



POLAND

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In 2019, 2 909 persons were killed in road crashes in Poland, a slight increase compared to 2018 (+1.6%). Pedestrians still represent a relatively high share of road deaths, with 27% of the total. The safety of elderly citizens is of growing concern. The 65-74 age group is the only age group that has seen an increase in the number of fatalities between 2010 and 2019. The 2013-20 National Road Safety Programme targets include a 50% reduction in road deaths and a 40% reduction in people seriously injured by 2020 (in comparison to 2010 levels). It is unlikely that these targets will be met.

Impact of Covid-19

In response to the Covid-19 pandemic, Poland introduced lockdown measures on 13 March 2020, which affected the movement of people and goods on the road and in turn, the exposure to road crashes.

The number of road deaths decreased by 26% in April 2020 and May 2020 compared with the average for 2017-19.

Table 1. Road fatalities by month

	Average 2017-2019	2020	% change
January	185	190	2.7
February	171	200	17
March	188	173	-8
April	207	153	-25.7
May	223	166	-25.6
June	252	207	-17.9
July	271	214	-21
August	273	240	-12.1
September	275	213	-22.5

Trends

Poland registered a slight **increase in the number of road deaths in 2019**. According to final data, 2 909 people lost their lives in traffic crashes in Poland in 2019. This represents a 1.6% increase on 2018. In 2018, Poland recorded 2 862 road fatalities.

The **longer-term trend for road deaths** in Poland has been downward. Between 2000 and 2019, the number of annual road fatalities fell by 54%. Over the more recent past, the trend in the decline of traffic fatalities has continued. The number of road casualties fell by 27% during the 2010-19 period.

The number of **traffic deaths per 100 000 inhabitants** in Poland has fallen by 54% between 2000 and 2019. In 2019, 7.7 traffic deaths per 100 000 inhabitants were recorded, compared to 16.4 in 2000. By way of comparison, the average in the European Union is 5.1 deaths per 100 000 inhabitants in 2019.

Poland recorded 1.0 **road fatalities per 10 000 registered vehicles** in 2019. This represents a decrease of 78% compared to the year 2000, when the rate of deaths to registered vehicles stood at 4.5. The fatality risk has therefore decreased more sharply than the mortality rate due to the sustained growth of the vehicle fleet. Between 2000 and 2019, the number of motorised vehicles more than doubled.

Country Profile

Population in 2019: 38 million

GDP per capita in 2019: USD 15 595

Cost of road crashes: 2.1% of GDP (2018)

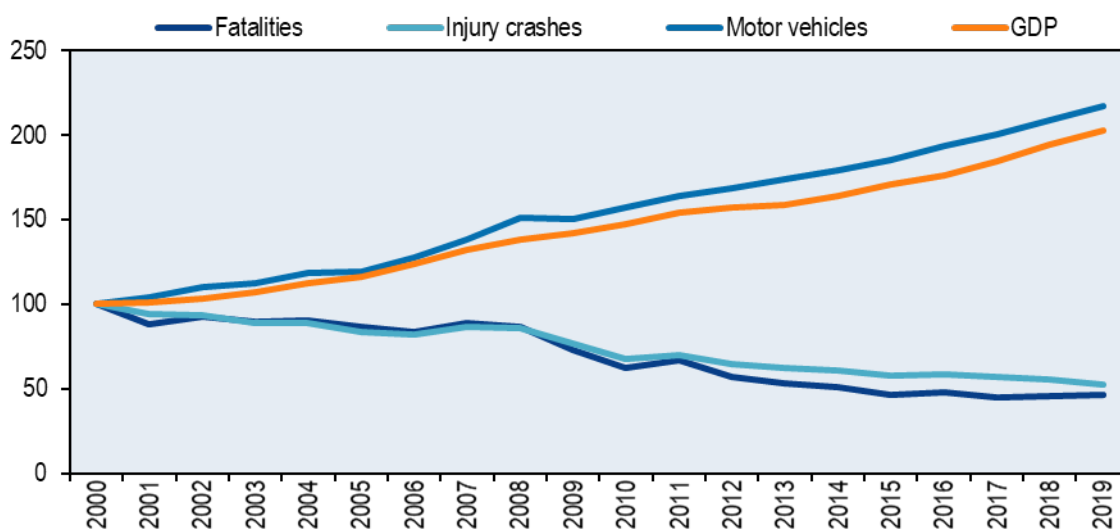
Road network in 2019: 424 564 kilometres (urban roads 16%; rural roads 83%; motorways 0.4%)

