



Automobile Club d'Italia



November 4, 2014

ROAD ACCIDENTS IN ITALY

Year 2013

In 2013, the number of road accidents resulting in deaths or injuries in Italy was 181,227, with 3,385 killed (deaths within 30 days) and 257,421 injured persons.

Comparing 2013 data with the previous year (2012), a decrease by 3.7% for accidents, 3.5% for injuries and 9.8% for killed persons is recorded. In Italy the decrease of persons killed in road accidents, between 2001 and 2013, is 52.3%, and the number of deaths decreased from 7,096 to 3,385 (Chart 1).

In the EU28 Countries, in 2013, 26,010 persons died in road accidents; in 2012, 28,298 victims were registered, with a percentage change in the number of deaths, between 2013 and 2010, equal to -17.7%. The same variation has been recorded, for the same period, in Italy. The number of deaths per million inhabitants in the EU28 countries, in 2012, was 51.4. In Italy this value was 56.2, thus putting Italy in the fourteenth position in the European ranking, behind United Kingdom, Spain, Germany and France.

During 2013, 136,438 road accidents, 184,683 injured and 1,421 killed persons were counted in the urban area roads. Regarding the motorways, the road accidents were 9,265, the injured persons 15,447 and the killed persons 321. On the other rural roads (motorways excluded), 35,524 road accidents, 57,291 injured and 1,643 killed were recorded.

The mortality index, calculated through the ratio between deaths and road accidents (per 100), shows that the most dangerous accidents occur on rural roads (motorways excluded), where 4.63 deaths every 100 road accidents happens. The inside urban area road accidents are less dangerous than the others (1.04 deaths per 100 accidents). For the motorways, the index is equal to 3.46 (per 100). On the rural roads and motorways a decrease of the mortality index, between 2013 and 2012 was recorded (values for 2012: 3.51 and 5.03).

The mortality index reaches the highest value between 3 and 6 o'clock a.m. (daily average 1.87 deaths per 100 accidents) The day of the week with the highest mortality index level is Sunday (3.1 deaths per 100 accidents). Considering the time, during the night (between 10 p.m. and 6 a.m.), the highest mortality index level is reached on rural roads or motorways and on Monday and Sunday nights (8.32 and 7.94 deaths per 100 accidents)

Victims in road accidents are mainly drivers (67.9%), passengers and pedestrians correspond, in that order, to 15.9% and 16.2%.

Among drivers killed in road accidents (2,297 in total), people between 20 and 44 years old (968 in total) are mainly involved in road accidents. Deaths are registered mainly for young people in the age classes 20-24, and for 40-44 years old adults (219 deaths and 218 deaths, respectively).

Cars represent the vehicle category mainly involved in road accidents (67.5%), while motorcycles account for 12.8% out of total vehicles involved, trucks 6.4%, bicycles 5.3% and moped 4.5%.

Motorcycles result to be the most dangerous vehicles category (mortality index 1.68 deaths per 100 vehicles involved), followed by bicycles (1.41) and moped (0.84).

Road accidents on Italian roads decrease

In 2013, the number of **road accidents** resulting in deaths or injuries in Italy was **181,227**, with **3,385 killed** and **257,421 injured persons**.

Every day, during 2012, an average number of **497** road accidents, **9** deaths and **705** injuries occurred on the Italian roads. Comparing these data with the previous year (2012), a decrease of 3.7% for accidents, 3.5% for injuries and 9.8% for killed persons is recorded (Table 1).

TABLE 1. ROAD ACCIDENTS, KILLED AND INJURED PERSONS - Years 2001-2013 (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)	% change of the number of deaths in respect to 2010 (c)
2001	263,100	7,096	373,286	124.5	-	-	-
2002	265,402	6,980	378,492	122.3	-1.6	-1.6	-
2003	252,271	6,563	356,475	114.5	-6.0	-7.5	-
2004	243,490	6,122	343,179	106.1	-6.7	-13.7	-
2005	240,011	5,818	334,858	100.4	-5.0	-18.0	-
2006	238,124	5,669	332,955	97.5	-2.6	-20.1	-
2007	230,871	5,131	325,850	87.8	-9.5	-27.7	-
2008	218,963	4,725	310,745	80.3	-7.9	-33.4	-
2009	215,405	4,237	307,258	71.7	-10.3	-40.3	-
2010 (d)	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 (e)	188,228	3,753	266,864	63.0	-2.8	-47.1	-8.8
2013	181,227	3,385	257,421	56.2	-9.8	-52.3	-17.7

