



October 2019

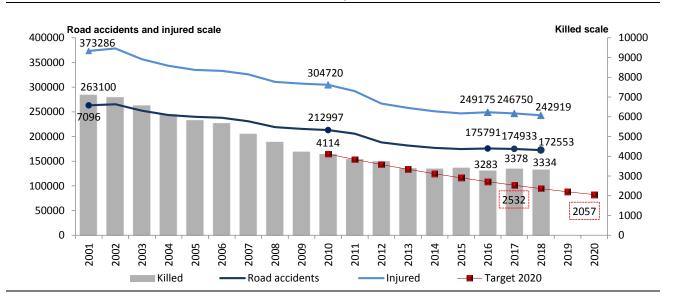
Update of the text disseminated on July 25th 2019

# **ROAD ACCIDENTS**

### Year 2018

- In 2018, 172,553 road accidents occurred in Italy resulting in death or injury, down comparing with 2017 (-1.4%), with 3,334 deaths (within 30 days) and 242,919 injured (-1.6%), (Chart 1).
- The number of deaths decreases in respect to 2017 (-44 units, -1.3%), after the increase detected in the previous year.
- Among the victims, the number of pedestrians (612, +2%), moped users (from 92 victims up to 108) and trucks occupants (189, +16%) increased. The motorcyclists (687, -6.5%), cyclists (219, -13.8%) and passenger cars users (1,423, -2.8%) showed a decrease.
- Although, in total, the amount of deaths decrease, the number of casualties on motorways (including ring roads and motorways junctions) increased from 296 in 2017 to 330 in 2018; +11.5% due to the accident occurred in Genoa on August 14, 2018 on the Morandi Bridge of the A10 Genoa-Savona-Ventimiglia, which involved many vehicles and caused 43 victims. The number of fatal accidents on motorways remains, however, stable, rising from 253 to 258 cases, between 2017 and 2018. On rural and built-up-area roads a decrease of victims is recorded (1,603 deaths; -0.7 % and 1,401 deaths; -4.5%).
- In the European Union, in 2018, the number of road accidents victims decreased slightly (-1% compared to 2017): about 25,000 against 25,321 in 2017. In the comparison between 2018 and 2010 (benchmark year for road safety), the deceased decreased by 21% in Europe and 19% in Italy. Every million inhabitants, in 2018 there are 49.1 deaths due to road accidents in the EU28 and 55.2 in Italy, which rises from 18th to 16th in the European ranking.
- Distraction, failure to observe precedence rules and high speed (40.7% in total) were among the most frequent misbehaviors. The most sanctioned violations of the Road Code were, in fact, failure to comply with the signs, failures to use safety devices and the use of mobile phone driving and speed excess
- The year 2018 the new registrations increased by 1% compared to the previous year, the car fleet was 1.3%. Motorway journeys, over about 6,000 kilometers of road net, shows show a substantial stability (+ 0.4%), with an increase of 2.3% compared to 2017 only for heavy goods vehicles, and with over 84 billion km traveled.

CHART 1. ROAD ACCIDENTS RESULTING IN DEATH OR INJURY, KILLED AND INURED. Years 2001-2018. Absolute values



Istat, since 2017 spreads final data of the previous year on road accidents in July, on the eve of the periods of summer exodus and the highest traffic intensity on the roads. The timely and early release of data aims to support decisions and to assure a better level of road safety and sensitization to responsible driving behaviour

This result was achieved thanks to an ongoing effort to improve the quality and timeliness in the dissemination of information, which involves ACI (Automobile Club d'Italia) as a partner, the Road Police, Carabinieri (special military body), Local Police, Statistical offices and Monitoring Centres of Municipalities, Provinces, Autonomous Provinces and Regions which agreed to a Memorandum of Understanding for the national coordination of activities related to the statistical road accident survey.

#### Victims on Italian roads comes back to a reduction

In 2018 there were 172,553 road accidents in Italy resulting in deaths or injuries<sup>1</sup>; the victims were 3,334 and the injured 242,919 (Table 1). Compared to the previous year, road accidents deaths decreased (-1.3%), after the increase recorded in 2017; road accidents and injuries also decreased (respectively -1.4% and -1.6%). The road accidents mortality rate pass from 55.8 to 55.2 deaths per million inhabitants between 2017 and 2018. Compared to 2010, road victims number declined by 19.0%.

