

Media Release

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Selected Data for "Road Safety Week" in November

Road accidents with casualties that occurred in the months of January to September 2020 as compared to the same time period in 2019¹

- During this period restrictions were imposed on the movement and transport of Israeli citizens due to the spread of the coronavirus in Israel. These restrictions on movement led to a sharp decrease in the number of road accidents (20.1%) and in the number of casualties (26.5%) as compared to the previous year.
- Despite the sharp decrease in the number of accidents and casualties, the decrease in the number of persons killed was more moderate and decreased by only 4.5%.
- Despite the decrease in persons killed, there was a sharp **increase** of 26.2% in the number of **motorcycle riders killed**, an increase of 3.8% in the number of **vehicle drivers killed**² and an increase of 1.5% in the number of **pedestrians killed**.
- There was a **sharp increase in the number of bicycle riders (not electric)** that were seriously injured – 28.6%.
- Despite the decrease in the number of road accidents, there was an **increase** in the number of **fatal** accidents on urban roads (20%) and an increase in the number of persons killed on these roads (16.8%).

¹Accidents of Expanded R.A. type. 2020 data are preliminary. Data on road accidents that occurred in October 2020 were not yet received at CBS. 2019 data are final.

² Vehicles with 4 wheels or more.

- During this period there was a decrease in the number of casualties (28.1%) and accidents (27.5%) in which **electric bicycles** were involved. Despite the decrease, there was an increase in the number of casualties (16.3%) and accidents (14.7%) in which **electric scooters** were involved, this is in data of accidents and casualties reported to the police.³
- Among the **electric bicycle riders hospitalized** as a result of road accidents that were not reported to the police, there was a decrease of 5.4% and an increase of 21.7% in the number of **electric scooter riders hospitalized** as a result of road accidents that were not reported to the police.⁴
- There was a decrease in the number of road accidents in which a **mobility scooter** was involved (41.3%) and in the number of casualties in these accidents (39.8%).³
- There was also a decrease of 6.8% in the number of **mobility scooter riders hospitalized** as a result of road accidents that were not reported to the police.⁴

Road accidents with casualties classified by CBS as Expanded R.A. type in 2019⁵

- The number of fatal accidents in 2019 (319) was 11.5% higher than in 2018 (286).
- The number of persons killed in 2019 (355) was 12.3% higher than in 2018 (316).
- The number of seriously injured casualties in 2019 (2,394) was higher by 10.5% than 2018 (2,166).
- The number of slightly injured casualties in 2019 (20,237) decreased by 1.5% as compared to 2018 (20,537).
- According to the police reports,⁶ in 2019 there were 1,653 accidents involving an electric bicycle. In these accidents 1,775 people were injured: 18 people were killed, 160 were seriously injured and 1,597 were slightly injured. Likewise, in accidents involving an electric bicycle that were not reported to the police, 506 casualties were hospitalized, of which 165 were seriously injured.⁷

³ Road accidents reported to the police of Expanded R.A. type and “General with Slight Casualties”.

⁴ Severity of injury in the hospitals is determined by the MAIS index. Including severity of injury that is unknown.

⁵ 2019 data are final.

⁶ Road accidents reported to the police of Expanded R.A. type and “General with Slight Casualties”.

⁷ According to the medical index MAIS.

