

# Cambodia

## Road Traffic Accident and Victim Information System



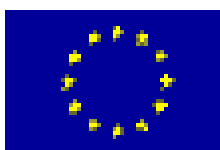
### Monthly Report April 2008



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European Union



Belgian Cooperation



World Health Organization



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# Cambodia Road Traffic Accident and Victim Information System

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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, Oddar 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**.

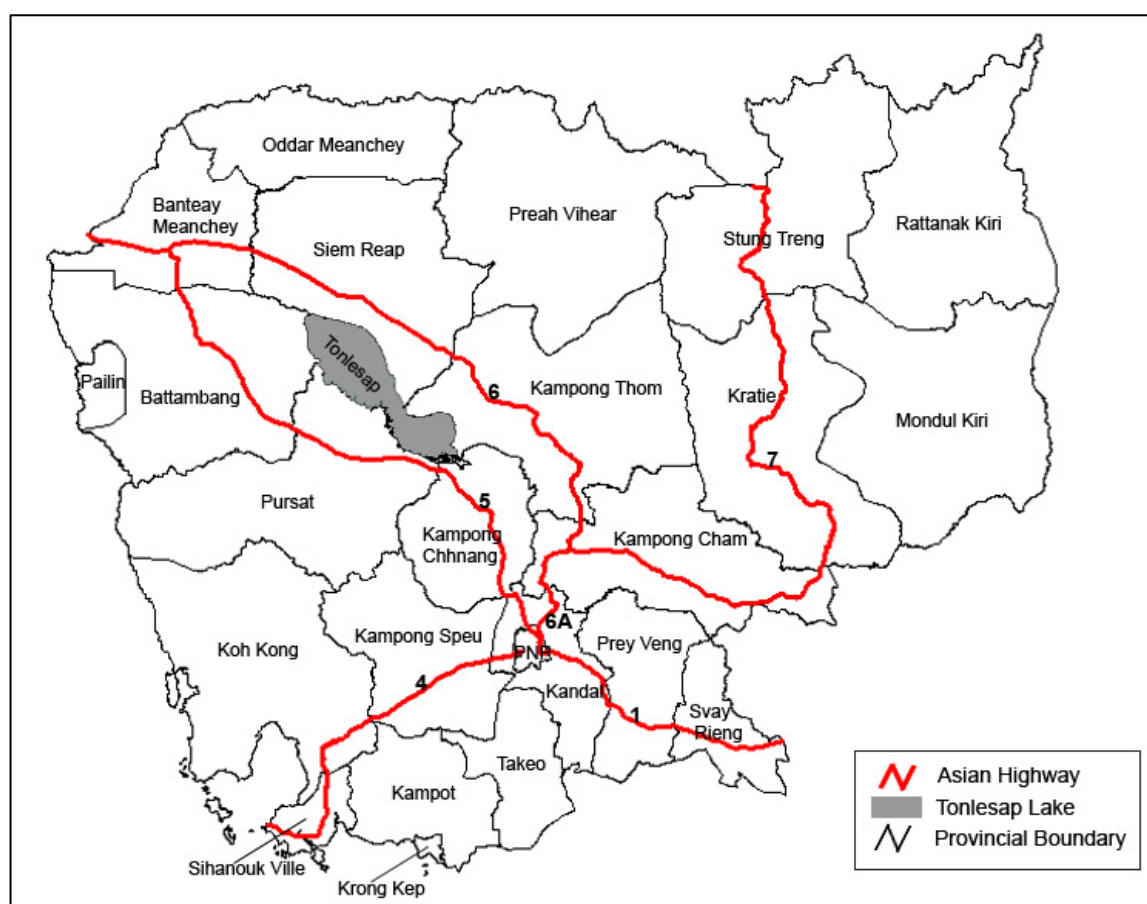
RTAVIS reports are **distributed monthly**. RTAVIS reports can also be found on the following websites: [www.roadsafetycambodia.info](http://www.roadsafetycambodia.info) and [www.cnctp.info](http://www.cnctp.info)

