

## Alcohol and Road Traffic Crashes

- The information given in Table 1 below is reported by the SAPS on “Quick Response Fatal Accident forms” to the National Fatal Accident Information Centre (NFAIC) of the Road Traffic Management Corporation (RTMC), which includes a summary of the suspected contributory human, vehicle and road factors to each accident, and which provide for the indication of drivers of vehicles and pedestrians suspected to be under the influence of alcohol at the time of the accident.

<b>Table 1 : Estimated Number of Fatal Crashes involving Drivers and Pedestrians suspected to be under the influence of alcohol</b>										
<b>2004</b>	<b>GA</b>	<b>KZ</b>	<b>WC</b>	<b>EC</b>	<b>FS</b>	<b>MP</b>	<b>NW</b>	<b>LI</b>	<b>NC</b>	<b>RSA</b>
Drivers	45	32	24	19	13	20	13	19	12	197
Pedestrians	19	9	14	16	3	10	3	6	0	80
Total crashes	2,340	2,313	1,280	940	744	966	866	890	290	10,629
<b>2005</b>	<b>GA</b>	<b>KZ</b>	<b>WC</b>	<b>EC</b>	<b>FS</b>	<b>MP</b>	<b>NW</b>	<b>LI</b>	<b>NC</b>	<b>RSA</b>
Drivers	75	18	65	38	28	15	14	15	5	273
Pedestrians	48	10	35	32	7	6	6	5	2	151
Total crashes	2,642	2,498	1,363	1,108	789	1,129	938	985	284	11,736
<b>2006</b>	<b>GA</b>	<b>KZ</b>	<b>WC</b>	<b>EC</b>	<b>FS</b>	<b>MP</b>	<b>NW</b>	<b>LI</b>	<b>NC</b>	<b>RSA</b>
Drivers	61	30	53	35	27	30	32	25	19	312
Pedestrians	34	18	27	42	12	11	28	4	4	180
Total crashes	2,910	2,465	1,350	1,415	890	1,132	996	1,001	295	12,454

The information in Table 1 above shows that, on a national basis : (a) the number of fatal road accidents in which drivers are suspected to be under the influence of alcohol increased from 197 in 2004 to 273 in 2005 and to 312 in 2006; and (b) the number of fatal road accidents in which pedestrians are suspected to be under the influence of alcohol, increased from 80 in 2004 to 151 in 2005 and to 180 in 2006.

<b>Table 2 : Estimated Percentage (%) of Fatal Crashes involving Drivers and Pedestrians suspected to be under the influence of alcohol</b>										
<b>2004</b>	<b>GA</b>	<b>KZ</b>	<b>WC</b>	<b>EC</b>	<b>FS</b>	<b>MP</b>	<b>NW</b>	<b>LI</b>	<b>NC</b>	<b>RSA</b>
Drivers	1.91	1.40	1.88	2.01	1.78	2.08	1.55	2.18	4.23	1.86
Pedestrians	0.82	0.39	1.06	1.74	0.45	1.04	0.39	0.62	0.00	0.75
<b>2005</b>	<b>GA</b>	<b>KZ</b>	<b>WC</b>	<b>EC</b>	<b>FS</b>	<b>MP</b>	<b>NW</b>	<b>LI</b>	<b>NC</b>	<b>RSA</b>
Drivers	2.86	0.74	4.77	3.46	3.53	1.32	1.50	1.54	1.69	2.31
Pedestrians	1.81	0.40	2.58	2.91	0.83	0.53	0.60	0.46	0.56	1.26
<b>2006</b>	<b>GA</b>	<b>KZ</b>	<b>WC</b>	<b>EC</b>	<b>FS</b>	<b>MP</b>	<b>NW</b>	<b>LI</b>	<b>NC</b>	<b>RSA</b>
Drivers	2.10	1.24	3.93	2.51	2.99	2.67	3.17	2.54	6.55	2.55
Pedestrians	1.16	0.74	1.96	2.94	1.31	1.00	2.85	0.42	1.31	1.48

The estimated percentage (%) of fatal crashes, expressed as a percentage of the total number of fatal crashes for the particular year, (a) in which drivers are suspected to be under the influence of alcohol increased from 1,86% in 2004 to 2,31% in 2005 and to 2,55% in 2006; and (b) the number of fatal road accidents in which pedestrians are suspected to be under the influence of alcohol increased from 0,75% in 2004 to 1,26% in 2005 and to 1,48% in 2006.