Source: Istat – Road accidents resulting in deaths or injuries register 2001 – 2013

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)

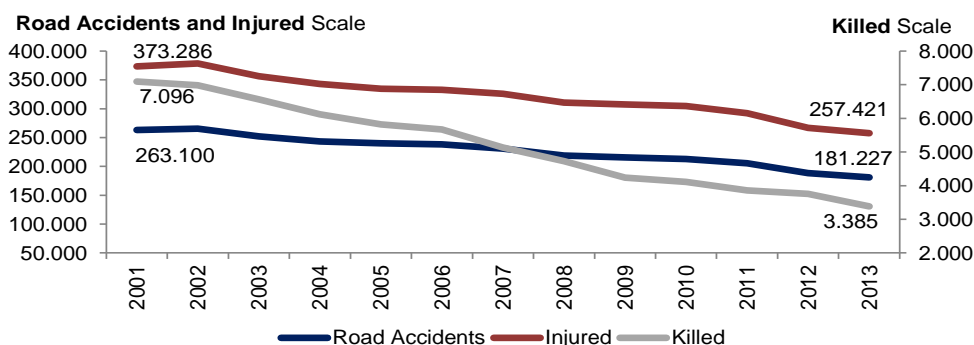
(b) The variations in change of the number of deaths in respect to the previous year is: $\left(\frac{M^t}{M^{t-1}} - 1\right) * 100$

(c) The percentage change of the number of deaths in respect to 2001 or 2010 is: $\left(\frac{M^t}{M^{2001}} - 1\right) * 100$; $\left(\frac{M^t}{M^{2010}} - 1\right) * 100$

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

(e) 2012 data has been revised during 2014 due to accident records provided to Istat after the deadline in 2013.

CHART 1. NUMBER OF ROAD ACCIDENTS RESULTING IN DEATH OR INJURY, KILLED AND INJURED PERSONS YEARS 2001-2013 (absolute values)



The European Union 2020 target: decrease in the number of deaths in Italy in line with EU28 average

Formattato: Inglese (Regno Unito)

In order to continue the process of improvement and awareness, promoted by the European Union for the 2001-2010 decade, which was supported by the White Paper of 2001, the General Assembly of the United Nations and the European Commission have proclaimed in 2010 a new decade of initiatives for Road Safety 2011-2020¹. The challenge for the new decade proposes the achievement of a further halving in the number of deaths from road accidents in Europe and globally, and the decrease in the number of serious injuries². To achieve these results, seven strategic goals have been proposed: to improve the education and training of road users, to facilitate rules' compliance, to make safer road infrastructures and vehicles, to promote the use of modern technologies to increase road safety, to improve emergency services and post-injury assistance, to protect the most vulnerable road users. In 2013, 26,010 people died in the UE28 in road accidents, in 2010 the victims were 31,595, with a 17.7% decrease between 2013 and 2010. In Italy the number of road deaths has decreased over the same period, by 17.7%, in line with the EU average. The percentage change in Italy between 2013 and 2012 is -9.8%, compared with -8.1% at EU28 level. In order to provide a standard measure of the level of mortality in road accident, harmonized and comparable between different European countries, Istat calculated the death rate, obtained by the ratio of the number of casualties in road accidents and the resident population. The indicator analysis shows that, in 2013, 51.4 persons per million inhabitants, died in EU28 in road accidents; in Italy, in the same year, the rate value was 56.2. These levels were, respectively, 62.8 and 69.4 in 2010. With this result, Italy placed fourteenth in the 2013 European ranking, behind the United Kingdom, Spain, Germany and France, among the major EU countries.