Registered motor vehicles in 2019: 31.9 million (cars 76%; goods vehicles 11%; motorcycles 6%; mopeds 4%, buses 0.4%)

Speed limits: 50 km/h on urban roads (60 at night time); 90/100/120 km/h on rural roads; 140 km/h on motorways

Limits on Blood Alcohol Content: 0.2 g/l

Figure 1. Road safety, vehicle stock and GDP trends
Index 2000 = 100



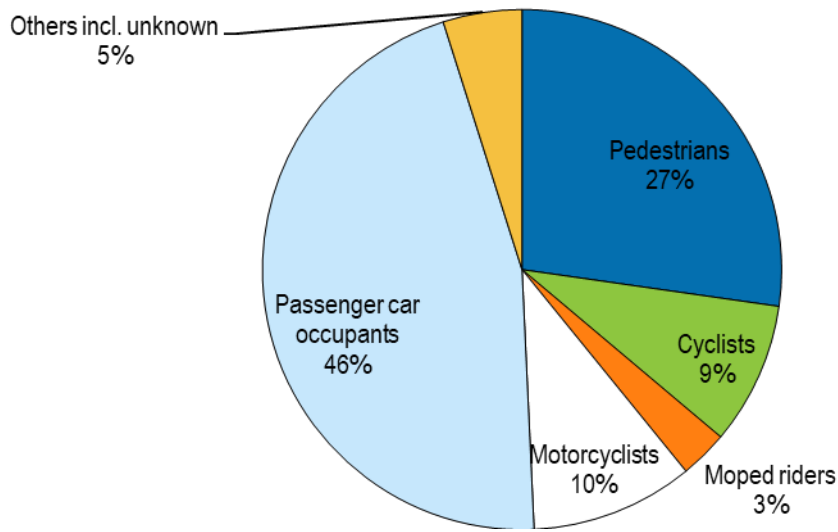
Note: Registered vehicles do not include mopeds.

Data for **fatalities by road user groups** remains largely unchanged. In 2019, occupants of passenger cars accounted for the largest share of road deaths with 46% of the total. They were followed by pedestrians (27%), cyclists (9%) and motorcyclists (10%). Compared to other IRTAD countries, the share of pedestrians killed is relatively high.

In 2019, the number of road deaths increased for all road users, with the exception of cyclists (-9.5%, i.e. 27 fewer cyclists killed) and pedestrians (10 fewer killed). The largest increase in 2019 was registered among motorcyclists with 23.9% more deaths compared to 2018 (from 238 to 295). These were followed by moped riders (14.5% more road deaths in 2019 compared to 2018).

The long-term trend shows that traffic in Poland has become safer for all road user groups with the exception of motorised two-wheelers. Between 2000 and 2019, the number of motorcyclists killed in traffic increased by 66% while the number of moped riders killed increased by 16%. During the same period, the strongest decline was registered among pedestrians with a decrease of 65%. More recently, since 2010 (figure 6), the number of road deaths decreased for all road users with the exception of motorised two-wheelers which increased by 12%. The strongest decreases were achieved for pedestrians (-36%) and car occupants (-28%).