#### **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.



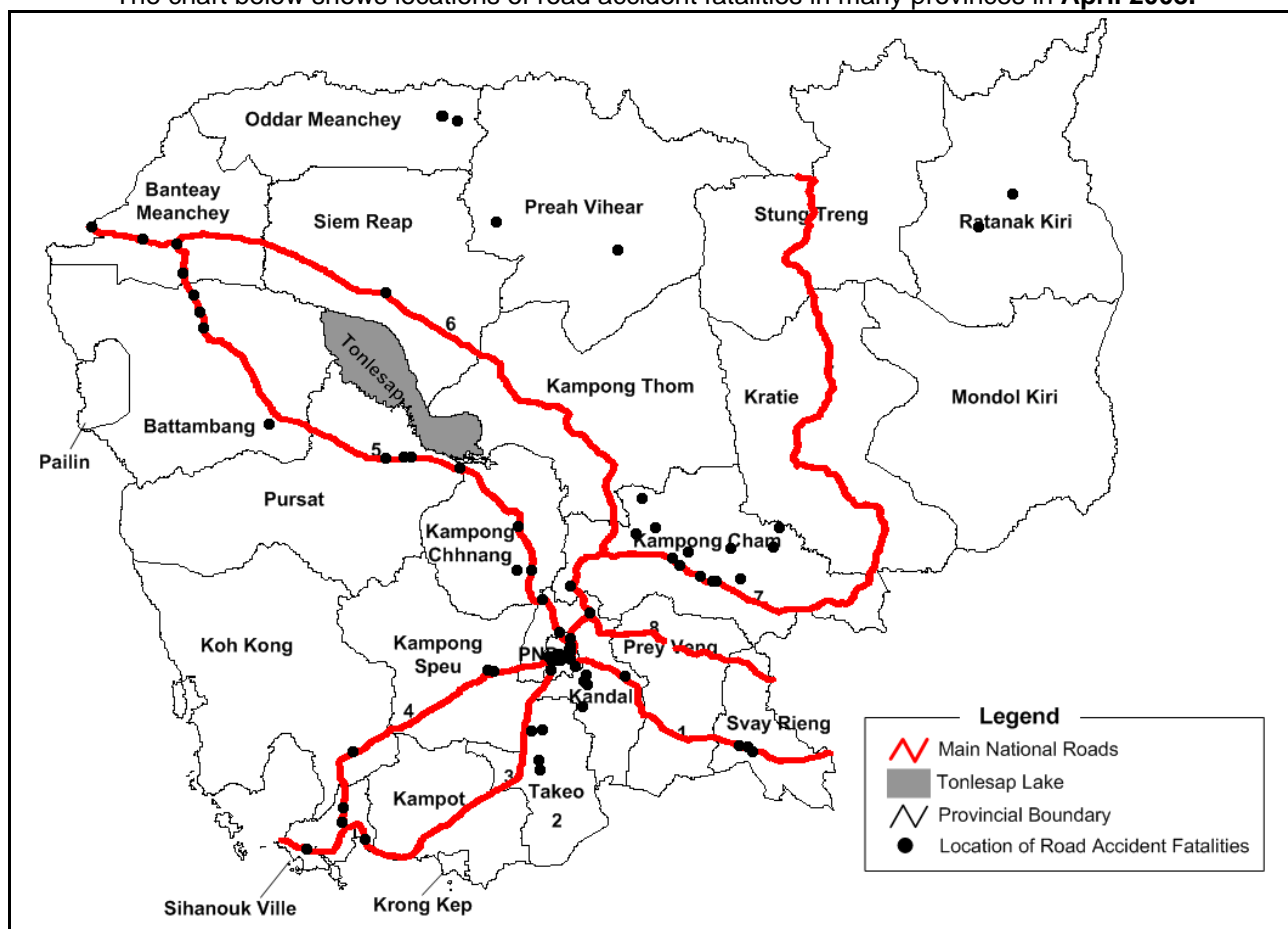
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### III. System Update

