

Glossary of terms

Acceleration–deceleration injuries: injuries that occur when a person's head is moving, and then hits an object, such as the ground, as in a motorcycle crash. The head's forward motion is stopped, but the brain, having its own mass, continues to move forward until it strikes the inside of the skull. It then rebounds striking the opposite side of the skull.

Bicycle helmet: A bicycle helmet is specifically designed to provide head protection for cyclists when the cyclist falls off the bike and hits the ground. They are not designed to provide adequate protection for a collision involving another moving vehicle (e.g. a car) or a collision at high speed, although they do provide some protection. A cycle helmet should not be too heavy and should provide adequate ventilation, because cycling can be an intense aerobic form of exercise which significantly raises body temperature. Thus, most helmets are constructed from lightweight materials pierced by strategically placed ventilation holes.

Brain contusion: damage to the nerves or blood vessels of the brain.

Closed head injury: injury where there is no open wound to the brain, often resulting from an impact which jars the brain in the skull. The movement of the brain within the skull may result in bruising, swelling, tearing of the brain tissues, nerves or blood vessels.

Cost: Use of resources that have alternative uses. Costs are generally measured in monetary terms, but the concept of cost includes any use of resources, not just direct out-of-pocket expenses (1).

Cost-benefit analysis: A formal analysis of costs and benefits of a programme, in which all relevant impacts are converted to monetary terms (1).

Cycle: A road vehicle which has two or more wheels and is propelled solely by the muscular energy of the persons on that vehicle, in particular by means of a pedal system, lever or handle (e.g. bicycles, tricycles, quadricycles and invalid carriages) (2).

Concussion: a head-trauma-induced alteration in mental status that may or may not involve loss of consciousness.

Diffuse axonal injury: injury to the axons in the brain that can have serious long term consequences.

Disability: any restriction or lack of ability (resulting from an impairment) to perform an activity in the manner or within the range considered normal for a human being.

Emergency medical services (EMS): the services provided by trained personnel using adequate equipment soon after an emergency. EMS services for injuries aim to reduce the rates of death from potentially life-threatening injuries. These services include the care provided before the person reaches the hospital (prehospital EMS, such care delivered in the field and transport to a fixed site of definitive care), and the medical care provided in a hospital-based setting.

Evaluation: an on-going process to assess the effectiveness of a programme in achieving its objectives. Evaluation also aims to identify problems that may arise with the implementation of a programme, so that concerns are fed back into the planning process and modifications can be carried out during the implementation. An evaluation is usually designed to try to distinguish the effect of a programme from those of other factors.

First aid: emergency treatment administered to an injured person at or near the injury site, prior to receiving professional medical care.

Head injury: injury to the head that may damage the scalp, skull or brain. Head injury may occur either as a closed head injury (e.g. the head hitting a car's wind-shield) or as a penetrating head injury (e.g. when a bullet pierces the skull).

High-income country: For the purpose of this document the World Bank classification has been used to classify countries, based on Gross National Income (GNI) per capita. A high-income country is one whose GNI is US\$ 9076 or more (3).

Intracranial haemorrhages: internal bleeding, which can occur in different areas of the head or brain.

Legislation: Acts or provisions that have the force of law, i.e. that give the police the right to enforce and courts of law the right to impose penalties (1).

Low-income country: For the purpose of this document the World Bank classification has been used to classify countries, based on Gross National Income (GNI) per capita. A low-income country is one whose GNI is US\$ 735 or less (3).

Middle-income country: For the purpose of this document the World Bank classification has been used to classify countries, based on Gross National Income (GNI) per capita. A middle-income country is one whose GNI is between US\$ 736 and US\$9075 (3).

Motorcycle helmet: A motorcycle helmet is a type of protective headgear used by motorcycle riders. Helmets are usually made of a hard substance (usually a type of plastic) that will afford protection from high speed collisions and falling objects. The primary goal of a motorcycle helmet is to protect the rider's head during impact, although many helmets provide additional conveniences, such as face shields, ear protection. Motorcycle helmets are generally designed to break in a crash (thus expending the energy otherwise destined for the wearer's skull), so they provide little or no protection after their first impact

Motorized two-wheelers: a two-wheeled vehicle powered by a motor engine – such as a motorcycle or moped.

Open head injury: injury which involves a fracture or penetration of the skull. May result in brain injuries.

Prehospital care: The care provided to reduce the effects of trauma or injury before the injured person reaches a hospital-based setting (see EMS). This includes the formal response provided by trained and equipped personnel, as well as the bystanders' response provided by lay people.