Figure 2. Road fatalities by road user group in percentage of total, 2019



Road deaths by age group in 2019 showed a strong increase in road deaths among people aged 0-14 (+21.4% compared to 2018, from 56 to 68 fatalities). The number of road deaths also slightly increased for the 21-24 age group (+6.4%) and the 25-64 age group (+4.5%). On the contrary, the largest decrease in road deaths was registered among people aged 15-17 with 22% fewer fatalities in 2019 compared to 2018.

Historically, young people represent a high-risk group in road safety. In 2019, the age group at highest risk was the 18-20 with a mortality rate of 14.7 deaths per 100 000 inhabitants in the same age group, more than twice the mortality rate of the general population (6.5). The 21-24 and 75 and above are at next highest risk in traffic with a mortality rate of 12.6 and 12.0.

Figure 3. Road fatality rates by age group, 2010-2019
Deaths per 100 000 population in a given age group

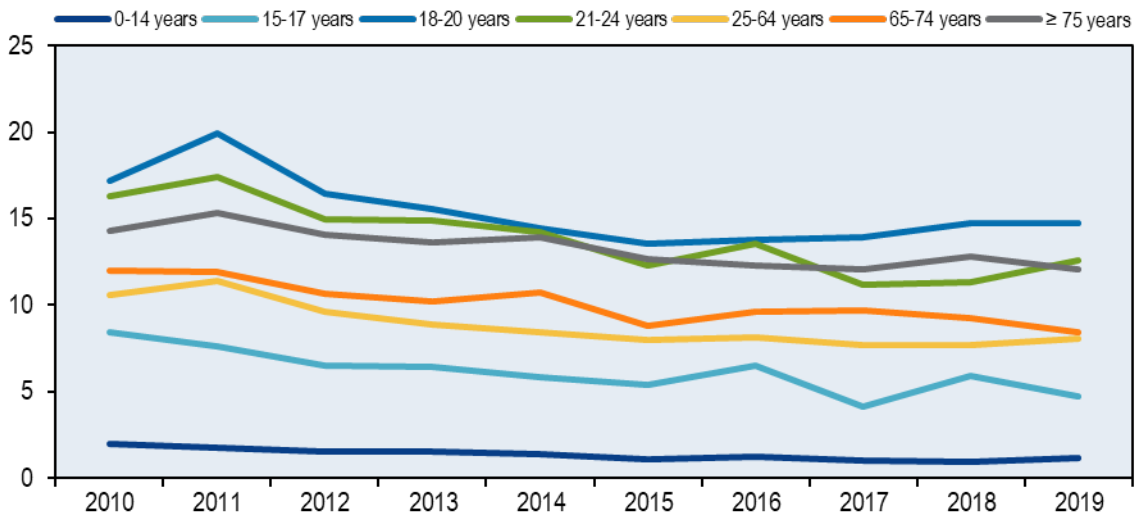
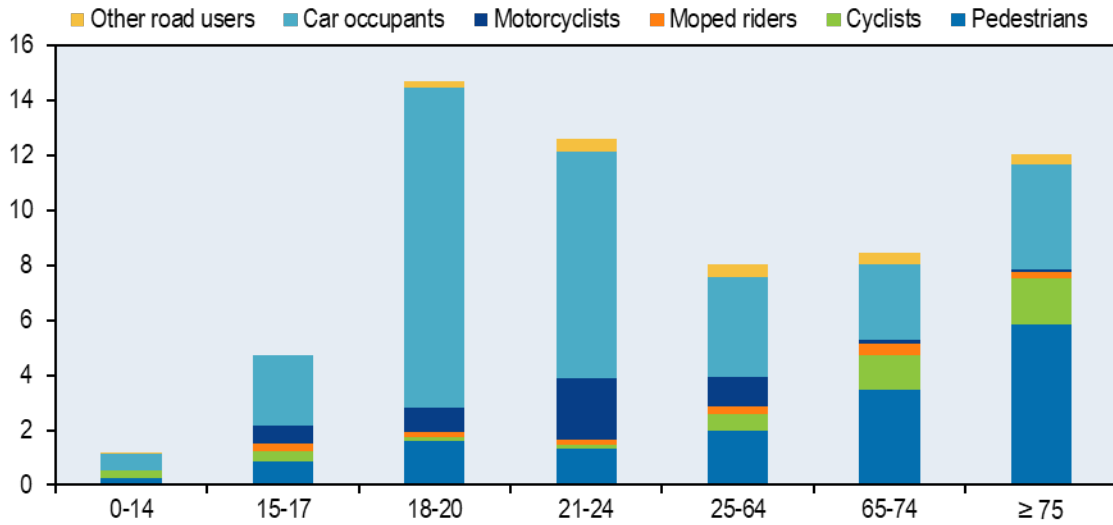