#### Introduction of GPS

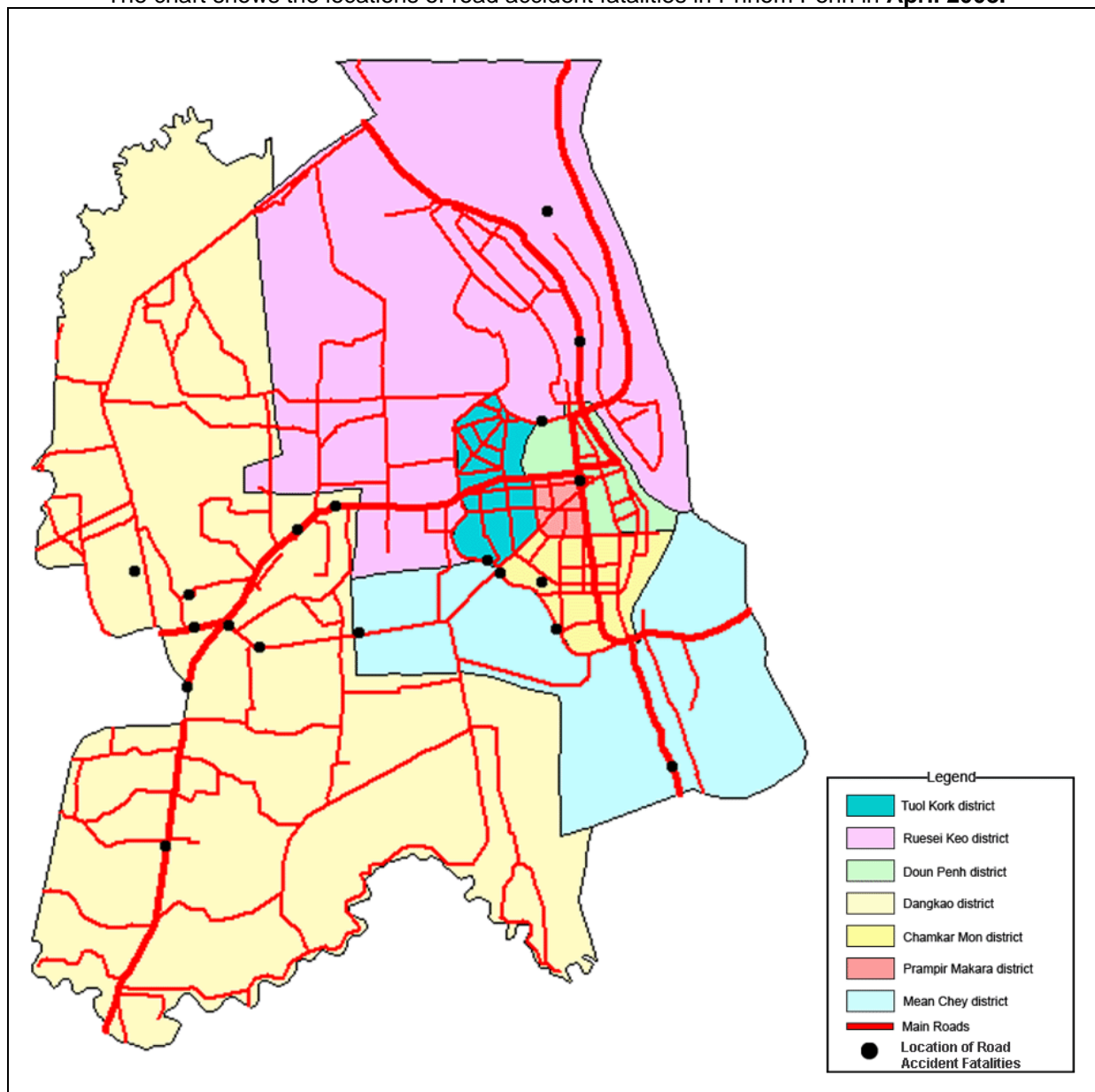
From July 2006, Global Position System (GPS) devices have been introduced to the traffic police in Russei Keo District in Phnom Penh. The GPS coordinates allow us now to exactly locate accidents, using GIS data. GPS devices have been progressively introduced to other districts of Phnom Penh and provinces 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 road accident fatalities in many provinces in **April 2008**.



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The chart shows the locations of road accident fatalities in Phnom Penh in **April 2008**.



