# WEEKLY EPIDEMIOLOGICAL REPORT

A publication of the Epidemiology Unit
Ministry of Health


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Vol. 40 No.03 — 12th – 18th January 2013

WER SRI LANKA - 2013


## Prevention of Road Traffic Accidents (RTA)

**Introduction**

Road traffic accidents—the leading cause of death by injury and the tenth-leading cause of all deaths globally—now make up a surprisingly significant portion of the worldwide burden of ill-health. An estimated 1.2 million people are killed in road crashes each year, and as many as 50 million are injured, occupying 30 percent to 70 percent of orthopedic beds in the hospitals of developing countries. if the present trends continue, road traffic injuries are predicted to be the third-leading contributor to the global burden of disease and injury by 2020.

In Sri Lanka, there have been 2721 causalities in the year 2011 and most of them (74 percent) have been in the 21-65 age group. Deaths among drivers and riders accounted for 1203 deaths (44 percent of deaths) and deaths among pedestrians accounted for 898 deaths (33 percent of deaths).

**Economic Burden**

Developing countries bear a large share of the burden due to road traffic accidents, accounting for 85 percent of annual deaths and 90 percent of the disability-adjusted life years (DALYs) lost each year globally. Since road traffic injuries affect mainly males (73 percent of deaths) globally and those between 15 and 44 years of age, this burden is creating an enormous economic hardship due to the loss of family breadwinners.

Moreover, the disability burden for this age group accounts for 60 percent of all DALYs lost because of road traffic accidents. The costs and consequences of these losses are significant. Three-quarters of all poor families who lost a member to road traffic death reported a decrease in their standard of living and 61 percent reported that they had to borrow money to cover expenses following their loss.

The World Bank estimates that road traffic injuries cost 1 percent to 2 percent of the gross national product (GNP) of developing countries, or twice the total amount of development aid received worldwide by developing countries.

**Contributory Factors**

Driver impairment is an important component of road traffic accidents globally. Driving at excessive speeds, while under the influence of alcohol or drugs, while being sleepy or tired, when visibility is compromised or without protective gear for all vehicle occupants are major factors in crashes, deaths and serious injuries.

In general, pedestrians, cyclists and moped and motorcycle riders are the most vulnerable road users as well as the heaviest users of roads in poor countries. Most people who use public transportation, bicycles or mopeds and motorcycles or who habitually walk are poor, illuminating the higher risk borne by those from less privileged classes

Road traffic injuries are predictable and preventable, but good data are important to understand the ways in which proven road safety interventions and technology can be implemented. Awareness of the consequences of road traffic injuries is lagging among general public and incorporation of comprehensive road safety programmes into national planning is necessary.

**Preventive Interventions**

The World Bank and the World Health Organization (WHO) advocate a "systems approach" to road traffic safety that emphasizes involvement at all levels of the road traffic system—from road providers and enforcers (vehicle manufacturers, road traffic planners, road safety engineers, police, educators, health professionals and insurers) to road users. Prevention interventions fall into several broad categories:

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Managing risk exposure with land-use

In developing countries, exposure to potential road traffic injury has increased largely because of rapid motorization, coupled with poor road conditions, rapid population growth, lack of safety features in cars, crowded roads, poor road maintenance, and lack of police enforcement. For example, in Vietnam, the number of motorcycles grew by 29 percent in 2001, with an associated increase of 37 percent in the number of road traffic deaths.

Promoting efficient patterns of land use and providing shorter, safer routes for vulnerable road users can reduce their exposure. Studies in Brazil, Mexico, and Uganda have found that pedestrians would rather cross a dangerous road than go out of their way to take a pedestrian bridge, even though such preferences increased their exposure to injury risk.

Improving public transportation systems can also reduce exposure. People in cars are between 8 and 20 times less likely to be killed in a road accident than walkers, bicyclists, or motorized two-wheeler users.

Planning and designing roads for safety

In almost all countries, road networks are designed from the perspective of the motor vehicle user. But developing countries can take lessons from safety conscious road designs in countries such as the Netherlands and Denmark, where roads are built to suit their function (high speed, rural, transitional between high speed and rural, and residential) and account for the safety of pedestrians and cyclists. Studies in Denmark showed that providing segregated bicycle lanes alongside urban roads reduced deaths among cyclists by 35 percent.

Providing visible, crashworthy and smart vehicles

Designing motorized vehicles that are more crashworthy is an important intervention in those developing countries where automobile safety regulations are more lax than in developed countries. One study showed that in developing countries, buses and trucks are involved in a much greater proportion of crashes, yet lack relevant safety standards.

Improving vehicular visibility is also important. In Thailand, hospital records showed that 75 percent to 80 percent of road traffic injuries were among users of motorized two-wheeled vehicles, which are not easily visible to larger vehicle operators. Improving the visibility of drivers in other instances (such as at night or during fog) can reduce injuries. Daytime running lights and high-mounted stop lamps have improved crashes in these cases, as have reflectors and colorful clothing.