Figure 4. Road fatality rate by age and road user group, 2019
Fatalities per 100 000 population



Analysis of **fatalities by road type** shows that in 2019 rural roads were the deadliest roads in Poland, accounting for 57% of all road deaths.

Since 2010, the number of road deaths decreased by 35.1% on urban roads and by 19.2% on rural roads. On the other hand, road deaths increased by 89% on motorways. This sharp increase is due to the strong expansion of the motorway network, which increased by 96% from 857 kilometres in 2010 to 1 676 kilometres in 2019.

Figure 5. Road fatalities by road type

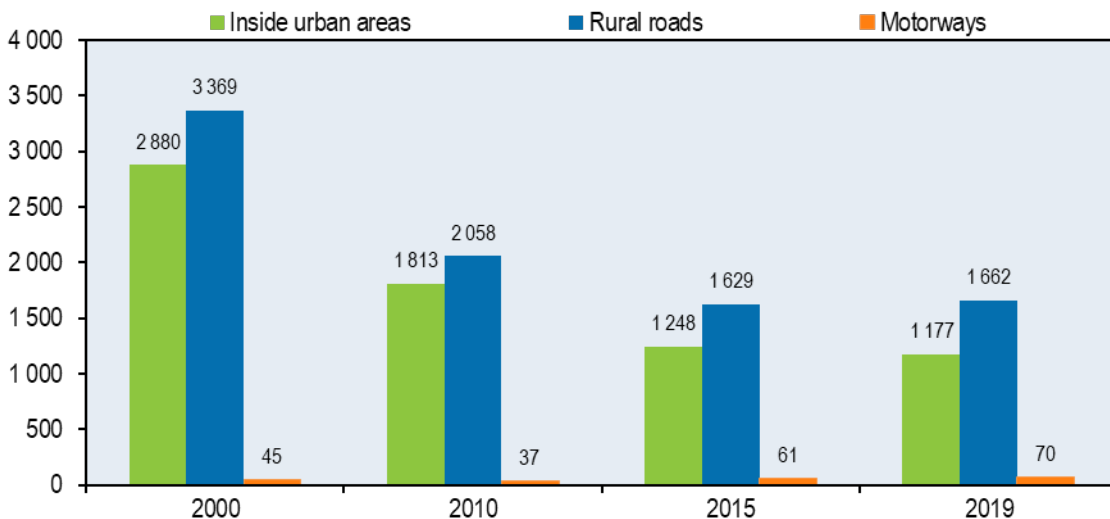
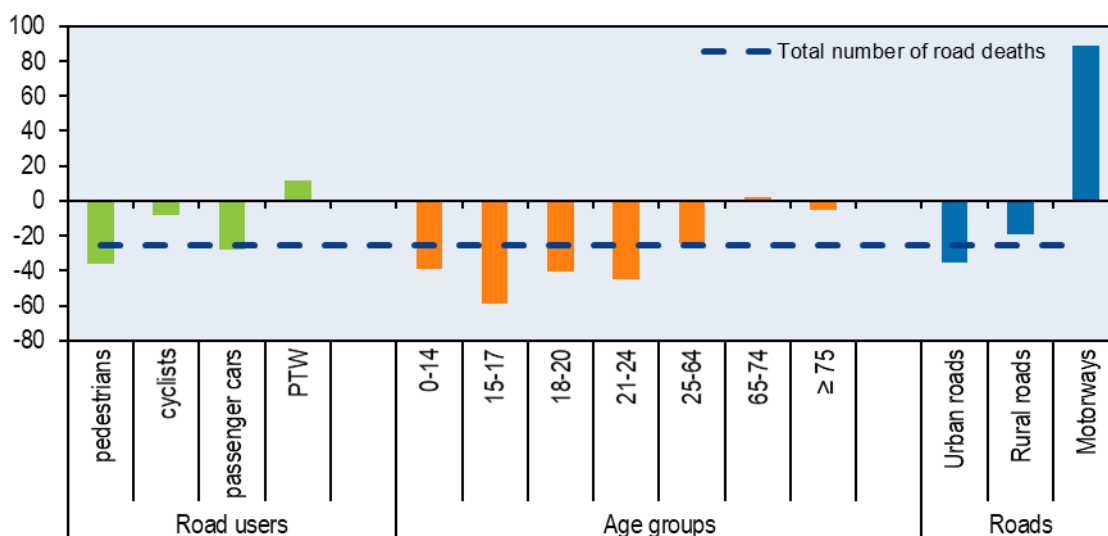


