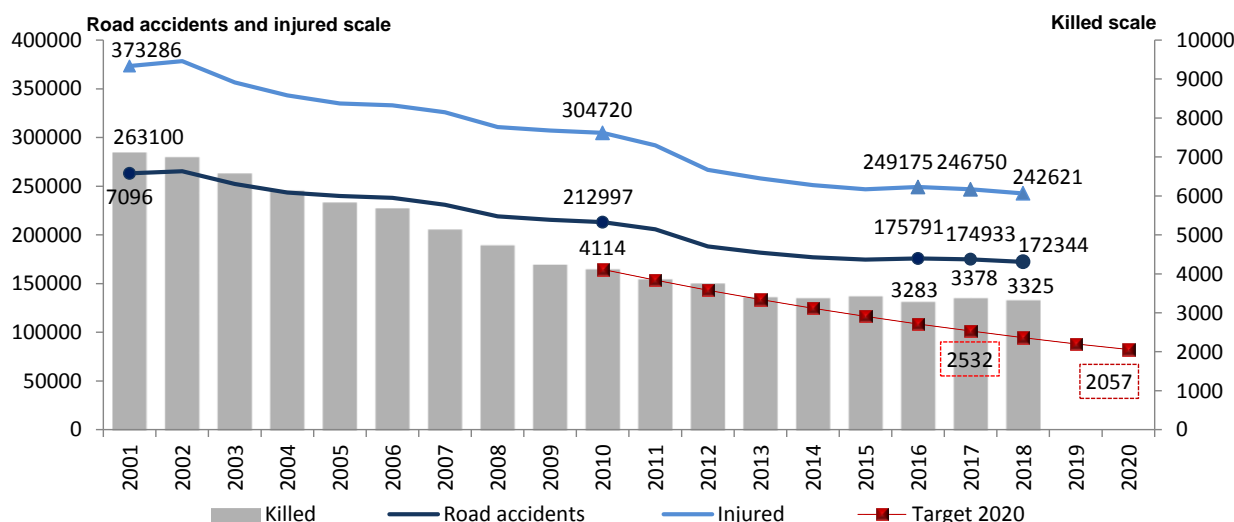


# ROAD ACCIDENTS

## Year 2018

- In 2018, 172,344 road accidents occurred in Italy resulting in death or injury, down comparing with 2017 (-1.5%), with 3,325 deaths (within 30 days) and 242,621 injured (-1.7%), (Chart 1).
- The number of deaths decreases in respect to 2017 (-53 units, -1.6%), after the increase detected in the previous year.
- Among the victims, the number of pedestrians (609, +1.5%), moped users (from 92 victims up to 108) and trucks occupants (188, +15.3%) increased. The motorcyclists (685, -6.8%), cyclists (219, - 13.8%) and passenger cars users (1.420, - 3.0%) showed a decrease.
- Although, in total, the amount of deaths decreased, the number of casualties on motorways (including ring roads and motorways junctions) increased - from 296 in 2017 to 327 in 2018; 10,5% - 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 255 cases, between 2017 and 2018. On rural and built-up-area roads a decrease of victims is recorded (1,596 deaths; -1.2 % and 1,402 deaths; -4.4%).
- In the European Union, the number of road accidents victims decreased slightly in 2018 (-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 19.2% in Italy. Every million inhabitants, in 2018 there were 49.1 deaths due to road accidents in the Eu28 and 55.0 in Italy, which rose from 18th to 16th in the European ranking.
- Distraction, failure to observe precedence rules and high speed (40.8% in total) were among the most frequent misbehaviors. The most sanctioned violations of the Road Code were, in fact, failures to comply with the signs, failures to use safety devices and the use of mobile phone driving and speed excess.
- 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 a substantial stability (+ 0.4%), with an increase of 2.3% compared to 2017 only for heavy goods vehicles, with over 84 billion km travelled.

