

# PO

## ROAD ACCIDENTS IN POLAND

Iłona BUTTLER

Motor Transport Institute, Poland  
(Received February 21, 2005)

### 1. INTRODUCTION

Poland is Europe's sixth largest country. It is situated in central Europe and occupies an area of 322,577km<sup>2</sup>. In 2003 the country had a population of 38,191,000. While Poland has an extensive 377,288km long road network, very few of the roads offer high standards. In 2003 motorways and national roads amounted to a mere 18,253km, of which motorways made up 405km. Poland joined the European Union in May 2004.

Poland's motorization is growing rapidly. In 2003 the number of passenger cars exceeded 11 million, and the number of vehicles is nearly 16 million. Over the last 20 years the number of passenger cars has increased 3.5 times and the growth did not slow until recently.

Compared to the European Union's top countries,

Poland's level of motorisation is low. The rate is 273 passenger cars per 1,000 population. Only two other countries in the European Union (Hungary and Slovakia) have lower levels of motorisation. Experts estimate that in the years to come, as the economy improves, the number of cars in Poland will grow quickly.

### 2. POLAND'S ROAD SAFETY PERFORMANCE

In 2003 in Poland there were 51,078 road accidents in which 5,640 people died (72% at the scene of the accident, 28% over the next 30 days), and 63,900 were injured (27% severe, 73% slight injury). Over the last 10 years more than 64,000 people died on Polish roads and more than 706,000 were injured (Table 2), including 190,000 severe injuries.

Table 1 Vehicle registration

Year	Motorized vehicle		Including:					
	Total	1993=100	Passenger cars		Trucks		Motorcycles	
			Total	1993=100	Total	1993=100	Total	1993=100
1993	10,437,538	100	6,770,557	100	1,235,158	100	1,067,634	100
1994	10,858,094	104.0	7,153,141	105.7	1,306,861	105.8	1,008,410	94.5
1995	11,185,781	107.2	7,517,266	111.0	1,354,099	109.6	929,269	87.0
1996	11,765,401	112.7	8,054,448	119.0	1,431,357	115.9	875,663	82.0
1997	12,283,503	117.7	8,533,449	126.0	1,487,439	120.4	842,358	78.9
1998	12,709,244	121.8	8,890,763	131.3	1,562,814	126.5	819,902	76.8
1999	13,169,216	126.2	9,282,816	137.1	1,682,887	136.2	804,461	75.3
2000	14,106,078	135.1	9,991,260	147.6	1,879,068	152.1	802,618	75.2
2001	14,724,293	141.1	10,503,052	155.1	1,979,293	160.2	802,752	75.2
2002	15,525,733	148.7	11,028,852	162.9	2,162,614	175.1	868,850	81.4
2003	15,898,983	152.3	11,243,827	166.1	2,191,762	177.4	845,456	79.2

Table 2 Traffic accidents and casualties

Year	Accidents		Killed		Injured	
	Total	1993=100	Total	1993=100	Total	1993=100
1993	48,901	100	6,341	100	58,812	100
1994	53,647	109.7	6,744	106.4	64,573	109.8
1995	56,904	116.4	6,900	108.8	70,226	119.4
1996	57,911	118.4	6,359	100.3	71,419	121.4
1997	66,586	136.2	7,311	115.3	83,162	141.4
1998	61,855	126.5	7,080	111.7	77,560	131.9
1999	55,106	112.7	6,730	106.1	68,449	116.4
2000	57,331	117.2	6,294	99.3	71,638	121.8
2001	53,799	110.0	5,534	87.3	68,194	116.0
2002	53,559	109.5	5,827	91.9	67,498	114.8
2003	51,078	104.5	5,640	88.9	63,900	108.7

Since 1997 (with small exceptions) Poland has seen a gradual drop in the number of accidents involving, killed and injured. The number of collisions, however, keeps growing. What this suggests is that as passenger cars are gradually replaced with more modern vehicles, offering better safety when an accident happens, and as the use of protective equipment increases (safety belts, airbags), the severity of accidents drops, but the sources of risk remain the same. Poland continues to be among Europe's high risk countries. Its road safety is best described with the following indicators:

- risk to the population: 15 killed /1 million population while Europe's top performers in safety have reached the level of 6 (the Netherlands, United Kingdom, Sweden),
- accident severity: 11 killed /100 road accidents, while

in some of the European Union's countries the rate is slightly above 3.