- According to the police reports,⁶ in 2019 there were 569 accidents involving an electric scooter. In these accidents 598 people were injured: 2 were killed, 41 were seriously injured and 555 were slightly injured. Likewise, in accidents involving an electric scooter that were not reported to the police, 209 casualties were hospitalized, of which 90 were seriously injured.⁷
- Approximately 24.1% of the pedestrians injured were aged 65 and over, more than twice their share in the population (11.8%).
- Crosswalks do not ensure safe crossings. 78.5% of pedestrians injured while crossing the road were injured in a crosswalk. Of the children (up to age 14) injured while crossing the road, 73.3% were injured in a crosswalk and of casualties aged 65 and over – 73.7% were injured in a crosswalk.
- Approximately 59% of casualties in road accidents were men and 41% were women.
- 25.1% of all the persons killed in road accidents in 2019 were pedestrians, lower than their average share in the last decade (31.4%). In 2019 there was a decrease of 9.2% in the number of pedestrians killed in road accidents as compared to 2018 (89 persons killed compared to 98 in 2018).
- Road congestion continues to increase: the increasing rate of annual kilometers travelled as well as the fleet of vehicles is higher than the rate of increase of the length and area of the roads. The annual kilometers travelled increased by 73.2% compared to the year 2000, and the vehicle fleet increased by 96.6%, whereas the area of the roads increased by 50.7% and the length of the roads by only 21.2%. On the other hand, the index of persons killed in road accidents since the year 2000 has decreased by 31.2% and the index of road accidents decreased by 38.7%.
- In 2019, the number of killed per 100,000 residents was 3.9, an increase of 9.6% as compared to 2018. The number of casualties per accident in 2018 was 1.8, similar to 2018.
- In the last decade there was a significant decrease in the number of killed per 100,000 residents- from 4.6 in 2009 to 3.9 in 2019. However, the number of casualties per accident has barely changed in the last decade: 1.8 in 2019 as compared to 2.0 in 2009.

Road accidents with casualties that occurred in the months of January to September 2020⁸

During this period there were **7,745 road accidents** with casualties, of the type classified by the CBS as expanded R.A. - a decrease of 20.1% as compared to the same time period in the previous year⁹. The number of fatal accidents decreased by 2.6% (221 as compared to 227) and there was a decrease of 17.4% in the number of serious accidents (1,317 as compared to 1,595). In these accidents, **13,049 people were injured**, a decrease of 26.5% as compared to this time period in the previous year (17,761). There was a decrease of 4.5% in the number of persons killed (236 in 2020 as compared to 247 in 2019) and the number of seriously injured decreased by 19.7% (1,444 as compared to 1,799).

Table A – Road Accidents and Casualties of Expanded R.A. type, January-September 2020 as compared with the same period in 2019

Accidents and Casualties by Severity	January-September 2020 Total Absolute Numbers	Percentage of change as compared to January-September 2019
Road Accidents with Casualties - Total	7,745	-20.1
Fatal	221	-2.6
Serious	1,317	-17.4
Slight	6,207	-12.1
Casualties - Total	13,049	-26.5
Killed	236	-4.5
Seriously injured	1,444	-19.7
Slightly injured	11,369	-27.7

Road accidents and casualties by type of road

The number of accidents on **urban roads** decreased by 19.1% as compared to 2019 (5,404 as compared to 6,683), and the number of casualties decreased by 23.2% (7,742 as compared to 10,085). However the number of fatal accidents on these roads increased by 20% as compared

⁸2020 data are preliminary. Data on road accidents that occurred in October 2020 were not yet received at CBS.

⁹2019 data are final.

with the same period in 2019 (108 as compared to 90), and in the number of persons killed there was an increase of 16.8% (111 as compared to 95).

The number of accidents on **non-urban roads** decreased by 22.2% as compared to 2019 (2,341 as compared to 3,008), and the number of casualties decreased by 30.9% (5,307 as compared to 7,676) and a decrease of 17.8% in the number of persons killed (125 as compared to 152).

It should be noted that despite the increase in the number of persons killed on urban roads, most of the persons killed in road accidents were killed on non-urban roads (111 on urban roads as compared to 125 on non-urban roads).

Road accidents and casualties by type of casualty

The number of persons killed decreased by 4.5% as compared to the same period in 2019 (236 as compared to 247). Despite the decrease in the number of persons killed, there was a sharp increase of 26.2% in the number of motorcycle riders killed (53 as compared to 42) and an increase of 3.8% in the number of vehicle drivers¹⁰ that were killed (82 as compared to 79).

Similarly, there was a sharp increase of 28.6% in the number of bicycle riders (not electric) that were seriously injured (72 as compared to 56).