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



Since 2017 Istat disseminates 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 ensure 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 came back to a reduction

In 2018 there were 172,344 road accidents in Italy resulting in deaths or injuries<sup>1</sup>; the victims were 3,325 and the injured 242,621 (Table 1). Compared to the previous year, road accidents deaths decreased (-1.6%), after the increase recorded in 2017; road accidents and injuries also decreased (respectively -1.5% and -1.7%). The road accident mortality rate passed from 55.8 to 55.0 deaths per million inhabitants between 2017 and 2018. Compared to 2010, road victims number declined by 19.2%.

**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)	% change number of deaths in respect to the previous year (c)	% 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
<b>2018</b>	<b>172,344</b>	<b>3,325</b>	<b>242,621</b>	<b>55,0</b>	<b>-1,6</b>	<b>-53,1</b>	<b>-19,2</b>

(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:  $((M^t / M^{t-1} \circ 2001 \circ 2010) - 1) * 100$

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 a 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 passenger cars belong to the Euro 0, Euro1 or Euro2 classes, they had over 18 years of age and they were 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>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>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 was 17.1 billion euros in 2018, while it was 21.4 billion euros in 2010.

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

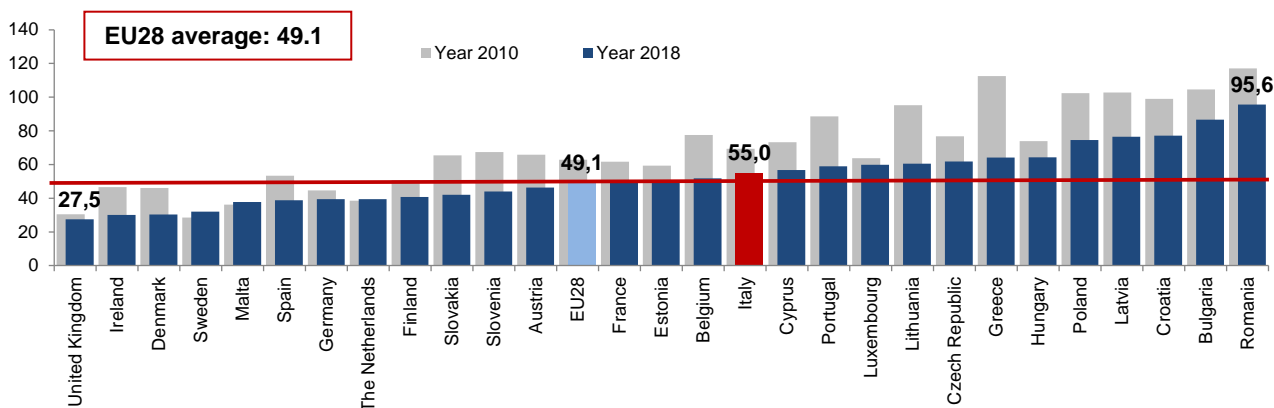
In 2018 the number of victims recorded a slight decrease in the Eu28, in respect of previous year. In total, about 25.000, in 2018, people died in road accidents, versus 31,595 in 2010, with a drop of 21%. The percentage decline was lower in Italy (-19.2%). Between 2018 and 2017, the number of victims decreased by 1% in the European Union and by 1.6% 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 55,0 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>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)

EU28 Countries	Absolute values			Percentage change (b)		Road mortality rate	
	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	3.325	-1,6	-19,2	69,4	55,0
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
<b>EU28</b>	<b>31.595</b>	<b>25.321</b>	<b>25.079</b>	<b>-1,0</b>	<b>-20,6</b>	<b>62,8</b>	<b>49,1</b>

\* 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 - - <https://etsc.eu/13th-annual-road-safety-performance-index-pin-report/> - European Commission CARE (Community Data Base on Road Accidents) - Brussels 4/4/2019 [http://europa.eu/rapid/press-release MEMO-19-1990 en.htm](http://europa.eu/rapid/press-release_MEMO-19-1990_en.htm)

