

Cambodia

Road Traffic Accident and Victim Information System



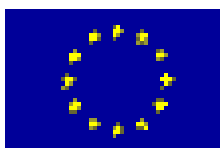
Monthly Report September 2007



Testing GPS on the road of Ratanakir province © HIB- Yorn Virak

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, 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**.

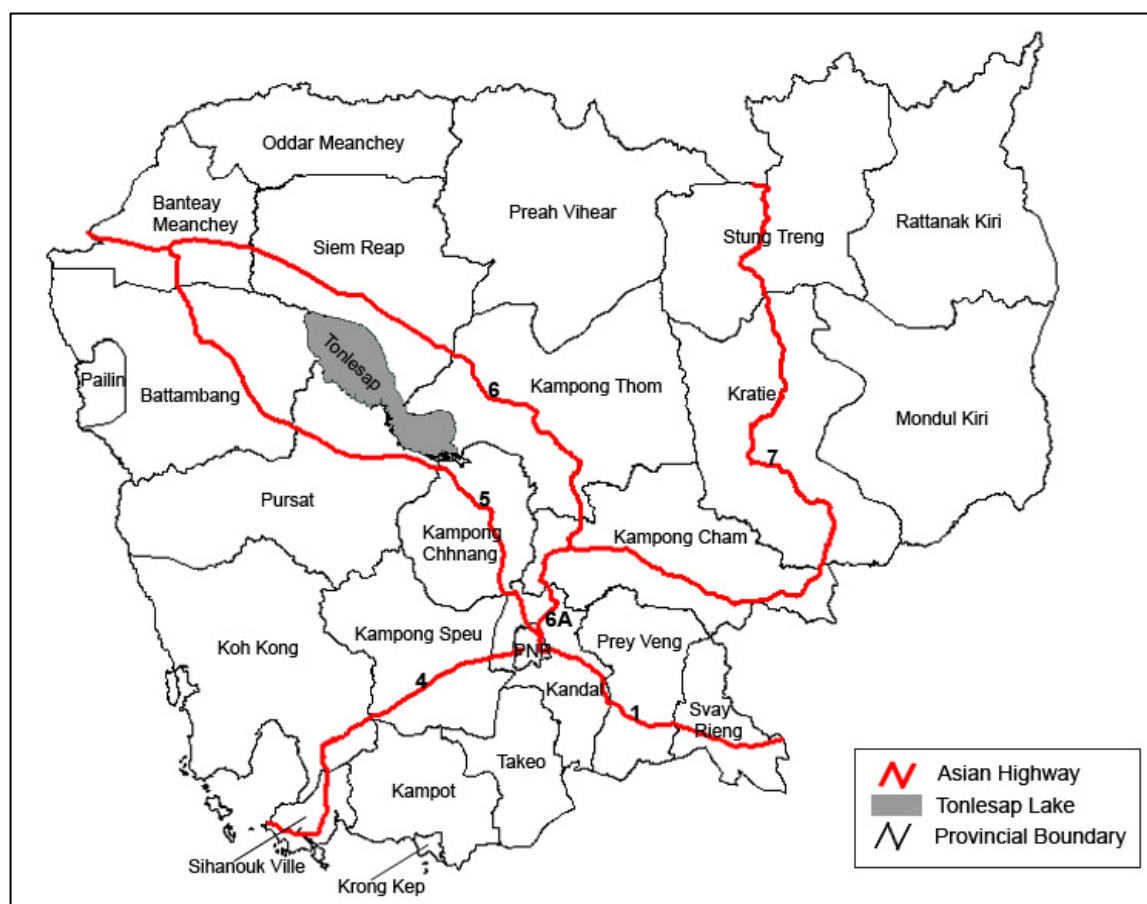
RTAVIS reports are **distributed monthly**. RTAVIS reports can also be found on the following website: www.roadsafetycambodia.info and www.cnctp.info

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 2006 has been released in June 2007.

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.



