Chapter 22

Lithuania

*This chapter presents 2015 road safety data for Lithuania along with provisional data from 2016. It looks at trends in traffic and road safety from the years 1990 to 2015 and road user behaviour patterns with a special focus on the ageing population. Sections include data on speed, drink driving, drugs and driving, distracted driving, fatigue and seat belt usage. The chapter reviews Lithuania's road safety strategy and national targets to 2017 and the progress achieved thus far. It also provides details of all recently implemented safety measures and current and ongoing research.**

* All data stem from the Road and Transport Research Institute and IRTAD. For more information please contact m.katkus@ktti.lt.

There were 242 road fatalities reported in Lithuania in 2015, a 9.4% decrease over 2014 and the equivalent of a fatality rate of 8.3 per 100 000. Pedestrians were the prime beneficiaries of this improvement, with a 26% decrease in fatalities in this group over the previous year. However, pedestrians remain among the most vulnerable road user group, accounting for 33% of all fatalities. Provisional data from 2016 indicate a second consecutive year with a marked improvement, recording 188 fatalities, a 22% decrease when compared to 2015.

Road safety data collection

Definitions applied in Lithuania

- Road fatality: Any person killed in a traffic crash within 30 days of the crash (prior to 1995, the limit was 7 days).
- Injured persons: As yet, there is no official definition of slight and serious injuries. The concept of using the Maximum Abbreviated Injury Scale of three or more (MAIS3+) for a serious injury is under discussion. Nevertheless, in 2015 police reported the number of traffic injuries by severity, based on health sector definitions:
  - Seriously injured: persons suffering a road injury entailing an irreversible mutilation of one part of the body or a loss of more than 30% of working capacity.
  - Lightly injured: persons suffering a road injury for more than 10 days, or a loss of working capacity between 5 and 30%.
  - Slightly injured: persons suffering a road injury for less than 10 days or a loss of working capacity inferior to 5%.

Data collection

Traffic police collect and manage most crash data in Lithuania. Hospitals and insurance companies also have data on some crashes.

There is no estimate of under-reporting. According to the police, nearly 100% of injury crash data are collected and recorded in the police database. The data are available to road safety experts for research. Information about the severity of an injury is defined in only 65% of injury crashes.

Road safety experts lack information to help identify the causes of crashes. Information on road user behaviour is also limited, and information on injury type is not systematically recorded.

Most recent safety data

Road crashes in 2016 – provisional data

Based on provisional data, there were 188 persons killed in road traffic in 2016, a decrease of more than 22% compared to 2015. However, the number of injury crashes as well as the number of injured persons both increased by 8% for the same time period.

Pedestrians and car occupants accounted for the greatest share of all fatalities (37% and 44%, respectively).

Road crashes in 2015

In 2015, 3 033 injury crashes were recorded, in which 242 road users were killed. This corresponds to a 9.4% decrease in fatalities compared to 2014, while the number of road crashes decreased by 6.8%.

Pedestrians benefited the most from these improvements with an almost 26% decrease in the number of fatalities. Road fatalities increased for all other road user groups for the same time period.

Trends in traffic and road safety (1990-2016)

Traffic

Between 1990 and 2015, the number of passenger cars was multiplied by 2.4. Unlike most European countries, the motorcycle fleet was more than halved. Before 1990 (when Lithuania was part of the Soviet Union), most people travelled on motorcycles, as for many this was the only affordable mode of individual motorised transport. From 1990 onward, when personal income started to grow, the vehicle market expanded and cars became affordable for many Lithuanian citizens who decided to exchange their motorcycle for a private car.

A new vehicle registration procedure was introduced in July 2014. Vehicles failing to meet the requirements of compulsory civil liability insurance and/or technical inspections were removed from the register. In practice one-third of the vehicles were removed from the register. It is therefore not possible to compare the evolution in the vehicle fleet before and after 2014.

In 2016, traffic volume (expressed in vehicle-kilometres driven) increased by 4.7% compared to 2015.

Road safety

Crashes and casualties

The number of road fatalities peaked in 1991 with 1 267 road deaths. Since then it has been divided by nearly five, while the number of motor vehicles has gradually increased.