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

Years 2010, 2012 and 2013 (absolute numbers, percentage change and deaths per million of inhabitants) (a)

COUNTRIES EU28	Absolute numbers			% change of the number of deaths (b)		Deaths per million of inhabitants	
	2010	2012	2013*	2013/2012	2013/2010	2010	2013
Austria	552	531	455	-14.3	-17.6	65.9	53.8
Belgium	841	767	720*	-6.1	-14.4	77.6	64.5
Bulgaria	776	605	600*	-0.8	-22.7	104.6	82.4
Cyprus	60	51	44	-13.7	-26.7	73.2	50.8
Denmark	426	393	368	-6.4	-13.6	99.0	86.3
Croatia	255	167	192*	15.0	-24.7	46.1	34.3
Estonia	79	87	81	-6.9	2.5	59.3	61.4
Finland	272	255	258	1.2	-5.1	50.8	47.5
France	3,992	3,653	3,250*	-11.0	-18.6	61.7	49.6
Germany	3,651	3,601	3,340	-7.2	-8.5	44.6	41.5
Greece	1,258	984	870*	-11.6	-30.8	112.5	78.6
Ireland	212	162	190	17.3	-10.4	46.6	41.4
Italy	4,114	3,753	3,385	-9.8	-17.7	69.4	56.2
Latvia	218	177	179	1.1	-17.9	102.8	88.4
Lithuania	299	301	258	-14.3	-13.7	95.2	86.8
Luxembourg	32	34	45	32.4	40.6	63.7	83.8
Malta	15	9	18*	100.0	20.0	36.2	42.7
The Netherlands	640	650	570	-12.3	-10.9	38.6	34.0
Poland	3,907	3,571	3,357	-6.0	-14.1	102.4	87.1
Portugal	937	743	650*	-12.5	-30.6	88.6	62.0
United Kingdom	1,905	1802	1,790*	-0.7	-6.0	30.5	28.0
Czech Republic	802	742	650	-12.4	-19.0	76.7	61.8
Romania	2,377	2,042	1,861	-8.9	-21.7	117.1	93.0
Slovakia	353	295	223	-24.4	-36.8	65.5	41.2
Slovenia	138	130	125	-3.8	-9.4	67.4	60.7
Spain	2,478	1,903	1,680	-11.7	-32.2	53.3	36.0
Sweden	266	285	260	-8.8	-2.3	28.5	27.2
Hungary	740	605	591	-2.3	-20.1	73.9	59.6
EU28	31,595	28,298	26,010	-8.1	-17.7	62.8	51.4

* Provisional data 2013 for Austria, Belgium, Bulgaria, Denmark, France, Greece, Malta, Portugal, United Kingdom.

(a) Source: European Transport Safety Council, Annual PIN report. Year 2014 - <http://etsc.eu/8th-annual-road-safety-performance-index-pin-report/>

(b) The variations in change 2013/2010 or 2012 is calculated by means the formulas : $((M^{2013}/M^{2010 \text{ or } 2012}) - 1) * 100$

¹ Policy orientations on road safety 2011 - 2020. White paper 2011: http://ec.europa.eu/transport/road_safety/pdf/com_20072010_en.pdf

² The European Commission proposed a definition of seriously injured person using the existing classification "Maximum Abbreviated Injury Scale" (MAIS). The seriously injured person is identified with a level MAIS3+.

Tables and graphics collection:

TABLE 3. ROAD ACCIDENTS, KILLED AND INJURED PERSONS BY ROAD TYPE . Year 2013 (absolute values, mortality index and % change 2013/2012)

ROAD TYPE	Road accidents	Killed	Injured	Mortality Index (a)	% change Accidents 2013/2012	%change Killed 2013/2012	% change Injured 2013/2012
Inside urban area roads	136,438	1,421	184,683	1.04	-4.4	-11.3	-4.2
Motorways	9,265	321	15,447	3.46	-1.5	-2.7	-2.6
Rural roads	35,524	1,643	57,291	4.63	-1.8	-9.8	-1.6
Total	181,227	3,385	257,421	1.87	-3.7	-9.8	-3.5

(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 2013 (absolute values, daily average and mortality index)

