence Prevention & NMH Communications
Design: Aaron Andrade

Printed in 2000 copies, Geneva, 04/2001

FACTS

about injuries



Preventing Global Injuries

EACH YEAR INJURIES ACCOUNT FOR MORE THAN 5 MILLION DEATHS GLOBALLY.¹ This figure is dwarfed by the number of survivors of injuries, many of whom suffer life-long health consequences. Traffic collisions, falls, drowning, burns and deliberate acts of violence against oneself or others are among the causes of these injuries. Most injury-related deaths and disabilities are preventable – that is the World Health Organization's (WHO) message. WHO's challenge is to place this issue on the global public health agenda.

Although injuries affect everyone regardless of age, sex, income or geographic region, some people are more vulnerable than others. Seven of the fifteen leading causes of death for men between the ages of 15-44 years are injury-related.² In descending order, they are road traffic injuries, interpersonal violence, self-inflicted injuries, war-related injuries, drowning, poisoning and falls. For women of the same age, five of the fifteen leading causes of death are injury-related. They are self-inflicted injuries, war-related injuries, road traffic injuries, fires and interpersonal violence.² The latter comprises deaths resulting from domestic violence and sexual assault.

Based on 1998 data, 88% of traffic-related deaths, 86% of suicides and 95% of homicides occurred in low and middle-income countries.¹ For most types of injuries, people die at a higher rate in low and middle-income countries than in high-income countries. The poor are at high risk for injury because they are faced with hazardous situations on a daily basis. For instance, their means of transport are overcrowded and poorly maintained. As pedestrians on unsafe roads, they are vulnerable to being crushed by cars and buses. Their workplaces adhere to few safety standards. Their homes, often poorly constructed, are vulnerable to fire. The poor also have less chance of survival when injured because they have less access to health services.



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