For years mistakes that passenger car drivers make have been the main cause of accidents in Poland, in particular ignoring road traffic regulations.

The most frequent causes of road accidents caused by drivers include high speed (28%), failure to give way (24%), illegal overtaking, overtaking and passing (12%) and illegally driving through pedestrian crossings (8%). Drinking and driving is a major problem in Poland as well. Despite stringent drinking and driving regulations (BAC = 0.2g/l) and penalties and the public's strong disapproval, drunk road users caused 11% of all road accidents.

Drunk road users are a definite majority with 96%

**Table 3 Causes of accidents in 2003**

	Accidents	%	2002=100
Total	51,078	100.00	95.37
<b>Vehicle drivers' non-compliance with traffic rules</b>	41,369	80.99	96.06
<b>Pedestrians' non-compliance with traffic rules</b>	8,446	16.54	92.22
<b>Passengers' non-compliance with traffic rules</b>	126	0.25	101.61
<b>Joint responsibility</b>	213	0.42	93.83
<b>Bad technical condition of road</b>	85	0.17	110.39
<b>Bad technical condition of vehicle</b>	429	0.84	89.00
<b>Others</b>	410	0.80	96.70

**Table 4 Accidents caused by road users under the influence of alcohol**

	Accidents	%	2002=100	Killed	%	2002=100	Injured	%	2002=100
Total	51,078	100	95.4	5640	100	96.8	63900	100	94.7
<b>Accidents caused by drunk road users</b>	5,800	11.4	88.2	711	12.6	87.9	7,037	11.0	87.1
<b>Caused by those driving</b>	3,913	7.7	87.7	495	8.8	87.1	5,268	8.2	86.1
- bicycles and motor bicycles	659	1.3	89.1	42	0.7	67.7	657	1.0	91.3
- motorcycles	170	0.3	81.7	25	0.4	113.6	194	0.3	73.8
- passenger cars	2,820	5.5	87.3	385	6.8	86.9	4,118	6.4	86.0
- trucks	169	0.3	92.9	23	0.4	88.5	206	0.3	85.5
- buses	3	0.0	75.0	0	0.0	-	4	0.0	100.0
- agricultural tractors	61	0.1	88.4	15	0.3	125.0	56	0.1	78.9
- horse-drawn vehicles	11	0.0	64.7	3	0.1	-	12	0.0	52.2
- others	20	0.0	250.0	2	0.0	66.7	21	0.0	262.5
<b>Caused by pedestrians</b>	1,737	3.4	88.1	191	3.4	88.8	1,611	2.5	88.4
<b>Caused by car occupants</b>	26	0.1	136.8	0	0.0	0.0	30	0.0	166.7
<b>Other causes</b>	78	0.2	104.0	14	0.2	155.6	89	0.1	111.3
<b>Joint responsibility of road users</b>	46	0.1	88.5	11	0.2	78.6	39	0.1	92.9

of all drunk drivers and 91% of all drunk pedestrians causing accidents.

Men also make up the biggest number of road accident casualties (76% of all killed and 61% of all injured) and those aged 18-24 (12% of the population, 16% of all killed, 21% of all injured). Similarly to other European countries the victims of road accidents are first of all passenger car users (drivers and occupants), but the situation is particularly bad for vulnerable road users. In Poland's major cities more than 60% of people killed in road accidents are pedestrians.

Apart from the trauma and a worse standard of living, road accidents bring measurable economic loss. The total cost of road accidents (fatalities + injured + material loss) in Poland at 2003 prices is estimated at PLN 19 billion (4 billion euros), i.e. 2.6% of GDP.

