

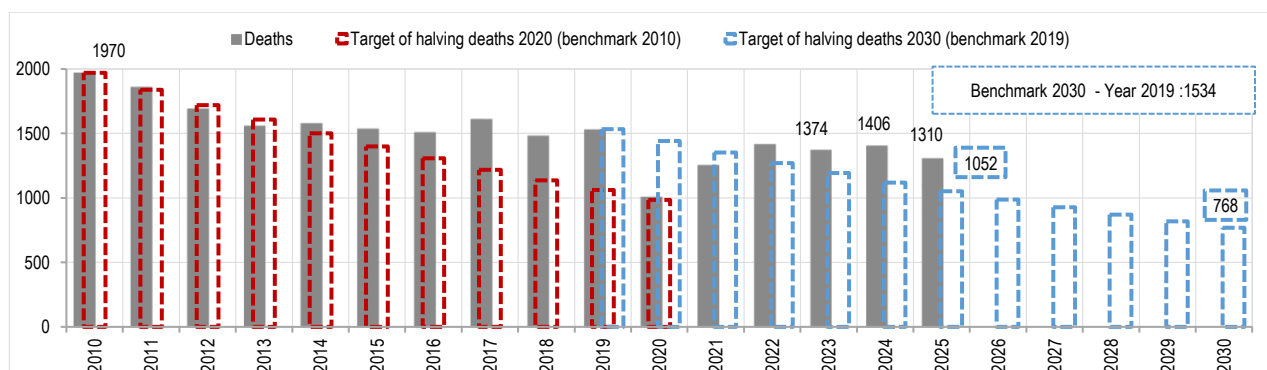
November 13th, 2025

ROAD ACCIDENTS

Preliminary estimates. January-June 2025

- According to preliminary estimates, in the January–June 2025 period there was, compared to the same period in 2024, a decrease in the number of road accidents resulting in death or injury¹ (82,344; -1.3%), of injured (111,090; -1.2%) and a more significant decline of deaths within 30 days (1,310; -6.8%).
- Compared with the first six months of 2019, the reference year chosen by the European Commission for the *Road Safety Policy Framework 2021–2030*, which sets an intermediate target of a 50% reduction in the number of fatalities and serious injuries by 2030, there was a modest decline in road accidents (-1.5%) and injuries (-5.0%), and a more marked reduction in deaths (-14.6%). The decrease in fatalities recorded in the first half of 2025 represents progress toward achieving the European targets, although the path ahead remains challenging.
- With reference to the first half of 2024, in 2025 the number of deaths increased on motorways (+4.4%), showing an opposite but milder trend than the decrease observed on urban roads (-8.4%) and on rural roads (-7.1%). However, when compared to the first six months of 2019, the number of motorway fatalities is lower by -33.4%, while the decreases are smaller on rural roads (-12.4%) and on urban roads (-12.2%).
- The car market² in the first half of 2025 shows a decline compared to the same period in 2024: both new car registrations and motorcycle registrations fell by -4.3%. Compared to 2019, new car registrations decreased by -20.1%, while motorcycles show a sharp increase (+41.1%). Based on data from the first four months of 2025, an increase of about 36% is expected in bike-sharing services during the year, reaching a total of 5 million rentals. The growth in total distance travelled is more modest (+12%), indicating a continued decline in average trip length observed in recent years. In contrast, e-scooter sharing has experienced a significant decline: from 99 active services in 2022 to 68 in 2024 and 62 in the early months of 2025. This trend is linked to the repositioning of operators across multiple cities and the withdrawal of some players from the Italian market. Conversely, total distances travelled by e-scooters in 2025 are estimated to increase by 34%, exceeding the peak recorded in 2022.
- Traffic on the main extra-urban road network³ in the first half of 2025 remained substantially stable compared to the same period in 2024; this result reflects a 2% increase in heavy vehicle traffic and an equivalent decrease in light vehicle traffic. As for motorway traffic, in the first four months of 2025, covering approximately 80% of the total motorway network, the number of vehicle-kilometres travelled increased by 0.3% compared with the same period in 2024. This growth is mainly attributable to the rise in light vehicle traffic (+0.4%), while heavy vehicle traffic remained stable (-0.04%).