Since 1991, road safety can be analysed for the following periods:

- **1992-96:** In 1992, a significant reduction in the number of fatalities was observed, immediately after the fall of the Soviet Union. The following years saw dramatic changes politically, as well as economic austerity. Nevertheless there was a positive impact on road safety, mainly through the introduction of safer European vehicles into the market.
- **1997-2000:** A slight increase was seen in the number of traffic fatalities, which reached a new peak in 1998. The number of casualties then dropped over the next two years as a result of an economic crisis in neighbouring Russia.
- **2000-07:** The economic situation in Lithuania started to improve and brought a rapid increase in traffic volume, which was accompanied by a yearly increase in road traffic fatalities.
- **2008-15:** An important breakthrough was achieved in 2008 with growing awareness among citizens of road safety issues and the leading role of the EU in setting a target to reduce by 50% the number of fatalities between 2001 and 2010, which many countries

achieved. In 2010 Lithuania reached the EU road safety target. The economic downturn in 2008-10 also probably contributed to a reduction in traffic and a decrease in the number of road fatalities.

Having successfully implemented the European target of reducing the number of deaths caused by road accidents by half in the period 2001-2010, since 2011 Lithuania have been working towards the new strategic objective defined in the National Traffic Safety Development Programme for 2011-2017. The main objectives are to rank among the 10 European Union states with the best results and to reduce the mortality rate below 60 fatalities per million inhabitants.

Rates

In 2015, the average mortality rate was of 8.4 road deaths per 100 000 inhabitants, less than a third of the 1990 rate. Yet, it remains much higher than the EU27 average of 5.2 and the national target of less than 6 killed per 100 000 inhabitants by 2017.

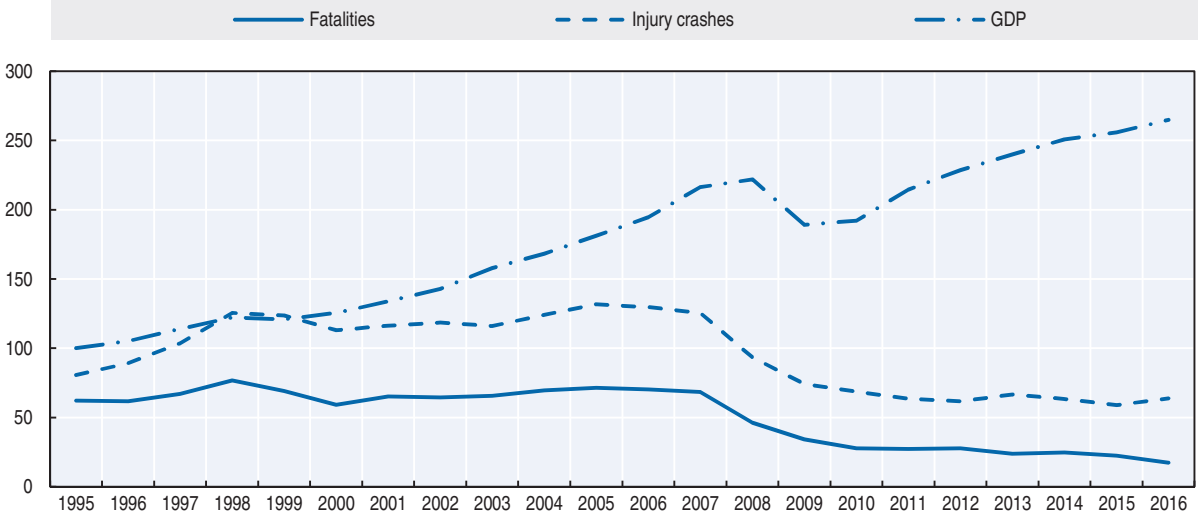
Table 22.1. **Road safety and traffic data**

	1990	2000	2010	2014	2015	*2015 % change from*			
						2014	2010	2000	1990
Reported safety data									
Fatalities	1 081	641	299	267	242	-9.4	-19.1	-62.2	-77.6
Injury crashes	5 135	5 807	3 530	3 255	3 033	-6.8	-14.1	-47.8	-40.9
Deaths per 100 000 inhabitants	29.3	18.3	9.5	9.1	8.4	-8.7	-12.9	-54.6	-71.7
Deaths per 10 000 registered vehicles	12.7	5.0	1.4	1.8	1.6	-12.9	12.0	-68.7	-87.7
Traffic data									
Registered vehicles[1] (thousands)	849	1 286	2 145	1 489	1 549	4.0	-27.8	20.4	82.6
Vehicle-kilometres (millions) [2]				1 085	1111	2.3			
Registered vehicles per 1 000 inhabitants	230	366	683	506	530	4.8	-22.3	44.8	130.8

1. With mopeds.
2. On roads of national significance.

StatLink http://dx.doi.org/10.1787/888933580631

Figure 22.1. **Road safety, traffic and GDP trends index 1995 = 100**



Source: World Bank (2017) (GDP; constant prices).

