

WEEKLY EPIDEMIOLOGICAL REPORT

A publication of the Epidemiology Unit Ministry of Healthcare and Nutrition

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Facts about Road Traffic Accidents (part 1)

Every day thousands of people are killed and injured on roads. Men, women or children, walking, biking or riding to school or work, playing in the streets or setting out on long trips never return home, leaving behind shattered families and communities. Millions of people each year will spend long weeks in hospital after severe crashes and many will never be able to live, work or play as they used to do. Current efforts to address road safety are minimal in comparison to growing this suffering.

Worldwide, the number of people killed on road traffic crashes each year is estimated at almost 1.2 million, while the number injured would be as high as 50 million. What is worse, without increased efforts and new initiative, the total number of road traffic deaths worldwide and injuries is forecast to rise by some 65% between 2000 and 2020 and in low income and middle income countries deaths are expected to increase by as much as 80%. Road traffic injury prevention and mitigation should be given the same attention and scale of resources that is currently paid to other prominent health issues if increasing human loss and injury on the roads, with their devastating human impact and large economic cost to society, are to be averted.

The magnitude of road traffic injuries globally can be summarized as follows:

- More than one million people are killed worldwide every year as a result of road traffic crashes.
- Road traffic injuries are the 11th leading cause of death and the 9th leading cause of disability adjusted life years lost worldwide.
- The poor and vulnerable road users- pedestrians, cyclists and motorcyclists bear the greatest burden.
- Some 90% of road traffic deaths occur in the

- developing world, which comprises two thirds of the global population.
- As motorization increases, many low-income and middle-income countries may face a growing toll of road traffic injuries, with potentially devastating consequences in human, social and economic terms.
- Males are more likely to be involved in road traffic crashes than females.
- Economically active adults, aged 15–44 years, account for more than half of all the road traffic deaths.
- Without new or improved interventions, road traffic injuries will be the third leading cause of death by the year 2020.
- The health, social and economic impacts of road traffic crashes are substantial.
- Between 20 and 50 million people sustain injury as a result of motor vehicle crashes each year.
- Nearly a quarter of all non-fatally injured victims requiring hospitalization sustain traumatic brain injury as a result of motor vehicle crashes.
- Between 30% and 86% of trauma admissions in some low-income and middle-income countries are the result of road traffic crashes.
- Millions of people are temporarily or permanently disabled as a result of road traffic crashes.
- Many people suffer significant psychological consequences for years following motor vehicle crashes.

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- Road traffic crashes cost governments, on average, between 1% and 2% of their gross national product.
- The social costs more difficult to quantify exact a heavy toll on victims, their families, friends and communities.
- The death of a breadwinner often pushes a family into certain poverty.

The public health approach

The public health approach to road traffic injury prevention is based on science. The approach draws on knowledge from medicine, biomechanics, epidemiology, sociology, behavioral science, criminology, education, economics, engineering and other disciplines.

While the health sector is only one of many bodies involved in road safety, and usually not even the leading one, it nonetheless has important roles to play. These include:

- discovering, through injury surveillance and surveys, as much as possible about all aspects of road crash injury by systematically collecting data on the magnitude, scope, characteristics and consequences of road traffic crashes;
- researching the causes of traffic crashes and injuries, and in doing so trying to determine:
 - causes and correlates of road crash injury,
 - factors that increase or decrease risk,
 - factors that might be modifiable through interventions;
- exploring ways to prevent and reduce the severity of injuries in road crashes by designing, implementing, monitoring and evaluating appropriate interventions;
- helping to implement, across a range of set-tings, interventions that appear promising, especially in the area of human behaviour, disseminating information on the

- outcomes, and evaluating the cost-effectiveness of these programmes;
- working to persuade policy makers and decision makers of the necessity to address injuries in general as a major issue, and of the importance of adopting improved approaches to road traffic safety;
- translating effective science-based information into policies and practices that protect pedestrians, cyclists and the occupants of vehicles;
- promoting capacity building in all these areas, particularly in gathering information and research.

Collection of data to build evidence on road traffic injuries

Road safety is of prime concern to many individuals, groups and organizations, all of whom require data and evidence. While different users have different data needs, reliable data and evidence are essential for describing the burden of road traffic injuries, assessing risk factors, developing and evaluating interventions, providing information for policy makers and decision makers, and raising awareness. Without reliable information, the priorities for road traffic injury prevention cannot be rationally or satisfactorily determined.