CHART 1. EUROPEAN TARGET FOR 2020 AND 2030: NUMBER OF ROAD ACCIDENT DEATHS. January–June periods, from 2010 to 2024, preliminary estimate for January–June 2025, and target for reduction in fatalities for 2020 and 2030. Absolute values.



Source: Istat - Survey on Road accidents resulting in death or injury – Years 2010-2024. Preliminary estimates 2025 (Ref. Data and Methods).

¹ A road accident is defined as “any event involving at least one vehicle on the road network, occurring on roads open to public traffic, resulting in death or injury (fatalities within 30 days and/or injuries)” (Vienna Convention, 1968; UNECE, ITF, Eurostat, 2019).

² Sources for contextual data: Public Motor Vehicle Register (ACI); Observatory for Sharing Mobility; Aiscat and Anas.

³ Recorded Mobility Index: calculated by Anas on the basis of the average monthly daily traffic by vehicle class.

TABLE 1. ROAD ACCIDENTS RESULTING IN DEATHS OR INJURIES, DEATHS AND INJURIES IN ITALY. Periods January-June 2019, 2024 and preliminary estimates 2025 (a), lower and higher limits (Confidence Interval 95%). Absolute values and percentage changes 2025/2024 and 2025/2019.

ROAD ACCIDENTS RESULTING IN DEATH OR INJURY	Road accidents	Deaths (within 30 days)	Injuries
Absolute Values			
January-June 2025 (a)	82,344	1,310	111,090
<i>Lower limit (CI 95%) (b)</i>	<i>80,909</i>	<i>1,297</i>	<i>109,151</i>
<i>Higher limit (CI 95%) (b)</i>	<i>83,501</i>	<i>1,326</i>	<i>112,653</i>
Percentage Change			
January-June 2025/2024 (a)	-1.3	-6.8	-1.2
<i>Lower limit (CI 95%) (b)</i>	<i>-3.0</i>	<i>-7.8</i>	<i>-2.9</i>
<i>Higher limit (CI 95%) (b)</i>	<i>+0.1</i>	<i>-5.7</i>	<i>+0.2</i>
January-June 2025/2019 (a)	-1.5	-14.6	-5.0
<i>Lower limit (CI 95%) (b)</i>	<i>-3.3</i>	<i>-15.5</i>	<i>-6.7</i>
<i>Higher limit (CI 95%) (b)</i>	<i>-0.2</i>	<i>-13.5</i>	<i>-3.7</i>
Absolute Values			
January-June 2024 (c)	83,385	1,406	112,428
January-June 2019 (c)	83,629	1,534	116,992

(a) Preliminary estimate 2025, based on microdata and summary data provided to Istat within 31st October 2025 (Ref. Data and Methods).

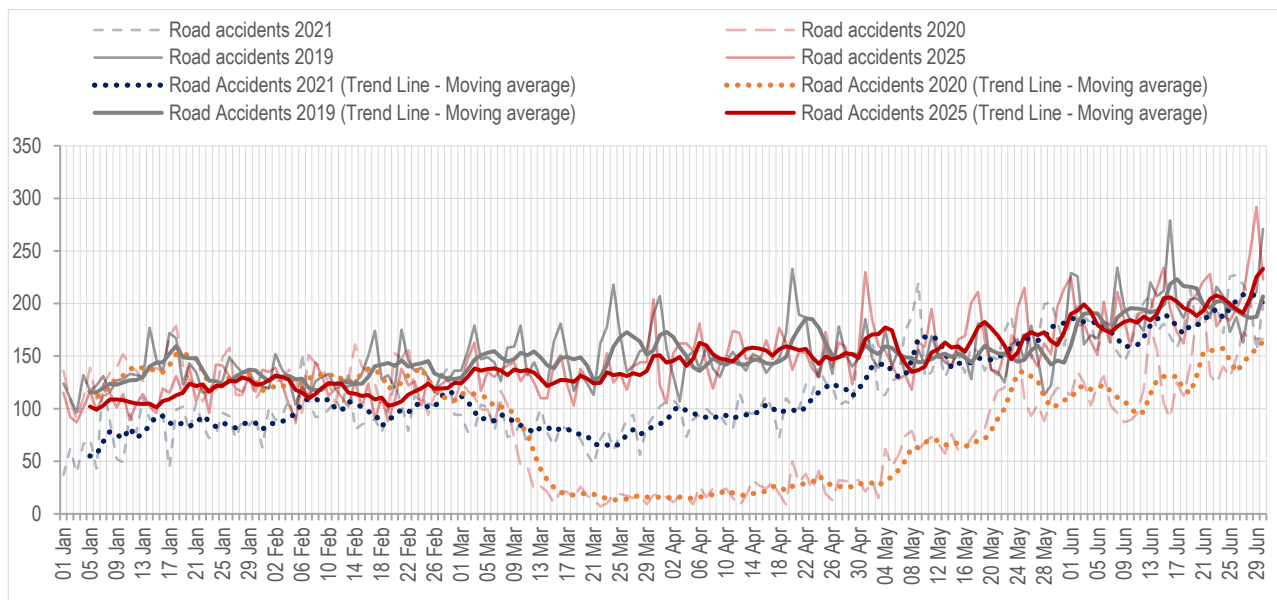
(b) To provide a "range" of values within the estimated number is expected, a Confidence Interval (95%) and lower and higher limits of the confidence intervals for preliminary estimate of accidents, deaths and injuries, were provided.