## THE 2002/2003 AND 2005/2006 ROAD TRAFFIC OFFENCE SURVEY REPORTS

2. A service provider was appointed to undertake surveys of serious road traffic offences countrywide. Surveys were undertaken during 2002, 2003, 2005 and 2006.

Based on the results of the annual road traffic offence survey reports for 2002, 2003, 2005 and 2006, I have extracted the information on test results for drivers which was found driving while exceeding the legal breath alcohol limit. These results for the four years, during day-time and night-time respectively, are summarized in Table 3 (daytime) and Table 4 (night-time) below. The legal limit is 0,24mg/litre for drivers of light motor vehicles and 0,1mg/litre for professional drivers (minibus taxis, buses and trucks).

<b>Table 3 : Percentage (%) of Drivers Driving while Exceeding the Legal Breath Alcohol Limit</b>											
<b>Day-time : 06:00 to 16:00</b>											
<b>Road User Group</b>	<b>Year</b>	<b>Province</b>									
		<b>GA</b>	<b>KZ</b>	<b>WC</b>	<b>EC</b>	<b>FS</b>	<b>MP</b>	<b>NW</b>	<b>LI</b>	<b>NC</b>	<b>RSA</b>
<b>Light motor vehicle</b> (motorcars and light delivery vehicles)	2002	2.00%	0.90%	2.00%	1.50%	1.00%	1.80%	4.00%	2.20%	3.10%	1.80%
	2003	1.10%	1.70%	2.90%	1.70%	1.50%	4.70%	2.60%	3.70%	2.30%	2.10%
	2005	1.10%	0.40%	1.00%	0.70%	0.70%	1.10%	0.30%	0.00%	0.70%	0.80%
	2006	0.30%	0.00%	1.00%	1.50%	1.50%	0.30%	0.00%	0.80%	1.00%	0.50%
<b>Minibus Taxi</b>	2002	3.00%	4.20%	1.60%	1.40%	0.80%	1.10%	2.30%	2.00%	3.40%	2.50%
	2003	1.40%	0.90%	0.50%	2.70%	0.50%	6.10%	2.80%	1.90%	1.20%	1.70%
	2005	2.20%	2.80%	0.70%	2.10%	2.50%	2.30%	0.50%	2.40%	7.60%	2.10%
	2006	1.00%	2.30%	2.00%	4.10%	0.00%	2.30%	2.80%	0.60%	6.00%	1.80%
<b>Bus</b>	2002	3.00%	4.20%	1.60%	1.40%	0.80%	1.10%	2.30%	2.00%	3.40%	2.50%
	2003	1.44%	0.90%	0.51%	2.74%	0.50%	6.12%	2.79%	1.92%	1.23%	1.70%
	2005	8.36%	0.00%	0.00%	0.00%	6.25%	0.00%	0.00%	0.00%	4.55%	3.40%

	2006	0.00%	0.00%	9.09%	0.00%	0.00%	0.00%	0.00%	4.00%	4.76%	1.70%
<b>Truck (&gt; 3,5 t)</b>	2002	3.00%	4.20%	1.60%	1.40%	0.80%	1.10%	2.30%	2.00%	3.40%	2.50%
	2003	1.44%	0.90%	0.51%	2.74%	0.50%	6.12%	2.79%	1.92%	1.23%	1.70%
	2005	1.76%	0.78%	1.69%	0.61%	0.00%	0.00%	0.68%	0.00%	1.71%	1.10%
	2006	1.25%	0.58%	2.63%	2.22%	2.16%	3.43%	1.22%	0.60%	2.13%	1.60%

The information in Table 3 above shows that on a national basis during day-time for light motor vehicles, the percentage of drivers driving while exceeding the legal breath alcohol limit, increased from 1,80% in 2002 to 2,10% in 2003. This percentage decreased to 0,80% in 2005 and further decreased to 0,50% in 2006. The percentage of drivers of buses driving while exceeding the legal breath alcohol limit during day-time, decreased from 2,50% in 2002 to 1,70% in 2003. This percentage increased to 3,40% in 2005 and again decreased to 1,70% in 2006.