Figure 6. Evolution of road deaths by user category, age group and road type, 2010-2019

Economic costs of road crashes

Costs of traffic crashes are calculated based on the capital approach. Traffic crashes represent a significant cost for society, estimated at around PLN 44.9 billion (around EUR 9.8 billion), or 2.1% of GDP (KRBRD, 2019).

Table 2. Costs of road crashes, 2018

	Unit cost [PLN]	Total [PLN]
Fatalities	2.4 million	6.85 billion
Injured		37.48 billion
Serious injuries	3.31 million	
Slight injuries	48 165	
Property damage costs	26 736	0.29 billion
Total		44.9 billion
Total as % of GDP		2.1%

Behaviour

The behaviour of road users is an important determinant of a country's road safety performance. **Inappropriate speed** in particular is one of the main causes of road crashes. In the last ten years, the number of fatal crashes involving speeding has decreased by 50%. However, speed remains one of the main causes of crashes in Poland and is a contributing factor in 35% of fatalities, based on data from 2019.

Speed enforcement efforts are constantly increasing and new regulations regarding automatic speed enforcement are being introduced into Polish law. Drivers who exceed the speed limit by 50 km/h in a built-up area have their driving licence automatically withdrawn for three months. Poland continues to equip its roadways with automatic speed cameras.

The table below summarises the speed limits in Poland for passenger cars.

Table 3. Passenger car speed limits by road type, 2020

	General speed limit
Urban roads	50 km/h between 5:00 and 23:00 60 km/h between 23:00 and 5:00
Rural roads	90 km/h
2-carriage expressway	120 km/h
Single carriage express roads and dual-carriage roads with at least two lanes in each directions	100 km/h
Motorways	140 km/h

The maximum authorised blood alcohol content (BAC) in Poland is 0.2 g/l for all drivers. Crashes are classified "**alcohol-related**" if one of the crash participants has a BAC of 0.2 g/l or more.

Over the last 10 years, the number of crashes caused by drivers under the influence of alcohol has decreased by 33%. According to police data, in 2019, 9.1% of traffic fatalities were alcohol-related. In 2019, the number of alcohol-related crashes decreased by 2% over 2018.

In Poland, driving under the influence of alcohol and **other psychoactive substances** is forbidden.

According to the European DRUID (Driving under the Influence of Drugs, Alcohol and Medicines) research project, the prevalence of alcohol in the driving population of Poland (1.9%) is lower than the EU average of 3.5%. The research indicated that the prevalence of illegal drugs in the EU is 1.9%, while in Poland it is 0.7%.

The use of hand-held **mobile phones** while driving is forbidden in Poland, while the use of hands-free phones is allowed. According to a national survey undertaken in 2016, around 4% of drivers in passenger cars use hand-held mobile phones.