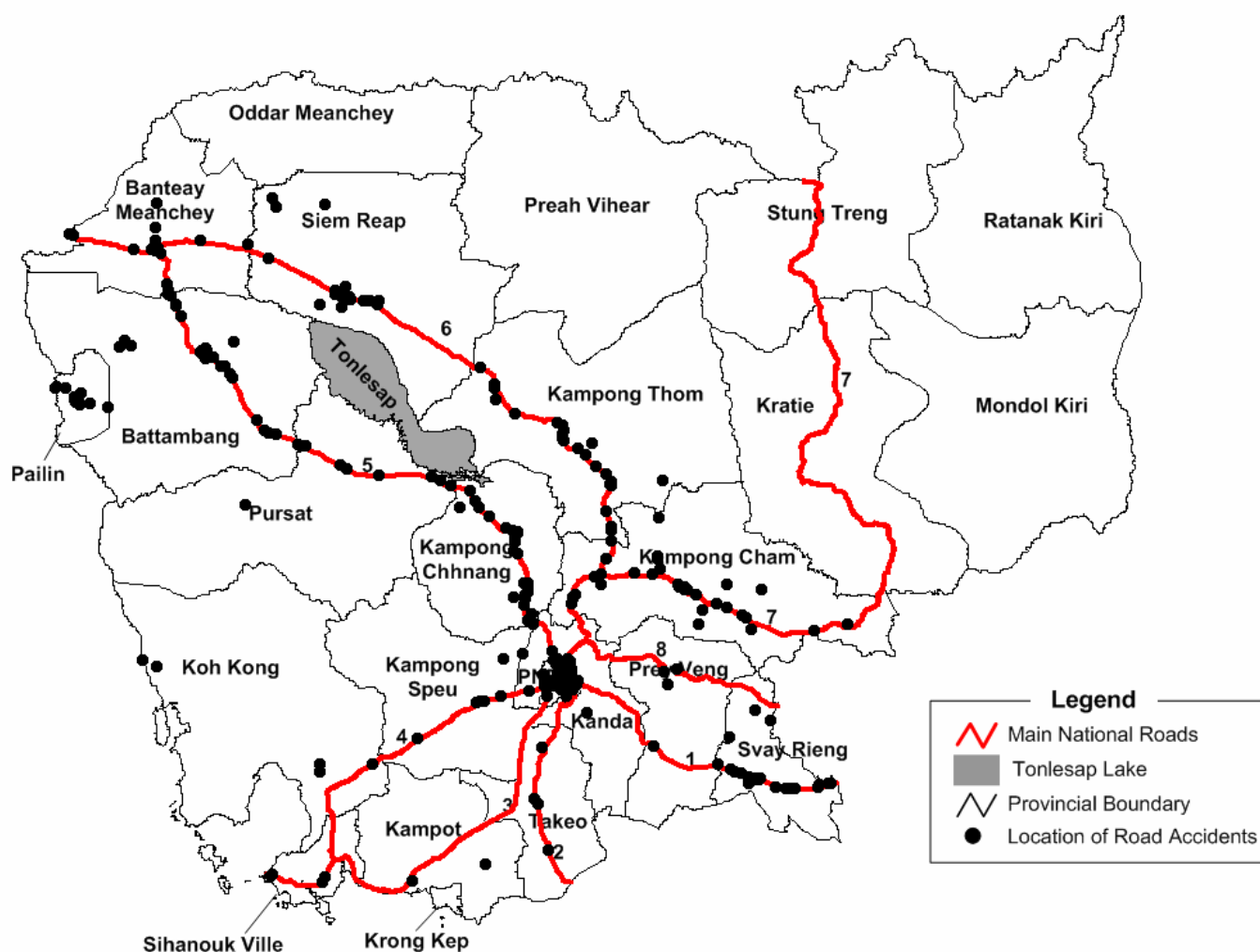
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III. System Update

