









Cambodia Road Traffic Accident and Victim Information System



Monthly Report November 2008



© Phnom Penh Municipality traffic police office

Developed with the support of:

European Union



Belgian Cooperation



World Health Organization



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I. Introduction

The **objective** of the Road Traffic Accident and Victim Information System (RTAVIS) is to provide government and development stakeholders in Cambodia with accurate, continuous and comprehensive information on **road traffic accidents and victims**.

It should allow them to better understand the current road safety situation, plan appropriate responses and evaluate impact of current and future initiatives.

The system is being developed by the Ministry of Public Works and Transport, the Ministry of Interior and the Ministry of Health, with the support of Handicap International.

In Siem Reap, Otdar Mean Chey and Kampong Cham provinces, the system is also supported by the Belgian Technical Cooperation.

The system is run based on data collection forms filled in by trained staff at major hospitals, private clinics and traffic police.

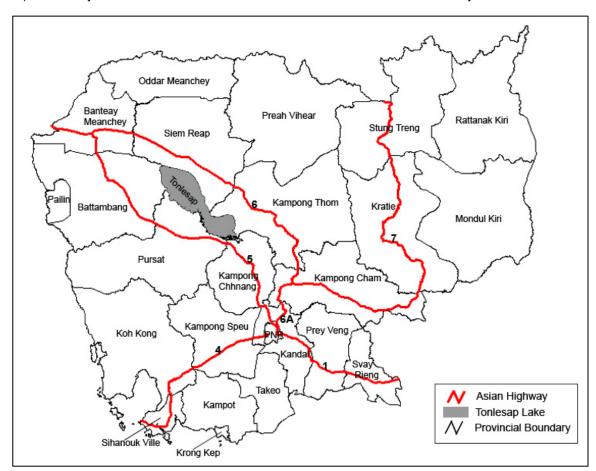
RTAVIS reports are **distributed monthly**. RTAVIS reports can also be found on the following websites: www.roadsafetycambodia.info and www.cnctp.info

Notice:

This monthly report is a snapshot of the situation at a particular time of the year. More analysis is provided in the annual report. The annual report 2007 has released in June 2008. The annual report 2008 will be released in April 2009.

II. System Coverage

RTAVIS covers the whole country. The map here below illustrates the Asian Highway (national road 1, 4, 5, 6, 6A and 7). The analysis of the number of fatalities is shown in the executive summary.



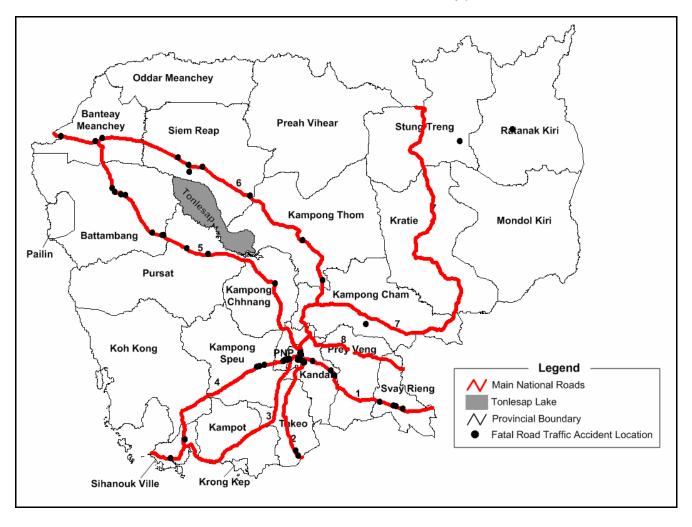


III. System Update

Introduction of GPS

From July 2006, Global Position System (GPS) devices have been introduced to the traffic police in Russei Keo District in Phnom Penh. The GPS coordinates allow us now to exactly locate accidents, using GIS data. GPS devices have been progressively introduced to other districts of Phnom Penh and provinces crossed by major national roads from August 2007. On the medium term, this will enable RTAVIS to identify blackspots of the Cambodian Road Network.

The chart below shows locations of fatal road traffic accidents in many provinces in November 2008.