Road safety by user group

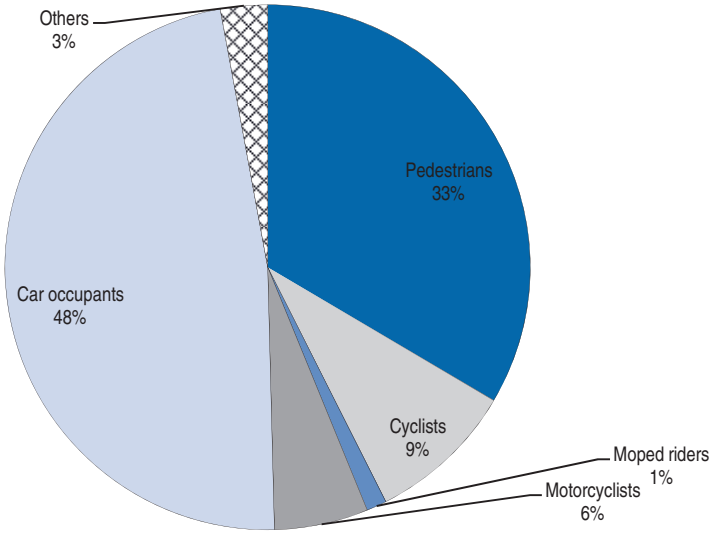
Car occupants and pedestrians are the main victims of traffic crashes. Pedestrians in particular represent one-third (33%) % of casualties, while car occupants account for 48% of the all fatalities.

Moped riders and motorcyclists account for only 1% and 6% of the all fatalities, reflecting their modal share in overall traffic.

Table 22.2. **Road fatalities by road user group**

	2010	2013	2014	2015	*2015 % change from*		
					2014	*2013*	*2010*
Pedestrians	108	98	109	81	-25.7	-17.3	-25.0
Cyclists	23	18	19	22	15.8	22.2	-4.3
Moped riders	3	4	1	3		-25.0	0.0
Motorcyclists	15	16	14	14	0.0	-12.5	-6.7
Car occupants	130	103	109	115	5.5	11.7	-11.5
Others	20	19	15	7	-53.3	-63.2	-65.0
Total	***299***	***258***	***267***	***242***	***-9.4***	***-6.2***	***-19.1***

Figure 22.2. **Road fatalities by road user group in percentage of total, 2015**



Road safety by age group

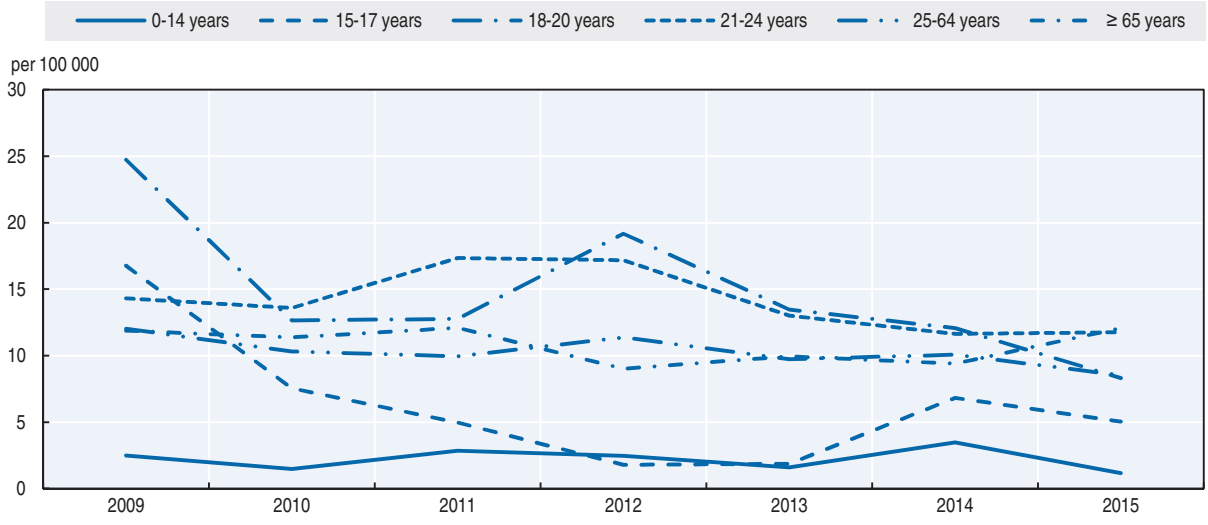
In 2015, all age groups benefitted from improvements in road safety, except the 65+ age group, for which the number of road deaths increased by nearly 35% from 49 in 2014 to 66 in 2015.