(c) Source: Istat - Survey on Road accidents resulting in death or injury – Year 2019, 2024 and preliminary estimate 2025.

To accurately represent the events that characterized the first six months of 2025, the graphs presented below are based on provisional daily data provided to Istat by the traffic police and the Carabinieri.

With regard to road accidents, the trend line of the daily time series, which smooths out short-term fluctuations, clearly shows, for both 2020 and 2021, the effects on road accident patterns of regulatory measures, full and partial lockdowns, and the subsequent recovery associated with the pandemic. In 2025, however, the figures return to levels very close to those recorded in 2019 (Chart 2).

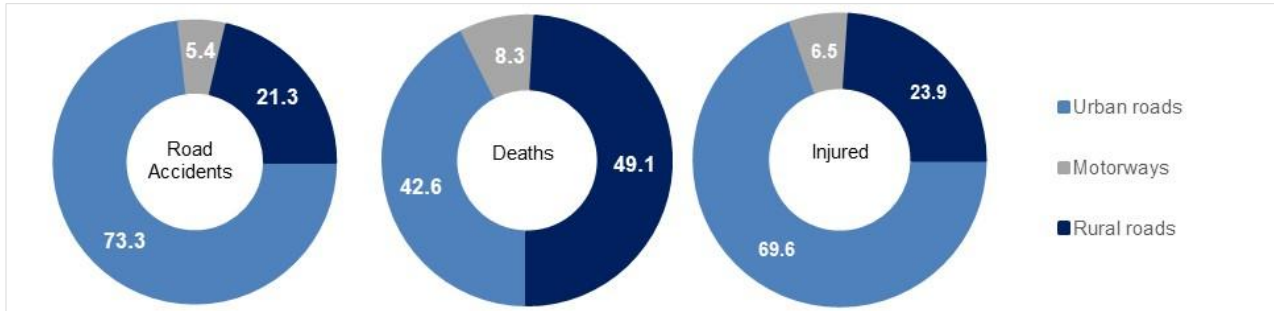
CHART 2. ROAD ACCIDENTS RESULTING IN DEATHS AND INJURY COLLECTED BY POLIZIA STRADALE AND CARABINIERI, BY DAY AND MONTH, DURING THE PERIOD JANUARY-JUNE 2019, 2020, 2021 AND 2025. Absolute values.



Source: Final data 2019, 2020, 2021 and provisional 2025 – Servizio di Polizia Stradale e Comando Generale dell'Arma dei Carabinieri

Road accidents occur more frequently on urban roads (73.3%), while the highest number of fatalities is recorded on rural roads (49.1%); motorways account for 5.4% of accidents and 8.3% of fatalities (Chart 3).