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

## Tables and charts collection

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

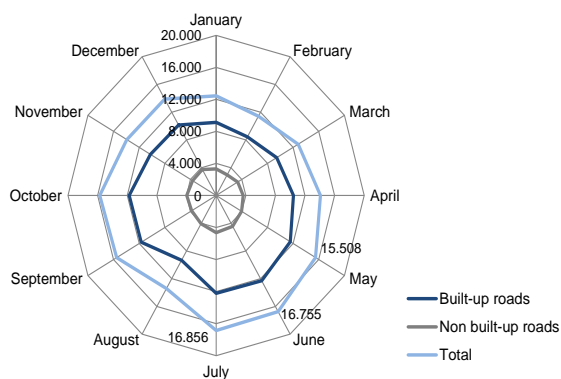


CHART 4. MORTALITY INDEX BY MONTH AND ROAD TYPE. Year 2018. (Deaths/Road accidents per 100) (a)

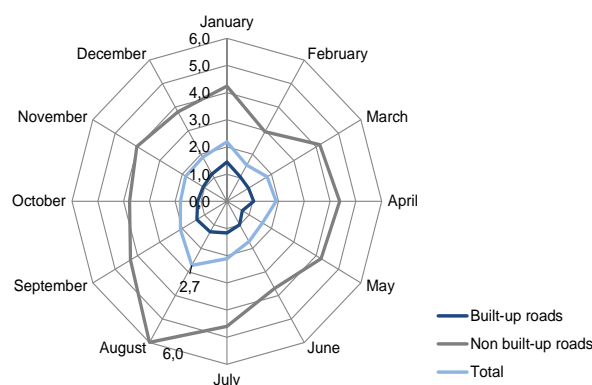


CHART 5. ROAD ACCIDENTS RESULTING IN DEATH OR INJURY AND KILLED BY MONTH. YEARS 2001-2018. Absolute values

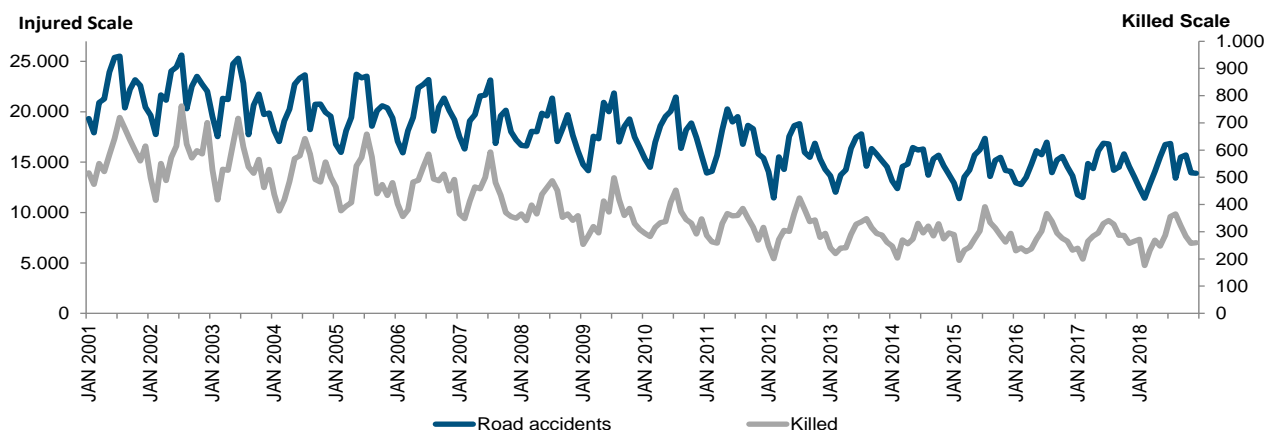


CHART 6. ROAD ACCIDENTS BY WEATHER CONDITIONS AND ROAD TYPE. Year 2018. Percentage values (a)