TABLE 1. ROAD ACCIDENTS, KILLED AND INJURED PERSONS. Years 2001, 2010-2018. Absolute values, deaths per million and percentage change

YEARS	Road accidents (a)	Killed	Injured	Deaths per million inhabitants (b)	U	% change number of deaths in respect to 2001 (c)	% change number of deaths in respect to 2010 (c)
2001	263,100	7,096	373,286	124.5	-	-	-
2010	212,997	4,114	304,720	69.4	-2.9	-42.0	-
2011	205,638	3,860	292,019	65.0	-6.2	-45.6	-6.2
2012	188,228	3,753	266,864	63.0	-2.8	-47.1	-8.8
2013	181,660	3,401	258,093	56.2	-9.4	-52.1	-17.3
2014	177,031	3,381	251,147	55.6	-0.6	-52.4	-17.8
2015	174,539	3,428	246,920	56.3	+1.4	-51.7	-16.7
2016	175,791	3,283	249,175	54.2	-4.2	-53.7	-20.2
2017	174,933	3,378	246,750	55.8	+2.9	-52.4	-17.9
2018	172,553	3,334	242.919	55,2	-1,3	-53,0	-19,0

(a) Road accident resulting in deaths (within the 30th day) or injuries is defined as the event that involves at least a vehicle circulating on the national road net. (b) Deaths out of resident population (per 1,000,000). (c) The percentage changes of the number of deaths is calculated as:  $((M^t/M^{t-1/o})^{2010}, 2010) - 1)*100$ 

The road accidents phenomenon is linked to a lot of factors, including mobility, road journeys, number of vehicles and fuel consumption.

Data on motorway kilometers driven in the year, over six thousand km of road network, showed an substantial stability of the mileage consistency (+0,4%) compared to 2017, also in this case higher for heavy vehicles (+2.3%). On the basis of an estimate of the Ministry of Infrastructure and Transport, the total mileage in Italy were equal to 530,092 million of vehicles-km, with a decrease of 2.2%, in respect of the previous year.

In 2018, the new vehicle registrations increased by 1%, while, on average, the car fleet grew by 1.3%, in respect of the previous year; with over 645 passenger cars and 845 per 1,000 inhabitants (value increased), Italy confirmed to be the European country with the highest motorization rate.

The age of the vehicle fleet continues to increase: 21.6% of passengers cars belong to the Euro 0, Euro1 or Euro2 classes, they have over 18 years of age and they are therefore also devoid of the simplest active safety devices.

Gasoline sales were substantially stable (-0.7%), LPG sales decreased, while diesel sales increased by 2.5%; these dynamics reflect the trend of motorway journeys<sup>2</sup>.

<sup>&</sup>lt;sup>1</sup> For data referred to 2018, the survey was based on a Memorandum of Understanding signed with some regions and provinces for the collection and monitoring data activities. Signatory Regions, in 2018, are: Emilia-Romagna, Friuli-Venezia Giulia, Lombardia, Piemonte, Puglia, Toscana, Veneto, Liguria, Calabria, Lazio and the autonomous provinces Bolzano-Bozen, Trento.

<sup>&</sup>lt;sup>2</sup> ACI, Aiscat; Unione Petrolifera Italiana; Ministero dello Sviluppo Economico; Istat.

In addition, the recorded increase in active mobility is very relevant. The data from "Audimob" Observatory of Isfort (Institute of training and research for transport) detected, in the last two years, a strong growth in walking, bicycle use, demand for public transport and shared mobility. Although the car, in fact, remains the most used means of travel, alternative modes of travel are also chosen.

The aging of the population is also reflected in the drivers of vehicles: comparing the data of the active licenses at the beginning of 2018 with those of about 10 years before, a marked increase in the number of drivers with more than 65 years of age emerges. For this last age class, the percentage of the total active licenses goes from 13% to 21%. On the other hand, the number of licensed young people decreases, especially up to 24 years of age.

