

ROAD SAFETY: A NEW PUBLIC HEALTH PRIORITY

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Abstract: Road safety is global public health problem. Over a million people are killed each year on the world's roadways; over 3,000 die each day, and tens of millions more are injured. WHO dedicated World Health Day 2004 to road traffic safety, with participation from over 132 countries. The Centers for Disease Control and Prevention (CDC) is a strong partner with WHO in developing and implementing interventions to reduce motor vehicle injuries. No single organization can face such challenges alone. Accordingly, we must collaborate as global partners to achieve better health, higher safety standards, and more efficient transportation systems. The 2004 WHO/World Bank World Report on road Traffic Injury Prevention provides guidance on how to achieve greater success in the global effort to reduce traffic and has been a key factor in mobilizing political will to address this neglected problem.

Road traffic-related crashes impose an enormous public health burden globally. In 2000, road traffic injuries were the ninth leading cause of disability-adjusted-life years lost worldwide and are projected to become third by 2020 (Peden et al., 2001). The costs are staggering. From the ambulance that transports an injured person to the emergency room, through hospitalization, rehabilitation, earnings loss, and social and family disruption, the economic consequences are far-reaching. Yet few governments or organizations acknowledge the problem's magnitude. These types of injuries *are preventable*, and lives will be saved and injuries and suffering reduced once effective road traffic injury prevention strategies are implemented.

Our roadways are becoming more crowded, creating a spectrum of problems ranging from pedestrian, bicycle, vehicle occupant, and motorcycle injuries to environmental pollution, noise, and health problems. These are worldwide problems that will grow more serious as travel and population size increase, as society ages, and as our predictable reliance on cars continues. As motorization increases in the world, any investment to improve transportation or to make it safer will have global implications. Yet, the rates of public investment for road safety remain critically low, particularly in low- and middle-income countries. For example, Pakistan and Uganda spend \$0.07 and \$0.09 per capita, respectively, on road safety. This is only 1% of the public expenditure on health in each country. Conversely, high-income countries such as the United Kingdom spend nearly \$39.00 (in 1980 US dollars) per capita on road safety (Bishai et al., 2003).

There were 42,815 deaths and almost 3 million nonfatal injuries attributable to road traffic crashes in the United States in 2002. Over 17,000 of the deaths were alcohol related. This makes road traffic crashes the leading cause of injury-related death, the leading cause of death for persons 1 to 34 years of age, and the third leading cause of nonfatal injuries. Sometimes being number one is not impressive. The United States currently holds the world record for having the highest number of motor vehicle deaths in the world and the U.S. injury death rate of 15.6 deaths per 100,000 population exceeds the mean of 11.7 among 34 countries reporting (National Safety Council, 2002).

The World Health Organization (WHO) is taking a bold step forward by addressing road traffic injuries as a *preventable* global health problem. WHO should be congratulated for their efforts. Their leadership on this issue has the potential to elevate awareness and broaden our concept of the preventable nature of road traffic-related crashes—putting it alongside other predictable, preventable diseases. Beginning in 2001, after consulting many countries, WHO's Department of Violence and Injury Prevention initiated a five-year strategy for road safety. That same year, CDC and WHO, with input from 50 countries, prepared injury surveillance guidelines for developing information systems that collect injury data (Holder et al., 2001).

In 2004, the WHO and the World Bank produced the *World Report on Road Traffic Injury Prevention (World Report)* to highlight the tragic toll that road traffic-related injuries take on society and how these injuries impact the health of all nations (Peden, Scurfield, Sleet et al., 2004). The *World Report* was the product of a collaborative effort by institutions and well over 100 experts from all continents and different sectors (e.g., transportation, health engineering, police, education, and the civil sector). The *World Report* listed six recommendations:

- ✍ Identify a lead agency within each country;
- ✍ Document the burden using effective surveillance systems;
- ✍ Prepare a national road safety strategy;
- ✍ Allocate financial resources to address the problem;
- ✍ Implement effective interventions to prevent road traffic crashes; and
- ✍ Promote international cooperation to improve road safety.

WHO also dedicated World Health Day 2004 to road traffic safety. WHO and the United Nations encouraged countries throughout the world to use World Health Day, April 7th, 2004, as a catalyst to promote road traffic safety at all societal levels of participation. World Health Day 2004 was an important opportunity for all of us committed to public health and safety to join hands and lend support to one another in our efforts to reduce this global burden. But to ensure World Health Day's far-reaching impact and success, these activities require continuing collaboration, research support, and public awareness. World Health Day did not end on April 7, 2004. Activities will continue throughout the year as countries and their leaders plan for improving road safety and reducing road traffic injuries using guidance from the *World Report*.

The fact that around 85% of all road traffic-related deaths and 90% of the disability-adjusted-life years lost due to crashes in the world occur in low- to middle-income countries makes the *World Report* and celebration of World Health Day even more relevant. Road safety is finally being recognized as a health equity issue and as an urgent global health priority (Nantulya and Sleet, 2003). Alcohol has been identified as among the leading risk factors (Peden, Scurfield, Sleet et.al., 2004)

Despite the unacceptable high rates of vehicle-related deaths in the USA, the U.S. motor vehicle death rates during the last century has declined dramatically, and is testament to the effectiveness of prevention (CDC, 1999). This downward trend occurred despite an increased number of vehicles, drivers, miles traveled, and a growing population. In other high income countries, traffic fatalities have also declined. As well, since 1979, traffic fatalities have dropped by 50% in Canada, 46% in Great Britain, and 48% in Australia. (Evans, 2003) Clearly the world has benefited from implementing as variety of traffic injury prevention strategies.

CDC, and its partners are working to reduce the burden of traffic injuries in the United States. This will require a comprehensive approach. For example, alcohol and excessive speed are two significant contributors to crashes and injuries that affect all road users, including drivers, occupants, cyclists, and pedestrians. But our experience in the United States demonstrates that while policy-oriented interventions (such as laws and regulations) are essential to reducing road traffic crashes and injuries, awareness and enforcement of these laws are critical to their success. This requires public health, transportation, and enforcement sectors to work together (Howat, Sleet, Elder, Maycock, 2004).

The Centers for Disease Control and Prevention (CDC) is working to reduce the impact of motor vehicle injuries on society by conducting research and implementing community-based programs in public health settings. CDC acknowledges that no single organization can face such challenges alone. Accordingly, we must collaborate with our global partners to achieve better health, higher safety standards, and more efficient transportation methods.

Many useful strategies for addressing roads, vehicles, and road-user behaviors already exist, and these can be implemented more widely (Elvick and Vaa, 2004; CDC, 2005). Where effective interventions are unavailable, they must be developed and tested, using science-based methods and research. Interventions that work in one setting may require careful tailoring and evaluation for application in other settings.

Road users everywhere deserve better and safer road travel. If we expect to prevent and control this global epidemic, we must use effective strategies simultaneously to address changes in the roads and transportation systems; to address vehicle safety; and to address the personal behaviors of drivers, passengers, pedestrians, cyclists, and decision makers. For more information on preventable road traffic-related injuries, visit www.cdc.gov/ncipc/whd2004 or www.who.int/world-health-day.

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