New technologies have created other avenues for road safety. These developments include intelligent speed adaptation, in which the vehicle determines the speed limit for the road; alcohol -ignition interlock systems that detect alcohol on the breath of drivers, preventing them from starting their engines; or electronic driver improvement monitors that connect individual driver profile assessments and an individual vehicle operator's actual driving performance.

Setting road and safety rules, securing compliance and improving transport policy

Setting and enforcing speed and blood alcohol concentration limits have proven to be perhaps the most successful interventions contributing to the decrease in injury in developed countries. Speed limiting devices on vehicles, limits on engine power, and non-vehicular traffic-calming measures hold the greatest promise in developing countries, according to some experts from India.

Enforcing blood alcohol limits is another opportunity to improve road safety. While it is commonly understood in developed countries that impaired driving is an important contributor to road traffic fatalities and injuries, little is known in these countries about the nature and scope of the problem. One survey of studies found that, in developing countries, blood alcohol was present in 33 percent to 69 percent of fatally injured drivers.

Because blood alcohol tolerances vary across countries, comparison studies are difficult, and to date, no study has provided the evidence to benchmark the tolerance level at which reductions in accidents can occur in developing countries. Finally, although mandatory seat-belt-use laws have reduced traffic injuries in developed countries by 40 to 50 percent, such laws must be tailored to the local situation: In developing countries, car occupants constitute less than 10 to 20 percent of traffic fatalities. These countries also need to improve helmet safety and use among two- and three-wheel vehicle operators as well as to enforce the appropriate number of passengers for these vehicles.

**Department of Police in Sri Lanka has key recommendations to prevent Road Traffic Accidents. Some of them are mentioned below**

1. All road users to act with civic responsibility.
2. To educate infants children high / junior school students / adults elderly people on traffic safety
3. Safe driving programmes to be conducted for drivers / riders and also conductors to be educated on safety
4. Road infrastructure defects to be identified and rectified by RDA and all other stakeholders
5. Disciplined driving method to be taught examine driving knowledge skills and also the knowledge of rules and regulations and medical fitness before issuance of driving and riding license
6. Identified risk drivers and to cancel/ suspend / their licenses by judiciary or by demerits systems by the Controller of Motor Traffic
7. To increase insurance premium of risk drivers
8. Deterrent punishment for offenders committing fatal grievous and serious accidents
9. Renewal of driving license every 3 years having rechecked the knowledge on rules and regulations, health, driving skills and driving records.
10. To include traffic road safety in school curriculum
11. To have special driving programmes for school leavers

***Sources***


- Road Traffic Accidents Increase Dramatically Worldwide, available from *http://www.prb.org/Articles/2006/Road TrafficAccidentsIncreaseDramaticallyWorldwide.aspx*
- Traffic Police - Road Traffic Accidents, available from *http://www.police.lk/index.php/traffic-police/56*


**Compiled by Dr. Madhava Gunasekera of the Epidemiology Unit**

## Table 1: Vaccine-preventable Diseases & AFP

05th – 11th January 2013 (02ndWeek)

| Disease | No. of Cases by Province | | | | | | | | | Number of cases during current week in 2013 | Number of cases during same week in 2012 | Total number of cases to date in 2013 | Total number of cases to date in 2012 | Difference between the number of cases to date in 2013 & 2012 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | W | C | S | N | E | NW | NC | U | Sab | | | | | |
| Acute Flaccid Paralysis | 00 | 00 | 01 | 00 | 00 | 00 | 00 | 00 | 01 | 02 | 06 | 02 | 06 | - 66.6 % |
| Diphtheria | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | - | - | - | - | - |
| Measles | 06 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 06 | 00 | 09 | 00 | % |
| Tetanus | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | % |
| Whooping Cough | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 03 | 04 | 00 | % |
| Tuberculosis | 112 | 44 | 06 | 27 | 00 | 64 | 00 | 00 | 17 | 270 | 205 | 396 | 569 | - 30.4 % |

## Table 2: Newly Introduced Notifiable Disease

05th – 11th January 2013 (02ndWeek)

| Disease | No. of Cases by Province | | | | | | | | | Number of cases during current week in 2013 | Number of cases during same week in 2012 | Total number of cases to date in 2013 | Total number of cases to date in 2012 | Difference between the number of cases to date in 2013 & 2012 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | W | C | S | N | E | NW | NC | U | Sab | | | | | |
| Chickenpox | 34 | 02 | 22 | 04 | 05 | 08 | 05 | 05 | 06 | 91 | 78 | 151 | 139 | + 04.5 % |
| Meningitis | 03 KL=2 CB=1 | 01 ML=1 | 01 MT=1 | 03 JF=2 VU=1 | 01 AM=1 | 01 PU=1 | 01 AP=1 | 01 MO=1 | 03 RP=1 KG=2 | 15 | 19 | 47 | 34 | + 08.6 % |
| Mumps | 08 | 01 | 01 | 03 | 03 | 03 | 01 | 0 | 05 | 25 | 84 | 52 | 167 | - 68.8 % |
| Leishmaniasis | 01 GM=1 | 00 | 04 HB=2 MT=2 | 01 VU=1 | 00 | 01 KG=1 | 07 AP=7 | 00 | 00 | 14 | 10 | 38 | 17 | + 123.5 % |