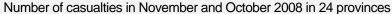


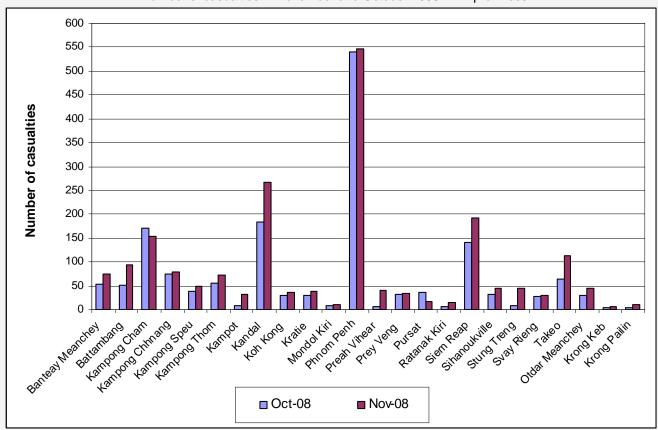


IV. Executive Summary

Key findings for the month of **November 2008** are the following:

- A provisional number of **2,041 casualties** were reported by the participating hospitals, health centres, private clinics and traffic police departments in the 24 reporting provinces. Among them, **540 were severely injured and 120 died**.
- In Phnom Penh, 547 casualties were reported, corresponding to 18% decrease compared to November 2007 and 1% increase compared to the previous month. Among them 31 died.
- 78% of casualties were males and 38% of them aged between 15 and 24 years old.
- 58% of fatalities were drivers and 15% were pedestrians.
- Compared to October, there was a significant increase of casualties in Kandal, a surrounded province of Phnom Penh where the national event of Water Festival was organized.

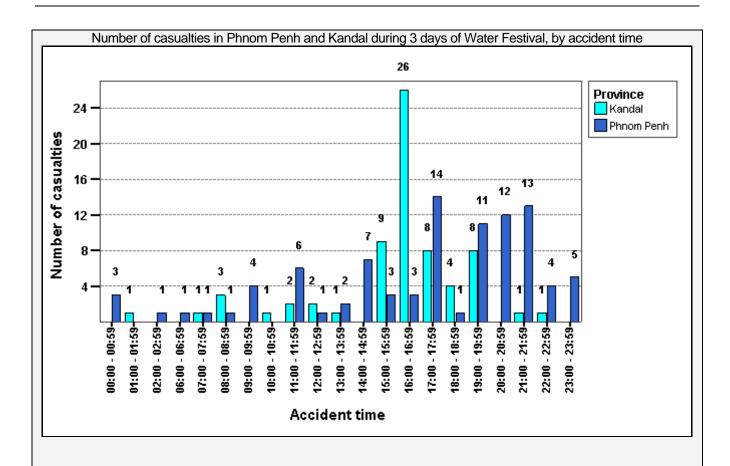




Water Festival

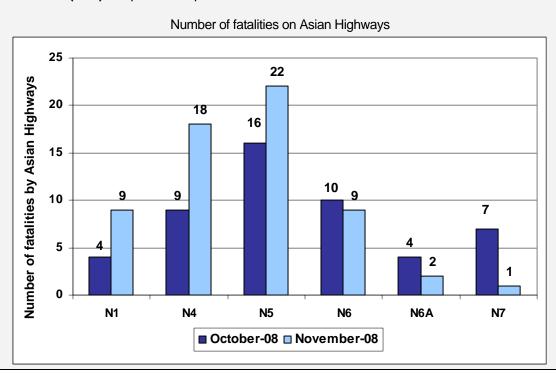
- The average daily numbers of casualties in the month were double during the water festival period (11th, 12th and 13th of November) with a peak of 137 casualties on the 12th.
- A total of 344 casualties were reported during these 3 days in 24 provinces. 11 of them died and 84 were severely injured.
- **Highest number** of casualties was observed **in Phnom Penh** (total of 94 and 5 of them died). More than **50%** of them were injured between **17:00 to 22:00 pm.**
- In Kandal, 68 casualties were reported. Almost 40% of them were injured between 16:00 to 17:00 pm.





Asian Highways

- More than 75% of fatalities in the country were involved in accidents along the Asian Highways.
- Significant increases of fatalities were reported on the national road 1 & 4 (double increases) and national road 5 (38%) compare to the previous month.





