Preventing Road Traffic Injuries: International efforts in road safety



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February 2007

1.2 million deaths



Road traffic injury mortality rates (per 100 000 population) in WHO regions, 2002

| Africa | Americas | | South East Asia | Europe | | Eastern Mediterranean | | Western Pacific | |
|--------|----------|------|--------------------|--------|------|-----------------------|------|-----------------|------|
| | HIC | LMIC | LMIC | HIC | LMIC | HIC | LMIC | HIC | LMIC |
| 27.4 | 14.8 | 16.6 | 18.6 | 11.1 | 17.2 | 31.1 | 26.4 | 11.9 | 18.5 |

| Leadi | Leading causes of deaths by age group, world, 2002 | | | | | | |
|-------|--|--|---|--|--|--|--|
| Rank | 0–4 years | 5–14 years | 15–29 years | 30–44 years | 45–59 years | ≥60 years | All ages |
| 1 | Lower respiratory Infections 1 890 008 | Childhood cluster diseases 219 434 | HIV/AIDS 707 277 | HIV/AIDS 1 178 856 | lschaemic heart disease 1 043 978 | lschaemic heart disease 5 812 863 | lschaemic heart disease 7 153 056 |
| 2 | Diarrhoeal disease 1 577 891 | Road traffic injuries 130 835 | Road traffic injuries 302 208 | Tuberculosis 390 004 | Cerebrovascular disease 623 099 | Cerebrovascular disease 4 685 722 | Cerebrovascular disease 5 489 591 |
| 3 | Low birth weight 1 149 168 | Lower respiratory Infections 127 782 | Self-Inflicted Injuries 251 806 | Road traffic injuries 285 457 | Tuberculosis 400 704 | Chronic obstructive pulmonary diseases 2 396 739 | Lower respiratory Infections 3 764 415 |
| 4 | Malaria 1 098 446 | HIV/AIDS 108/090 | Tuberculosis 245 818 | Ischaemic heart disease 231 340 | HIV/AIDS 390 267 | Lower respiratory Infections 1 395 611 | HIV/AIDS 2 818 762 |
| 5 | Childhood cluster diseases 1 046 177 | Drowning 86 327 | interpersonal violence 216 169 | Setf-Inflicted Injuries 230 490 | Chronic obstructive pulmonary diseases 309 726 | Trachea, bronchus, lung cancers 927 889 | Chronic obstructive pulmonary diseases 2 743 509 |
| 6 | Birth asphyxia and birth trauma 729 066 | Malaria 76 257 | Lower respiratory Infections 92 522 | Interpersonal vtolence 165 796 | Trachea, bronchus, lung cancers 261 860 | Diabetes mellitus 749 977 | Diarrhoeal diseases 1 766 447 |
| 7 | HIV/AIDS 370 705 | Tropical cluster diseases 35 454 | Fires 90 845 | Cerebrovascular disease 124-417 | Cirrhosis of the liver 250 208 | Hypertensive heart disease 732 262 | Childhood-cluster diseases 1 359 548 |
| 8 | Congenital heart anomalies 223 569 | Ares 33 046 | Drowning 87 499 | Cirrhosis of the live 100 101 | Road traffic injuries 221 776 | Stomach cancer 605 395 | Tuberculosis 1 605 063 |
| 9 | Protein—energy mainutrition 138 197 | Tuberculosis 32 762 | War 71 680 | Lower respiratory Infections 98 2 32 | Self-Inflicted Injuries 189 215 | Tuberculosis 495 199 | Trachea, bronchus, lung cancers 1 2 38 417 |
| 10 | STDs excluding HIV 67 871 | Protein–energy mainutrition 30 763 | Hypertensive disorders 61 711 | Polsonings 81 930 | Stomach cancer 185 188 | Colon and rectum cancers 476 902 | Malaria 1 221 432 |
| 11 | Meningitis 64 255 | Meningitis 30 69 4 | Matemal haemor- rhage 56 233 | Fires 67 511 | Liver cancer 180 117 | Nephritis and nephrosis 440 708 | Road traffic injuries 1 183 492 |
| 12 | Drowning 57 287 | Leukaemia 21 097 | lschaemic heart disease 53 870 | Maternal haemorrhage 63 191 | Diabetes meilitus 175 423 | Alzheimer and other dementias 382 339 | Low Birth weight 1 149 172 |
| 13 | Road traffic injuries 49.736 | Falls 20 084 | Polsoning 52.956 | War 61 018 | Lower respiratory Infections 160 259 | Liver cancer 367 503 | Diabetes mellitus 982 175 |
| 14 | Endocrine disorders 42 619 | Violence 18 551 | Childhood cluster diseases 48 101 | Drowning 56 744 | Breast cancer 147 489 | Clirthosis of the liver 366 417 | Hypertensive heart disease 903 612 |
| 15 | Tuberculosis 40 574 | Polsonings 18 529 | Abortion 43 782 | Liver cancer 55 486 | Hypertensive heart disease 129 634 | Oesophagus cancer 318 112 | Self-Inflicted Injuries 874 955 |