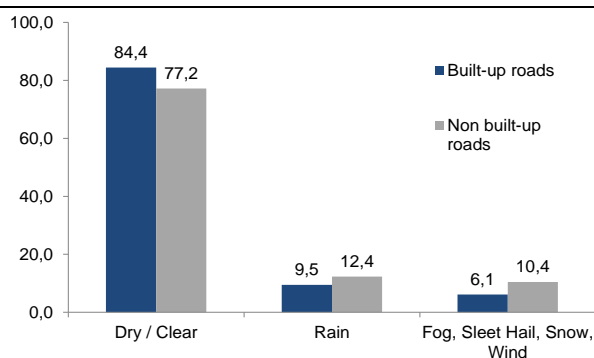


CHART 7. MORTALITY BY WEATHER CONDITIONS AND HOUR OF THE DAY. Year 2018. (Deaths/Road accidents per 100) (a)

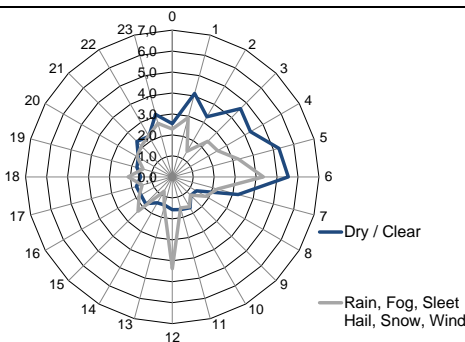
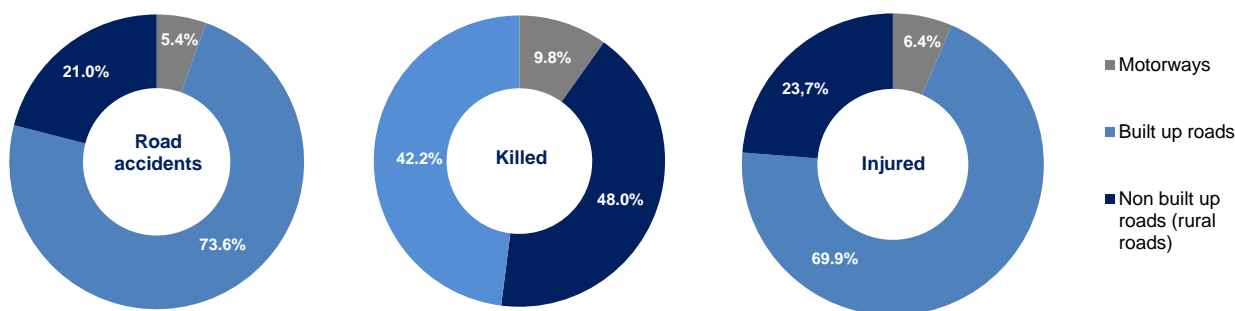


TABLE 4. ROAD ACCIDENTS RESULTING IN DEATH OR INJURY, KILLED AND INJURED BY ROAD TYPE. Years 2018, 2017 and 2016. Absolute values and percentage changes 2018/2017

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	% Change killed 2018/2017	% Change injured 2018/2017
Built up roads	126,701	130,461	131,107	1,402	1,467	1,463	169,573	174,612	176,423	-2.9	-4.4	-2.9
Motorways	9,372	9,395	9,360	327	296	274	15,440	15,844	15,790	-0.2	+10.5	-2.5
Non built up roads (a)	36,271	35,077	35,324	1,596	1,615	1,546	57,608	56,294	56,962	+3.4	-1.2	+2.3
<b>Total</b>	<b>172,344</b>	<b>174,933</b>	<b>175,791</b>	<b>3,325</b>	<b>3,378</b>	<b>3,283</b>	<b>242,621</b>	<b>246,750</b>	<b>249,175</b>	<b>-1.5</b>	<b>-1.6</b>	<b>-1.7</b>