V. Evolution of Main Indicators

| | Jun-08 | Jul-08 | Aug-08 | Sep-08 | Oct-08 | Nov-08 | |
|---|------------------|-------------------|------------------|-------------------|------------------|-------------------|--|
| Number of casualties reported to RTAVIS | 1,777 | 1,828 | 1,455 | 1,970 | 1,634 | 2,041 | |
| Gender | | | | | | | |
| Percentage of males casualties | 73% | 72% | 73% | 71% | 74% | 78% | |
| Age | | | | | | | |
| Percentage of casualties aged between 15 and 24 years | 39% | 37% | 38% | 40% | 28% | 37% | |
| old | 3970 | 37 /0 | 30 /6 | 4070 | 2070 | 37 70 | |
| Type of road user | | | | | | | |
| Percentage of motorbike riders | 79% | 79% | 81% | 80% | 78% | 75% | |
| Percentage of pedestrians | 8% | 6% | 6% | 6% | 7% | 8% | |
| Percentage of car riders (private and taxis) | 3% | 4% | 3% | 4% | 5% | 6% | |
| Percentage of bicycle riders | 4% | 3% | 4% | 3% | 5% | 4% | |
| Occupation | | | | | | | |
| Percentage of students | 23% | 22% | 21% | 24% | 22% | 23% | |
| Percentage of farmers | 23% | 25% | 29% | 28% | 25% | 24% | |
| Percentage of workers | 24% | 25% | 20% | 17% | 21% | 20% | |
| Percentage of house keepers | 4% | 6% | 4% | 4% | 5% | 5% | |
| Percentage of vendors/small businesses owners | 7% | 6% | 7% | 7% | 6% | 6% | |
| Percentage of motorbike taxis | 4% | 3% | 3% | 3% | 3% | 4% | |
| Residence of casualty | | | | | | | |
| Percentage of casualties residing in another province than | 17% | 18% | 16% | 17% | 15% | 19% | |
| the province of accident | 1770 | 1070 | 1070 | 11 70 | 1070 | .070 | |
| Severity of injuries: | | | | | | | |
| Percentage of severely injured casualties (requiring | 30% | 30% | 25% | 27% | 29% | 26% | |
| chirurgical intervention of ICU) | (534 cases) | (551 cases) | (358 cases) | (538 cases) | (476 cases) | (540 cases) | |
| Percentage of deaths | 6% (98 cases) | 7% (124 cases) | 5% (70 cases) | 7% (129 cases) | 6% (99 cases) | 6% (120 cases) | |
| Nature of injuries: | (1111111) | (| (1 11111) | (| (| (| |
| Percentage of casualties suffering from cranial trauma | 47% | 51% | 45% | 49% | 44% | 43% | |
| Percentage of them being considered as severe (coma) | 5% | 4% | 6% | 4% | 5% | 7% | |
| Percentage of casualties suffering from fracture | 18% | 18% | 19% | 15% | 17% | 22% | |
| Percentage of casualties having wounds/cuts | 54% | 53% | 57% | 60% | 54% | 53% | |
| Day of accident: | 0.70 | 0070 | 0.70 | 0070 | 0.70 | 5575 | |
| Percentage of casualties injured during the weekend (from Friday 6 pm to Sunday midnight) | 36% | 38% | 39% | 36% | 34% | 37% | |
| Time of accident: | | | | | | | |
| Percentage of casualties injured during nighttime (from 6 | 1 | | | | | 1 | |
| pm to 5.59 am) | 31% | 34% | 31% | 28% | 28% | 29% | |
| Peak(s) of casualties | 4pm-5pm | 7pm-8pm | 5pm-6pm | 6pm-7pm | 6pm-7pm | 6pm-7pm | |
| Cause of accident | | | | | | | |
| Percentage of casualties injured in accidents due to | | | | | | | |
| human error | 97% | 98% | 98% | 98% | 97% | 96% | |
| High speed | 51% | 54% | 55% | 54% | 51% | 52% | |
| Alcohol abuse | 14% | 14% | 14% | 13% | 16% | 16% | |
| Non respect of rights of way rules | 9% | 7% | 7% | 10% | 12% | 11% | |
| Changing lane without due care | 5% | 4% | 4% | 5% | 4% | 3% | |
| Dangerous overtaking | 15% | 15% | 11% | 9% | 8% | 9% | |
| Dangerous overtaking Driving against flow of traffic | 2% | 2% | 3% | 4% | 3% | 3% | |
| Other | 1% | 2% | | 3% | 3% | 2% | |
| Percentage of casualties injured in accidents due to road | 170 | ۷% | 4% | 3% | 3% | ∠70 | |
| conditions | 7% | 8% | 6% | 5% | 5% | 7% | |
| Percentage of casualties injured in accidents due to weather conditions | 1% | 1% | 3% | 3% | 2% | 1% | |
| Percentage of casualties injured in accidents due to vehicle defect | 1% | 2% | 2% | 2% | 5% | 2% | |
| | | | | | | | |