Young people (21-24) as well as those aged 65 years and above are the age groups most at risk with a fatality rate of 12 per 100 000 inhabitants. Older people are particularly vulnerable as pedestrians.

Table 22.3. **Road fatalities by age group**

Age	2010	2013	2014	2015	*2015 % change from*		
					2014	2013	2010
0-14	7	7	15	5	-66.7	-28.6	-28.6
15-17	10	2	7	5	-28.6	150.0	-50.0
18-20	18	17	14	9	-35.7	-47.1	-50.0
21-24	25	22	20	20	0.0	-9.1	-20.0
25-64	172	155	159	134	-15.7	-13.5	-22.1
65-74	34	29	18	29	61.1	0,0	-14,7
75-84	26	19	18	27	50.0	42,1	3,8
≥ 85	3	6	13	10	-23.1	66,7	233,3
Total	***299***	***258***	***267***	***242***	***-9.4***	***-6.2***	***-19.1***

Figure 22.3. **Road fatality rates by age group**
Deaths per 100 000 inhabitants in a given age group, 2009-15



Box 22.1. **Road safety for an ageing population**

In Lithuania, the driving licence has to be renewed every ten years. To renew their licence, drivers (including motorcyclists and moped riders) pass a medical examination. After the age of 56, the medical examination must be taken every five years for drivers aged 56-69; every two years for drivers aged 70-79 and every year for those aged 80 and above.

Table 22.4. **Road fatalities among senior citizens**

	65-74	*75-84*	*85+*
	2015	2015	2015
Pedestrians	13	14	7
Cyclists	6	1	1
Moped riders	0	0	0
Motorcyclists	0	0	0
Car occupants	10	12	2
Total	***29***	***27***	***10***

Box 22.1. **Road safety for an ageing population** *(cont.)*

Figure 22.4. **Road fatality rates in the 65+ age groups**
Deaths per 100 000 inhabitants in a given age group, 2013-15