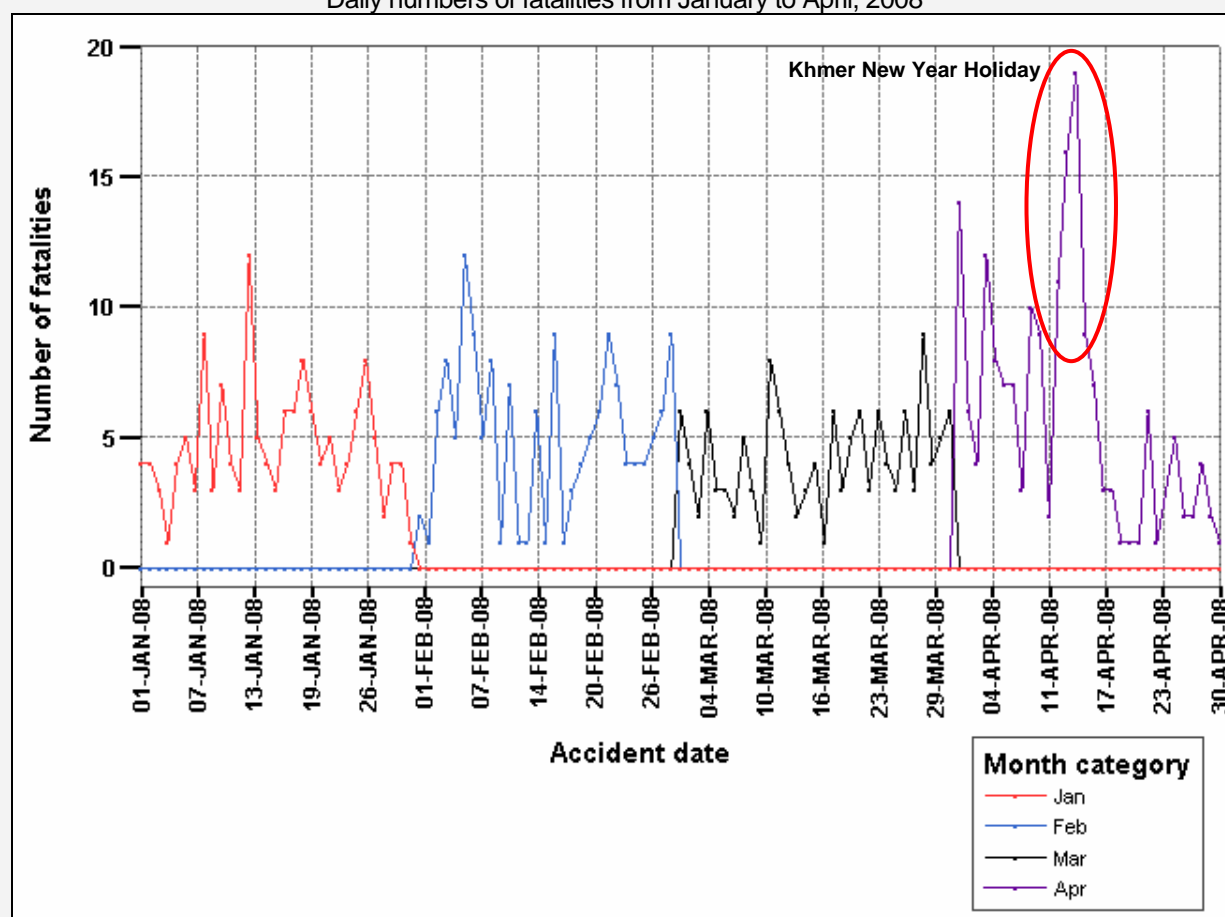
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### IV. Executive Summary

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

- A provisional number of **2,545 casualties** were reported by the participating hospitals, health centres, private clinics and traffic police departments in the 24 reporting provinces. Among them, **715 were severely injured and 176 died**. **The number of fatalities has increased by 21% compared to April 2007**. The peak of casualties and fatalities were observed during the **Khmer New Year Holiday** (920 injured, and 62 died during 12<sup>th</sup> to 16<sup>th</sup>).
- **In Phnom Penh, 502 casualties** were reported, corresponding to **50% increase compared to April 2007** and **8% increase** compared to the previous month. Among them, **34 died**.
- **10% of motorbikes' casualties** wore a helmet at accident time, in Phnom Penh, whereas it was only 5% in the whole country.
- The peak of casualties was observed between 2pm and 3pm, compared to the 5pm and 8pm in the first 3 months of the year.