<b>Table 4 : Percentage (%) of Drivers Driving while Exceeding the Legal Breath Alcohol Limit</b>											
<b>Night-time : 18:00 to 24:00</b>											
<b>Road User Group</b>	<b>Year</b>	<b>Province</b>									
		<b>GA</b>	<b>KZ</b>	<b>WC</b>	<b>EC</b>	<b>FS</b>	<b>MP</b>	<b>NW</b>	<b>LI</b>	<b>NC</b>	<b>RSA</b>
<b>Light motor vehicle</b> (motorcars and light delivery vehicles)	2002	7.80%	2.50%	2.60%	6.25%	3.60%	5.00%	8.90%	8.00%	7.40%	5.50%
	2003	2.65%	4.49%	8.13%	2.48%	4.40%	13.42%	2.86%	8.90%	4.69%	5.10%
	2005	4.28%	3.01%	2.51%	3.28%	3.92%	5.21%	2.99%	2.82%	3.06%	3.60%
	2006	4.83%	1.84%	2.30%	5.20%	4.41%	5.57%	5.07%	4.94%	3.64%	4.00%
<b>Minibus Taxi</b>	2002	3.00%	4.20%	1.60%	1.40%	0.80%	1.10%	2.30%	2.00%	3.40%	2.50%
	2003	1.44%	0.90%	0.51%	2.74%	0.50%	6.12%	2.79%	1.92%	1.23%	1.70%
	2005	12.12%	1.64%	6.38%	8.82%	4.58%	9.80%	3.26%	4.04%	7.14%	7.70%
	2006	4.98%	3.85%	5.88%	6.35%	3.33%	7.25%	1.79%	3.08%	8.33%	4.91%
<b>Bus</b>	2002	3.00%	4.20%	1.60%	1.40%	0.80%	1.10%	2.30%	2.00%	3.40%	2.50%
	2003	1.44%	0.90%	0.51%	2.74%	0.50%	6.12%	2.79%	1.92%	1.23%	1.70%
	2005	11.11%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.90%
	2006	0.00%	0.00%	6.25%	8.33%	10.53%	0.00%	0.00%	0.00%	0.00%	2.10%
<b>Truck (&gt; 3,5 t)</b>	2002	3.00%	4.20%	1.60%	1.40%	0.80%	1.10%	2.30%	2.00%	3.40%	2.50%
	2003	1.44%	0.90%	0.51%	2.74%	0.50%	6.12%	2.79%	1.92%	1.23%	1.70%
	2005	1.64%	0.96%	0.00%	2.44%	1.31%	1.60%	1.75%	3.64%	3.64%	1.50%
	2006	2.21%	1.54%	3.27%	0.00%	5.00%	2.15%	3.80%	0.79%	1.11%	2.20%

The information in Table 4 above shows that on a national basis during night-time for drivers of light motor vehicles, the percentage driving while exceeding the legal breath alcohol limit, decreased from 5,50% in 2002 to 5,10% in 2003. This percentage further decreased to 3,60% in 2005 and again increased to 4,00% in 2006. The percentage of

drivers of minibus taxis driving while exceeding the legal breath alcohol limit during night-time, decreased from 2,50% in 2002 to 1,70% in 2003. This percentage increased to 7,70% in 2005 and again decreased to 4,91% in 2006.

3. Of particular concern is the fact that driver alcohol levels in all provinces at night-time were extremely high when compared to acceptable international standards which reflects a very serious concern when the legal limit is exceeded by more than 0,5% of drivers.