Injury surveillance systems

Most countries have some form of national system for aggregating data on road crashes using police records or hospital records, or both. However, the quality and reliability of data vary between surveillance systems in different countries and also between systems within the same country. For road traffic injuries, certain key variables need to be collected.

Source:

World Report on RoadTraffic Injury Prevention Annual Health Bulletin 2005-2006 This article was compiled by Dr M G Malawaraarachchi,

| Key sources of road traffic injury data Source | Type of data | Comments |
|---|--|--|
| Police | Number of road traffic incidents, fatalities and | Level of detail varies from one country to another. |
| Ponce | injuries | Police records can be inaccessible. |
| | Type of road users involved | Underreporting is a common problem, particularly in low-income and middle |
| | Age and sex of casualties | income countries. |
| | Type of vehicles involved | income countries. |
| | Police assessment of causes of crashes | |
| | Location and sites of crashes | |
| | Prosecutions | |
| TT 11 - 22 - 7 - 1 - 5.1 - 2 | | |
| Health settings (e.g. hospital inpatient records, | Fatal and non-fatal injuries | Level of detail varies from one health care facility to another. |
| emergency room records, trauma registries, | Age and sex of casualties | Injury data may be recorded under "other causes", making it difficult to extract for |
| ambulance or emergency technician records, health | Costs of treatment | analysis. |
| clinic records, family doctor records) | | |
| Insurance firms | Fatal and non-fatal injuries | Access to these data may be difficult. |
| | Damage to vehicles | |
| | Costs of claims | |
| Other private and public institutions, including | Number of fatal and non-fatal injuries occurring | These data may be specific to the planning and operation of the firms. |
| transport companies | among employees | |
| | Damage and losses | |
| | Insurance claims | |
| | Legal issues | |
| | Operational data | |
| Government departments and specialized agencies | Population denominators | These data are complementary and important for analysis of road traffic injuries. |
| collecting data for national planning and | Income and expenditure data | The data are collected by different ministries and organizations, though there may |
| development | Health indicators | be one central agency that compiles and produces reports, such as statistical |
| | Exposure data | abstracts, economic surveys and development plans. |
| | Pollution data | |
| | Energy consumption | |
| | Literacy levels | |
| Special interest groups (e.g. research institutes, non- | Number of road traffic incidents, fatal and non- | Various organizations have different interests. |
| governmental organizations, victim support | fatal injuries | |
| organizations, transport unions, consulting firms, | Type of road users involved | |
| institutions involved in road safety activities) | Age and sex of casualties | |
| • | Type of vehicles involved | |
| | Causes | |
| | Location and sites of crashes | |
| | Social and psychological impacts | |
| | Interventions | |

Table 1: Vaccine-preventable Diseases & AFP

22nd-28th August 2009 (35th Week)

| | | | No | o. of Cas | es by F | Provinc | e | Number of cases | Number of cases | Total | Total | Difference between the | | | |
|----------------------------|-----------------------|----|-----|--------------------------------------|-----------------------------------|--|--|---|--------------------|-------|-------|---------------------------|-----------|----------|--|
| Disease | W C S N E NW NC U Sal | | Sab | during current week in 2009 | during same week in 2008 | number of cases to date in 2009 | number of cases to date in 2008 | number of cases to date in 2009 & 2008 | | | | | | | |
| Acute Flaccid Paralysis | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 01 | 01 | 03 | 51 | 70 | -27.1% | |
| Diphtheria | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | - | |
| Measles | 00 | 03 | 00 | 02 | 00 | 00 | 00 | 00 | 01 | 07 | 04 | 117 | 89 | 9 +31.5% | |
| Tetanus | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 02 | 18 | 27 | -33.3% | |
| Whooping Cough | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 02 | 40 | 32 +25.0% | | |
| Tuberculosis | 154 | 01 | 72 | 31 | 03 | 02 | 17 | 01 | 13 | 294 | 206 | 6968 | 6204 | 12.3% | |