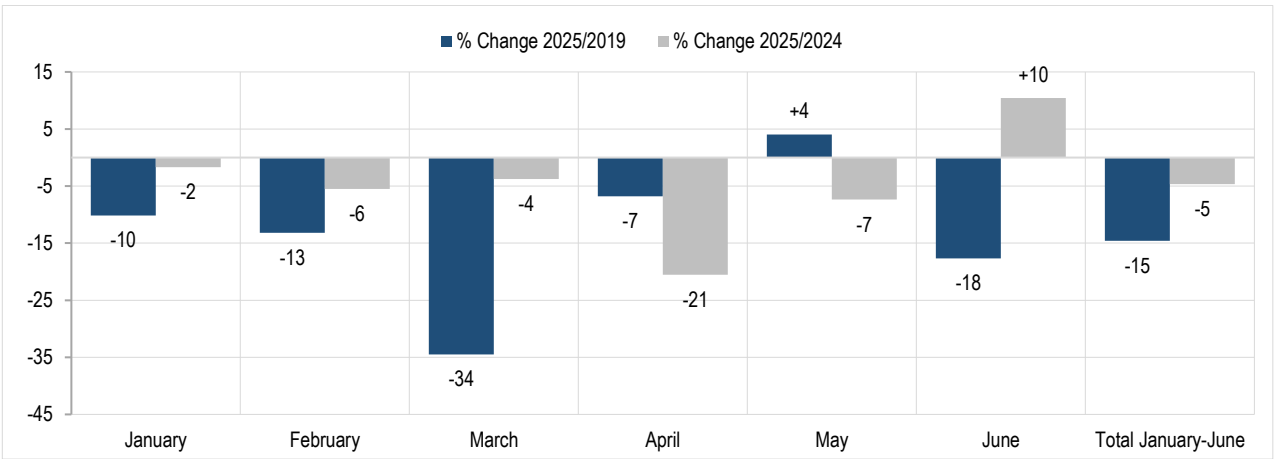
CHART 3. ROAD ACCIDENTS RESULTING IN DEATH OR INJURY, DEATHS AND INJURIES BY ROAD CATEGORY. Period: January–June 2025. Preliminary estimates, percentage values (a).



(a) Urban Roads include roads Provinciali, Statali and Regionali within built-up areas. Rural roads include roads Statali, Regionali e Provinciali out of built-up area and Comunali extraurbane

The number of fatalities shows a variable monthly trend during the first half of 2025 compared both to the same period of the previous year and to 2019: in the first comparison, the number is lower in all months of the semester, with the only exception of June, which records an increase of +10.4%. Compared to the same semester in 2019, the months from January to April and June show significant decreases (–34.5% in March), while May records an increase (+4.1%) (Chart 4).

CHART 4. PERCENTAGE CHANGE OF DEATHS NUMBER BY MONTH. JANUARY-JUNE 2025, 2024, AND 2019. Percentage change January-June 2025 vs 2019 and 2024.