Using the Ministry of Infrastructure and Transport parameters for 2010<sup>3</sup>, revalued in 2017 values, based on the Istat consumer price index, the total social cost for road accidents resulting in death or injury, was estimated equal to around 18.6 billion euros in 2018, 1.1% of the national GDP. At constant 2010 values, the calculation of the social costs of road accidents is 17.1 billion euros for 2018, while it was 21.4 billion euros in 2010.

### Slight decrease in number of victims for the European Union in 2018

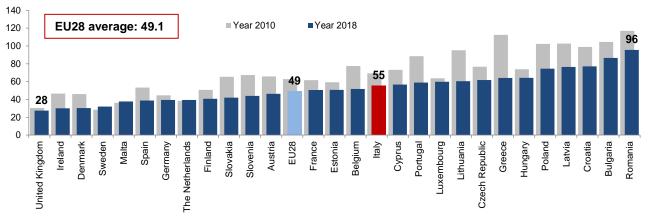
In 2018 the number of victims records a slight decrease in the EU28, in respect of previous year. In total, about 25.000, in 2018, people died in road accidents, versus 31,595 in 2010, with a drop of 21%. The percentage decline was lower in Italy (-19.0%). Between 2018 and 2017, the number of victims decreased by 1% in the European Union and by 1.3% in Italy.

The road mortality rate (deaths per million inhabitants), indicator used for a comparative analysis, in 2018, was equal to 49.1 in EU28 and 55.2 in Italy (62.8 and 69.4 respectively in 2010). With this result, our country went down to 16<sup>th</sup> position in a European ranking, it was 18<sup>th</sup> in 2017.

Similarly in 2017, reduction at European level did not affect all countries. In 2018, road accidents victims were still rising in eleven countries, some of which are more recent members of the European Union, such as Estonia (+ 39.6%), Czech Republic (+ 13.7%), Latvia (+8, 8%), Poland (+ 1.1%), Hungary (+ 0.6%), but also some other countries with more tradition for road safety, such as Sweden (+ 28.1%), The Netherlands (+ 10.6%), Germany (+ 2.8%), Finland (+ 0.9%), Portugal (+ 0.7%) (Table 2 and Chart 2).

Between 2010 and 2018, the yearly percentage change in the number of road victims was 2.8% in the EU28 and 2.6% in Italy, however, lower than the estimated value in order to reach the 2020 target set. In the period 2018-2020, the number of victims in the European Union and Italy, by now, should decrease by about 20% every year within 2020.

## CHART 2. ROAD MORTALITY RATE IN THE COUNTRIES OF THE EUROPEAN UNION (EU28) (a). Years 2010 and 2018



(a) Road mortality rate (deaths in road accidents per million inhabitants)

Source: European Transport Safety Council, Annual PIN report. Year 2019 - https://etsc.eu/13th-annual-road-safety-performance-index-pin-report/

<sup>&</sup>lt;sup>3</sup> Ministry of Infrastructure and Transport - Evaluation Study of Social Costs of road accidents. Year 2010.

TABLE 2. KILLED PERSONS IN ROAD ACCIDENTS IN THE COUNTRIES OF THE EUROPEAN UNION (EU28).

Years 2010, 2017 and 2018. Absolute values, percentage change and road mortality rate per 1,000,000 inhabitants (a)