Road accidents in which electric bicycles were involved

During these months there were 895 road accidents with casualties that were reported to the police and had an electric bicycle involved in the accident (as compared to 1,234 in the same time period of the previous year). In these accidents, 955 people were injured¹¹ (as compared to 1,329 in the same time period of the previous year) of which: 14 were killed, 95 were seriously injured and 846 were slightly injured (as compared to 16 killed, 106 seriously injured and 1,207 slightly injured in the same time period of the previous year). In addition, in accidents not reported to the police, 367 casualties were hospitalized (as compared to 388 in the same time period of the previous year), of which 114 were seriously injured¹² (as compared to 118 in the same time period of the previous year).

¹⁰ Vehicles with 4 wheels or more.

¹¹ All of the casualties (including pedestrians) in all the vehicles that were involved in a road accident with an electric bicycle.

¹² Severity of injury in the hospitals is determined by the MAIS (Maximum Abbreviated Injury Scale) which is a medical index of the severity of injury that is the highest of the AIS (Abbreviated Injury Scale) scores set for each of the nine areas of the body. The index provides a general score of injury severity even for casualties with more than one injury. The values of this index are between 1 and 6. 1-2 slightly injured, 3-6 seriously injured.

Road accidents in which electric scooters were involved

Despite the decrease in casualties and accidents in which electric bicycles were involved, there was an increase in the number of casualties and accidents in which electric scooters were involved. In these months there were 464 road accidents with casualties reported to the police in which **electric scooters** were involved (as compared to 395 in the same time period of the previous year). In these accidents 488 people were injured¹³ (as compared to 417 in the same time period of the previous year) of which: 1 person was killed, 30 were seriously injured and 457 were slightly injured (as compared to 27 seriously injured and 390 slightly injured in the same time period of the previous year). In addition, in accidents not reported to the police, 174 casualties were hospitalized (as compared to 143 in the same time period of the previous year), of which 70 were seriously injured (as compared to 62 in the same time period of the previous year).

Road accidents in which mobility scooters were involved

In these months there were 62 road accidents with casualties **reported** to the police in which **mobility scooters** were involved (as compared to 104 in the same time period of the previous year). In these accidents 68 people were injured¹⁴ (as compared to 113 in the same time period of the previous year) of which: 6 were seriously injured and 62 were slightly injured (as compared to one person killed, 6 seriously injured and 106 slightly injured in the same time period of the previous year). In addition, in accidents **not reported** to the police, 55 casualties were hospitalized (as compared to 59 in the same time period of the previous year), of which 27 were seriously injured (as compared to 29 in the same time period of the previous year).

¹³ All of the casualties (including pedestrians) in all the vehicles that were involved in a road accident with an electric scooter.

¹⁴ All of the casualties (including pedestrians) in all the vehicles that were involved in a road accident with a mobility scooter.

Select Data for 2019

In 2019, there were 12,670 road accidents with casualties classified by CBS as “Expanded R.A.” - an increase of 0.9% as compared to 2018 (12,557). In these accidents, 22,986 people were injured, a decrease of 0.1% as compared to 2018 (23,019).