### 3. MAIN ROAD SAFETY PROBLEMS

Analyses of statistics show that Poland's main road safety problems in 2003 were:

- vulnerable road users (pedestrians, bicyclists);
- people commonly ignoring traffic regulations, such as speed limits (75% of drivers exceed the speed limits in towns and 54% on rural national roads), but also drink-driving laws or using restraints;
- traffic risk on major roads outside built-up areas (6% of the length of the road network, 25% of all accidents, 40% of all killed, 27% of all injured, severity of accidents: 18 fatalities / 100 accidents);
- young drivers aged 18-24 (20% of all involved in road accidents);
- intoxication of drivers and pedestrians. While recent

years have seen some reduction, the number of drunk drivers caught by the police is still very high (in 2003 road police revealed 167,318 drink-driving cases. 18,830 of these drivers had a BAC of 0.2-0.5ml/g, and 148,488 more than 0.5ml/g); there has been concern about an increase in alcohol consumption last year, suggesting that this could be reflected in road traffic.

With time Poland can expect new problems, such as the safety of elderly road users, safe road transport, in particular truck driver fatigue problem, narcotics and some drugs rendering drivers less capable of driving, road traffic risk on regional, district and municipal roads.

### 4. PREVENTATIVE EFFORTS IN POLAND

In 1993 the National Road Safety Council was established in Poland, an inter-ministerial team of advisers to the Prime Minister. Its main responsibility is to coordinate road safety efforts. Since 2002 Poland has had its governmental road safety programme, called GAMBIT 2000. It estimates that by 2010 the number of killed will be reduced to 4000 (by 36% compared to 2000). The programme is currently being revised to apply the EU's 50% target to Poland. Over the last 10 years road safety has been attracting more and more interest from the authorities at various levels of government, with a lot of coverage of the topic in the press, radio and television. Sadly, the growing interest in reducing road traffic risk is not accompanied with active road safety policies. In the last decade the penalty points system was introduced (1993), the requirement to carry children in special restraints, daytime running lights must be used from 1 Oc-

**Table 5 Casualties in 2003**

	Killed			Injured		
	Total	%	2002=100	Total	%	2002=100
<b>Total</b>	5,640	100	96.8	63,900	100	94.7
<b>Pedestrian</b>	1,878	33.3	94.5	16,578	25.9	93.9
<b>Cyclists and motorcyclists</b>	701	12.4	94.7	7,508	11.7	98.4
<b>Drivers and passengers:</b>						
- motorcycles	145	2.6	86.8	1,444	2.3	92.4
- passengers cars	2,543	45.1	99.8	33,447	52.3	92.8
- trucks	291	5.2	100.0	3,127	4.9	106.5
- others	82	1.5	87.2	1,796	2.8	106.9

---

tober till the end of February, the penalties for drinking and driving offences were made even tougher (2002), and high risk sites were marked with special signs. In May 2004 after many years of effort, Poland finally introduced the 50km/h speed limit in built-up areas, but the new limit applies only between 5 a.m. and 11 p.m. Despite the protests of specialists, 60km/h still applies outside these hours. New regulations are now being prepared, which will completely change the way drivers are trained and examined in Poland and introduce, among other things, supervised driving and provisional driving licenses for novice drivers.

## **5. CONCLUSION**

Poland's fast and dynamic growth of motorisation over the last 20 years took the government by surprise. With the road infrastructure unsuitable for the growing needs, a largely differentiated fleet of cars, difficulties with effective traffic enforcement, too few effective preventative schemes and the limited possibility to use the experience of other countries, the effects of growing motorisation have turned into a painful experience. There is every indication that the years to come will not be the easiest for Poland. Over the last three years (2001-2003) compared to 2000 the number of road accidents in Poland went down by 10.9%, the number of killed by 10.4% and injured by 10.8%. The figures suggest that at the beginning of the decade Poland is behind on the EU's road safety programme but also the national GAMBIT 2000 programme. Early 2004 data show that the progress Poland was making in reducing casualties has lost impetus. Data from the Police Headquarters show that in 2004 there were 51,069 road accidents, i.e. a mere 9 less than in 2003. The death toll of these accidents was 5,712 (increase by 72, i.e. 1.3%) and 64,661 people were injured (increase by 761, i.e. by 1.2%). The police received reports of 424,938 collisions, compared to the previous year's 367,700. If Poland wants to continue to stay active in the EU's programme to halve road accident casualties by 2010, in 2005 it must introduce radical changes to how it runs its preventative schemes. Otherwise it will simply be too late.