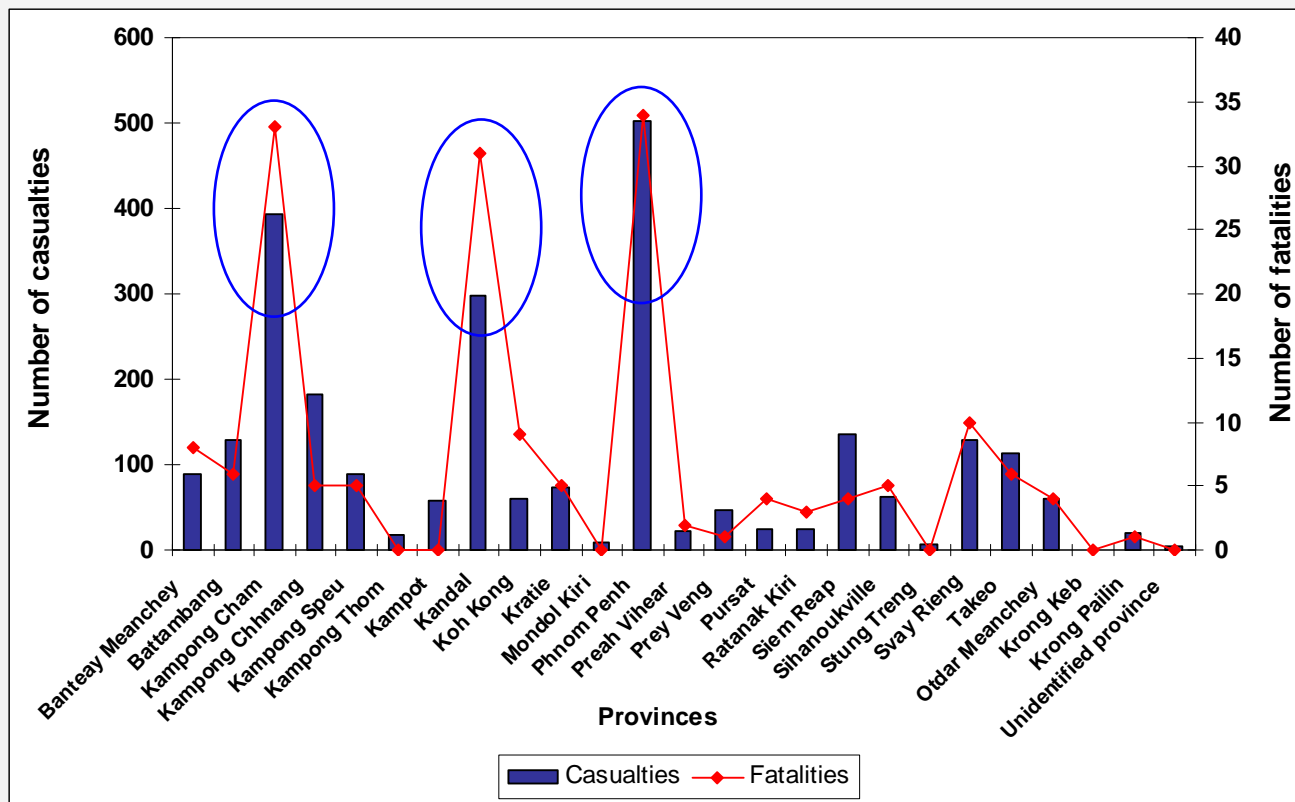
Daily numbers of fatalities from January to April, 2008