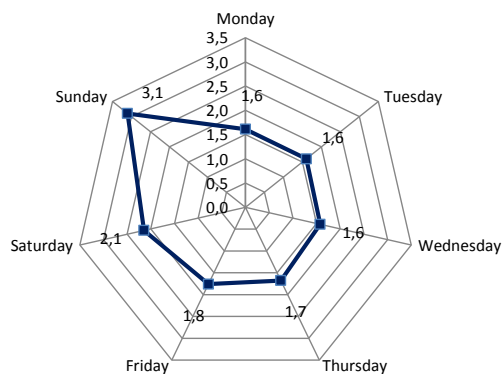
MONTHS	Road Accidents		Killed		Mortality Index by month (a)
	Absolute numbers	Daily average	Absolute numbers	Daily average	
January	13.623	439	240	8	1,76
February	11.992	428	220	8	1,83
March	13.693	442	239	8	1,75
April	14.210	474	240	8	1,69
May	16.330	527	288	9	1,76
June	17.439	581	327	11	1,88
July	17.766	573	334	11	1,88
August	14.555	470	347	11	2,38
September	16.282	543	313	10	1,92
October	15.732	507	292	9	1,86
November	15.112	504	286	10	1,89
December	14.493	468	259	8	1,79
Year 2010	181.227	497	3.385	9	1,87

(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, KILLED AND INJURED PERSONS BY DAY WEEK. Year 2013 (absolute values and percentage distribution)

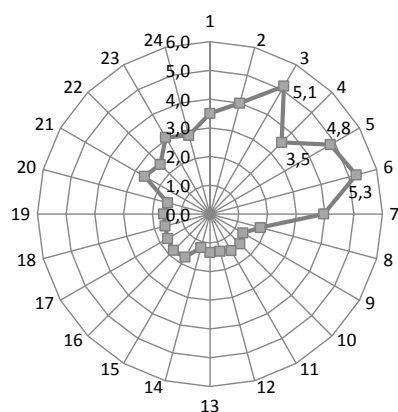
DAY WEEK	Absolute numbers			Percentage distribution		
	Road accidents	Killed	Injured	Road accidents	Killed	Injured
Monday	27.107	437	37.624	15.0	12.9	14.6
Tuesday	27.816	446	38.062	15.3	13.2	14.8
Wednesday	26.939	425	36.767	14.9	12.6	14.3
Thursday	27.563	462	37.701	15.2	13.6	14.6
Friday	28.066	494	38.808	15.5	14.6	15.1
Saturday	24.676	529	37.134	13.6	15.6	14.4
Sunday	19.060	592	31.325	10.5	17.5	12.2
Total	181.227	3.385	257.421	100.0	100.0	100.0

CHART 2. MORTALITY INDEX BY WEEK DAY. Year 2013 (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. MORTALITY INDEX BY DAY TIME. Year 2013 (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).

TABLE 6. ROAD ACCIDENTS, KILLED AND INJURED PERSONS BY DAY WEEK AND ROAD TYPE, DURING THE NIGHT Year 2013, (absolute values) (a)

DAY WEEK	Urban roads			Rural roads (b)			Total		
	Road accidents	Killed	Injured	Road accidents	Killed	Injured	Road accidents	Killed	Injured
Monday night	1.801	35	2.722	793	66	1.269	2.594	101	3.991
Tuesday night	1.772	35	2.541	824	50	1.351	2.596	85	3.892
Wednesday night	1.990	37	2.934	816	57	1.314	2.806	94	4.248
Thursday night	2.207	53	3.309	869	58	1.396	3.076	111	4.705
Friday night	3.245	65	5.155	1.360	99	2.273	4.605	164	7.428
Saturday night	3.923	69	6.736	1.711	111	3.370	5.634	180	10.106
Sunday night	1.959	35	3.057	1.007	80	1.814	2.966	115	4.871
Total night	16.897	329	26.454	7.380	521	12.787	24.277	850	39.241

(a) Between 10 p.m. and 6 a.m.

(b) Included rural roads called: Statali, Regionali and Provinciali, Comunali out of urban area and highways.