Introduction of GPS

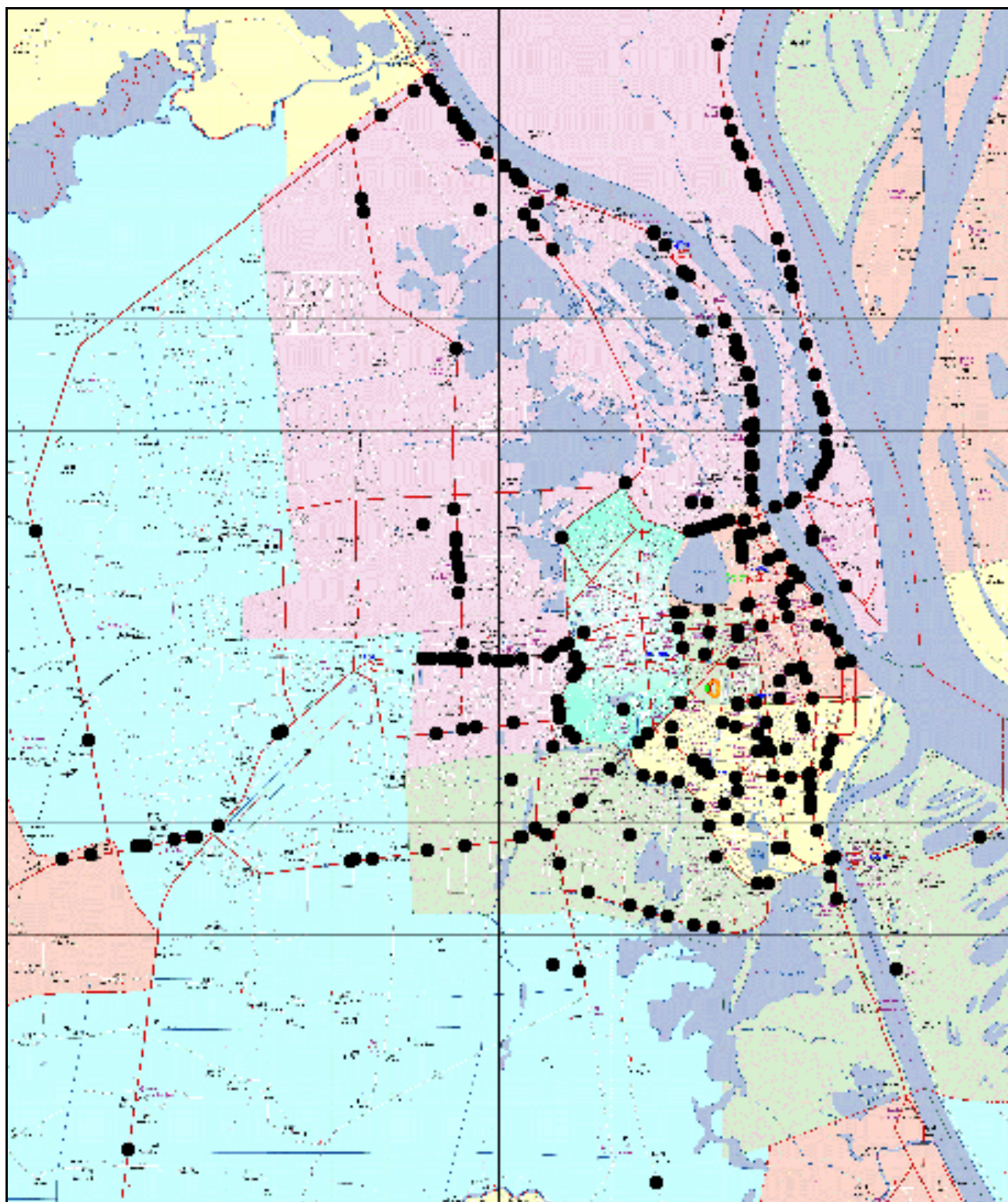
From July 2006, Global Position System (GPS) devices have been introduced to the traffic police in Russei Keo District in Phnom Penh. The GPS coordinates allow us now to exactly locate accidents, using GIS data. GPS devices have been progressively introduced to other districts of Phnom Penh and provinces 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 location of accidents in many provinces from August to September 2007.