Table 2: Newly Introduced Notifiable Disease

22nd-28th August 2009 (35th Week)

| | | | No | o. of Ca | ses by | Provin | ce | | | | | | | 5166 |
|---------------|----------------------------|------------|------------|----------|--------|--------------------|------------|--------------------|------------|--|---|---|---|--|
| Disease | W | С | S | N | Е | NW | NC | U | Sab | Number of cases during current week in 2009 | Number of cases during same week in 2008 | Total number of cases to date in 2009 | Total number of cases to date in 2008 | Difference between the number of cases to date in 2009 & 2008 |
| Chickenpox | 05 | 05 | 04 | 15 | 02 | 01 | 10 | 05 | 15 | 62 | 46 | 11868 | 3693 | +221.4% |
| Meningitis | 10 GM=3 CB=5 KL=2 | 01 NE=1 | 01 GL=1 | 00 | 00 | 03 KR=2 PU=1 | 00 | 04 BD=3 MO=1 | 03 KG=3 | 22 | 23 | 764 | 941 | -18.8% |
| Mumps | 02 | 01 | 04 | 04 | 05 | 05 | 00 | 04 | 04 | 29 | 62 | 1319 | 1991 | -33.8% |
| Leishmaniasis | 00 | 01 ML=1 | 02 HB=4 | 00 | 00 | 00 | 03 AP=3 | 00 | 00 | 06 | Not available* | 490 | Not available* | - |

Key to Table 1 & 2

Provinces: W: Western, C: Central, S: Southern, N: North, E: East, NC: North Central, NW: North Western, U: Uva, Sab: Sabaragamuwa.

DPDHS Divisions: CB: Colombo, GM: Gampaha, KL: Kalutara, KD: Kandy, ML: Matale, NE: Nuwara Eliya, GL: Galle, HB: Hambantota, MT: Matara, JF: Jaffna,

KN: Killinochchi, MN: Mannar, VA: Vavuniya, MU: Mullaitivu, BT: Batticaloa, AM: Ampara, TR: Trincomalee, KM: Kalmunai, KR: Kurunegala, PU: Puttalam,

AP: Anuradhapura, PO: Polonnaruwa, BD: Badulla, MO: Moneragala, RP: Ratnapura, KG: Kegalle.

Data Sources:

Weekly Return of Communicable Diseases: Diphtheria, Measles, Tetanus, Whooping Cough, Chickenpox, Meningitis, Mumps.

Special Surveillance: Acute Flaccid Paralysis.

Leishmaniasis is notifiable only after the General Circular No: 02/102/2008 issued on 23 September 2008.

Table 4: Surveillance of Communicable diseases among IDP's 22nd-28th August 2009 (35th Week)

| Area Disease | Dysentery | Enteric fever | Viral Hepatitis | Chicken Pox | Watery Diarrhoea |
|--------------|-----------|---------------|--------------------|-------------|---------------------|
| Vavunia | 0 | 11 | 2 | 3 | - |
| Chendikulam | 33 | 32 | 38 | 196 | 313 |
| Total | 33 | 43 | 40 | 199 | 313 |

Table 4: Selected notifiable diseases reported by Medical Officers of Health

22th-28th August 2009 (35th Week)