Eliza Countries	Al	bsolute values		Percentage	change (b)	Road mortality rate		
EU28 Countries	2010	2017	2018*	2018/2017*	2018/2010*	2010	2018*	
Austria*	552	414	409	-1.2	-25.9	65.9	46.4	
Belgium*	841	615	590	-4.1	-29.8	77.6	51.8	
Bulgaria	776	682	611	-10.4	-21.3	104.6	86.7	
Croatia	426	331	317	-4.2	-25.6	99.0	77.2	
Cyprus	60	53	49	-7.5	-18.3	73.2	56.7	
Czech Republic	802	577	656	13.7	-18.2	76.7	61.8	
Denmark*	255	175	175	0.0	-31.4	46.1	30.3	
Estonia	79	48	67	39.6	-15.2	59.3	50.8	
Finland*	272	223	225	0.9	-17.3	50.8	40.8	
France*	3,992	3,448	3,259	-5.5	-18.4	61.7	50.3	
Germany*	3,651	3,177	3,265	2.8	-10.6	44.6	39.4	
Greece*	1,258	731	690	-5.6	-45.2	112.5	64.2	
Hungary	740	625	629	0.6	-15.0	73.9	64.3	
Ireland*	212	156	146	-6.4	-31.1	46.6	30.1	
Italy	4,114	3,378	3,334	-1.3	-19.0	69.4	55.2	
Latvia	218	136	148	8.8	-32.1	102.8	76.5	
Lithuania	299	192	170	-11.5	-43.1	95.2	60.5	
Luxembourg	32	25	36	44.0	12.5	63.7	59.8	
Malta	15	19	18	-5.3	20.0	36.2	37.8	
Poland	3,907	2,831	2,862	1.1	-26.7	102.4	74.5	
Portugal	937	602	606	0.7	-35.3	88.6	58.9	
Romania	2,377	1,951	1,867	-4.3	-21.5	117.1	95.6	
Slovakia	353	276	229	-17.0	-35.1	65.5	42.1	
Slovenia	138	104	91	-12.5	-34.1	67.4	44.0	
Spain*	2,478	1,830	1,812	-1.0	-26.9	53.3	38.8	
Sweden*	266	253	324	28.1	21.8	28.5	32.0	
The Netherlands	640	613	678	10.6	5.9	38.6	39.5	
United Kingdom*	1,905	1,856	1,825	-1.7	-4.2	30.5	27.5	
EU28	31,595	25,321	25,088	-1.0	-20.6	62.8	49.1	

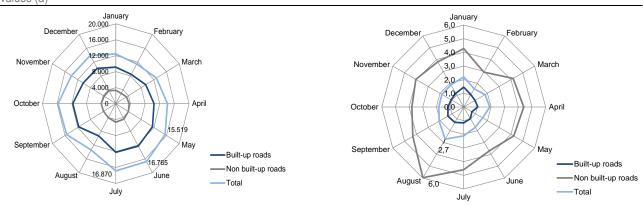
<sup>\*</sup> Preliminary estimate 2018: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Spain, Sweden, United Kingdom

(a) Source: European Transport Safety Council, Annual PIN report. Year 2019 - - <a href="https://etsc.eu/13th-annual-road-safety-performance-index-pin-report/">https://etsc.eu/13th-annual-road-safety-performance-index-pin-report/</a> - European Commission CARE (Community Data Base on Road Accidents) - Brussels 4/4/2019 <a href="https://europa.eu/rapid/press-release\_MEMO-19-1990\_en.htm">https://europa.eu/rapid/press-release\_MEMO-19-1990\_en.htm</a>

## **Tables and charts collection:**

CHART 3. ROAD ACCIDENTS RESULTING IN DEATH OR INURY BY MONTH AND ROAD TYPE. Year 2018. Absolute values (a)

CHART 4. MORTALITY INDEX BY MONTH AND ROAD TYPE. Year 2018. (Deaths/Road accidents per 100) (a)



<sup>(</sup>b) The percentage changes of the number of deaths is calculated as:  $((M^{2018}/M^{2017 \text{ or } 2010})-1)*100.$ 

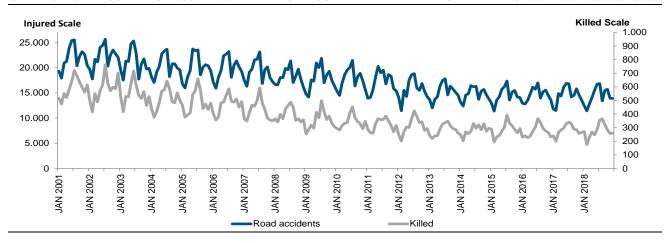


CHART 6. ROAD ACCIDENTS BY WEATHER CONDITIONS AND ROAD TYPE. Year 2018. Percentage values (a)

CHART 7. MORTALITY BY WEATHER CONDITIONS AND HOUR OF THE DAY. Year 2018. (Deaths/Road accidents per 100) (a)