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

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



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

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

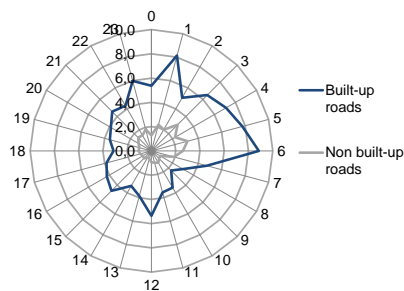
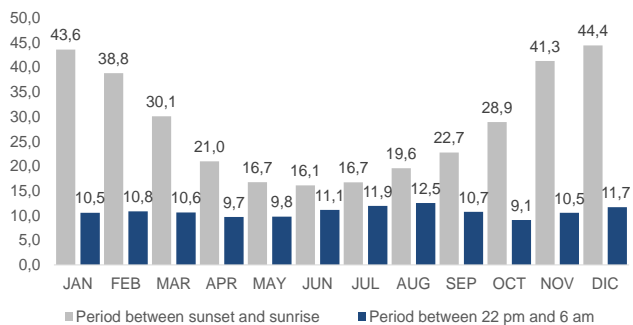
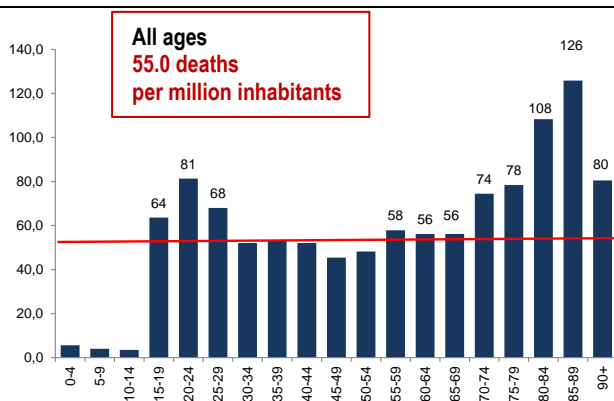


CHART 10. ROAD ACCIDENTS BY MONTH AND PERIOD IN THE DAY. Year 2018, percentage values (a)



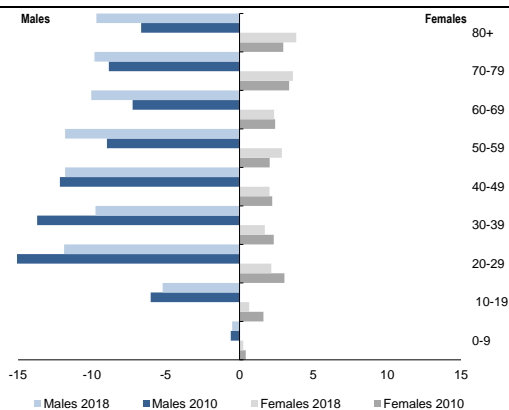
(a) Included rural or not built up roads called: Statali, Regionali and Provinciali, Comunalì out of urban area.