Risk: The possibility of an unwanted event occurring.

Risk factor: A factor which affects the probability of a crash or collision occurring or influences the severity of the consequences which arise as a result of the event.

Road traffic accident: a collision involving at least one vehicle in motion on a public or private road, that results in at least one person being injured or killed (2).

Road traffic crash or collision: an incident, involving at least one moving vehicle, that may or may not lead to injury, which occurs on a public road.

Road traffic fatality: a death occurring within 30 days of the road traffic crash (2).

Road traffic injuries: fatal or non-fatal injuries incurred as a result of a road traffic crash.

Road user: a person using any part of the road system as a non-motorized or motorized transport user.

Surveillance: systematic ongoing collection, collation, and analysis of data and the timely dissemination of information to those who need to know so that action can be taken.

Traumatic brain injury: any injury to the brain resulting from the application of external forces to the skull. Traumatic brain injury can lead to a spectrum of problems including concussion, contusion (haemorrhage within the brain), or diffuse injuries that cause more severe neurological damage.

Vulnerable road users: road users most at risk in traffic – such as pedestrians, cyclists and public transport passengers. Children, older people and disabled people may also be included in this category.

References

1. Elvik R, Vaa T. *The handbook of road safety measures*. Amsterdam, The Netherlands, Elsevier, 2004.
2. Economic Commission for Europe Intersecretariat Working Group on Transport Statistics. *Glossary of transport statistics. Third edition*. New York, NY, United Nations Economic and Social Council, 2003 (TRANS/WP.6/2003/6), (www.unece.org/trans/main/wp6/pdfdocs/glossen3.pdf, accessed 23 May 2006).
3. *Country classification: classification of economies*. Washington DC, The World Bank Group, 2002 (www.worldbank.org/data/countryclass/countryclass.html, accessed 23 May 2006).

Partner organizations in the development of the manual

World Health Organization (WHO)

As the United Nations specialized agency for health, the World Health Organization aims to integrate road safety into public health programmes around the world in order to reduce the unacceptably high levels of road traffic injuries. A public health approach is used, combining epidemiology, prevention and advocacy. Special emphasis is given to low- and middle-income countries where most road traffic crashes occur. In recent years WHO has focused its efforts on the implementation of the recommendations contained in the *World report of road traffic injury prevention*, which it co-produced with the World Bank, and in particular on addressing the main risk factors for road traffic injuries. Following a United Nations General Assembly resolution on road safety, adopted in 2004, WHO acts as a coordinator for road safety initiatives within the United Nations system, and to this end has facilitated the development of the United Nations Road Safety Collaboration – a group of over international road safety organizations, including many United Nations agencies. This coordinating role was further endorsed by a fourth UN General Assembly resolution, adopted in 2005.

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World Bank

The World Bank promotes the improvement of road safety outcomes in low- and middle-income countries as a global development priority. It provides financial and technical support to countries, working through government agencies, nongovernmental organizations, and the private sector to formulate strategies to improve road safety. The World Bank's mission is to assist countries accelerate their implementation of the recommendations of the *World report on road traffic injury prevention* which it developed jointly with the World Health Organization in 2004. To achieve

this, it emphasizes country capacity-building, and the development of global partnerships, with a focus on the achievement of measurable road safety results.

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Global Road Safety Partnership (GRSP)

The Global Road Safety Partnership is a partnership between business, civil society and government dedicated to the sustainable reduction of death and injury on the roads in developing and transition countries. By creating and strengthening links between partners, GRSP aims to increase awareness of road safety as an issue affecting all sectors of society. GRSP seeks to establish sustainable partnerships and to deliver road safety interventions through increased resources, better coordination, management, greater innovation, and knowledge sharing both globally and locally.

GRSP is a hosted programme of the International Federation of Red Cross and Red Crescent Societies.

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FIA Foundation for the Automobile and Society

The FIA Foundation for the Automobile and Society is a registered UK charity with the objectives of promoting public safety and public health, the protection and preservation of human life, and the conservation, protection and improvement of the physical and natural environment. Since its establishment in 2001, the FIA Foundation has become a prominent player in promoting road safety around the world. It conducts advocacy to raise awareness about the growing epidemic of road traffic injuries and place road safety on the international political agenda. It promotes research

and the dissemination of results to encourage best practice in road safety policy, and offers financial support to third party projects through a grants programme.

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