Table B - Road Accidents and Casualties of Expanded R.A. type, 2019

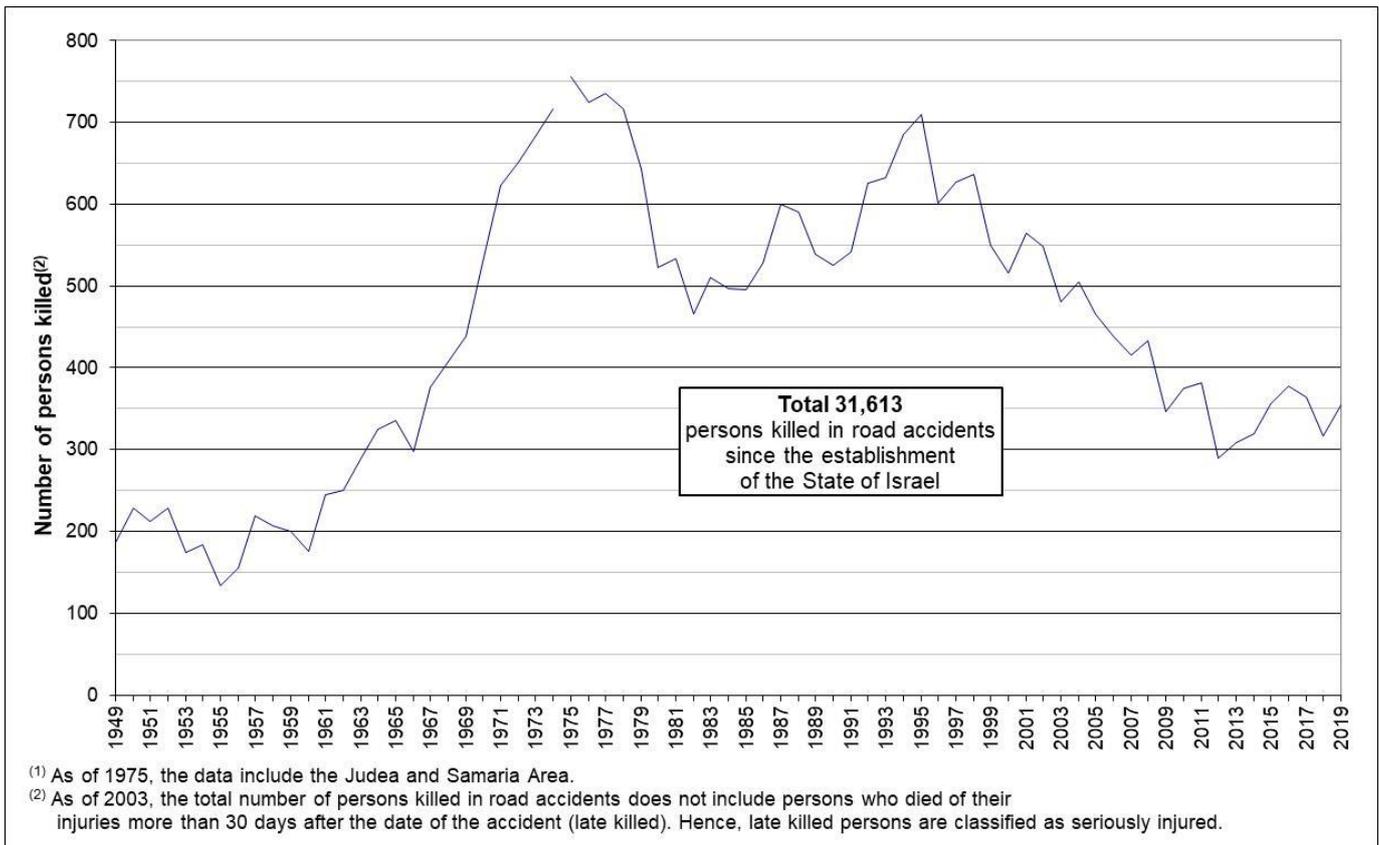
Accidents and Casualties by Severity	Total Absolute Numbers	Percentage of change as compared to 2018
Road Accidents with Casualties - Total	12,670	0.9
Fatal	319	11.5
Serious	2,134	9.9
Slight	10,217	-1.1
Casualties - Total	22,986	-0.1
Killed	355	12.3
Seriously injured	2,394	10.5
Slightly injured	20,237	-1.5

In 2019, in addition to the road accidents classified by CBS as Expanded R.A. type (presented above), the Israel Police recorded 44,828 road accidents with slight casualties that were classified by CBS as “General with Slight Casualties” type. This is an increase of 4.6% as compared to 2018. In these accidents there were 59,381 reported casualties with slight injuries (an increase of 4.6% as compared to 2018).

Table C- Road Accidents with Casualties of “General with Slight Casualties” type, 2019

	Total Absolute Numbers	Percentage of change as compared to 2018
Road Accidents with Casualties - Total	44,828	4.6
Slightly injured - Total	59,381	4.6

Diagram 1- Persons killed in road accidents 1949-2019, absolute numbers



Road Accidents with Casualties

69.5% of the accidents occurred on **urban roads**; 50.3% of the accidents that occurred on urban roads were at intersections.