| | Jun-08 | Jul-08 | Aug-08 | Sep-08 | Oct-08 | Nov-08 |
|--|------------|------------|------------|------------|------------|------------|
| Type of accident: | | | | | | |
| Percentage of casualties injured in motorbike-motorbike collisions | 40% | 45% | 49% | 47% | 45% | 40% |
| Percentage of casualties injured in motorbike-4 wheeler collisions | 21% | 18% | 16% | 18% | 16% | 20% |
| Percentage of casualties injured in motorbike-pedestrian collisions | 7% | 7% | 8% | 7% | 8% | 8% |
| Percentage of motorbike casualties who fell alone | 8% | 7% | 7% | 8% | 8% | 8% |
| Average number of people injured per accident | 2.4 | 2.4 | 2.3 | 2.6 | 2.4 | 2.2 |
| Hit and Run | 2.4 | 2.4 | 2.0 | 2.0 | 2.4 | 2.2 |
| Percentage of casualties injured in accidents where the driver of the vehicle causing the accidents escaped after the accident | 20% | 27% | 25% | 20% | 23% | 27% |
| Estimation of average vehicle damage cost | 201 US\$ | 170 US\$ | 173 US\$ | 145 US\$ | 195 US\$ | 130 US\$ |
| Percentage of four-wheeled vehicles with | 201 00φ | 170 000 | 170 000 | 1-10-000 | 100 000 | .ου ουψ |
| Left-hand-drive Right-hand-drive | 79% 21% | 71% 29% | 73% 27% | 74% 26% | 85% 15% | 76% 24% |
| Location of accident: | ,, | | ,, | | 1070 | |
| Percentage of casualties injured in urban areas | 43% | 41% | 47% | 44% | 49% | 46% |
| Percentage of casualties injured in accidents occurring on national roads | 50% | 56% | 55% | 53% | 54% | 50% |
| Percentage of casualties injured in accidents occuring on provincial roads | 5% | 5% | 8% | 8% | 10% | 10% |
| Percentage of casualties injured in accidents occurring on paved roads | 79% | 81% | 83% | 82% | 86% | 82% |
| Characteristics of location: | | | | | | |
| Percentage of casualties injured in accidents occuring on straight roads | 79% | 77% | 76% | 80% | 79% | 80% |
| Percentage of casualties injured in junctions (X, T, Y-junctions and roundabout) | 10% | 9% | 13% | 10% | 11% | 10% |
| Percentage of casualties injured in curves | 10% | 13% | 9% | 8% | 8% | 8% |
| Safety Measures: | 1070 | 1070 | 070 | 070 | 070 | 070 |
| Percentage of car/truck/bus drivers having a driving licence | 38% | 48% | 71% | 58% | 48% | 58% |
| Percentage of motorbikes' casualties wearing a helmet | 6% | 10% | 9% | 8% | 8% | 6% |
| Time to be transferred to hospitals: | | | | | | |
| Percentage of casualties arriving at hospitals between 10 and 30 minutes after the accident | 35% | 31% | 30% | 34% | 37% | 33% |
| Percentage of casualties arriving at hospital more than 2 hours after the accident | 32% | 36% | 37% | 36% | 28% | 33% |
| Way to be transferred to hospitals: | | | | | | |
| Percentage of casualties transported by ambulance | 33% | 36% | 31% | 32% | 35% | 34% |
| Percentage of casualties transported to the hospital by their family or relatives | 58% | 55% | 56% | 54% | 52% | 57% |
| Percentage of casualties arriving alone at the hospital | 9% | 9% | 13% | 14% | 13% | 9% |
| Estimation of average cost of treatment | 194 US\$ | 174 US\$ | 133 US\$ | 156 US\$ | 151 US\$ | 159 US\$ |
| Attendance of police: | | | | | | |
| Percentage of cases were police was present on the accident site | 65% | 66% | 59% | 68% | 68% | 64% |