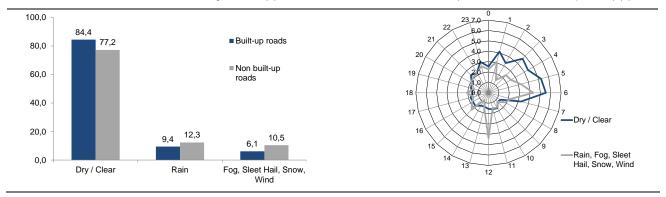
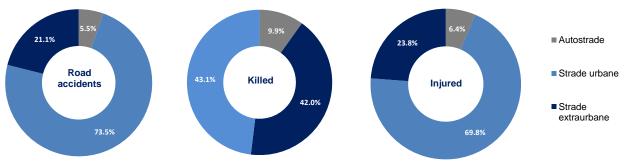


TABLE 4. ROAD ACCIDENTS RESULTING IN DEATH OR INJURY, KILLED AND INJURED BY ROAD TYPE. Years 2018, 2017 and 2016. Absolute values and percentage changes 2018/2017

ROAD CATEGORY	Road accidents 2018	Road accidents 2017	Road accidents 2016	Killed 2018	Killed 2017	Killed 2016	Injured 2018	Injured 2017	Injured 2016	% Change accidents 2018/2017	killed	injured
Built up roads	126,744	130,461	131,107	1,401	1,467	1,463	169,607	174,612	176,423	-2.8	-4.5	-2.9
Motorways	9,437	9,395	9,360	330	296	274	15,545	15,844	15,790	+0.4	+11.5	-1.9
Non built up roads (a)	36,372	35,077	35,324	1,603	1,615	1,546	57,767	56,294	56,962	3.7	-0.7	+2.6
Total	172,553	174,933	175,791	3,334	3,378	3,283	242,919	246,750	249,175	-1.4	-1.3	-1.6

<sup>(</sup>a) Included rural or not built up roads called: Statali, Regionali and Provinciali, Comunali out of urban area.

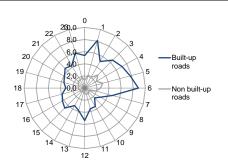
CHART 8. ROAD ACCIDENTS RESULTING IN DEATH OR INJURY, KILLED AND INJURED BY ROAD TYPE (a). Year 2018 percentage values

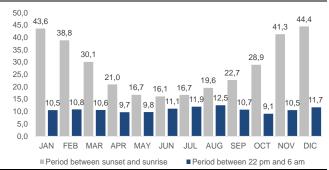


<sup>(</sup>a) Included rural or not built up roads called: Statali, Regionali and Provinciali, Comunali out of urban area.

# CHART 9. MORTALITY INDEX BY TIME AND ROAD CLASS. Year 2018, percentage values

# CHART 10. ROAD ACCIDENTS BY MONTH AND PERIOD IN THE DAY. Year 2018, percentage values (a)

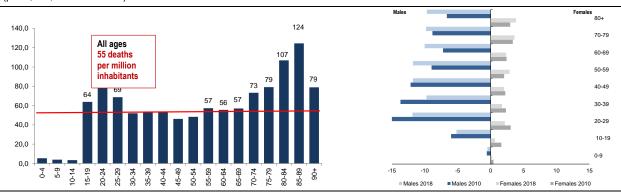




(a) Included rural or not built up roads called: Statali, Regionali and Provinciali, Comunali out of urban area.

CHART 11. ROAD MORTALITY RATE BY AGE CLASS. Year 2018 (per 1,000,000 inhabitants)

CHART 12. KILLED IN ROAD ACCIDENTS, AGE PYRAMID BY AGE CLASS. Year 2018. Percentage values