TABLE 7. KILLED AND INJURED PERSONS IN ROAD ACCIDENTS BY SEX AND AGE CLASS. Year 2013 (absolute values)

AGE CLASSES	Killed			Injured		
	Males	Females	Total	Males	Females	Total
0 - 4	13	10	23	1,434	1,181	2,615
5 - 9	8	3	11	2,015	1,722	3,737
10 -14	16	5	21	3,188	2,507	5,695
15 -19	128	35	163	12,827	7,664	20,491
20 -24	248	57	305	17,836	11,590	29,426
25 -29	221	37	258	15,523	10,402	25,925
30 -34	176	24	200	14,576	9,339	23,915
35 -39	181	38	219	14,639	9,536	24,175
40 -44	222	34	256	14,192	9,450	23,642
45 -49	200	34	234	13,268	8,639	21,907
50 -54	178	44	222	10,756	7,390	18,146
55 -59	160	38	198	8,066	5,424	13,490
60 -64	145	44	189	6,226	4,219	10,445
65 -69	151	45	196	4,998	3,470	8,468
70 -74	175	52	227	4,435	3,074	7,509
75 -79	160	57	217	3,885	2,530	6,415
80 -84	149	63	212	2,526	1,522	4,048
85 -89	76	36	112	1,093	665	1,758
90 -94	34	9	43	261	167	428
95 -99	0	2	2	26	12	38
unknown	50	27	77	2,655	2,493	5,148
Total	2,691	694	3,385	154,425	102,996	257,421

CHART 4. KILLED PERSONS IN ROAD ACCIDENTS BY AGE CLASS. Year 2012 and 2013 (absolute values)

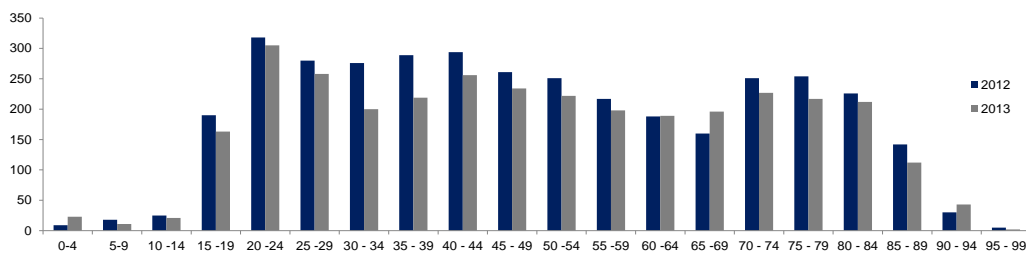


TABLE 8. DRIVERS, KILLED AND INJURED, BY SEX AND AGE CLASS– Year 2013 (a) (absolute values)

AGE CLASSES	Killed drivers			Injured drivers		
	Males	Females	Total	Males	Females	Total
0 - 9	1	0	1	120	42	162
10 -14	5	0	5	939	251	1,190
15 -19	86	9	95	8,859	2,812	11,671
20 -24	188	31	219	13,507	6,239	19,746
25 -29	173	26	199	12,385	6,345	18,730
30 -34	147	13	160	12,027	5,992	18,019
35 -39	156	19	175	12,470	6,429	18,899
40 -44	197	18	215	12,224	6,443	18,667
45 -49	168	21	189	11,557	5,747	17,304
50 -54	156	25	181	9,364	4,483	13,847
55 -59	137	21	158	7,008	3,004	10,012
60 -64	114	15	129	5,161	1,953	7,114
65 -69	120	18	138	4,023	1,455	5,478
70 -74	126	15	141	3,489	1,153	4,642
75 -79	110	11	121	2,931	870	3,801
80 -84	86	8	94	1,741	374	2,115
85 -89	38	1	39	685	126	811
90 -94	12	1	13	131	19	150
95 -99	0	0	0	9	1	10
Unknown	22	3	25	1,227	621	1,848
Total	2,042	255	2,297	119,857	54,359	174,216

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

CHART 5. KILLED DRIVERS BY AGE CLASS. Year 2012 and 2013 (absolute values)

