



Automobile Club d'Italia



November 6th, 2013

Year 2012

ROAD ACCIDENTS IN ITALY

- During 2012, the number of road accidents resulting in deaths or injuries in Italy was 186,726, with 3,653 killed (deaths within 30 days) and 264,716 injured persons.
- Comparing 2012 data with the previous year (2011), a decrease of 9.2% for accidents, 9.3% for injuries and 5.4% for killed persons is recorded. In Italy the decrease, of killed persons in road accidents, between 2001 and 2012, is 48.5%, and the number of deaths passed from 7,096 to 3,653 (Chart 1).
- In the EU27 Countries, during 2012, 27,724 persons died in road accidents; during 2011, 30,382 victims were registered. The percentage change of the number of deaths, between 2011 and 2012, is 8.8% and -5.4%, respectively in EU27 and in Italy. The number of deaths per million inhabitants in the EU27 countries, during 2012, was 55.0. In Italy this value was 60.1, ranking thirteenth position in the European classification, behind United Kingdom, Spain, Germany and France.
- During 2012, 141,715 road accidents, 191,521 injured and 1,562 killed persons were counted on the inside urban area roads. Regarding the motorways, the road accidents were 9,398 the injured persons 15,852 and the killed persons 330. On the other rural roads (motorways excluded), 35,613 road accidents, 57,343 injured and 1,761 killed were recorded.
- The mortality index, calculated by means the ratio between deaths and road accidents (per 100), shows that the most dangerous accidents occur on the rural roads (motorways excluded), where 4.94 deaths every 100 road accidents happens. The inside urban area road accidents are less dangerous than the others (1.10 deaths per 100 accidents). For the motorways, the index is equal to 3.51 (per 100). On the rural roads and motorways an increase of the mortality index, between 2012 and 2011 was recorded (values for 2011: 4.73 e 3.07).
- The mortality index reach the highest value at 3, 5 and 6 o'clock a.m. (daily average 1.96 deaths per 100 accidents) The week day with the highest mortality index level is Sunday (2.99 deaths per 100 accidents). Concerning the night-time (between 10 p.m. and 6 a.m.), the highest mortality index level is reached on rural roads or motorways and on Monday and Thursday night (7.71 and 7.74 deaths per 100 accidents)
- In seven cases out of ten the drivers are victims in road accidents represents (70.0%), passengers and pedestrians correspond, in that order, to 14.6% and 15.4%.
- Among drivers deceased in road accidents (2,555 in total), people between 20 and 49 years old (1,321 in total – 51.7%) are at a disadvantage, compared to the other ages. Deaths are registered mainly for young people in the age classes 20-24 and adults 40-44 years old (263 deaths and 275 deaths). It has to be noted that the proportion of bicycle drivers killed in road accidents is still on the rise: +2.5% between 2012 and 2011. An increase of 7.2% was recorded over the previous year.
- Cars represent the vehicle category mainly involved in road accidents (66.3%), motorcycles represent 13.6% out of total vehicles involved, trucks 6.5%, bicycles 5.2% and moped 5.0%.

Road accidents trend in Italy Number of deaths on the roads still decreasing

During 2012, the number of **road accidents** resulting in deaths or injuries in Italy was **186,726**, with **3,653 killed** and **264,716 injured persons**.

Every day, during 2011, an average number of **512** road accidents, **10** deaths and **725** injuries occurred on the Italian roads. Comparing these data with the previous year (2011), a decrease of 9.2% for accidents, 9.3% for injuries and 5.4% for killed persons is recorded (Table 1).