VI. Data by Provinces

| | Jun | -08 | Jul-08 | | Aug-08 | | Sep-08 | | Oct-08 | | Nov-08 | |
|---|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|
| Number of casualties reported to RTAVIS all provinces | 1,7 | 77 | 1,828 | | 1,455 | | 1,970 | | 1,634 | | 2,041 | |
| Severity of injuries | Severe | Death |
| Banteay Meanchey | 18 | 5 | 12 | 4 | 17 | 4 | 29 | 17 | 7 | 7 | 22 | 6 |
| Battambang | 10 | 2 | 14 | 7 | 16 | 1 | 16 | 8 | 14 | 3 | 15 | 13 |
| Kampong Cham | 69 | 10 | 56 | 13 | 23 | 7 | 48 | 23 | 38 | 10 | 36 | 4 |
| Kampong Chhnang | 4 | 0 | 10 | 2 | 9 | 1 | 27 | 5 | 27 | 4 | 13 | 1 |
| Kampong Speu | 19 | 4 | 26 | 3 | 16 | 8 | 17 | 4 | 20 | 1 | 16 | 11 |
| Kampong Thom | 18 | 1 | 18 | 4 | 11 | 1 | 16 | 10 | 18 | 5 | 23 | 3 |
| Kampot | 6 | 4 | 15 | 3 | 3 | 1 | 13 | 3 | 3 | 0 | 8 | 0 |
| Kandal | 70 | 9 | 61 | 22 | 64 | 13 | 74 | 18 | 57 | 12 | 70 | 13 |
| Koh Kong | 3 | 4 | 1 | 4 | 15 | 2 | 8 | 3 | 9 | 7 | 20 | 0 |
| Kratie | 2 | 4 | 26 | 4 | 29 | 0 | 9 | 2 | 17 | 3 | 11 | 1 |
| Mondol Kiri | 1 | 0 | 1 | 0 | NYA | NYA | 2 | 0 | 3 | 0 | 2 | 1 |
| Phnom Penh | 129 | 33 | 103 | 29 | 67 | 7 | 104 | 18 | 110 | 13 | 106 | 31 |
| Preah Vihear | 4 | 1 | 6 | 0 | 3 | 0 | 2 | 0 | 3 | 1 | 5 | 1 |
| Prey Veng | 19 | 4 | 18 | 6 | 11 | 5 | 24 | 3 | 15 | 5 | 7 | 2 |
| Pursat | 12 | 2 | 11 | 3 | 11 | 1 | 8 | 1 | 13 | 6 | 10 | 4 |
| Ratanak Kiri | 7 | 3 | 4 | 0 | 3 | 4 | 5 | 1 | 3 | 0 | 8 | 2 |
| Siem Reap | 78 | 6 | 105 | 3 | 22 | 3 | 64 | 4 | 62 | 8 | 82 | 7 |
| Sihanoukville | 4 | 1 | 16 | 4 | 8 | 7 | 20 | 1 | 8 | 5 | 13 | 3 |
| Stung Treng | 4 | 0 | 6 | 1 | 1 | 0 | 7 | 1 | 1 | 0 | 14 | 3 |
| Svay Rieng | 14 | 1 | 12 | 2 | 3 | 0 | 8 | 2 | 8 | 1 | 6 | 6 |
| Takeo | 4 | 1 | 23 | 5 | 20 | 4 | 20 | 2 | 20 | 4 | 38 | 8 |
| Otdar Meanchey | 13 | 3 | 1 | 0 | NYA | NYA | 7 | 0 | 15 | 4 | 11 | 0 |
| Krong Keb | 0 | 0 | 3 | 3 | 0 | 0 | 2 | 2 | 2 | 0 | 1 | 0 |
| Krong Pailin | 4 | 0 | 3 | 2 | 6 | 1 | 7 | 0 | 3 | 0 | 3 | 0 |
| Unidentified province | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 |
| Total | 512 | 98 | 551 | 124 | 358 | 70 | 538 | 129 | 476 | 99 | 540 | 120 |

Notice: **NYA** i.e. Not yet available.



Contacts

Further analysis and **additional information** is available on request. Please do not hesitate to contact one of the following persons

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