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



All ages  
55.0 deaths  
per million inhabitants

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

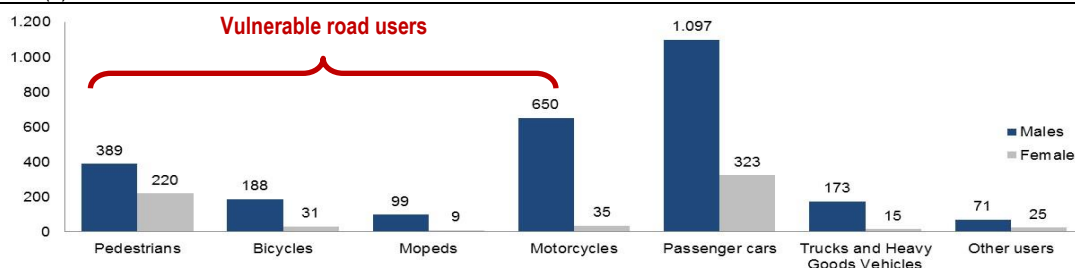


**TABLE 5. KILLED AND INJURED IN ROAD ACCIDENTS BY GENDER AND AGE CLASS. Year 2018, absolute values**

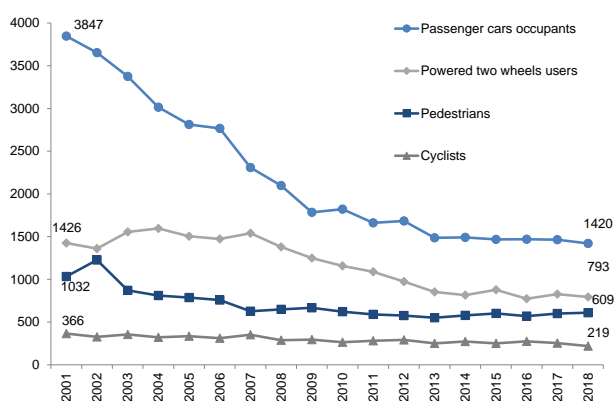
AGE CLASSES (a)	Killed			Injured		
	Males	Females	Total	Males	Females	Total
0 - 4	8	5	13	1.359	1.177	2.536
5 - 9	8	3	11	1.863	1.576	3.439
10 -14	8	2	10	2.726	2.194	4.920
15 -19	159	19	178	12.347	6.690	19.037
20 -24	197	38	235	16.684	9.342	26.026
25 -29	184	31	215	14.798	8.654	23.452
30 - 34	142	29	171	12.254	7.299	19.553
35 - 39	171	26	197	11.775	7.043	18.818
40 - 44	200	29	229	12.517	7.556	20.073
45 - 49	179	36	215	12.787	7.894	20.681
50 -54	185	45	230	12.113	7.450	19.563
55 -59	194	47	241	9.832	5.971	15.803
60 -64	165	38	203	7.382	4.280	11.662
65 -69	157	37	194	5.286	3.275	8.561
70 - 74	164	58	222	4.545	3.107	7.652
75 - 79	151	58	209	3.880	2.529	6.409
80 - 84	155	63	218	2.866	1.779	4.645
85 - 89	115	45	160	1.387	789	2.176
90 +	41	15	56	420	222	642
Unknown	84	34	118	3.776	3.197	6.973
<b>Total</b>	<b>2.667</b>	<b>658</b>	<b>3.325</b>	<b>150.597</b>	<b>92.024</b>	<b>242.621</b>

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 TYPE. Years 2001- 2018. Absolute values**



**CHART 15. KILLED IN ROAD ACCIDENTS BY MAIN ROAD USER TYPE. Percentage changes 2018/2017, 2018/2010 e 2018/2001**

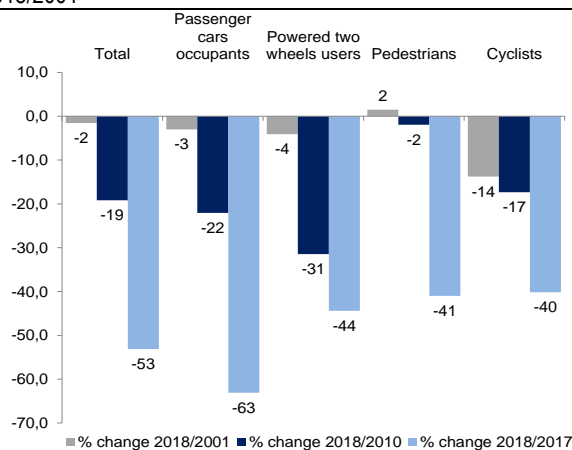




TABLE 7. KILLED IN ROAD ACCIDENTS IN ITALIAN REGIONS (a). Years 2010 and 2018. Absolute values, percentage changes, road mortality rate per 100,000 inhabitants

REGIONS	Killed (absolute values)			%changes 2018/2010 (b) (a)	Mortality rate 2010 (b)	Mortality rate 2018 (b)
	2010	2017	2018			
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	310	-22.7	9.3	7.0
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	335	-25.6	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
<b>Italy</b>	<b>4,114</b>	<b>3,378</b>	<b>3,325</b>	<b>-19.2</b>	<b>6.9</b>	<b>5.5</b>