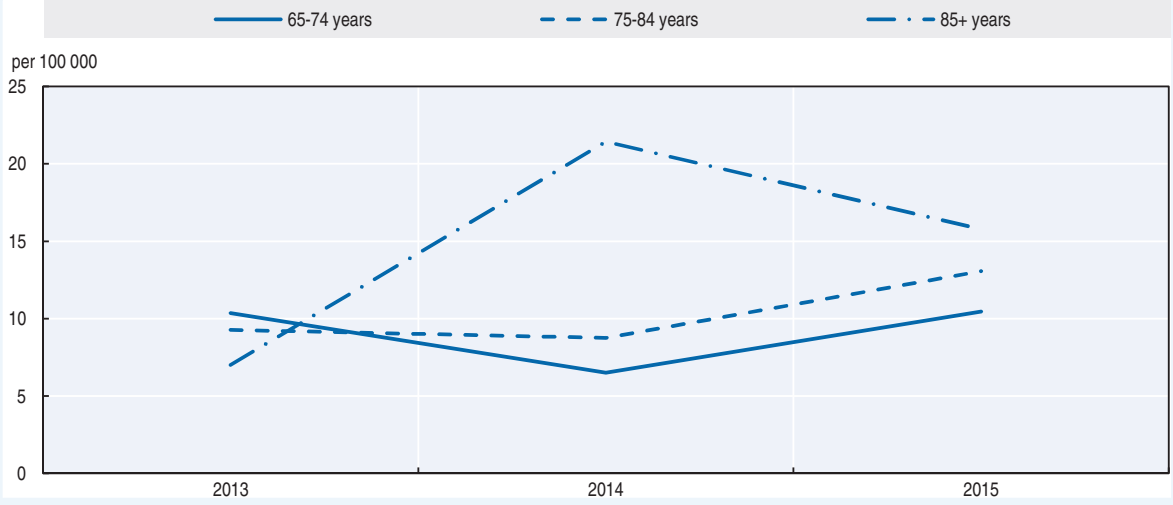
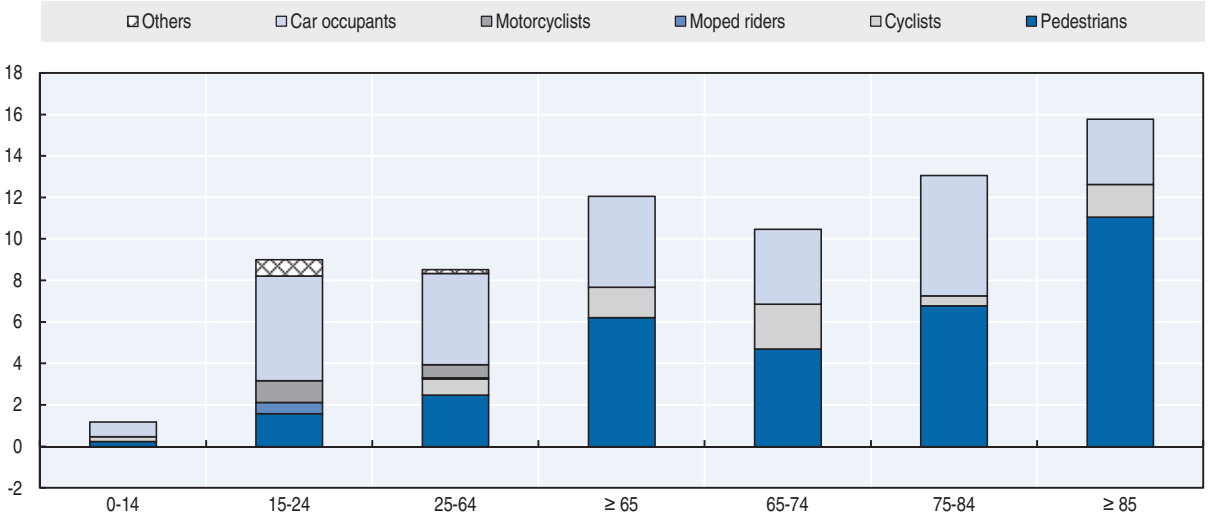


Figure 22.5. **Road fatality rate by age and road user group**
Fatalities per 100 000 inhabitants, 2015

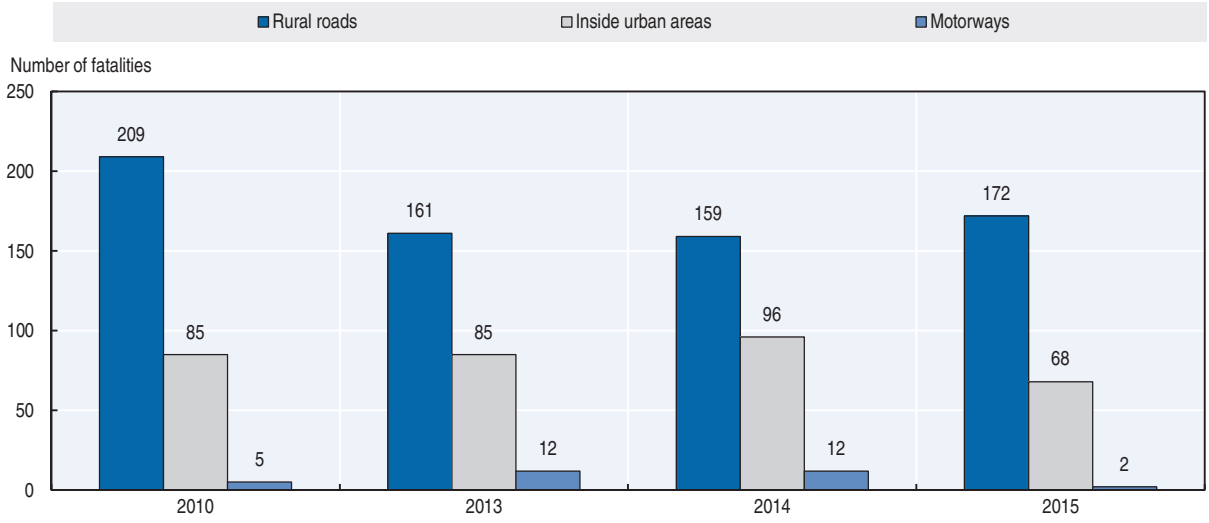


Road safety by road type

In 2015, most road crashes (71%) occurred on rural roads. These crashes are also more severe on these roads, as speeds are higher and infrastructure for cyclists and pedestrians less developed.