TABLE 1. ROAD ACCIDENTS, KILLED AND INJURED PERSONS - Years 2001-2012 (absolute values, deaths per million and percentage change)

YEARS	Road accidents	Killed	Injured	Deaths per million inhabitants (a)	% change of the number of deaths in respect to the previous year (b)	% change of the number of deaths in respect to 2001 (c)
2001	263,100	7,096	373,286	124.5	-	-
2002	265,402	6,980	378,492	122.1	-1.6	-1.6
2003	252,271	6,563	356,475	113.9	-6.0	-7.5
2004	243,490	6,122	343,179	105.2	-6.7	-13.7
2005	240,011	5,818	334,858	99.3	-5.0	-18.0
2006	238,124	5,669	332,955	96.2	-2.6	-20.1
2007	230,871	5,131	325,850	86.4	-9.5	-27.7
2008	218,963	4,725	310,745	79.0	-7.9	-33.4
2009	215,405	4,237	307,258	70.4	-10.3	-40.3
2010 (d)	212,997	4,114	304,720	68.0	-2.9	-42.0
2011	205,638	3,860	292,019	63.7	-5.6	-45.6
2012	186,726	3,653	264,716	60.1	-5.4	-48.5

Source: Istat – Road accidents resulting in deaths or injuries register 2001 – 2012

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.

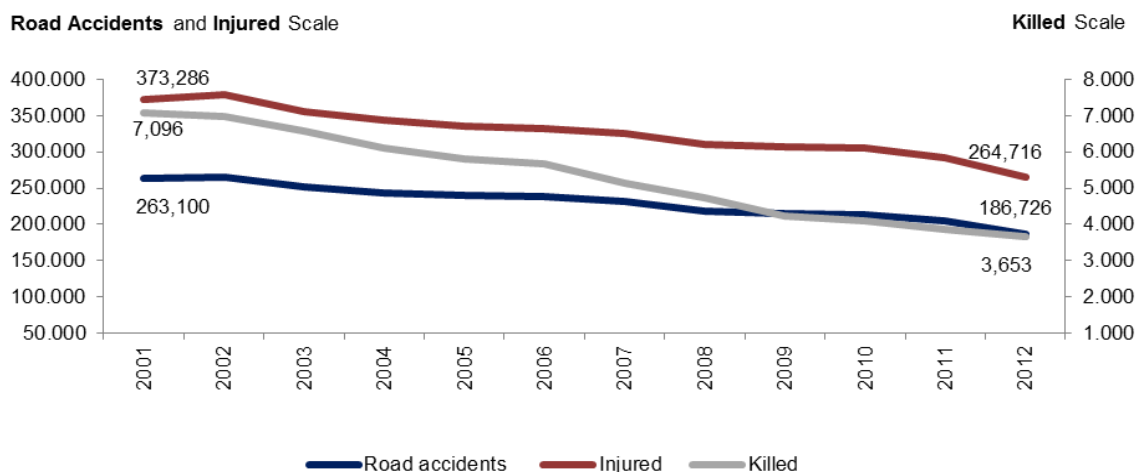
(a) Deaths out of resident population (per 1,000,000)

(b) The variations in change of the number of deaths in respect to the previous year is: $\left(\frac{M^t}{M^{t-1}} - 1\right) * 100$

(c) The percentage change of the number of deaths in respect to 2001 (2001=100) is: $\left(\frac{M^t}{M^{2001}} - 1\right) * 100$

(d) 2010 has been revised during 2013, upon request of Toscana Region.

CHART 1. NUMBER OF ROAD ACCIDENTS RESULTING IN DEATH OR INJURY, KILLED AND INJURED PERSONS YEARS 2001-2012 (absolute values)



The European Union 2020 goal: a decrease of deaths number in Italy

During 2010 the UN General Assembly proclaimed a new Decade of Action for Road Safety 2011-2020 to further reduce the number of deaths due to road accidents in the world. The European Commission, in occasion of the new decade of road safety initiatives, outlined guidelines based on seven main strategic objectives too: improving vehicle safety and road infrastructure, increasing intelligent technology, strengthen education and training for road users, improving controls, setting a goal to reduce injuries in car accidents, special care to the safety of motorcyclists.

With the year 2010, the first decade dedicated to the road safety and to actions to reach the fatality targeted reduction of 50% has been concluded. The new challenge launched by the United Nation on May 11th 2011, started up the new decade 2011-2020 for the road safety, establishing the target of a new halving of deaths and a reduction of serious injuries¹.