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The chart shows the locations of road traffic accidents in Phnom Penh from July 2006 to September 2007



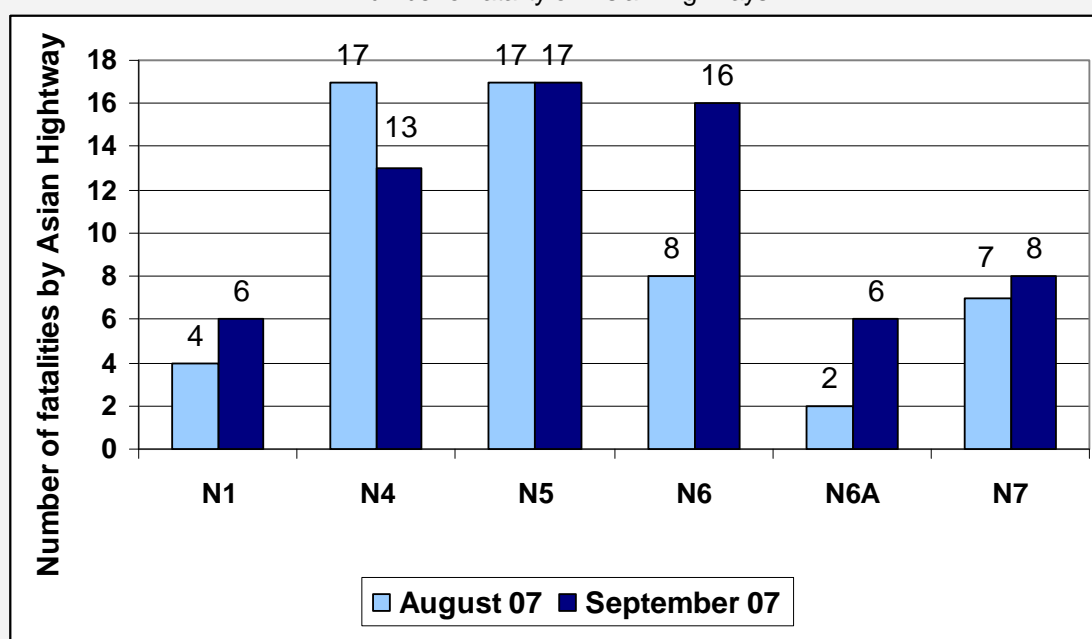
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IV. Executive Summary

Key findings for the month of **September 2007** are the following:

- A provisional number of **1,818 casualties** were reported by the participating hospitals, health centres, private clinics and traffic police departments in the 24 reporting provinces. Among them, **537 were severely injured and 121 died**.
- **In Phnom Penh, 484 casualties** were reported, corresponding to a **39% increase compared to September 2006** and a **3% decrease** compared to the previous month.
- **39% of casualties** arriving at hospital **more than 2 hours** after the accident.
- **52% of 4-wheeler drivers** having a **driving license**.
- **59% of fatalities were drivers** followed by **passenger (30%) and pedestrians (12%)**.
- Motorbike-4 wheeler collisions accounted for **19% of casualties, and 44% of fatalities**.

Number of fatality on Asian Highways



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V. Evolution of Main Indicators