The most significant improvements achieved in 2015 were on motorways and urban roads, while fatalities on rural roads increased by more than 8%.

Figure 22.6. **Road fatalities by road type**



Economic costs of traffic crashes

Traffic crashes represent a significant cost for society, estimated in 2015 at around EUR 346 million, i.e. 1% of GDP. Costs are estimated using a "capital approach" method.

Table 22.5. **Costs of road crashes, 2015**

Cost (EUR)	Unit cost	Total
Fatalities		EUR 147.4 million
Injured persons		EUR 198.8 million
Property damage costs		*Not included*
Total (EUR)		EUR 346.2 million
Total as % of GDP (at constant prices)		1%

Recent trends in road user behaviour

Speed

According to police data, inappropriate speed is the main cause of traffic crashes in Lithuania. Speeding at 30 km/h above the limit is considered a serious violation, incurring severe sanctions, including immediate licence withdrawal for novice drivers.

Observations in 2015 indicate that 16% to 26% of all drivers exceed the speed limit by more than 10 km/h on different types of state roads. In 2014 research showed that 33% of drivers exceed the speed limit by more than 10 km/h in urban areas. The table below summarises the main speed limits in Lithuania.

Table 22.6. **Passenger car speed limits by road type, 2017**

	General speed limit	Comments
Urban roads	50 km/h	-
Rural roads	90 km/h (70 km/h on gravel roads)	70 km/h for novice drivers (driving experience of less than 24 months)
Motorways	120 or 130 km/h (110 km/h in winter)	90 km/h for novice drivers

Drink driving

The general maximum authorised blood alcohol content (BAC) in Lithuania is 0.4 g/l and since 1 May 2015, 0.0 g/l for novice drivers (less than 24 months driving experience), professional drivers, moped and motorcycle drivers.

Drivers that tested positive for being under the influence of alcohol have their licence withdrawn for 12-36 months and are fined EUR 150-900. The most dangerous violations (and repeat drink-driving offences) can be punished by an administrative arrest for 10-30 days. In 2015, drink driving contributed to 8% of road crashes.

Between 2004 and 2015, the number of alcohol-related crashes was halved. However, the share of crashes due to drink driving has remained stable at about 10%.

Important legislation changes entered into force in 2016. Since 1 January 2016, it is prohibited to sell alcohol in petrol stations. Since 1 April 2016, driving with a BAC of 1.5 g/l and above is considered as a crime and subject to a sanction of up to one year imprisonment.

Drugs and driving

Drivers that test positive for driving under the influence of drugs are subject to a fine of EUR 300-900 and licence withdrawal of 12-36 months. They can also be subject to 10-30 days administrative arrest.

In 2015, it was reported that 2 injury road crashes involved drivers under the influence of drugs.

Seat belts and helmets

Seat belt wearing is compulsory in all seats. Children below 135 cm in height must use dedicated child restraints.

According to police data, in 2015, 37% of killed car occupants and 33% of killed drivers were not wearing a seat belt when the crash occurred.

Based on a 2016 survey on roads of national significance, 98% of car drivers and 97% of front seat passengers were wearing a seatbelt, while only 26% of rear seat passengers did so.

Table 22.7. **Seat belt wearing rate by car occupancy on roads of national significance**

%

	2014	2016
Front seat		
General (driver + passengers)	96*	98*
Driver	97*	98*
Passenger	95*	97*
Rear seats		
General	33*	26*
Children (use of child restraint)	n.a	n.a

All riders of powered two-wheelers are required to wear a helmet. Cyclists under 18 years old must wear a helmet.

Distraction

It is not permitted to drive using a hand-held mobile phone. Hands-free mobile phones may be operated. There is no estimate of the number of fatal crashes due to the use of mobile phones.

National road safety strategies and targets

Organisation of road safety

The main stakeholder is the Ministry of Transport and Communications of the Republic of Lithuania, supported by the Lithuanian Road Administration. Police and municipalities are also agencies responsible for road safety.