Seat belt use has been compulsory in front seats since 1983 and rear seats since 1991.

According to the law in force since 2015, a child up to 150 cm in height must be transported in a child seat (age is irrelevant in this case). Children taller than 135 cm and weighing more than 36 kg (the maximum weight permitted by the seats currently on offer) are allowed to travel in the rear seat and must be fastened with seat belts. If only two child seats fit in the rear seat, the regulations allow a third child aged three years or more to be

carried between them. They must be fastened with seat belts. You can also carry a child in a rearward-facing front seat if the passenger airbag is deactivated in the car.

Table 4. Seat belt wearing rates
Percentages

	2014	2017	2019
Front seats			
Driver	93	94	97
Passenger	94	95	98
Urban roads (driver)	92	..	..
Rural roads (driver)	92	..	..
Motorways (driver)	96	..	..
Rear seats			
General	71	79	86
Children (use of child restraint)	89	93	..

Helmet wearing has been compulsory on motorcycles and mopeds since 1997. The helmet wearing rate by riders of powered two-wheelers is nearly 100%.

Helmet use is not compulsory for bicycles.

Road safety management and strategies

There are several **factors of influence on Poland's road safety performance** as captured by the above indicators. Since 1991, when the peak in the number of fatalities was reached, the following legislation and policies have been implemented in Poland:

- compulsory seat belt wearing for all car occupants (1991)
- demerit point system (1998)
- compulsory use of child restraints (1998)
- appointment of the National Road Safety Council (2002)
- 50 km/h speed limit in built-up areas (2004)
- daytime running lights (2007)
- speed enforcement (including automatic speed enforcement) (2011)
- implementation of the EU directive on road safety management (2012)
- changes in the driver education system (2013)
- increased severity of penalties for speeding (2015)

- severe penalties for drunk driving (2015)
- development of the National Road Safety Programme 2013-20.

Responsibility for the organisation of road safety in Poland lies with the National Road Safety Council (NRSC, *Krajowa Rada Bezpieczeństwa Ruchu Drogowego*). It was established on 1 January 2002 under the Act of Road Traffic Law as an auxiliary inter-ministerial body for the Polish Council of Ministers for road safety issues. The NRSC is chaired by the minister responsible for transport. The members of the NRSC are high-level representatives of several ministries and governmental institutions. The executive unit is the NRSC Secretariat, based in the Ministry of Infrastructure. The NRSC establishes targets and co-ordinates the activities of government administrations in the area of road safety.

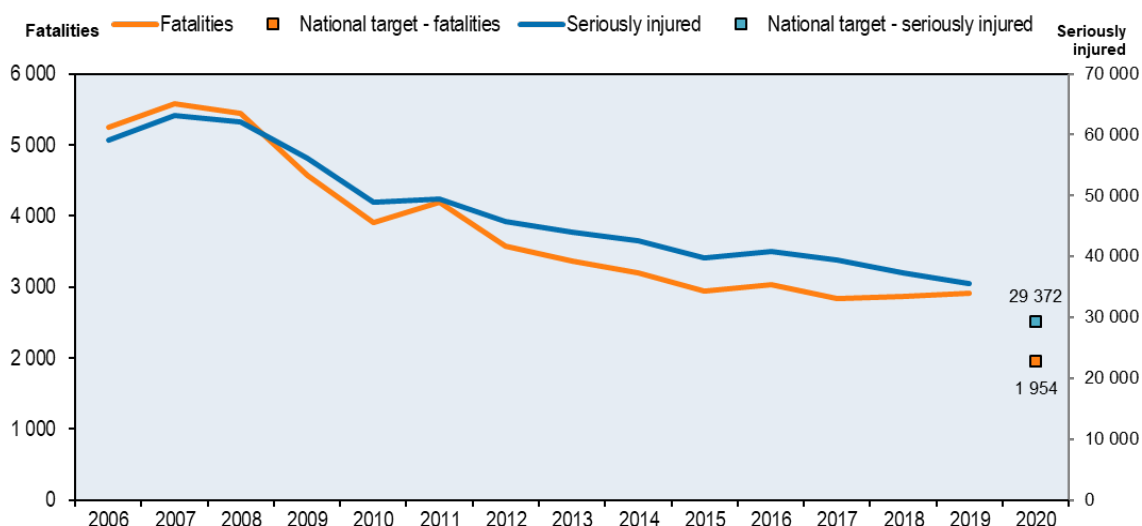
In January 2013, the NRSC adopted a **National Road Safety Programme** for the period 2013-20, developed by the NRSC Secretariat and experts from government bodies. It is based on the Vision Zero approach.