AGE		Killed		Injured				
CLASSES (a)	Males	Females	Total	Males	Females	Total		
0 - 4	8	5	13	1,361	1,178	2,539		
5 - 9	8	3	11	1,864	1,578	3,442		
10 -14	8	2	10	2,729	2,196	4,925		
15 -19	159	19	178	12,363	6,696	19,059		
20 -24	197	38	235	16,714	9,355	26,069		
25 -29	185	31	216	14,823	8,665	23,488		
30 - 34	142	29	171	12,277	7,309	19,586		
35 - 39	171	26	197	11,793	7,048	18,841		
40 - 44	201	29	230	12,539	7,566	20,105		
45 - 49	180	37	217	12,804	7,899	20,703		
50 -54	187	45	232	12,122	7,455	19,577		
55 -59	194	48	242	9,848	5,978	15,826		
60 -64	165	38	203	7,386	4,285	11,671		
65 -69	158	37	195	5,291	3,278	8,569		
70 - 74	165	58	223	4,552	3,108	7,660		
75 - 79	151	58	209	3,881	2,529	6,410		
80 - 84	155	63	218	2,871	1,781	4,652		
85 - 89	115	45	160	1,387	789	2,176		
90 +	41	15	56	420	223	643		
Unknown	84	34	118	3,779	3,199	6,978		
Total	2.674	660	3,334	150.804	92,115	242.919		

The age class variable, also includes the "unknown or not indicated" mode. For each accident, in fact, also the occupants of other vehicles involved over the third is counted too. For these individuals, of which we only know the number and the outcome, demographic characteristics, including the age, are not detected

CHART 13. KILLED IN ROAD ACCIDENTS BY GENDER AND ROAD USER TYPE. Year 2018. Absolute values, mortality and harmfulness index (a)

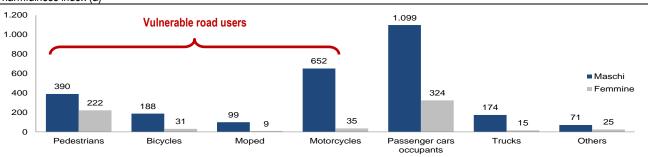


CHART 14. KILLED IN ROAD ACCIDENTS BY MAIN ROAD USER CHART 15. KILLED IN ROAD ACCIDENTS BY MAIN ROAD TYPE. Years 2001- 2018. Absolute values

USER TYPE. Percentage changes 2018/2017, 2018/2010 e 2018/2001

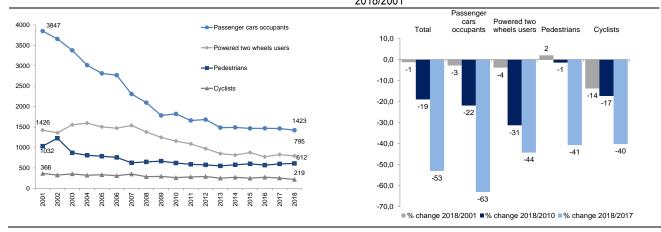


TABLE 7. KILLED IN ROAD ACCIDENTS IN ITALIAN REGIONS (a). Years 2010 and 2018. Absolute values, percentage changes, road mortality rate per 100,000 inhabitants

nortainty rate per recipes inne		ed (absolute v	alues)	%changes	Mortality rate	Mortality rate	
REGIONS	2010	2010 2017 2018		<b>2018/2010</b> (b) (a)	<b>2010</b> (b)	<b>2018</b> (b)	
Piemonte	327	279	251	-23.2	7.5	5.7	
Valle d'Aosta/Vallée d'Aoste	11	8	12	+9.1	8.7	9.5	
Lombardia	565	423	483	-14.5	5.9	4.8	
Bolzano/Bozen	30	30	33	10.0	6.0	6.2	
Trento	29	29	30	+3.4	5.6	5.6	
Veneto	396	301	311	-21.5	8.2	6.3	
Friuli-Venezia Giulia	103	69	77	-25.2	8.4	6.3	
Liguria	84	87	124	+47.6	5.3	8.0	
Emilia-Romagna	401	378	316	-21.2	9.3	7.1	
Toscana	306	269	239	-21.9	8.4	6.4	
Umbria	79	48	48	-39.2	9.0	5.4	
Marche	109	96	87	-20.2	7.1	5.7	
Lazio	450	356	338	-24.9	8.2	5.7	
Abruzzo	79	69	76	-3.8	6.0	5.8	
Molise	28	27	15	-46.4	8.9	4.9	
Campania	254	242	206	-18.9	4.4	3.5	
Puglia	292	236	201	-31.2	7.2	5.0	
Basilicata	48	33	45	-6.3	8.3	8.0	
Calabria	138	100	127	-8.0	7.0	6.5	
Sicilia	279	208	210	-24.7	5.6	4.2	
Sardegna	106	90	105	-0.9	6.5	6.4	
Italy	4,114	3,378	3,334	-19.0	6.9	5.5	