Age distribution Road traffic injury mortality in Africa, 2002



60% of deaths from road traffic injuries occur among those younger than 30 years old

Road traffic death rates (per 100 000 population) in selected African countries



Rate per 100 000 population

20-50 million injuries



Road User fatalities



■ Pedestrians □ Bicyclists ■ Motorized 2-wheelers □ Motorized 4-wheelers □ Other

Road traffic crashes are predicted to rise





RTIS are more complex in LMICS



Road safety should be addressed using a "systems approach"



Road safety is a shared responsibility



Road traffic injuries are a public health problem



WHD and launch of World Traffic Report 7 Apríl 2004



African launches of WRRTIP











Focus on successful interventions HELMETS

Most motorcycle deaths are a result of head injuries. Wearing a motorcycle helmet correctly can cut the risk of death by almost 40%, and the risk of severe injury by 70%.

After passing helmet legislation in <u>Malaysia</u> there was a 30% reduction in motorcycle deaths

A hospital-based study in <u>Nigeria</u> revealed that none of head injured motorcyclists were wearing a helmet at the time of their collision



Focus on successful interventions ALCOHOL AND DRUGS

Consuming alcohol before driving increases the risk of a crash as well as the likelihood that death or serious injury will result. Passing a drink–driving law and enforcing it can reduce the number of road deaths by 20%.

With the exception of <u>South</u> <u>Africa</u>, drink-driving laws in Africa are vague or not enforced. No pedestrian laws.

No African countries have drugdriving laws despite the known increased crash risks.



Focus on successful interventions SEAT-BELTS and CHILD RESTRAINTS

Wearing a seat-belt reduces the likelihood of being ejected from a vehicle, thereby decreasing the risk of death or serious injury by 40%-65%.

After passage/enforcement of seat belt law in the <u>United Kingdom</u> there was a 35% reduction in hospital admissions

In <u>Australia</u> there was a 26% reduction in car occupant deaths

Most countries in Africa have seatbelt laws for drivers, but few have child-seat laws



Focus on successful interventions SPEED



Speed kills all types of road users drivers, pedestrians and cyclists. A 5% cut in average speed can reduce the number of fatal crashes by as much as 30%.

After passing and enforcing a 5 km/hr REDUCTION in the speed limit in **Switzerland** there was a 12% reduction in deaths.

After INCREASING the speed limit by between 2-4 miles/hr in the <u>USA</u> there was a 19-34% increase in deaths.

Focus on successful interventions VISIBILITY



Pedestrians and cyclists can be difficult to see on the roads and are therefore at risk of road traffic injuries. Wearing lightly-coloured or reflective clothing makes them much more visible and can help avoid collisions.

Promising studies underway :

In <u>Uganda</u>, motocyclists are encouraged to wear reflective vests

In <u>South Africa</u>, children's school clothes and bags are reflectorized

Focus on successful interventions LOW COST ENGINEERING MEASURES



Simple low-cost engineering measures save thousands of lives every year.

Speed bumps in <u>**Ghana**</u> reduced crashes by 35% at a high-risk crash site.

Building a pass over a busy <u>Ugandan</u> road has reduced the number of deaths among school children

Emergency medical services

WHO Executive Board Resolution 26 January 2007 Emergency care systems







1st GLOBAL UN ROAD SAFETY WEEK 2007 23-29 Apríl 2007

Road Safety is no Accident

- Country events
- World Youth Assembly (23-24 April, Geneva)
 - Youth declaration
 - Results video and drawing competitions
- 2nd Stakeholders Forum

www.who.int/roadsafety/

Predictions for Africa - 2030

| Leading causes of DEATH | Leading causes of DALYs | | |
|---------------------------------|----------------------------------|--|--|
| in Low-income countries, 2030 | in Low-income countries, 2030 | | |
| | | | |
| 1. Ischaemic heart disease | 1. HIV/AIDS | | |
| 2. HIV/AIDS | 2. Perinatal conditions | | |
| 3. Cerebrovascular disease | 3. Unipolar depressive disorders | | |
| 4. COPD | 4. Road traffic accidents | | |
| 5. Lower respiratory infections | 5. Ischaemic heart disease | | |
| 6. Perinatal conditions | 6. Lower respiratory infections | | |
| 7. Road traffic accidents | 7. Diarrhoeal diseases | | |
| 8. Diarrhoeal diseases | 8. Cerebrovascular disease | | |
| 9. Diabetes mellitus | 9. Cataracts | | |
| 10. Malaria | 10. Malaria | | |

Road traffic crashes can be prevented



Steps to consider for Africa

- Political commitment
- Lead agencies at national level
- Focus on effective prevention measures
- Strengthen trauma care
- Develop data collection systems
- Create a culture of safety