The 2013-20 programme targets include a 50% reduction in road deaths and a 40% reduction in people seriously injured by 2020, in comparison to 2010 levels.

The National Road Safety Council is in charge of monitoring road safety performance.

At the beginning of 2016, a provisional interim report was published, which estimated that Poland was on track to reach its fatality target but not the injury target. Achieving this target would require the adoption and implementation of new and effective measures. Based on the current available data it can be assumed that these targets will be hard to meet until 2020.

Figure 7. Trends in road fatalities and seriously injured toward national target



Measures

- A law has been introduced concerning the creation of road life corridors and the obligation for drivers to follow a “zipper procedure” in order to facilitate and shorten the travel time for services rescuing victims.
- The National Road Safety Council organised training courses for local road authorities on the use of engineering measures to improve the safety of road users.
- The National Road Safety Council launched new awareness campaigns concerning pedestrian safety, senior safety and risky driving behaviours.

Definitions, methodology, data collection

- Road fatality: a person who died immediately or within 30 days of the crash.
- Seriously injured person: a person who sustains a serious disability, an incurable disease or a chronic life threatening disease, a permanent mental disorder, complete or substantial permanent incapacity to work in their current occupation, or permanent or substantial scarring or disfiguration of the body. The definition also includes persons who suffer other injuries that incapacitate them or cause health problems for longer than seven days.

Poland does not yet rate serious injuries as having a score of three or more on the Maximum Abbreviated Injury Scale (MAIS3+).

- Slightly injury person: person who experiences a loss of health at a lesser level than in the case of serious injuries and that continues for less than seven days.
- Injury crash: crash resulting in at least one injured or killed person.

The foundational source of road crash data is the police database, which was set up in 1975 under the responsibility of the police’s Department of Road Traffic.

Information is gathered by police officers according to categories included in the Road Accident Card (such as the description of the crash site, circumstances of the crash, behaviour of participants, type of injuries, etc.). Guidelines and definitions are described in the Head Chief of Police Regulation No. 31 of 22 October 2015 (with the modifications included in Regulation No. 37 of 30 October 2015 and Regulation No. 40 of 18 December 2017).

In 2012, the Motor Transport Institute reviewed the police crash database and compared data from the years 2008-10 with public statistics from national health services and the national statistics office. The result was that the number of people killed in road crashes could be 3-25% higher than official police data. This pilot study showed the need for further investigation.

Since 2014, the Polish Road Safety Observatory has been established at the Motor Transport Institute, which collects, analyses and publicises data on road safety. The IT system of the Observatory has two parts: a data warehouse and an information portal <http://www.obserwatoriumbrd.pl/en/> with an interactive map with public access to some data <http://www.obserwatoriumbrd.pl/app/?lang=en>.

Resources

Recent research

The Motor Transport Institute developed national guidelines for safe cycling which are included in a manual for decision makers, road authorities and road designers.

The Motor Transport Institute developed methodology for speed cameras locations and their assessment.

The Ministry of Infrastructure is currently working on legislation on electric scooters and similar devices and on increasing pedestrian priority at pedestrian crossings and unifying speed limits in built-up areas between daytime and night-time.