| DPDHS Division | | Dengue Dysentery er / DHF* | | Encephali Enteric tis Fever | | Food Poisoning | | Leptospiros is | | Typhus Fever | | Viral Hepatitis | | Human Rabies | | Returns Received Timely** | | | |
|-------------------|-----|-------------------------------|----|--------------------------------|---|-------------------|----|-------------------|----|-----------------|----|--------------------|----|-----------------|----|---------------------------------|----|----|-----|
| | Α | В | Α | В | Α | В | Α | В | Α | В | Α | В | Α | В | Α | В | Α | В | % |
| Colombo | 61 | 3286 | 5 | 150 | 0 | 9 | 6 | 143 | 0 | 45 | 25 | 421 | 0 | 5 | 4 | 90 | 0 | 4 | 92 |
| Gampaha | 76 | 3131 | 4 | 116 | 0 | 18 | 0 | 32 | 0 | 13 | 12 | 231 | 0 | 7 | 31 | 132 | 1 | 3 | 73 |
| Kalutara | 10 | 1261 | 4 | 267 | 0 | 11 | 0 | 45 | 0 | 43 | 7 | 179 | 0 | 1 | 1 | 63 | 0 | 2 | 58 |
| Kandy | 32 | 3444 | 3 | 213 | 0 | 6 | 00 | 23 | 1 | 55 | 2 | 162 | 2 | 127 | 8 | 93 | 0 | 0 | 68 |
| Matale | 19 | 1359 | 2 | 84 | 0 | 2 | 0 | 26 | 0 | 6 | 1 | 238 | 0 | 5 | 5 | 57 | 0 | 2 | 75 |
| Nuwara Eliya | 2 | 211 | 4 | 347 | 0 | 2 | 2 | 149 | 0 | 786 | 2 | 32 | 2 | 59 | 3 | 66 | 0 | 0 | 77 |
| Galle | 9 | 465 | 0 | 179 | 0 | 10 | 0 | 3 | 0 | 40 | 5 | 122 | 0 | 9 | 2 | 26 | 1 | 4 | 84 |
| Hambantota | 9 | 761 | 1 | 69 | 0 | 8 | 0 | 6 | 1 | 12 | 1 | 57 | 1 | 62 | 0 | 38 | 0 | 0 | 91 |
| Matara | 17 | 963 | 2 | 215 | 0 | 4 | 0 | 5 | 0 | 16 | 4 | 114 | 3 | 101 | 1 | 46 | 0 | 1 | 100 |
| Jaffna | 0 | 12 | 0 | 84 | 0 | 3 | 0 | 198 | 0 | 28 | 0 | 0 | 0 | 124 | 0 | 154 | 0 | 2 | 13 |
| Kilinochchi | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mannar | 1 | 5 | 1 | 69 | 0 | 1 | 4 | 92 | 0 | 4 | 0 | 0 | 0 | 0 | 3 | 54 | 0 | 0 | 50 |
| Vavuniya | 0 | 19 | 0 | 14 | 0 | 21 | 15 | 300 | 0 | 2 | 0 | 3 | 0 | 2 | 0 | 3399 | 0 | 0 | 50 |
| Mullaitivu | 0 | 0 | 0 | 18 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Batticaloa | 1 | 497 | 1 | 205 | 0 | 12 | 0 | 12 | 0 | 50 | 0 | 9 | 0 | 2 | 0 | 17 | 0 | 4 | 64 |
| Ampara | 1 | 207 | 0 | 33 | 0 | 0 | 0 | 11 | 0 | 8 | 0 | 10 | 0 | 2 | 0 | 23 | 0 | 0 | 43 |
| Trincomalee | 1 | 318 | 1 | 80 | 1 | 3 | 1 | 7 | 0 | 1 | 0 | 17 | 0 | 19 | 2 | 38 | 0 | 1 | 80 |
| Kurunegala | 48 | 2379 | 1 | 138 | 0 | 9 | 1 | 51 | 0 | 9 | 2 | 85 | 3 | 65 | 2 | 114 | 0 | 4 | 70 |
| Puttalam | 12 | 524 | 0 | 120 | 0 | 7 | 0 | 62 | 0 | 2 | 2 | 70 | 0 | 31 | 1 | 27 | 0 | 1 | 89 |
| Anuradhapur | 5 | 495 | 2 | 87 | 0 | 4 | 0 | 5 | 0 | 20 | 0 | 81 | 0 | 28 | 10 | 158 | 0 | 2 | 68 |
| Polonnaruwa | 0 | 138 | 5 | 42 | 0 | 2 | 0 | 20 | 0 | 6 | 1 | 56 | 0 | 9 | 3 | 53 | 0 | 0 | 71 |
| Badulla | 4 | 252 | 5 | 200 | 0 | 2 | 1 | 34 | 0 | 19 | 1 | 74 | 1 | 90 | 3 | 260 | 0 | 1 | 67 |
| Monaragala | 2 | 136 | 7 | 76 | 0 | 1 | 0 | 23 | 1 | 13 | 0 | 13 | 1 | 55 | 3 | 76 | 0 | 1 | 91 |
| Ratnapura | 30 | 1785 | 3 | 400 | 0 | 19 | 0 | 44 | 0 | 8 | 4 | 203 | 1 | 31 | 5 | 121 | 0 | 1 | 67 |
| Kegalle | 29 | 3312 | 0 | 132 | 0 | 7 | 0 | 34 | 0 | 6 | 2 | 150 | 0 | 25 | 6 | 174 | 0 | 1 | 64 |
| Kalmunai | 6 | 161 | 1 | 79 | 0 | 1 | 0 | 13 | 0 | 3 | 0 | 2 | 0 | 3 | 1 | 16 | 0 | 0 | 46 |
| SRI LANKA | 375 | 25121 | 52 | 4805 | 1 | 162 | 30 | 1339 | 03 | 1195 | 71 | 2374 | 14 | 862 | 94 | 5295 | 02 | 34 | 69 |

Source: Weekly Returns of Communicable Diseases WRCD).

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ON STATE SERVICE

^{*}Dengue Fever / DHF refers to Dengue Fever / Dengue Haemorrhagic Fever.

**Timely refers to returns received on or before 28th August, 2009 Total number of reporting units =311. Number of reporting units data provided for the current week: 217

A = Cases reported during the current week. B = Cumulative cases for the year.