Concerning data referred to 2012, in the European Union, 27,724 persons died. Deaths on road accidents registered for 2011 were 30,382, with a decrease of 8.8% between 2012 and 2011. In Italy the number of road deaths decreased by 5.4% over the same period. In the EU27 countries, during 2012, 55.0 persons died in road accidents per million inhabitants. In Italy the rate was 60.1, ranking thirteenth position in the European classification, behind the United Kingdom, Spain, Germany and France. (Table 2).

TABLE 2. KILLED PERSONS IN ROAD ACCIDENTS WITHIN COUNTRIES OF THE EUROPEAN UNION (EU27).

Years 2011, and 2012 (absolute numbers, variations in change and deaths per million of inhabitants) (a)

COUNTRIES EU27	Absolute numbers		Variations in change (b)		Deaths per million of inhabitants	
	2011	2012*	2012/2011	2011	2012	
Austria	523	522	- 0.2	62.2	61.8	
Belgium	858	750	- 12.6	78.3	67.6	
Bulgaria	658	605	- 8.1	87.7	82.6	
Cyprus	71	51	- 28.2	88.3	59.2	
Denmark	220	175	- 20.5	39.6	31.4	
Estonia	101	87	- 13.9	75.4	64.9	
Finland	292	255	- 12.7	54.3	47.2	
France	3,963	3,653	- 7.8	62.8	57.6	
Germany	4,009	3,601	- 10.2	49.0	44.0	
Greece	1,141	1,027	- 10.0	100.9	91.0	
Ireland	186	162	- 12.9	41.5	35.3	
Italy	3,860	3,653	- 5.4	63.7	60.1	
Latvia	179	177	- 1.1	80.3	86.7	
Lithuania	297	301	1.3	91.5	100.1	
Luxembourg	33	34	3.0	64.5	64.8	
Malta	17	9	- 47.1	40.7	21.6	
The Netherlands	661	650	- 1.7	39.7	38.9	
Poland	4,189	3,571	- 14.8	109.7	92.7	
Portugal	891	743	- 16.6	83.8	70.5	
United Kingdom	1,960	1,768	- 9.8	31.4	28.1	
Czech Republic	773	738	- 4.5	73.4	70.2	
Romania	2,018	2,042	1.2	94.2	95.6	
Slovakia	324	295	- 9.0	59.6	54.6	
Slovenia	141	130	- 7.8	68.8	63.2	
Spain	2,060	1,834	- 11.0	44.6	39.7	
Sweden	319	286	- 10.3	33.9	30.2	
Hungary	638	605	- 5.2	63.9	60.8	
EU27	30,382	27,724	- 8.8	60.7	55.0	

* Provisional data 2012 for Austria, Belgium, Bulgaria, Denmark, Estonia, Finland, France, Greece, The Netherlands, Portugal, United Kingdom, Slovakia e Spain

(a) Source: European Transport Safety Council, Annual PIN report. Year 2012-2013 - <http://www.etsc.eu/PIN-publications.php>

(b) The variations in change 2012/2011 is calculated by means the formulas : $((M^{2012} / M^{2011}) - 1) * 100$

¹ A common definition of "serious injuries", adopted by EU27 Countries, does not exist. The European Commission proposed the use of the existing trauma scale "Maximum Abbreviated Injury Scale" (MAIS). Serious injuries are related with a level MAIS>=3.

Tables and graphics collection:

TABLE 3. ROAD ACCIDENTS, KILLED AND INJURED PERSONS BY ROAD TYPE . Year 2012 (absolute values, mortality index and % change 2012/2011)

ROAD TYPE	Road accidents	Killed	Injured	Mortality Index (a)	% change Accidents 2012/2011	%Change Killed 2012/2011	% change Injured 2012/2011
Inside urban area roads	141,715	1,562	191,521	1.10	-9.7	-10.4	-10.1
Motorways	9,398	330	15,852	3.51	-14.6	-2.4	-14.4
Rural roads	35,613	1,761	57,343	4.94	-5.3	-1.0	-5.2
Total	186,726	3,653	264,716	1.96	-9.2	-5.4	-9.3

(a) The mortality index is the ratio between the number of killed persons in road accidents out of total road accidents resulting in death or injury (per 100).