Nominated by the government, the State Traffic Safety Commission comprises representatives of state and municipal administration bodies and NGOs. The commission makes recommendations on road safety policy.

Road safety strategy for 2011-20

Following the encouraging results in the past decade, Lithuania has developed a new National Traffic Safety Development Programme for 2011-17, based on the long-term vision that no one should be killed or seriously injured on Lithuanian roads.

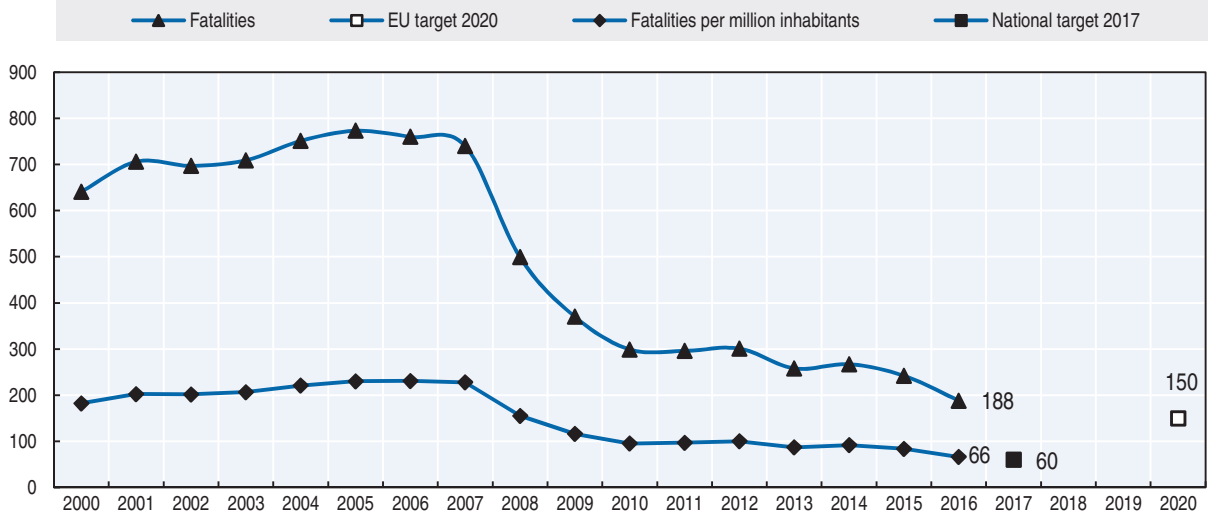
Road safety targets

Lithuania successfully achieved the European target of reducing the number of traffic deaths by 50% in the period 2001-10. The number of fatalities was reduced by 58%, from 706 to 299.

The target of the 2011-17 programme is to reach a mortality rate of fewer than six killed per 100 000 inhabitants (or 60 per million inhabitants), in order to be ranked among the best performing countries in the European Union. To achieve this objective, it is planned to improve:

- road user behaviour
- vehicle safety

Figure 22.7. **Trends in road fatalities towards national target**



- infrastructure
- the rescue service quality
- the crash data collection system.

Recent safety measures (2014-17)

Road safety management

Recent road safety management measures focused on the following areas:

- implementation of the EU Directive 2008/96/EC on road infrastructure safety management
- implementation of road network safety management (high risk site ranking, black spot management); road safety inspections; road safety audits and road safety impact assessment.

Drink driving

- Since 1st January 2016, it is forbidden to sell alcohol in petrol stations.
- Since 1 May 2015, there is a 0.0 g/l maximum authorised BAC level for novice drivers (less than 24 months driving experience), professional drivers, moped and motorcycle drivers.

Cyclist safety

- Since 2014, cyclists are required to wear a bright coloured and reflective vest during the day (it was already compulsory at night), or alternatively to cycle with lights on.

Infrastructure

- In 2014, a national method to manage city black spots was approved and a pilot project was implemented for the five largest cities. Every year since then Kaunas (the second largest city in Lithuania) has used this method to identify and treat black spots. See: *www.kaunas.lt/transportas/juoduju-demiu-zemelapis/* (accessed 26 June 2017).

Vehicles

- In 2014, registration of modified right-hand drive vehicles was prohibited.
- Since 2014, "End of life" vehicles cannot be registered and are not allowed to circulate.

References

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