31.6% of the accidents that occurred on **non-urban roads** occurred at intersections.

The severity of the accidents on non-urban roads was more severe than the severity of accidents on urban roads: on urban roads, 1.5% of accidents were fatal and another 16.1% were serious, whereas on non-urban roads 4.9% of the accidents were fatal and 18.5% were serious.

67.7% of accidents occurred during daytime hours and 32.3% at night.

67.9% of accidents were collisions between vehicles, 24.0% of the accidents were hitting a pedestrian, 6.8% were single vehicle accidents and the rest were other and not known.

Casualties in road accidents

Approximately 59% of the **casualties** were men and 41% were women.

The share of **children** among casualties is lower than their share in the population.¹⁵ Children aged 0-14 were approximately 12.1% of the casualties and 9.6% of those killed, while their share of the population is 28.1%.

¹⁵ Population data from the end of 2019.

The share of **Arabs** among the casualties is higher than their share of the population. Arabs comprise 21% of the population of Israel, but are 29.6% of the casualties in road accidents and 31.8% of the people killed. 14 Arab children (up to age 14) were killed in 2019, and they comprise 41.2% of all children killed in road accidents.

65.8% of **casualties** in road accidents were injured in accidents during daylight hours and 34.2% at night.

42.3% of the casualties were injured in accidents that occurred on **non-urban roads** that are 30.5% of all accidents, but 61.7% of the people killed and 38.5% of the seriously injured on these roads.

14.9% of all casualties were **pedestrians**: 14.7% of all the injured (seriously and slightly injured) and 25.1% of the killed.

Casualties aged 65 and over were 24.1% of the pedestrians injured, more than twice their share of the population (the share of aged 65 and over is 11.8%). Of the 89 pedestrians killed in road accidents, 31 were aged 65 and over.

Crosswalks do not ensure safe crossings – of the pedestrians injured while crossing, 78.5% were injured in a crosswalk. Of the children (up to age 14) injured while crossing the road, 73.3% were injured in a crosswalk, and of those aged 65 and over 73.7%.

Drivers involved in Road Accidents

22,773 **drivers** were involved in road accidents with casualties, an increase of 0.4% as compared to 2018.

72.8% of **drivers** involved in accidents were men and 27.2% were women. The percentage of women drivers in fatal accidents was 11.7%. The percentage of women among all licenced drivers is 44.3%.

The share of **young drivers** (up to age 24), among all drivers involved in road accidents with casualties was 17.8%, however their share of all licenced drivers is only 14.2%. The share of older drivers (those aged 65 and over) involved in road accidents was 11.0%, less than their relative share of all licenced drivers - 12.8%.

Vehicles Involved in Road Accidents

22,773 **vehicles** were involved in road accidents with casualties, an increase of 0.4% as compared to 2018.