TABLE 4. ROAD ACCIDENTS AND KILLED PERSONS BY MONTH. Year 2012 (absolute values, daily average and mortality index)

MONTHS	Road Accidents		Killed		Mortality Index by month (a)
	Absolute numbers	Daily average	Absolute numbers	Daily average	
January	13,945	465	247	8	1.77
February	11,337	391	198	7	1.75
March	15,428	498	269	9	1.74
April	14,187	473	295	10	2.08
May	17,456	563	296	10	1.70
June	18,524	617	361	12	1.95
July	18,709	604	406	13	2.17
August	15,872	512	370	12	2.33
September	15,401	513	326	11	2.12
October	16,692	538	335	11	2.01
November	15,118	504	265	9	1.75
December	14,057	453	285	9	2.03
Year 2010	186,726	512	3,653	10	1.96

(a) The mortality index is the ratio between the number of killed persons in road accidents out of total road accidents resulting in death or injury (per 100).

TABLE 5. ROAD ACCIDENTS AND KILLED PERSONS BY MONTH AND ROAD TYPE. Year 2012 (absolute values and mortality index)

MONTHS	Inside Urban area			Rural roads (a)		
	Road accidents	Killed persons	Mortality Index (b)	Road accidents	Killed persons	Mortality Index (b)
January	10,725	117	1.09	3,220	130	4.04
February	8,675	82	0.95	2,662	116	4.36
March	12,063	117	0.97	3,365	152	4.52
April	10,701	113	1.06	3,486	182	5.22
May	13,513	134	0.99	3,943	162	4.11
June	14,033	160	1.14	4,491	201	4.48
July	13,953	179	1.28	4,756	227	4.77
August	11,504	148	1.29	4,368	222	5.08
September	11,519	138	1.20	3,882	188	4.84
October	12,870	141	1.10	3,822	194	5.08
November	11,631	112	0.96	3,487	153	4.39
December	10,528	121	1.15	3,529	164	4.65
Year 2010	141,715	1,562	1.10	45,011	2,091	4.65

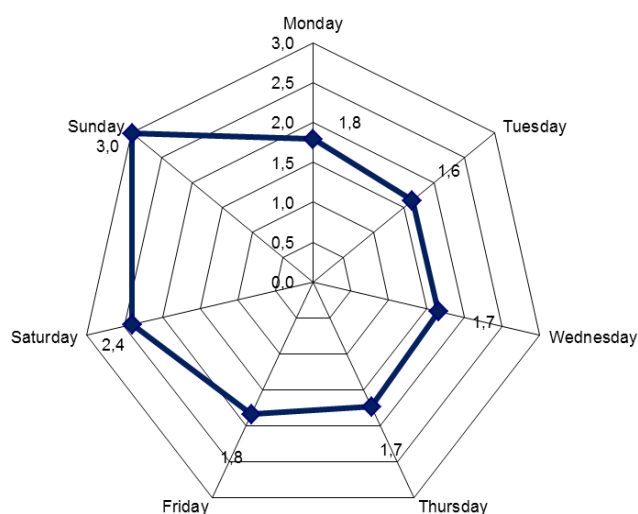
(a) Motorways included.

(b) The mortality index is the ratio between the number of killed persons in road accidents out of total road accidents resulting in death or injury (per 100).

TABLE 6. ROAD ACCIDENTS, KILLED AND INJURED PERSONS BY DAY WEEK. Year 2012 (absolute values and percentage distribution)

DAY WEEK	Absolute numbers			Percentage distribution		
	Road accidents	Killed	Injured	Road accidents	Killed	Injured
Monday	28,094	503	39,007	15.0	13.8	14.7
Tuesday	27,665	453	37,546	14.8	12.4	14.2
Wednesday	27,752	461	37,858	14.8	12.6	14.3
Thursday	28,367	491	38,528	15.2	13.4	14.6
Friday	29,423	541	40,581	15.8	14.8	15.3
Saturday	25,878	620	39,112	13.9	17.0	14.8
Sunday	19,547	584	32,084	10.5	16.0	12.1
Total	186,726	3,653	264,716	100.0	100.0	100.0

CHART 2. MORTALITY INDEX BY WEEK DAY. Year 2012 (a)



(a) The mortality index is the ratio between the number of killed persons in road accidents out of total road accidents resulting in death or injury (per 100).