### **THE REPORT OF THE MEDICAL RESEARCH COUNCIL OF SOUTH AFRICA (“the MRC report”)**

4. In 2004 the MRC compiled a report pertaining to the number of people killed in road accidents, whose blood alcohol exceeded 0,05g/100ml. In this **6<sup>th</sup> Annual Report of the National Injury Mortality Surveillance System (NIMSS)**, the fatalities are grouped per “road user group” namely, drivers, passengers, pedestrians and cyclists.
5. The following table (Table 5), which I have obtained from the above MRC report, reflects the percentage of various road user deaths involving alcohol. As is evident from this table, the blood alcohol concentration (BAC) of just more than half (50,88%) of the 570 drivers killed in accidents and tested after their death by the MRC during 2004, exceeded the legal blood alcohol limit. (It is estimated that 3,358 drivers were killed in road accidents during 2004 of which 570 or 16,97% were tested by the MRC at 35 mortuaries around the country). The mean BAC of drivers exceeds the legal limit of 0,05g/100ml by between 3 to 4 times.

<b>Table 5 : Blood Alcohol Levels by Transport User (2004 MRC Report)</b>				
<b>Transport User</b>	<b>BAC's done</b>	<b>BAC's positive</b>	<b>% Positive</b>	<b>Mean BAC</b>
<b>Driver</b>	570	290	50.88%	0.17
<b>Passenger</b>	342	137	40.06%	0.15
<b>Pedestrian</b>	1,306	780	59.72%	0.21
<b>Cyclist</b>	119	46	38.66%	0.15
<b>Total</b>	<b>2,337</b>	<b>1,253</b>	<b>53.62%</b>	

## NUMBER OF DRIVER AND PEDESTRIAN FATALITIES

6. The number of drivers and pedestrians killed in road accidents per annum over the three (3) year period from 2004 to 2006, is given in Table 6 below.

<b>Table 6 : No. of Drivers and Pedestrians Killed in Fatal Road Accidents per Annum</b>											
<b>Year</b>	<b>User Group</b>	<b>Province</b>									
		<b>GA</b>	<b>KZ</b>	<b>WC</b>	<b>EC</b>	<b>FS</b>	<b>MP</b>	<b>NW</b>	<b>LI</b>	<b>NC</b>	<b>RSA</b>
<b>2004</b>	drivers	679	468	321	253	304	332	286	251	112	<b>3,007</b>
	pedestrians	1,276	1,398	707	485	244	369	417	391	93	<b>5,381</b>
	<b>total</b>	<b>1,954</b>	<b>1,866</b>	<b>1,028</b>	<b>738</b>	<b>548</b>	<b>701</b>	<b>703</b>	<b>643</b>	<b>206</b>	<b>8,388</b>
<b>2005</b>	drivers	782	581	391	286	308	430	297	321	109	<b>3,505</b>
	pedestrians	1,448	1,517	718	554	327	440	430	383	89	<b>5,905</b>
	<b>total</b>	<b>2,230</b>	<b>2,098</b>	<b>1,109</b>	<b>839</b>	<b>635</b>	<b>870</b>	<b>727</b>	<b>705</b>	<b>198</b>	<b>9,410</b>
<b>2006</b>	drivers	978	647	468	379	373	481	345	375	104	<b>4,148</b>
	pedestrians	1,459	1,382	652	692	322	379	433	389	87	<b>5,796</b>
	<b>total</b>	<b>2,437</b>	<b>2,029</b>	<b>1,120</b>	<b>1,072</b>	<b>695</b>	<b>860</b>	<b>778</b>	<b>764</b>	<b>190</b>	<b>9,944</b>

If the percentage of drivers (50,88%) and pedestrians (59,72%) killed in road accidents, as found in the MRC study report that exceeded the legal blood alcohol limit in Table 5, are applied to the figures in Table 6 above, the estimated number of drivers and pedestrians killed using the road whilst under the influence of alcohol over the 3 year period, is shown in Table 7 below.