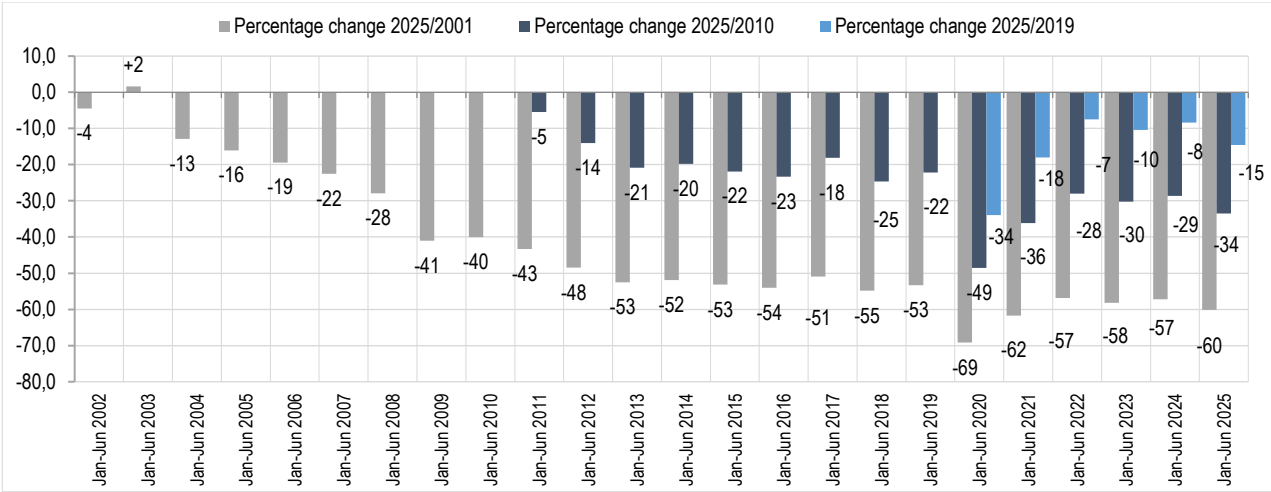


Source: Istat - Survey on Road accidents resulting in death or injury – Years 2019, 2024. Preliminary estimates 2025 (Ref. Data and Methods).

Chart 5 shows the percentage changes in the number of fatalities recorded in the first halves of the years following the reference years 2001 (vs 2002–2025), 2010 (vs 2011–2025), and 2019 (vs 2020–2025), corresponding to the decades of road safety initiatives promoted by the United Nations General Assembly.

Compared to the first half of 2001, there has been a steady decline over the past 20 years, reaching –60.1% in the first half of 2025. however, the 14.6% reduction in fatalities in the first half of 2025 compared with the same period in 2019 indicates only limited progress in recent years, confirming the need to intensify actions to achieve the European target of halving road fatalities by 2030 (Chart 5).

CHART 5. NUMBER OF DEATHS IN ROAD ACCIDENTS PERCENTAGE CHANGE. Periods January-September 2002-2024, preliminary estimates January-June 2025, preliminary estimates lower and higher limits (Confidence Interval 95%). Change in respect of year 2001 and 2010 and 2019



Source: Istat - Survey on Road accidents resulting in death or injury – Years 2002-2024. Preliminary estimates 2025 (Ref. Data and Methods).

Glossary

Road accidents resulting in death or injury

All road accidents involving at least one moving vehicle and one person injured or killed as a consequence of this accident. Not injured participants within an injury accident can optionally be recorded, Material damage-only accidents are not considered (Vienna Agreement 1968 – Unece, ITF ed Eurostat 2019).

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

Killed or fatally injured persons: death within 30 days of the road accident, confirmed suicide and natural death are not included.

The harmonized definition of severity of lesions, established at the international level, involves the use, for serious injuries of MAIS 3 + score, i.e., the maximum AIS value equal to or greater than 3. AIS (Abbreviated Injuries Scale) is a classification which describes the severity of the trauma, reported for each of the nine regions in which the human body is divided: the head, face, neck, chest, abdomen, spine, upper limbs, lower limbs, other. The degree of injury varies from 1 (minor injury) to 6 (fatal injury).

Percentage change: the percentage change between X_t and X_{t-k} respectively at t and $t-k$ time is calculated as $(X_t / X_{t-k} - 1) * 100$

Data and Methods

The traditional survey of road accidents resulting in death or injury and the quarterly survey, in urban selected areas, are carried out by Istat with the cooperation of ACI (Automobile Club of Italy) and Regions and Provinces participating to a National Agreement with Istat, aimed to a decentralization of collection and monitoring for road accidents statistics.

The preliminary estimate for the first semester 2025 of road accidents resulting in death or injury data has been calculated on the basis of:

- 1) the provisional data provided by the Ministry of the Interior (Servizio di Polizia Stradale);
- 2) the provisional data provided by the Ministry of the Defence (Arma dei Carabinieri);
- 3) data from the quarterly survey of road accidents in urban areas (main municipalities).

Data in urban areas is collected from 198 municipalities. The unit selection was done using the technique of *Cut Off* (with a threshold of 50%). The subgroup contains all main municipalities in the provinces and some municipalities for which a significant share of the total number of accidents in the Province was recorded (just in case the percentage of accidents occurred in a main municipality is less than 50% of the amount in province). The share of accidents in the municipalities collected through the quarterly accounts for over 65 % of accidents with injuries recorded by the Local Police in Italy.