CHART 3. ROAD ACCIDENTS BY DAY TIME. Year 2012 (absolute values)

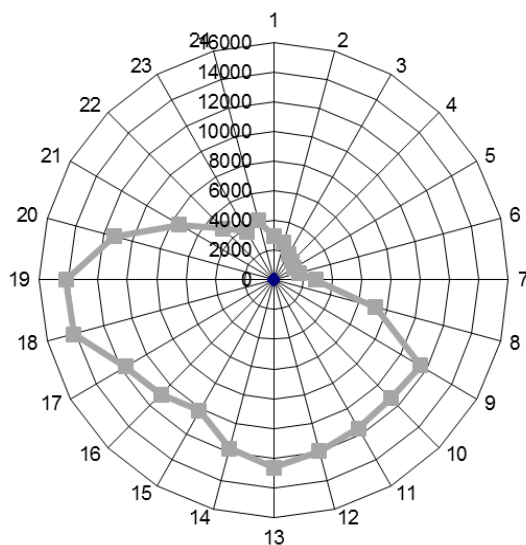
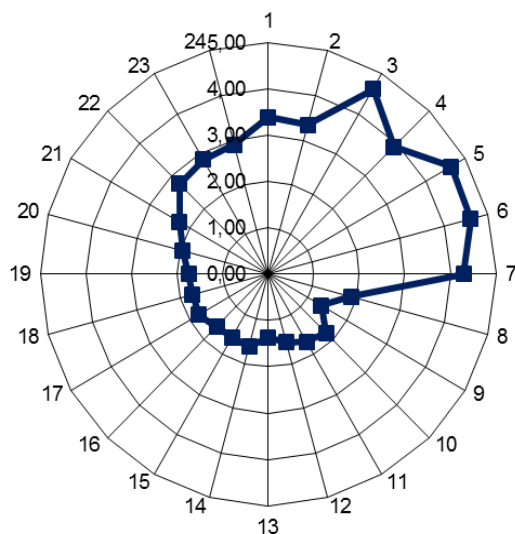


CHART 4. MORTALITY INDEX BY DAY TIME. Year 2012 (a) (absolute values)



(a) The mortality index is the ratio between the number of killed persons in road accidents out of total road accidents resulting in death or injury (per 100).

TABLE 7. KILLED AND INJURED PERSONS IN ROAD ACCIDENTS BY SEX AND AGE CLASS. Year 2012 (absolute values)

AGE CLASSES	Killed			Injured		
	Males	Females	Total	Males	Females	Total
0 - 4	7	2	9	1,426	1,190	2,616
5 - 9	10	8	18	1,940	1,724	3,664
10 -14	16	8	24	3,202	2,541	5,743
15 -19	146	38	184	14,395	8,241	22,636
20 -24	242	67	309	19,238	12,067	31,305
25 -29	230	45	275	16,614	10,545	27,159
30 - 34	227	39	266	15,837	9,552	25,389
35 - 39	246	32	278	15,695	9,895	25,590
40 - 44	242	44	286	14,831	9,377	24,208
45 - 49	220	33	253	13,438	8,805	22,243
50 -54	208	36	244	10,574	6,884	17,458
55 -59	168	39	207	7,793	5,055	12,848
60 -64	150	35	185	6,164	4,064	10,228
65 -69	124	36	160	4,817	3,303	8,120
70 - 74	177	66	243	4,414	3,119	7,533
75 - 79	189	59	248	3,768	2,442	6,210
80 - 84	159	66	225	2,356	1,550	3,906
85 - 89	99	42	141	1,034	657	1,691
90 - 94	21	7	28	255	145	400
95 - 99	5	0	5	29	13	42
unknown	47	18	65	3,094	2,633	5,727
Total	2,933	720	3,653	160,914	103,802	264,716

CHART 5. KILLED PERSONS IN ROAD ACCIDENTS BY SEX AND AGE CLASS. Year 2012 (percentage distribution)