<b>Table 7 : Based on the MRC report - the Estimated number of Drivers and Pedestrians Killed in Fatal Road Crashes per Annum whilst under the influence of Alcohol</b>											
<b>Year</b>	<b>User Group</b>	<b>Province</b>									
		<b>GA</b>	<b>KZ</b>	<b>WC</b>	<b>EC</b>	<b>FS</b>	<b>MP</b>	<b>NW</b>	<b>LI</b>	<b>NC</b>	<b>RSA</b>
<b>2004</b>	drivers	345	238	163	129	155	169	146	128	57	<b>1,530</b>
	pedestrians	762	835	422	290	146	221	249	234	56	<b>3,213</b>
	<b>total</b>	<b>1,107</b>	<b>1,073</b>	<b>585</b>	<b>418</b>	<b>301</b>	<b>390</b>	<b>395</b>	<b>362</b>	<b>113</b>	<b>4,743</b>
<b>2005</b>	drivers	398	295	199	145	157	219	151	163	55	<b>1,783</b>
	pedestrians	865	906	429	331	195	263	257	229	53	<b>3,526</b>
	<b>total</b>	<b>1,263</b>	<b>1,201</b>	<b>628</b>	<b>476</b>	<b>352</b>	<b>482</b>	<b>408</b>	<b>392</b>	<b>109</b>	<b>5,310</b>
<b>2006</b>	drivers	497	329	238	193	190	245	176	191	53	<b>2,111</b>
	pedestrians	871	825	389	413	192	226	258	233	52	<b>3,461</b>
	<b>total</b>	<b>1,369</b>	<b>1,154</b>	<b>628</b>	<b>606</b>	<b>382</b>	<b>471</b>	<b>434</b>	<b>423</b>	<b>105</b>	<b>5,572</b>

Based on the figures in Table 7 above, the estimated number of hours between intoxicated driver and pedestrian fatalities respectively, is shown in Table 8 below.

<b>Table 8 : An Intoxicated Driver or a Pedestrian Killed in a Fatal Road Accident every ..... hours</b>											
<b>Year</b>	<b>User Group</b>	<b>Province</b>									
		<b>GA</b>	<b>KZ</b>	<b>WC</b>	<b>EC</b>	<b>FS</b>	<b>MP</b>	<b>NW</b>	<b>LI</b>	<b>NC</b>	<b>RSA</b>
<b>2004</b>	drivers	25	37	54	68	57	52	60	68	153	<b>6</b>
	pedestrians	11	10	21	30	60	40	35	37	157	<b>3</b>
	<b>total</b>	<b>8</b>	<b>8</b>	<b>15</b>	<b>21</b>	<b>29</b>	<b>22</b>	<b>22</b>	<b>24</b>	<b>78</b>	<b>2</b>
<b>2005</b>	drivers	22	30	44	60	56	40	58	54	158	<b>5</b>
	pedestrians	10	10	20	27	45	33	34	38	165	<b>2</b>
	<b>total</b>	<b>7</b>	<b>7</b>	<b>14</b>	<b>18</b>	<b>25</b>	<b>18</b>	<b>21</b>	<b>22</b>	<b>81</b>	<b>2</b>
<b>2006</b>	drivers	18	27	37	45	46	36	50	46	166	<b>4</b>
	pedestrians	10	11	22	21	46	39	34	38	169	<b>3</b>
	<b>total</b>	<b>6</b>	<b>8</b>	<b>14</b>	<b>14</b>	<b>23</b>	<b>19</b>	<b>20</b>	<b>21</b>	<b>84</b>	<b>2</b>

The information in Table 8 shows, for example, that during 2004 in Gauteng a driver of a vehicle under the influence of alcohol was killed every 25 hours. In 2005 this estimated figure changed to a driver killed every 22 hours and in 2006 further reduced to an intoxicated driver fatality every 18 hours. On a national basis an intoxicated driver fatality occurred every 4 hours during 2006.