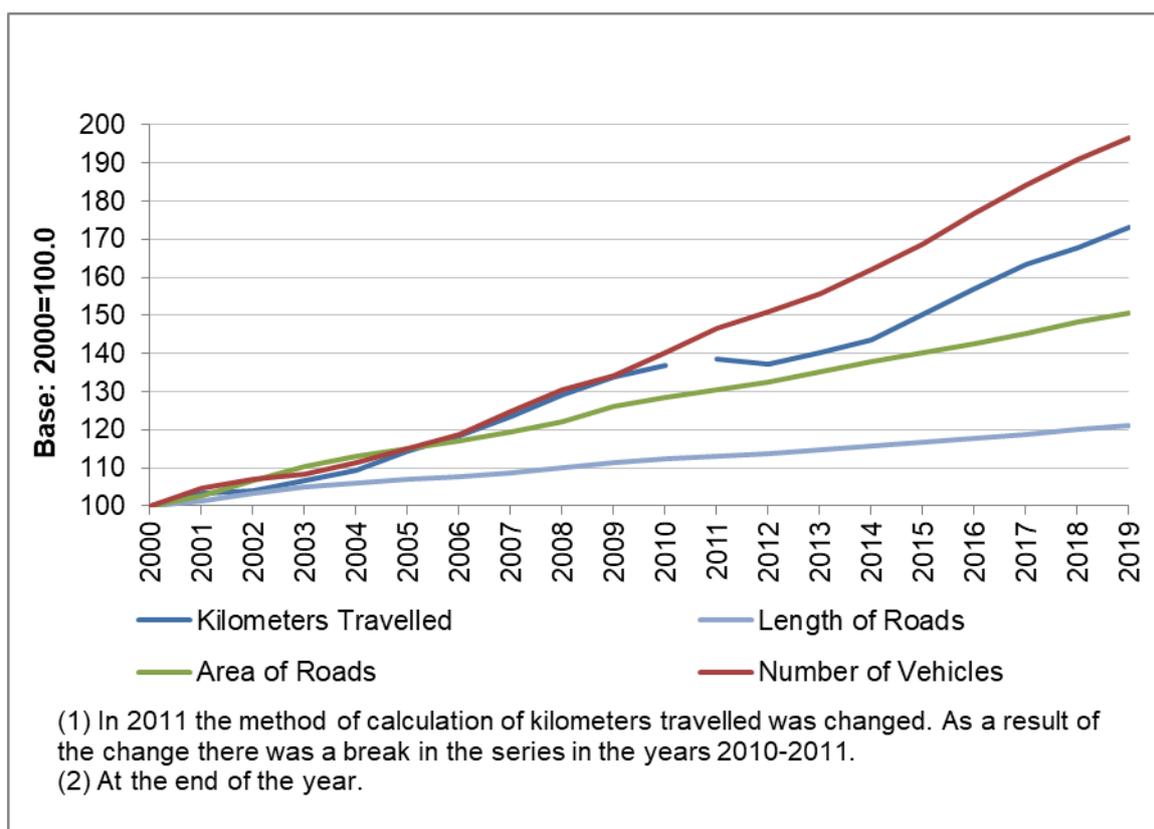
The share of large trucks (16 tons and over) in fatal accidents (6.4%) was 2.6 times greater than their share in kilometers travelled (2.5%).

The share of motorcycles in road accidents with casualties (9.7%) was 6.1 times greater than their share in kilometers travelled (1.6%).

Road Congestion

The total national kilometers travelled by motor vehicles reached 63.2 billion k”m in 2019, an increase of 3.3% compared to 2018. Road congestion continues to increase: the increasing rate of annual kilometers travelled as well as the fleet of large vehicles is higher than the rate of increase of the length and area of the roads. The annual kilometers travelled increased by 73.2% compared to the year 2000, and the vehicle fleet increased by 96.6%, whereas the area of the roads increased by 50.7% and the length of the roads by only 21.2%. On the other hand, the index of persons killed in road accidents since the year 2000 has decreased by 31.2% and the index of road accidents decreased by 38.7%.

Diagram 2 – Indices of Annual Kilometers Travelled, Number of Vehicles, Area and Length of Roads 2000-2019



Road accidents with casualties in which electric vehicles were involved and according to the law do not require a licence, including “Expanded R.A.” and “General with Slight Casualties”

Road accidents with casualties in which electric bicycles were involved

In 2019 there were 1,653 road accidents with casualties that had an electric bicycle involved in the accident and were **reported** to the police, 431 of which were Expanded R.A. type and the rest "General with Slight Casualties" type. This is in comparison to 1,821 accidents in 2018, of which 471 were Expanded R.A. type. In 2019, 1,775 people were injured in these accidents: 18 were killed, 160 were seriously injured and 1,597 were slightly injured. This is in comparison to the 1,983 casualties in 2018. The number of casualties decreased by 10.5% compared to 2018 and the number of accidents decreased by 9.2% compared to 2018.

Similarly, 506 casualties were hospitalized following road accidents involving electric bicycles that were **not reported** to the police. This is compared to 568 casualties hospitalized in the previous year- a decrease of 10.9%. According to the medical index MAIS, among the casualties not reported to the police 165 people were seriously injured, 339 were slightly injured and 2 people had an unknown MAIS value.