Websites

Ministry of Infrastructure: <https://www.gov.pl/web/infrastruktura>

National Road Safety Programme 2013-2020:
<http://www.krbrd.gov.pl/files/file/Programy/KRBRD-Program-P1a-20140422-S2-K3d-EN.pdf>

National Road Safety Council (KRBRD): <http://www.krbrd.gov.pl/>

Motor Transport Institute: <https://www.its.waw.pl/>

Polish Road Safety Observatory: <http://www.obserwatoriumbrd.pl/en/>

References

KRBRD (2019), *Valuation of the costs of accidents and collisions on the road network in Poland at the end of 2018, distinguishing the average socio-economic costs of accidents on the Trans-European Network - Transport*, National Road Safety Council, <http://krbrd.gov.pl/pl/koszty-zdarzen-drogowych.html>

Road safety and traffic data

	1990	2000	2010	2017	2018	2019	2019 % change over			
							2018	2010	2000	1990
Reported safety data										
Fatalities	7 333	6 294	3 908	2 831	2 862	2 909	1.6%	-25.6%	-53.8%	-60.3%
Injury crashes	50 532	57 331	38 832	32 760	31 674	30 288	-4.4%	-22.0%	-47.2%	-40.1%
Deaths per 100,000 population	19.3	16.4	10.2	7.5	7.5	7.7	1.7%	-25.2%	-53.4%	-60.3%
Deaths per 10,000 registered vehicles	8.1	4.5	1.8	1.0	1.0	1.0	-2.2%	-46.2%	-78.7%	-88.3%
Deaths per billion vehicle kilometres	..	..	19.6	11.9	11.7	..	..	..	..	..
Fatalities by road user										
Pedestrians	2 977	2 256	1 236	873	803	793	-1.2%	-35.8%	-64.8%	-73.4%
Cyclists	574	692	280	220	285	258	-9.5%	-7.9%	-62.7%	-55.1%
Moped riders	288	75	83	55	76	87	14.5%	4.8%	16.0%	-69.8%
Motorcyclists	749	178	259	231	238	295	23.9%	13.9%	65.7%	-60.6%
Passenger car occupants	2 237	2 709	1 853	1 295	1 291	1 333	3.3%	-28.1%	-50.8%	-40.4%
Other road users	508	384	197	157	169	143	-15.4%	-27.4%	-62.8%	-71.9%
Fatalities by age group										
0-14 years	471	267	112	56	56	68	21.4%	-39.3%	-74.5%	-85.6%
15-17 years	223	245	122	46	64	50	-21.9%	-59.0%	-79.6%	-77.6%
18-20 years	455	443	280	169	172	167	-2.9%	-40.4%	-62.3%	-63.3%
21-24 years	636	583	392	209	203	216	6.4%	-44.9%	-63.0%	-66.0%
25-64 years	4 493	3 751	2 293	1 674	1 657	1 732	4.5%	-24.5%	-53.8%	-61.5%
65-74 years	..	575	331	345	350	337	-3.7%	1.8%	-41.4%	..
≥ 75 years	..	420	345	328	349	327	-6.3%	-5.2%	-22.1%	..
Fatalities by road type										
Urban roads	4 348	2 880	1 813	1 238	1 251	1 177	-5.9%	-35.1%	-59.1%	-72.9%
Rural roads	2 960	3 369	2 058	1 523	1 559	1 662	6.6%	-19.2%	-50.7%	-43.9%
Motorways	25	45	37	70	52	70	34.6%	89.2%	55.6%	180.0%
Traffic data										
Registered vehicles (thousands)	9 041	14 106	22 115	28 307	29 451	30 614	3.9%	38.4%	117.0%	238.6%
Vehicle kilometres (millions)	..	..	199 303	238 227	244 701	..	..	..	..	..
Registered vehicles per 1,000 population	237.7	368.7	579.4	745.5	775.5	806.2	4.0%	39.1%	118.7%	239.2%

Note: Registered vehicles do not include mopeds.