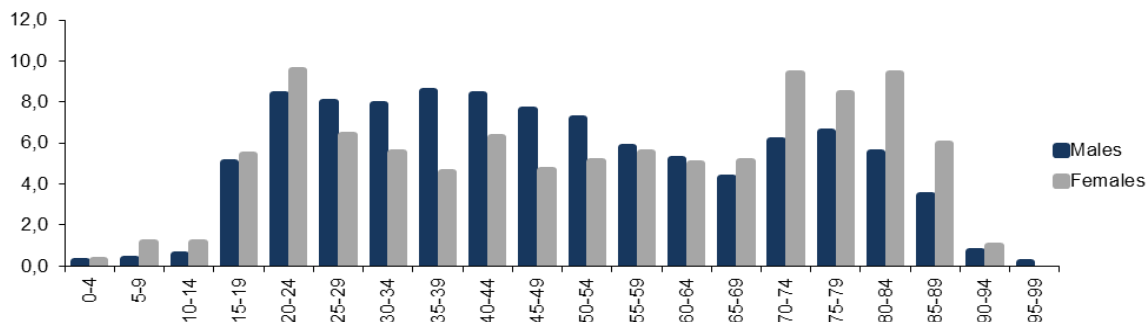


TABLE 8. DRIVERS, KILLED AND INJURED, BY SEX AND AGE CLASS– Year 2012 (a) (absolute values)

AGE CLASSES	Killed drivers			Injured drivers		
	Males	Females	Total	Males	Females	Total
0 – 9	-	-	-	132	44	176
10 -14	6	2	8	1,042	292	1,334
15 -19	101	6	107	10,180	3,368	13,548
20 -24	188	31	219	14,547	6,579	21,126
25 -29	187	20	207	13,383	6,431	19,814
30 -34	201	22	223	13,189	6,100	19,289
35 -39	206	17	223	13,504	6,668	20,172
40 -44	213	22	235	12,889	6,398	19,287
45 -49	193	21	214	11,685	5,753	17,438
50 -54	178	18	196	9,247	4,080	13,327
55 -59	148	22	170	6,805	2,746	9,551
60 -64	122	14	136	5,224	1,848	7,072
65 -69	100	15	115	3,976	1,347	5,323
70 -74	126	19	145	3,487	1,198	4,685
75 -79	119	15	134	2,839	773	3,612
80 -84	98	13	111	1,629	372	2,001
85 -89	60	4	64	665	119	784
90 -94	9	-	9	137	14	151
95 -99	1	-	1	9	2	11
Unknown	30	8	38	1,468	583	2,051
Total	2,286	269	2,555	126,037	54,715	180,752

(a) Drivers, killed or injured in road accidents, included in the age classes 0-4 and 5-9 years, are bicycles drivers.

CHART 6. KILLED DRIVERS BY SEX AND AGE CLASS. Year 2012 (percentage distribution)

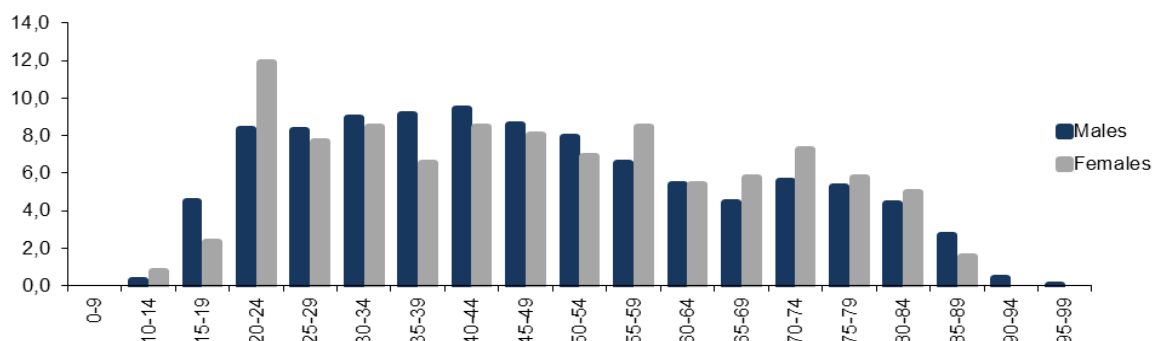


TABLE 9. DRIVERS, KILLED AND INJURED, BY SEX AND VEHICLES TYPE. Year 2012 (absolute values)