<sup>(</sup>a) Percentage change: ((M2018/M2010)-1)\*100 b)The number of deaths per 100,000 inhabitants is calculated by the ratio between the total deaths in the region and the average resident population by the year 2016 (Source Istat)

CHART 16. ROAD ACCIDENTS RESULTING IN DEATH OR INJURY AND KILLED IN THE MAIN MUNICIPALITIES IN ITALY (IN TOTAL). Years 2001-2018. Absolute values (a)

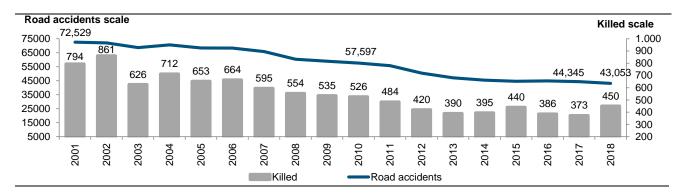


TABLE 6. ROAD ACCIDENTS RESULTING IN DEATH OR INJURY AND KILLED BY ROAD CATEGORY IN LARGE MUNICIPALITIES IN ITALY. Years 2017 and 2016 (a). Absolute values, road mortality rate per 100,000 inhabitants, percentage change 2017/2010

		Built up ro	ads		N	lot built up r	oads (b)		Road	Road	% Change
MAIN CITIES	Road accidents 2018	Road accidents 2017	Killed 2018	Killed 2017	Road accidents 2018	Road accidents 2017	Killed 2018	Killed 2017	mortality rate Year 2018 (per 100,000)	mortality rate Year 2017 (per 100,000)	killed (total) 2018/2010 (d)
Torino	2,925	3,037	32	37	72	42	1	1	3.8	4.3	+13.8
Milano	8,189	8,255	43	45	334	306	6	8	3.6	3.9	-15.5
Verona	1,232	1,180	8	5	126	133	4	1	4.7	2.3	-55.6
Venezia	470	471	3	5	187	178	3	3	2.3	3.1	-45.5
Trieste	816	831	6	8	87	75	1	2	3.4	4.9	-36.4
Genova	3,911	4,045	22	22	243	234	46	1	11.7	4.0	+112.5
Bologna	1,808	1,743	19	12	189	221	6	3	6.4	3.9	-10.7
Firenze	2,445	2,552	13	10	53	38	-	-	3.4	2.6	-48.0
Roma	10,559	11,398	113	97	1,436	1,488	35	32	5.0	4.5	-18.7
Napoli	2,102	2,180	25	22	196	194	7	3	3.3	2.6	-8.6
Bari	1,442	1,370	14	6	167	202	1	1	4.7	2.2	+50.0
Palermo	1,985	2,110	20	26	59	59		1	3.0	4.0	-48.7
Messina	706	694	6	4	113	139	1	1	3.0	2.1	-56.3
Catania	1,153	1,109	14	11	80	61	1	6	4.8	5.4	-34.8
Total	39,743	40,975	338	310	3,342	3,370	112	63	4.6	3.8	-14.4

<sup>(</sup>a) Included rural or not built up roads called: Statali, Regionali and Provinciali, Comunali out of urban area and motorways.

<sup>(</sup>b) Percentage change:  $((M^{2018}/M^{2010})-1)*100$ ; the symbol "-" means "no changes".

#### Glossary:

**Bus:** passenger-carrying vehicle, most commonly used for public transport, having more than 16 seats for passengers.

**Deaths:** the number of people, involved in road accidents, who die immediately or within 30 days after the event occurred. This definition was adopted on 01st January 1999, while in the past (up until 31st December 1998) deaths were considered to include only deaths within seven days of the accident.

Goods vehicle: Motor vehicle used only for the transport of goods.

Injured: the road user was seriously or slightly injured (but not killed within 30 days) in the road accident.

**Moped:** two or three wheeled vehicle equipped with internal combustion engine, with size less than 50 cc and maximum speed that does not exceed 45 km/h (28mph).

**Motorcycle:** two or three wheeled motor vehicle, with engine size up to 125 cc, or maximum speed exceeding 45km/h (28 mph) or with engine size more than 125 cc.