Table D- Casualties (1) in Road Accidents in which electric bicycles were involved, by severity of injury and year

Absolute Numbers

Severity of Injury	2018	2019
Casualties reported to the Police (2)	1,983	1,775
Killed	19	18
Seriously injured	146	160
Slightly injured	1,818	1,597
Casualties not reported to the Police (3)	568	506
Seriously injured	192	165
Slightly injured	371	339
Unknown	5	2

- (1) All of the casualties (including pedestrians) in all the vehicles that were involved in a road accident with electric bicycles.
- (2) Expanded R.A. and “General with Slight Casualties”
- (3) Severity of injury according to MAIS index.

Road accidents with casualties in which electric scooters were involved

In 2019 there were 569 road accidents with casualties that had electric scooters involved in the accident and were **reported** to the police, 118 of which were Expanded R.A. type and the rest "General with Slight Casualties" type. This is in comparison to 220 accidents in 2018, of which 61 were Expanded R.A. type. In 2019, 598 people were injured in these accidents, in comparison to the 237 casualties in 2018. Of all the casualties in 2019, 2 were killed, 41 were seriously injured and 555 were slightly injured.

In road accidents involving electric scooters that were **not reported** to the police, 209 casualties were hospitalized (49 in 2018). According to the medical index MAIS, among the casualties not reported to the police 90 people were seriously injured and 118 were slightly injured.

Table E- Casualties (1) in Road Accidents in which electric scooters were involved, by severity of injury and year

Absolute Numbers

Severity of Injury	2018	2019
Casualties reported to the Police (2)	237	598
Killed	1	2
Seriously injured	21	41
Slightly injured	215	555
Casualties not reported to the Police (3)	49	209
Seriously injured	16	90
Slightly injured	33	118
Unknown	0	1

- (1) All of the casualties (including pedestrians) in all the vehicles that were involved in a road accident with electric scooters.
- (2) Expanded R.A. and "General with Slight Casualties"
- (3) Severity of injury according to MAIS index.

Road accidents with casualties in which mobility scooters were involved

In 2019 there were 134 road accidents with casualties that had mobility scooters involved in the accident and were **reported** to the police, 34 of which were Expanded R.A. type and the rest "General with Slight Casualties" type. This is in comparison to 105 accidents in 2018, of which 35 were Expanded R.A. type. In 2019, 145 people were injured in these accidents, in comparison to

the 118 casualties in 2018. Of all the casualties in 2019, 1 was killed, 9 were seriously injured and 135 were slightly injured.

In road accidents involving mobility scooters that were **not reported** to the police, 86 casualties were hospitalized (67 in 2018). According to the medical index MAIS, among the casualties not reported to the police 45 people were seriously injured and 41 were slightly injured.

Table F- Casualties (1) in Road Accidents in which mobility scooters were involved, by severity of injury and year

Absolute Numbers

Severity of Injury	2018	2019
Casualties reported to the Police (2)	118	145
Killed	2	1
Seriously injured	12	9
Slightly injured	104	135
Casualties not reported to the Police (3)	67	86
Seriously injured	32	45
Slightly injured	35	41
Unknown	0	0

- (1) All of the casualties (including pedestrians) in all the vehicles that were involved in a road accident with mobility scooters.
- (2) Expanded R.A. and "General with Slight Casualties"
- (3) Severity of injury according to MAIS index.

Explanations

The CBS database is based on an administrative file received monthly from the Israel Police. The file records the accidents that were reported to the Police, and for which an accident file was opened in the Israel Police. An additional administrative file from hospitals is received monthly from the National Center for Trauma and Emergency Medicine Research at the Gertner Institute,¹⁶ the file includes information on casualties in road accidents that were hospitalized and on their severity of injury (MAIS index).

International guidelines recommend using the MAIS scale to determine the severity of the injury in road accidents. As of 2013, the severity of injury is determined by a combination of hospital data and police data.