VEHICLES TYPE	Killed drivers			Injured drivers		
	Males	Females	Total	Females	Total	Males
Cars	1,001	177	1,178	58,847	39,241	98,088
Trucks	146	3	149	5,599	359	5,958
Bicycles	237	52	289	11,341	5,270	16,611
Moped	105	12	117	11,590	4,210	15,800
Motorcycles	767	20	787	37,149	5,051	42,200
Mini cars	7	1	8	292	167	459
Other vehicles	23	4	27	1,219	417	1,636
Total	2,286	269	2,555	126,037	54,715	180,752

TABLE 10. DRIVERS, KILLED AND INJURED, BY SEX AND ROAD TYPE . Year 2012 (absolute values)

ROAD TYPE	Killed drivers			Injured drivers		
	Males	Females	Total	Males	Females	Total
Inside Urban Area Roads	887	97	984	91,139	40,840	131,979
Motorway	179	16	195	6,792	2,582	9,374
Rural roads	1,220	156	1,376	28,106	11,293	39,399
Total	2,286	269	2,555	126,037	54,715	180,752

TABLE 11. PEDESTRIAN, KILLED AND INJURED, BY SEX AND AGE CLASS . Year 2012 (absolute values)

AGE CLASSES	Killed pedestrian			Injured pedestrian		
	Males	Females	Total	Males	Females	Total
0-4	-	2	2	238	159	397
5-9	3	1	4	388	293	681
10 -14	2	3	5	569	512	1,081
15 -19	5	5	10	577	653	1,230
20 -24	8	3	11	528	569	1,097
25 -29	8	10	18	538	562	1,100
30 -34	8	6	14	554	553	1,107
35 -39	22	4	26	563	630	1,193
40 -44	14	8	22	604	643	1,247
45 -49	13	5	18	588	761	1,349
50 -54	12	9	21	542	763	1,305
55 -59	16	8	24	425	715	1,140
60 -64	21	11	32	508	703	1,211
65 -69	20	11	31	517	753	1,270
70 -74	37	24	61	633	855	1,488
75 -79	59	31	90	693	851	1,544
80 -84	56	36	92	563	675	1,238
85 -89	37	27	64	279	334	613
90 -94	9	2	11	85	73	158
95 -99	3	-	3	15	3	18
Unknown	4	1	5	162	123	285
Total	357	207	564	9,569	11,183	20,752

CHART 7. KILLED PEDESTRIAN BY SEX AND AGE CLASS .Year 2012 (percentage distribution)

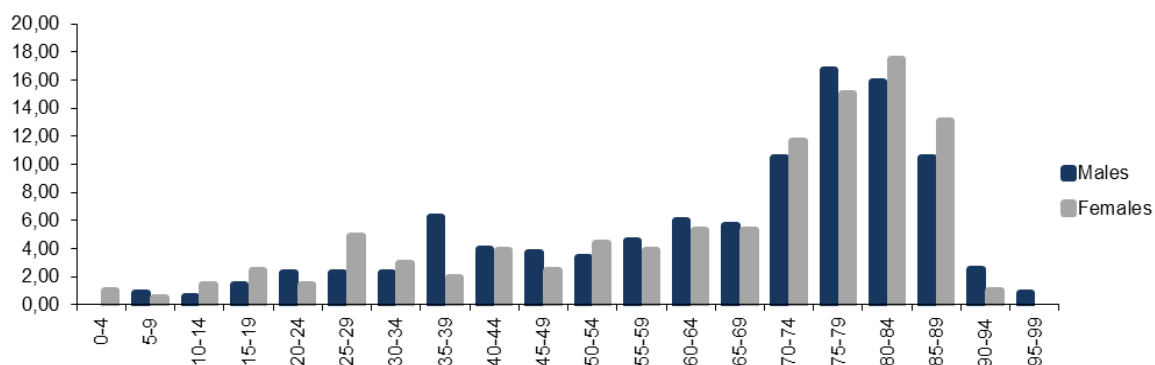


TABLE 12. PASSENGERS, KILLED AND INJURED, BY SEX AND AGE CLASS. Year 2012 (absolute values)