	Apr-07	May-07	Jun-07	Jul-07	Aug-07	Sep-07
Number of casualties reported to RTAVIS	2,694	1,768	1,531	1,538	1,504	1,818
Gender						
Percentage of males casualties	74%	74%	75%	75%	72%	72%
Age						
Percentage of casualties aged between 15 and 24 years old	42%	34%	31%	35%	28%	30%
Type of road user						
Percentage of motorbike riders	76%	74%	75%	77%	74%	77%
Percentage of pedestrians	5%	7%	6%	9%	9%	9%
Percentage of car riders (private and taxis)	7%	6%	4%	4%	7%	2%
Percentage of bicycle riders	3%	4%	5%	6%	3%	4%
Occupation						
Percentage of students	20%	21%	24%	24%	23%	25%
Percentage of farmers	30%	28%	20%	21%	17%	23%
Percentage of workers	21%	19%	25%	23%	21%	20%
Percentage of house keepers	6%	6%	5%	5%	7%	6%
Percentage of vendors/small businesses owners	7%	7%	6%	5%	5%	7%
Percentage of motorbike taxis	3%	4%	4%	5%	6%	5%
Residence of casualty						
Percentage of casualties residing in another province than the province of accident	15%	14%	17%	20%	18%	15%
Severity of injuries:						
Percentage of severely injured casualties (requiring chirurgical intervention of ICU)	26% (697 cases)	23% (407 cases)	27% (416 cases)	30% (460 cases)	32% (488 cases)	30% (537 cases)
Percentage of deaths	5% (146 cases)	5% (96 cases)	7% (103 cases)	6% (92 cases)	6% (99 cases)	6% (121 cases)
Nature of injuries:						
Percentage of casualties suffering from cranial trauma	34%	36%	41%	44%	45%	46%
Percentage of them being considered as severe (coma)	12%	15%	8%	8%	10%	13%
Percentage of casualties suffering from fracture	12%	14%	15%	16%	23%	19%
Percentage of casualties having wounds/cuts	59%	58%	50%	54%	47%	50%
Day of accident:						
Percentage of casualties injured during the weekend (from Friday 6 pm to Sunday midnight)	38%	32%	39%	34%	32%	39%
Time of accident:						
Percentage of casualties injured during nighttime (from 6 pm to 5.59 am)	31%	30%	31%	33%	32%	30%
Peak(s) of casualties	7pm-8pm	7pm-8pm	4pm-5pm and 7pm-8pm	5pm-6pm	7pm-8pm	4pm-5pm
Cause of accident						
Percentage of casualties injured in accidents due to human error	95%	95%	94%	91%	94%	95%
High speed	55%	45%	46%	50%	45%	48%
Alcohol abuse	16%	17%	14%	16%	15%	15%
Non respect of rights of way rules	7%	8%	10%	10%	11%	11%
Changing lane without due care	6%	5%	5%	5%	6%	6%
Dangerous overtaking	6%	15%	13%	5%	10%	9%
Driving against flow of traffic	2%	3%	5%	3%	4%	3%
Other	3%	2%	1%	2%	3%	3%
Percentage of casualties injured in accidents due to road conditions	16%	11%	10%	10%	9%	9%
Percentage of casualties injured in accidents due to weather conditions	1%	4%	5%	6%	6%	4%
Percentage of casualties injured in accidents due to vehicle defect	4%	6%	3%	5%	3%	4%