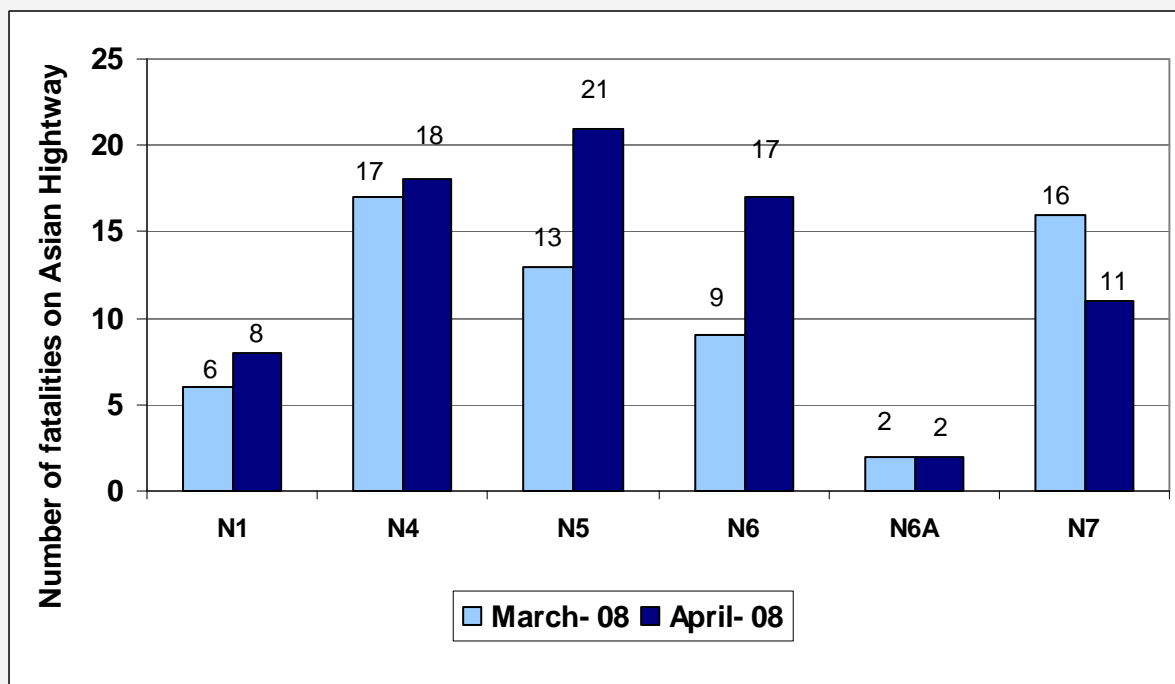
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- The highest casualties and fatalities were in Phnom Penh, followed by Kampong Cham province (393 casualties and 34 fatalities) and Kandal province.

Number of casualties and fatalities by provinces



- The number of **fatalities on all Asian Highways** increased more than 20% compared to the previous month.



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### V. Evolution of Main Indicators

	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08
<b>Number of casualties reported to RTAVIS</b>	2,455	2,239	2,299	2,011	1,941	<b>2,545</b>
<b>Gender</b>						
Percentage of males casualties	71%	74%	73%	74%	75%	<b>73%</b>
<b>Age</b>						
Percentage of casualties aged between 15 and 24 years old	31%	29%	28%	33%	28%	<b>33%</b>
<b>Type of road user</b>						
Percentage of motorbike riders	75%	75%	74%	78%	75%	<b>77%</b>
Percentage of pedestrians	8%	7%	7%	7%	8%	<b>7%</b>
Percentage of car riders (private and taxis)	5%	6%	6%	4%	5%	<b>4%</b>
Percentage of bicycle riders	4%	4%	4%	4%	4%	<b>4%</b>
<b>Occupation</b>						
Percentage of students	24%	25%	21%	24%	23%	<b>25%</b>
Percentage of farmers	25%	24%	29%	25%	25%	<b>27%</b>
Percentage of workers	19%	22%	21%	22%	21%	<b>22%</b>
Percentage of house keepers	6%	6%	6%	5%	5%	<b>5%</b>
Percentage of vendors/small businesses owners	5%	5%	4%	5%	6%	<b>6%</b>
Percentage of motorbike taxis	4%	4%	4%	3%	4%	<b>3%</b>
<b>Residence of casualty</b>						
Percentage of casualties residing in another province than the province of accident	19%	16%	15%	17%	17%	<b>18%</b>
<b>Severity of injuries:</b>						
Percentage of severely injured casualties (requiring surgical intervention of ICU)	28% (678 cases)	28% (618 cases)	30% (689 cases)	24% (485 cases)	28% (551 cases)	<b>28% (715 cases)</b>
Percentage of deaths	6% (144 cases)	6% (128 cases)	6% (145 cases)	7% (148 cases)	7% (130 cases)	<b>7% (176 cases)</b>
<b>Nature of injuries:</b>						
Percentage of casualties suffering from cranial trauma	40%	51%	49%	47%	49%	<b>51%</b>
Percentage of them being considered as severe (coma)	7%	4%	8%	7%	9%	<b>10%</b>
Percentage of casualties suffering from fracture	20%	20%	23%	19%	20%	<b>16%</b>
Percentage of casualties having wounds/cuts	54%	53%	50%	56%	52%	<b>52%</b>
<b>Day of accident:</b>						
Percentage of casualties injured during the weekend (from Friday 6 pm to Sunday midnight)	40%	37%	35%	33%	37%	<b>30%</b>
<b>Time of accident:</b>						
Percentage of casualties injured during nighttime (from 6 pm to 5.59 am)	33%	30%	31%	32%	35%	<b>35%</b>
Peak(s) of casualties	6pm-7pm	6pm-7pm	5pm-6pm	7pm-8pm	5pm-6pm	<b>2pm-3pm</b>
<b>Cause of accident</b>						
Percentage of casualties injured in accidents due to human error	<b>96%</b>	<b>97%</b>	<b>97%</b>	<b>97%</b>	<b>97%</b>	<b>97%</b>
High speed	52%	54%	49%	52%	50%	54%
Alcohol abuse	14%	12%	13%	14%	15%	10%
Non respect of rights of way rules	8%	7%	9%	9%	9%	8%
Changing lane without due care	5%	5%	6%	6%	6%	5%
Dangerous overtaking	11%	13%	14%	9%	12%	15%
Driving against flow of traffic	3%	3%	3%	4%	2%	2%
Other	3%	3%	3%	3%	3%	3%
Percentage of casualties injured in accidents due to road conditions	<b>10%</b>	<b>12%</b>	<b>15%</b>	<b>6%</b>	<b>10%</b>	<b>7%</b>
Percentage of casualties injured in accidents due to weather conditions	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>1%</b>
Percentage of casualties injured in accidents due to vehicle defect	<b>3%</b>	<b>1%</b>	<b>2%</b>	<b>1%</b>	<b>2%</b>	<b>3%</b>