(a) Percentage change:  $\frac{(M^{2018} / M^{2010}) - 1}{1} * 100$  (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)

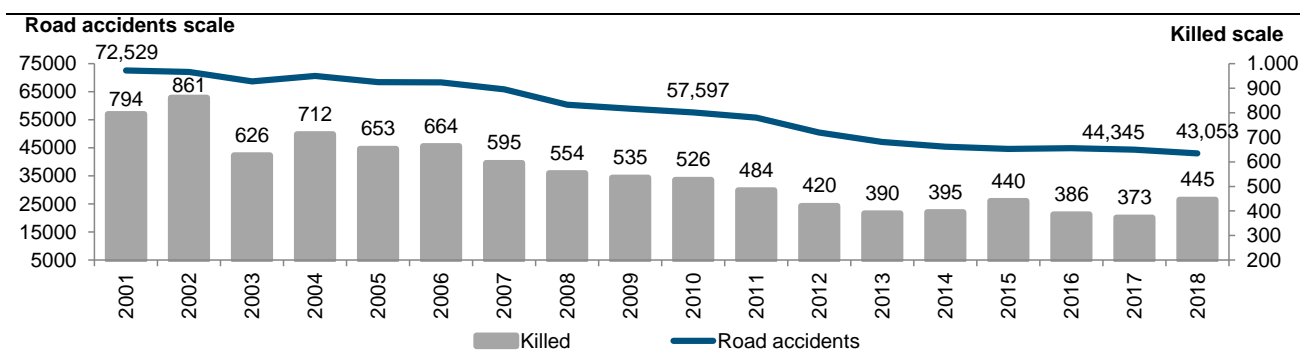




TABLE 6. ROAD ACCIDENTS RESULTING IN DEATH OR INJURY AND KILLED BY ROAD CATEGORY IN LARGE MUNICIPALITIES IN ITALY. Years 2017 and 2016 (a). Absolute values, road mortality rate per 100,000 inhabitants, percentage change 2017/2010

MAIN CITIES	Built up roads				Not built up roads (b)				Road mortality rate Year 2018 (per 100,000)	Road mortality rate Year 2017 (per 100,000)	% Change killed (total) 2018/2010 (d)
	Road accidents 2018	Road accidents 2017	Killed 2018	Killed 2017	Road accidents 2018	Road accidents 2017	Killed 2018	Killed 2017			
Torino	2,925	3,037	32	37	72	42	1	1	3.8	4.3	+13.8
Milano	8,194	8,255	43	45	336	306	6	8	3.6	3.9	-15.5
Verona	1,233	1,180	8	5	127	133	4	1	4.7	2.3	-55.6
Venezia	469	471	3	5	187	178	3	3	2.3	3.1	-45.5
Trieste	817	831	6	8	90	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	1,810	1,743	19	12	190	221	6	3	6.4	3.9	-10.7
Firenze	2,444	2,552	13	10	52	38	-	-	3.4	2.6	-48.0
Roma	10,551	11,398	110	97	1,396	1,488	33	32	5.0	4.5	-21.4
Napoli	2,110	2,180	25	22	191	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	708	694	6	4	111	139	1	1	3.0	2.1	-56.3
Catania	1,152	1,109	14	11	81	61	1	6	4.8	5.4	-34.8
<b>Total</b>	<b>39,751</b>	<b>40,975</b>	<b>335</b>	<b>310</b>	<b>3,302</b>	<b>3,370</b>	<b>110</b>	<b>63</b>	<b>4.6</b>	<b>3.8</b>	<b>-15.4</b>

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

(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: <http://dati.istat.it/> (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 [http://ec.europa.eu/transport/road\\_safety/specialist/statistics/index\\_en.htm](http://ec.europa.eu/transport/road_safety/specialist/statistics/index_en.htm)