In accordance to this, as of 2018, the Israel Police file is linked with the trauma registration system file in the CBS, to improve the quality of the data on injury severity, according to the MAIS index.¹⁷ The improvement was applied to data from 2013 and onwards.

Additionally, as of 1975, the road accident data include accidents that occurred in the Judea and Samaria Area (including a revision of the previous years in which the data was published separately).

¹⁶ **The hospital data are transferred to the CBS from the Trauma Registration System, which operated in the following hospitals:** Sheba Medical Center at Tel Hashomer; Rambam Medical Center; Assaf Harofeh Medical Center; Edith Wolfson Medical Center; Ziv Medical Center; Hillel Yaffe Medical Center; Galilee Hospital Medical Center, Nahariyya; Barzilai Medical Center, Ashkelon; Poriya Hospital, Tiberias; Tel Aviv Sourasky Medical Center-Ichilov Hospital; Rabin Medical Center-Beilinson Hospital; Soroka University Medical Center; Kaplan Medical Center; Hadasah University Hospital – Ein Kerem; EMMS Nazareth Hospital; Shaare Zedek Medical Center, Jerusalem; Emek Medical Center; Laniado Hospital; Yoseftal Medical Center, Eilat; Meir Medical Center, Kefar Sava and Samson Assuta Hospital, Ashdod.

¹⁷ A person who was involved in a road accident and is found in **both** the police records and hospital data, the severity of their injury is based on the hospital data (MAIS medical index). A person who was involved in a road accident and is found **only** in the police records (not found in the hospital data), the severity of their injury is based on the police records.

Definitions

Person killed in a road accident: A person who died in a road accident, or a person who was injured in a road accident and died of his or her injuries within 30 days.

Serious and slightly injured in CBS publications: A person who was involved in a road accident and is found in **both** the police records and hospital data, the severity of their injury is based on the hospital data (MAIS medical index). A person who was involved in a road accident and is found **only** in the police records (not found in the hospital data), the severity of their injury is based on the police records.

Maximum Abbreviated Injury Scale (MAIS): medical index of the severity of an injury that is the highest of the AIS (Abbreviated Injury Scale) scores set for each of nine areas of the body. The index provides a general score of injury severity even for casualties with more than one injury. The values of this index are between 1 and 6, in which 1-2 - slightly injured, 3-6 - seriously injured.

Road accident with casualties: A road accident involving at least one road vehicle in motion, resulting in at least one injured or killed person. Including collisions between road vehicles, collisions between road and rail vehicles, rail accidents, and road vehicles hitting pedestrians, animals, or inanimate objects); excluding road accidents incurring only material damage, and terrorist acts. Multi-vehicle collisions are counted as only one road accident. Suicides or suicide attempts that caused road accidents are not considered accidents, unless other passengers were hurt.¹⁸

Road accident with casualties of the "Expanded R.A." type: Road accidents classified by the Police as an "R.A." type or road accidents classified by the Police as "General with Casualties", but according to the hospitals' data there was at least one seriously injured person. This casualty is classified in the CBS as a seriously injured casualty and therefore the accident is classified by the CBS as a road accident of "Expanded R.A." type.

Road accidents of the "General with Slight Casualties" type: This refers to a road accident that was classified by the police as "General with Casualties" type and according to the hospital data **all** the casualties were slightly injured.

¹⁸ There is a distinction between an accident defined by the police as an accident investigated (R.A. file) and an accident not investigated (General with Casualties file). This distinction is based on the number of days that passed from the date of the accident until the date of report to the police (gap in reporting) and other criteria, such as vehicle number, number of drivers, number of casualties involved in the accident and the severity of the driving offense. The Israel Police do not receive reports on accidents in which only army vehicles were involved.

The severity of the accident is determined by the severity of the most severe casualty in the accident:

Fatal road accident: A road accident in which at least one person was killed, or a road accident in which at least one person was injured and died of his or her injuries within 30 days.

Serious road accident: A road accident in which at least one person was seriously injured, and in which no one was killed.

Slight road accident: A road accident in which at least one person was slightly injured, and in which no one was killed or seriously injured.