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	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08
<b>Type of accident:</b>						
Percentage of casualties injured in motorbike-motorbike collisions	45%	44%	39%	43%	40%	<b>45%</b>
Percentage of casualties injured in motorbike-4 wheeler collisions	17%	20%	18%	18%	20%	<b>18%</b>
Percentage of casualties injured in motorbike-pedestrian collisions	8%	7%	7%	9%	7%	<b>7%</b>
Percentage of motorbike casualties who fell alone	6%	6%	8%	7%	8%	<b>7%</b>
<b>Average number of people injured per accident</b>	<b>3.2</b>	<b>2.6</b>	<b>2.5</b>	<b>2.4</b>	<b>2.1</b>	<b>2.8</b>
<b>Hit and Run</b>						
Percentage of casualties injured in accidents where the driver of the vehicle causing the accidents escaped after the accident	22%	23%	19%	21%	22%	<b>19%</b>
<b>Estimation of average vehicle damage cost</b>	<b>166 US\$</b>	<b>190 US\$</b>	<b>220 US\$</b>	<b>148 US\$</b>	<b>216 US\$</b>	<b>170 US\$</b>
<b>Percentage of four-wheeled vehicles with</b>						
Left-hand-drive	70%	70%	68%	75%	78%	<b>74%</b>
Right-hand-drive	30%	30%	32%	25%	28%	<b>26%</b>
<b>Location of accident:</b>						
Percentage of casualties injured in urban areas	50%	44%	42%	44%	42%	<b>41%</b>
Percentage of casualties injured in accidents occurring on national roads	54%	55%	53%	56%	55%	<b>55%</b>
Percentage of casualties injured in accidents occurring on provincial roads	4%	5%	10%	9%	6%	<b>6%</b>
Percentage of casualties injured in accidents occurring on paved roads	79%	76%	76%	80%	76%	<b>75%</b>
<b>Characteristics of location:</b>						
Percentage of casualties injured in accidents occurring on straight roads	80%	83%	80%	77%	79%	<b>80%</b>
Percentage of casualties injured in junctions (X, T, Y-junctions and roundabout)	8%	9%	9%	14%	11%	<b>8%</b>
Percentage of casualties injured in curves	12%	7%	9%	9%	10%	<b>10%</b>
<b>Safety Measures:</b>						
Percentage of car/truck/bus drivers having a driving licence	55%	50%	46%	41%	41%	<b>62%</b>
Percentage of motorbikes' casualties wearing a helmet	7%	4%	6%	10%	7%	<b>5%</b>
<b>Time to be transferred to hospitals:</b>						
Percentage of casualties arriving at hospitals between 10 and 30 minutes after the accident	36%	30%	34%	32%	35%	<b>33%</b>
Percentage of casualties arriving at hospital more than 2 hours after the accident	33%	39%	37%	36%	34%	<b>37%</b>
<b>Way to be transferred to hospitals:</b>						
Percentage of casualties transported by ambulance	31%	43%	34%	27%	30%	<b>35%</b>
Percentage of casualties transported to the hospital by their family or relatives	61%	53%	58%	68%	65%	<b>60%</b>
Percentage of casualties arriving alone at the hospital	8%	4%	8%	5%	5%	<b>5%</b>
<b>Estimation of average cost of treatment</b>	<b>173 US\$</b>	<b>185 US\$</b>	<b>170 US\$</b>	<b>260 US\$</b>	<b>176 US\$</b>	<b>258 US\$</b>
<b>Attendance of police:</b>						
Percentage of cases where police was present on the accident site	64%	69%	70%	72%	66%	<b>75%</b>