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	Apr-07	May-07	Jun-07	Jul-07	Aug-07	Sep-07
Type of accident:						
Percentage of casualties injured in motorbike-motorbike collisions	40%	37%	37%	41%	39%	40%
Percentage of casualties injured in motorbike-4 wheeler collisions	17%	18%	18%	18%	18%	19%
Percentage of casualties injured in motorbike-pedestrian collisions	6%	7%	7%	8%	8%	9%
Percentage of motorbike casualties who fell alone	11%	11%	10%	9%	9%	7%
Average number of people injured per accident	3.6	2.7	2.8	2	2.5	3
Hit and Run						
Percentage of casualties injured in accidents where the driver of the vehicle causing the accidents escaped after the accident	18%	21%	23%	23%	18%	26%
Estimation of average vehicle damage cost	196 US\$	156 US\$	178 US\$	156 US\$	204 US\$	177 US\$
Percentage of four-wheeled vehicles with						
Left-hand-drive	77%	71%	72%	69%	61%	75%
Right-hand-drive	23%	29%	28%	31%	39%	25%
Location of accident:						
Percentage of casualties injured in urban areas	37%	42%	46%	53%	53%	47%
Percentage of casualties injured in accidents occurring on national roads	55%	57%	56%	51%	48%	53%
Percentage of casualties injured in accidents occurring on provincial roads	8%	6%	10%	7%	8%	8%
Percentage of casualties injured in accidents occurring on paved roads	67%	77%	79%	82%	80%	81%
Characteristics of location:						
Percentage of casualties injured in accidents occurring on straight roads	78%	78%	75%	81%	76%	78%
Percentage of casualties injured in junctions (X, T, Y-junctions and roundabout)	8%	10%	12%	8%	13%	14%
Percentage of casualties injured in curves	11%	8%	13%	10%	11%	8%
Safety Measures:						
Percentage of car/truck/bus drivers having a driving licence	51%	51%	50%	48%	52%	52%
Percentage of motorbikes' casualties wearing a helmet	3%	4%	2%	3%	3%	4%
Time to be transferred to hospitals:						
Percentage of casualties arriving at hospitals between 10 and 30 minutes after the accident	32%	31%	37%	38%	32%	32%
Percentage of casualties arriving at hospital more than 2 hours after the accident	34%	36%	35%	30%	38%	39%
Way to be transferred to hospitals:						
Percentage of casualties transported by ambulance	23%	21%	27%	34%	36%	33%
Percentage of casualties transported to the hospital by their family or relatives	63%	64%	63%	55%	57%	59%
Percentage of casualties arriving alone at the hospital	14%	15%	10%	11%	7%	8%
Estimation of average cost of treatment	73 US\$	143 US\$	119 US\$	131 US\$	182 US\$	161 US\$
Attendance of police:						
Percentage of cases where police was present on the accident site	62%	56%	65%	67%	68%	69%



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VI. Data by Provinces

	Apr-07		May-07		Jun-07		Jul-07		Aug-07		Sep-07	
Number of casualties reported to RTAVIS all provinces	2,694		1,768		1,531		1,538		1,504		1,818	
Severity of injuries	Severe	Death	Severe	Death	Severe	Death	Severe	Death	Severe	Death	Severe	Death
Banteay Meanchey	54	9	9	8	11	4	21	7	13	3	20	3
Battambang	42	10	11	2	5	8	16	15	43	6	43	9
Kampong Cham	104	25	70	18	45	18	36	9	34	13	30	15
Kampong Chhnang	20	10	14	3	24	5	16	4	20	5	32	6
Kampong Speu	36	7	35	2	10	3	6	0	17	2	25	6
Kampong Thom	37	19	12	5	13	9	31	7	10	1	30	8
Kampot	7	2	7	2	2	1	9	4	9	1	6	1
Kandal	64	12	43	9	39	12	52	12	48	12	61	12
Koh Kong	13	2	6	1	8	0	3	4	7	2	6	0
Kratie	26	5	9	2	9	1	6	1	11	0	6	2
Mondol Kiri	11	1	10	1	1	0	3	1	2	1	3	0
Phnom Penh	76	11	114	22	95	20	107	16	120	18	114	25
Preah Vihear	0	0	1	0	2	0	0	0	0	0	0	0
Prey Veng	30	6	7	0	15	4	21	2	7	3	22	3
Pursat	17	5	5	5	4	2	7	1	6	3	8	2
Rotanak Kiri	2	3	1	0	7	1	2	0	2	1	3	0
Siem Reap	89	6	5	3	67	5	69	2	67	6	67	10
Sihanoukville	11	3	7	2	28	3	17	2	14	11	11	8
Stung Treng	7	1	2	2	10	2	0	0	6	0	3	1
Svay Rieng	23	4	11	5	4	3	17	0	16	2	12	2
Takeo	19	5	20	4	11	1	13	4	27	6	23	5
Otdar Meanchey	1	0	4	0	0	1	1	0	0	2	3	2
Krong Keb	NYA	NYA	NYA	NYA	NYA	NYA	1	1	1	1	0	1
Krong Pailin	7	0	4	0	4	0	3	0	7	0	8	0
unidentified province	1	0	0	0	2	0	3	0	1	0	1	0
Total	697	146	407	96	416	103	460	92	488	99	537	121

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



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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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