**Passenger car:** motor vehicle with 3 or 4 wheels, mainly used to transport people, seating for no more than 8 occupants. Motor vehicles with these characteristics used as taxis as well as motor caravans are also included.

Pedal cycle: vehicle with at least 2 wheels, without engine. In some cases it can also use electric power.

**Pedestrian:** person on foot; person pushing or holding bicycle, Person who uses a wheel chair ,a pram or a pushchair, leading or herding an animal, riding a toy cycle on the footway, person on roller skates, skateboard or skis. Does not include persons in the act of boarding or alighting from a vehicle.

**Percentage change:** the percentage change is calculated by means the difference between data at **t** time and data **t-1** (or t-x) time, divided by data at **t-1**(or t-x) time, per 100.

**Public motor vehicle registry (PRA):** the registry holding all public deeds relating to the transfer of property and rights of ownership, in addition to the records of loans and mortgages on all motor vehicles registered in Italy.

**Road accident:** the 1968 Vienna Convention defines a road accident as an event occurring on the roads or squares open to traffic involving standing or moving vehicles and which results in injury to people. For this reason, if the accident only involves damage to objects, it is excluded from the statistics. This definition therefore reserves attention exclusively for reported accidents involving injury to people.

**Road accidents harmfulness index:** the ratio of the number of injuries caused by road accidents and the number of collisions, per 100 accidents.

**Road accidents mortality index:** the ratio of the number of fatalities caused by road accidents and the number of collisions, per 100 accidents.

**Road accidents seriousness index:** the ratio of the number of fatalities caused by road accidents and the total number of deaths and injuries as a result of accidents, per 100 accidents.

**Road tractor** road motor vehicle designed, exclusively or primarily, to haul other road vehicles which are not power-driven (mainly semi-trailers).

Rural or non-built up roads: outside urban area, no motorway

**Serious injuries:** the serious injuries are identified by MAIS classification (Maximum Abbreviated Injury Scale). The severity level is measured by a 6-level scale. Serious injuries have a score of 3 or higher (MAIS3+).

Two wheel motor vehicle: motor vehicle moving on two wheels. Includes mopeds and motorcycles but not bicycles.

Urban or built up roads: inside urban area, no motorway.

#### Methodological note

#### Data flow and definitions

The survey on road accidents resulting in death (within 30 day) or injury, carried out by the Italian National Institute of Statistics (Istat), with the cooperation of ACI (Automobile Club of Italy) and other local organisations, is an exhaustive and monthly based data collection (National Statistical Programme - PSN – 00142 code).

The survey collects all road accidents involving at least a vehicle, circulating on the national road net, resulting in death or injury and documented by a Police authority.

The detection unit is the single road accident resulting in death or injury; all information is referred to the period when the accident occurred.

As regards the data flow, a flexible model was adopted by Istat, through the subscription of a Memorandum of understanding or special agreements signed with regions (NUTS2 level) and provinces (NUTS3 level), in order to facilitate the local authority information needs and to improve the timeliness and quality of data collected.

#### Main information collected:

- · Date, time and location of the accident
- Type of road
- · Road surface
- Signals
- · Weather conditions
- Type of accident (collision, investment, etc.)
- · Type of vehicles involved
- · Consequences of the accident to people
- · Causes of the accident

#### **Timeliness and dissemination**

The figures for every year **t-1** are disseminated in July of the year **t**, approximately five months after the collection deadline.

#### **European Union law of reference:**

Reference: COUNCIL DECISION of 30 November 1993 on the creation of a Community database on the road accidents Decision n. 704 of 1993

### Link to database and websites:

- Noi Italia: http://noi-italia.istat.it/
- DWH I.stat: <a href="http://dati.istat.it/">http://dati.istat.it/</a> (Health Statistics/Road Accidents)
- Time series: http://seriestoriche.istat.it/
- CARE Community database on road accidents resulting in death or injury DG-MOVE European Commission <a href="http://ec.europa.eu/transport/road\_safety/specialist/statistics/index\_en.htm">http://ec.europa.eu/transport/road\_safety/specialist/statistics/index\_en.htm</a>