The list of the municipalities included in the survey has been updated, since 2023. The number of municipalities, in fact, passed from 172 to 198.

The reduced availability of direct observations at infra-annual intervals compared to total aggregates requires the use of estimation methods based on indicators. These methods consist of dividing certain quantities, specifically, in relation to the performance of some selected indicators or benchmark rates.

To calculate the preliminary estimate of road accidents resulting in death or injury, victims and injured persons in urban areas, the trend of data for the municipalities subgroup in the period January-June 2025, and 2024 final data was used. The technique estimates the six months period values, with reference to not available municipalities set, using the rates calculated on the resident population, in the previous year or in a series of previous years. For the calculation of the preliminary estimate for road accidents with injuries, deaths and injured persons, detected by the Local Police, road accidents, mortality and injury rates were processed. Rates were calculated on the basis of final data, referred to the subset of 198 municipalities in 2025 and final and complete 2024 data.

Specifically, in a first step, the rates for the first six months of 2024, already disseminated indicators, were processed, separately for the 198 municipalities (quarterly survey) and for the rest of the Italian municipalities. The calculation of the absolute values for road accidents, injured and victims, for the first six months in 2025, was obtained by setting a relationship between the rates calculated for 2024 ($t-1$) in the two subsets of municipalities (198 quarterly survey municipalities and the rest of municipalities) and 2025 rates (t). To provide a "range" for the estimated values, confidence intervals (CI 95%) have been calculated, Considering the specific data set characteristics, the application of *Bootstrap method*⁴ to derive reliable estimates of standard deviation and confidence intervals of parameters, was planned.

⁴ Di Ciccio T.J., Efron B. "Bootstrap Confidence Intervals" in Statistical Science 1996, Vol. 11, No. 3, 189-228;

The use of Bootstrap resampling techniques allows to build confidence intervals statistically accurate, with optimal efficiency, without the need to formulate the assumption of normal distribution for the population, basic hypothesis for the calculation of confidence intervals with traditional methods. In particular, the confidence interval estimation was performed using the alternative method called *Bootstrap-t*, based on the selection of 100 random samples for the first level and 100 samples extracted for each of the previous ones, for the second level (over 10,000 in total). The samples, each one with size equal to 198 units, identical to the original set of data, were selected with the units replacement. Some "self-representative" units were included in all first level samples.

The self-representative units consist in 9 municipalities (January-June 2025)⁵, for which was recorded a high number of deaths and accidents (the number of road accidents detected in the self-representative units is over 50% out of the total), while the remaining Municipalities were randomly chosen in each sample.

The Table 2 includes the values for standard deviation and lower and upper limit of the confidence intervals of the estimated values.

TABLE 2. ROAD ACCIDENTS RESULTING IN DEATHS OR INJURIES, DEATHS AND INJURED PERSONS IN ITALY, January-June 2025, Bootstrap t parameters, preliminary estimates and Lower and Higher limit (absolute values; Confidence Interval – CI 95%)

ROAD ACCIDENTS, FATALITIES AND INJURED PERSONS	Theta	Theta_var	T_lo	T_hi	Estimated value (a)	CI 95% (b)	
						Lower Limit	Higher Limit
January-June 2025							
Road accidents	37,708.27	1,789.12	0.56150	-0.42508	37,681	36,704	38,468
Deaths (within 30 days)	310.7	1,732.66	0.53690	-0.57850	310	301	321
Injuries	47,562.42	2,336.34	0.57912	-0.42783	47,512	46,209	48,562

(a) Observed values for road accidents involving personal injuries, fatalities, and injured persons, recorded through the quarterly survey of Local Police in 198 municipalities (IST-002497).
(b) The calculation of confidence intervals was carried out with reference to the proportion of accidents, fatalities, and injuries derived from the quarterly summary survey conducted among the 198 Local Police forces in the sample. The variables *Theta*, *Theta_var*, *T_lo*, and *T_hi* refer to the application of the Bootstrap T method to this dataset.
The values reported in the table for the lower and upper limits were then extrapolated to the total number of road accidents, fatalities, and injuries, by including the known data from the Traffic Police and the Carabinieri, as well as by expanding the Local Police sample data to the full population.