### 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. .

### Dengue Prevention and Control Health Messages

**You have a duty and a responsibility in preventing dengue fever. Make sure that your environment is free from water collections where the dengue mosquito could breed.**

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

05th – 11th January 2013 (02ndWeek)

| DPDHS Division | Dengue Fever / DHF* | | Dysentery | | Encephalitis | | Enteric Fever | | Food Poisoning | | Leptospirosis | | Typhus Fever | | Viral Hepatitis | | Human Rabies | | Returns Received |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | A | B | A | B | A | B | A | B | A | B | A | B | A | B | A | B | % |
| Colombo | 186 | 341 | 2 | 3 | 0 | 0 | 3 | 4 | 1 | 1 | 2 | 8 | 0 | 1 | 1 | 4 | 0 | 0 | **92** |
| Gampaha | 77 | 218 | 1 | 3 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 2 | 1 | 1 | 2 | 9 | 0 | 0 | **73** |
| Kalutara | 27 | 70 | 4 | 5 | 1 | 1 | 2 | 4 | 0 | 0 | 8 | 20 | 0 | 1 | 0 | 0 | 0 | 0 | **77** |
| Kandy | 13 | 19 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **4** |
| Matale | 6 | 27 | 7 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 7 | 0 | 0 | **75** |
| Nuwara | 2 | 5 | 1 | 3 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | **69** |
| Galle | 12 | 25 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 4 | 6 | 1 | 1 | 0 | 0 | 0 | 0 | **74** |
| Hambantota | 9 | 18 | 2 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 3 | 4 | 2 | 5 | 6 | 13 | 0 | 0 | **92** |
| Matara | 16 | 21 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 4 | 5 | 0 | 1 | 16 | 33 | 0 | 0 | **100** |
| Jaffna | 33 | 66 | 2 | 11 | 1 | 1 | 14 | 35 | 0 | 0 | 0 | 0 | 11 | 39 | 0 | 0 | 0 | 0 | **92** |
| Kilinochchi | 2 | 3 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | **50** |
| Mannar | 5 | 16 | 1 | 4 | 0 | 0 | 1 | 2 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | **100** |
| Vavuniya | 2 | 6 | 1 | 5 | 0 | 0 | 1 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **75** |
| Mullaitivu | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **60** |
| Batticaloa | 9 | 16 | 2 | 7 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | **64** |
| Ampara | 2 | 6 | 9 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | **71** |
| Trincomalee | 6 | 7 | 4 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 1 | 1 | 0 | 0 | 0 | 0 | **75** |
| Kurunegala | 127 | 304 | 4 | 15 | 0 | 0 | 1 | 6 | 0 | 0 | 1 | 4 | 0 | 2 | 0 | 1 | 0 | 0 | **69** |
| Puttalam | 18 | 45 | 2 | 5 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **58** |
| Anuradhapu | 23 | 45 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 2 | 0 | 0 | **74** |
| Polonnaruw | 1 | 5 | 4 | 7 | 0 | 0 | 0 | 1 | 0 | 0 | 4 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | **86** |
| Badulla | 9 | 16 | 5 | 5 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 2 | 3 | 0 | 3 | 0 | 0 | **71** |
| Monaragala | 6 | 16 | 2 | 5 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 0 | 0 | **64** |
| Ratnapura | 7 | 40 | 4 | 18 | 1 | 9 | 0 | 1 | 0 | 2 | 0 | 7 | 0 | 0 | 0 | 4 | 0 | 0 | **56** |
| Kegalle | 21 | 63 | 1 | 2 | 0 | 0 | 1 | 1 | 0 | 0 | 3 | 5 | 1 | 1 | 7 | 10 | 0 | 0 | **82** |
| Kalmune | 15 | 32 | 3 | 3 | 0 | 1 | 0 | 0 | 0 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | **38** |
| **SRI LANKA** | **635** | **1432** | **63** | **140** | **05** | **14** | **26** | **62** | **04** | **12** | **35** | **81** | **20** | **60** | **37** | **90** | **00** | **00** | **69** |

**Source: Weekly Returns of Communicable Diseases WRCD). 0**

***Dengue Fever / DHF** refers to Dengue Fever / Dengue Haemorrhagic Fever.

****Timely** refers to returns received on or before 11th January, 2013 Total number of reporting units 329. Number of reporting units data provided for the current week: 229

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

**PRINTING OF THIS PUBLICATION IS FUNDED BY THE WORLD HEALTH ORGANIZATION (WHO).**

Comments and contributions for publication in the WER Sri Lanka are welcome. However, the editor reserves the right to accept or reject items for publication. All correspondence should be mailed to The Editor, WER Sri Lanka, Epidemiological Unit, P.O. Box 1567, Colombo or sent by E-mail to **chepid@sltnet.lk.**

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