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#### VI. Data by Provinces

	Nov-07		Dec-07		Jan-08		Feb-08		Mar-08		Apr-08	
<b>Number of casualties reported to RTAVIS all provinces</b>	<b>2,455</b>		<b>2,239</b>		<b>2,299</b>		<b>2,011</b>		<b>1,941</b>		<b>2,545</b>	
<b>Severity of injuries</b>	Severe	Death	Severe	Death	Severe	Death	Severe	Death	Severe	Death	Severe	Death
Banteay Meanchey	21	2	21	9	19	7	22	5	22	5	29	8
Battambang	29	3	22	5	55	8	32	7	27	6	17	6
Kampong Cham	79	37	58	21	58	18	53	22	57	20	103	33
Kampong Chhnang	19	6	30	3	16	6	7	6	12	6	20	5
Kampong Speu	15	5	15	3	37	7	25	12	18	10	37	5
Kampong Thom	32	10	35	6	31	5	4	0	22	5	9	0
Kampot	15	2	7	4	7	1	21	2	3	2	20	0
Kandal	62	14	70	6	77	18	74	14	63	18	76	31
Koh Kong	4	1	9	3	7	2	3	0	4	0	8	9
Kratie	31	7	15	3	16	3	17	8	31	5	33	5
Mondol Kiri	4	1	5	1	2	2	6	3	8	2	1	0
Phnom Penh	173	21	121	18	101	18	96	28	111	19	134	34
Preah Vihear	3	3	1	0	8	1	8	1	4	1	2	2
Prey Veng	8	2	25	5	13	7	19	8	12	2	20	1
Pursat	27	13	22	1	12	6	10	4	11	0	6	4
Ratanak Kiri	8	1	4	6	NYA	NYA	1	0	NYA	NYA	11	3
Siem Reap	70	7	82	7	129	7	16	8	97	7	89	4
Sihanoukville	14	1	18	5	26	10	12	3	10	2	24	5
Stung Treng	3	1	10	0	10	1	10	2	3	1	2	0
Svay Rieng	11	3	10	2	18	5	13	1	13	7	26	10
Takeo	22	2	22	15	24	5	26	6	11	6	22	6
Otdar Meanchey	20	0	10	2	7	6	8	7	5	6	16	4
Krong Keb	0	0	1	0	6	0	NYA	NYA	NYA	NYA	NYA	NYA
Krong Pailin	7	2	4	3	7	2	2	1	3	0	9	1
Unidentified province	1	0	1	0	3	0	0	0	4	0	1	0
<b>Total</b>	<b>678</b>	<b>144</b>	<b>618</b>	<b>128</b>	<b>689</b>	<b>145</b>	<b>485</b>	<b>148</b>	<b>551</b>	<b>130</b>	<b>715</b>	<b>176</b>

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



## Cambodia Road Traffic Accident and Victim Information System Monthly Report – April 2008

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### Contacts

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

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