The observed values and the corresponding upper and lower bounds of the confidence intervals were subsequently rescaled by applying an expansion coefficient, in order to extend the results from Local Police data to the entire population.
In the final calculation, provisional data provided by the Traffic Police and the Carabinieri were also included. The final results are presented in Table 3.

TABLE 3. ROAD ACCIDENTS RESULTING IN DEATHS OR INJURIES, DEATHS AND INJURIES IN ITALY. Preliminary estimates 2025 (a), lower and higher limits (Confidence Interval 95%). Absolute values.

ROAD ACCIDENTS RESULTING IN DEATH OR INJURY	Road accidents	Deaths (within 30 days)	Injuries
Absolute values			
January-June 2025 (a)	82,344	1,310	111,090
Lower limit (CI 95%) (b)	80,909	1,297	109,151
Higher limit (CI 95%) (b)	83,501	1,326	112,653

(a) Stima preliminare 2025, basata su microdati provvisori di Polizia Stradale e Carabinieri e dati riepilogativi dalla rilevazione trimestrale condotta sulle Polizie Locali di 198 comuni (dati pervenuti all'Istat entro il 31/10/2025).
(b) Per la stima preliminare del periodo gennaio-giugno 2025, per fornire una "forchetta" di valori all'interno dei quali sia prevista la variazione delle numerosità stimate, la stima puntuale è stata accompagnata dal dato sui limiti inferiore e superiore degli intervalli di confidenza (IC 95%) dei valori stimati per incidenti, morti e feriti.
(c) Fonte: Istat - Rilevazione degli incidenti stradali con lesioni a persone, stima preliminare 2025.

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Efron B., Le Page R. "Introduction to bootstrap" in "Exploring the limits of Bootstrap" edited by Le Page R., Billard L., Wiley, New York, 1992.
⁵ Self-representative units in the samples: Roma, Milano, Napoli, Catania, Palermo, Torino, Ravenna, Firenze e Genova

Finally, the percentage changes in the preliminary estimate of road accident fatalities for the period January–June 2025, compared with the reference values for the road safety decades (2001, 2010, and 2019) and illustrated in Figure 5, were calculated using the point estimate for January–June 2025 together with the lower and upper bounds of the confidence intervals shown in Table 4.

TABLE 4. DEATHS IN ROAD ACCIDENTS IN ITALY.

Preliminary estimates 2025 (a), FINAL DATA 2001, 2010 AND 2019, lower and higher limits (Confidence Interval 95%). Absolute values and percentage change 2025/2001, 2025/2010, 2025/2019

DEATHS IN ROAD ACCIDENTS	Deaths (within 30 days)
January-June 2025 (a)	1,310
<i>Lower limit (CI 95%) (b)</i>	1,297
<i>Higher limit (CI 95%) (b)</i>	1,326
January-June 2025/2001 (percentage values)	-60.1
<i>Lower limit (CI 95%) (b)</i>	-60.6
<i>Higher limit (CI 95%) (b)</i>	-59.6
January-June 2025/2010 (percentage values)	-33.5
<i>Lower limit (CI 95%) (b)</i>	-34.2
<i>Higher limit (CI 95%) (b)</i>	-32.7
January-June 2025/2019 (percentage values)	-14.6
<i>Lower limit (CI 95%) (b)</i>	-15.5
<i>Higher limit (CI 95%) (b)</i>	-13.5
January-June 2001 (c)	3,287
January-June 2010 (c)	1,970
January-June 2019 (c)	1,534

(a) Preliminary estimate 2025, based on microdata and summary data provided to Istat within 31st October 2025 (Polizia Stradale, Carabinieri, Local Police of 198 municipalities) (Ref. Data and Methods).

(b) To provide a "range" of values within the estimated number is expected, a Confidence Interval (95%) and lower and higher limits of the confidence intervals for preliminary estimate of accidents, deaths and injuries, were provided.

(c) Source: Istat - Survey on Road accidents resulting in death or injury – Year 2019, 2024 and preliminary estimate 2025.

Coverage

The data are published at the national level.

Timeliness and dissemination data

Preliminary estimates referred to the first semester (year *t*) disseminated in November/December of the same year (year *t*).

Link to bibliographic references

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