AGE CLASSES	Killed passengers			Injured passengers		
	Males	Females	Total	Males	Females	Total
0 - 4	7	-	7	1,176	1,029	2,205
5 - 9	7	7	14	1,432	1,389	2,821
10 -14	8	3	11	1,591	1,737	3,328
15 -19	40	27	67	3,638	4,220	7,858
20 -24	46	33	79	4,163	4,919	9,082
25 -29	35	15	50	2,693	3,552	6,245
30 - 34	18	11	29	2,094	2,899	4,993
35 - 39	18	11	29	1,628	2,597	4,225
40 - 44	15	14	29	1,338	2,336	3,674
45 - 49	14	7	21	1,165	2,291	3,456
50 -54	18	9	27	785	2,041	2,826
55 -59	4	9	13	563	1,594	2,157
60 -64	7	10	17	432	1,513	1,945
65 -69	4	10	14	324	1,203	1,527
70 - 74	14	23	37	294	1,066	1,360
75 - 79	11	13	24	236	818	1,054
80 - 84	5	17	22	164	503	667
85 - 89	2	11	13	90	204	294
90 - 94	3	5	8	33	58	91
95 - 99	1	-	1	5	8	13
Unknown	13	9	22	1,464	1,927	3,391
Total	290	244	534	25,308	37,904	63,212

CHART 8 KILLED PASSENGERS BY SEX AND AGE CLASS. Year 2012 (percentage distribution)

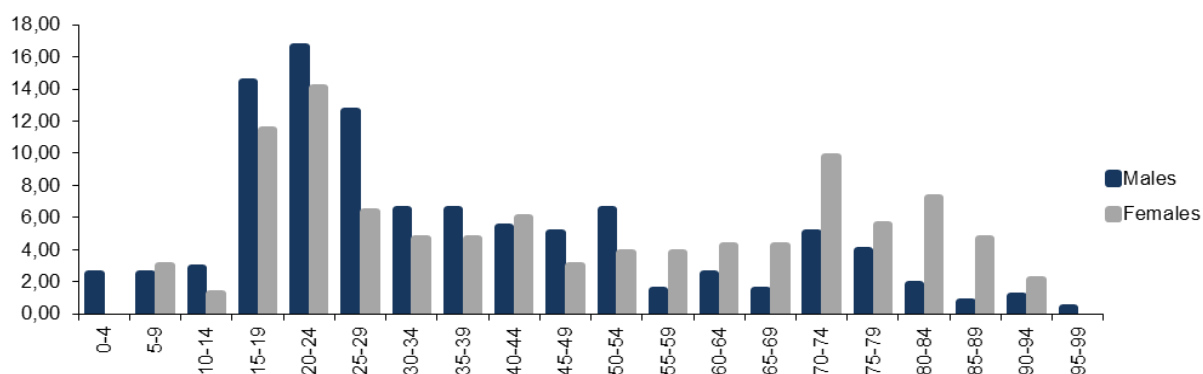


TABLE 13. VEHICLES INVOLVED IN ROAD ACCIDENTS, KILLED AND INJURED PERSON BY VEHICLES TYPE. Year 2012 (a) (absolute values and percentage distribution)

VEHICLES TYPE	Absolute values			Percentage distribution		
	Vehicles	Killed	Injured	Vehicles	Killed	Injured
Cars	230,184	1,633	149,595	66.3	52.9	61.3
Trucks	23,173	174	8,009	6.7	5.6	3.3
Bicycles	17,885	289	16,816	5.2	9.4	6.9
Moped	17,512	122	17,657	5.0	3.9	7.2
Motorcycles	47,311	822	47,368	13.6	26.6	19.4
Mini cars	691	11	616	0.2	0.4	0.3
Other vehicles	10,200	38	3,903	2.9	1.2	1.6
Total	346,956	3,089	243,964	100.0	100.0	100.0

(a) Pedestrians excluded.