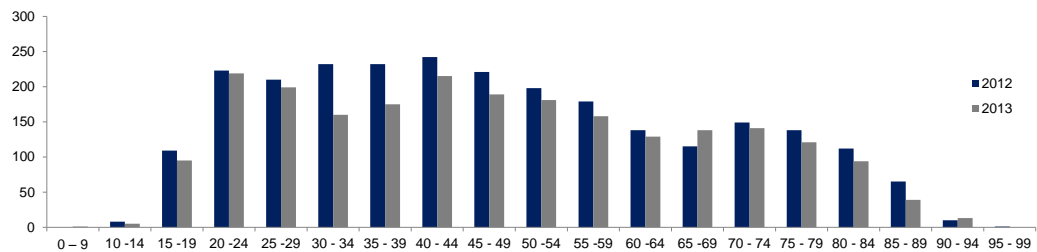


TABLE 9. DRIVERS, KILLED AND INJURED, BY SEX AND VEHICLES TYPE. Year 2013 (absolute values)

VEHICLES TYPE	Killed drivers			Injured drivers		
	Males	Females	Total	Females	Total	Males
Cars	897	182	1.079	57.804	40.118	97.922
Trucks	121	2	123	5.131	356	5.487
Bicycles	216	33	249	11.399	5.170	16.569
Moped	104	12	116	9.912	3.616	13.528
Motorcycles	649	23	672	33.854	4.495	38.349
Minicars	3	0	3	265	142	407
Other vehicles	52	3	55	1.492	462	1.954
Total	2.042	255	2.297	119.857	54.359	174.216

TABLE 10. PEDESTRIAN, KILLED AND INJURED, BY SEX AND AGE CLASS . Year 2013 (absolute values)

AGE CLASSES	Killed pedestrian			Injured pedestrian		
	Males	Females	Total	Males	Females	Total
0-4	5	4	9	240	142	382
5-9	2	0	2	413	256	669
10 -14	3	2	5	570	534	1.104
15 -19	8	6	14	586	819	1.405
20 -24	16	6	22	493	604	1.097
25 -29	16	5	21	525	572	1.097
30 -34	6	2	8	577	536	1.113
35 -39	16	5	21	561	602	1.163
40 -44	14	3	17	555	662	1.217
45 -49	17	4	21	609	757	1.366
50 -54	12	3	15	608	824	1.432
55 -59	14	10	24	466	726	1.192
60 -64	21	18	39	562	764	1.326
65 -69	21	12	33	587	783	1.370
70 -74	39	17	56	618	816	1.434
75 -79	35	34	69	691	802	1.493
80 -84	53	44	97	596	679	1.275
85 -89	32	20	52	327	337	664
90 -94	17	4	21	95	90	185
95 -99	0	0	0	14	8	22
Unknown	2	1	3	116	112	228
Total	349	200	549	9.809	11.425	21.234

CHART 6. KILLED PEDESTRIAN BY AGE CLASS .Year 2012 and 2013 (absolute values)

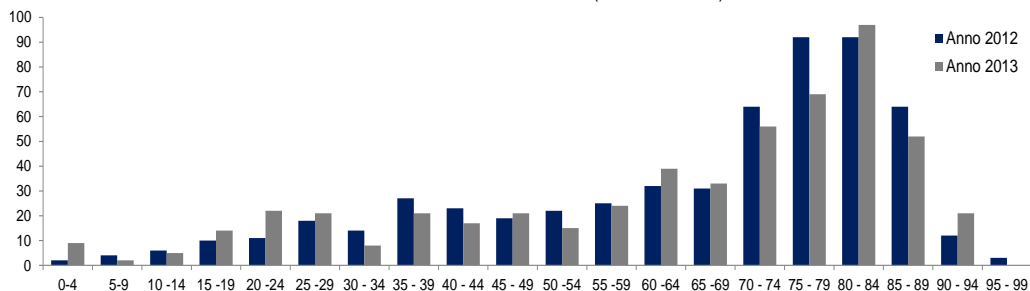


TABLE 12. PASSENGERS, KILLED AND INJURED, BY SEX AND AGE CLASS. Year 2013 (absolute values)

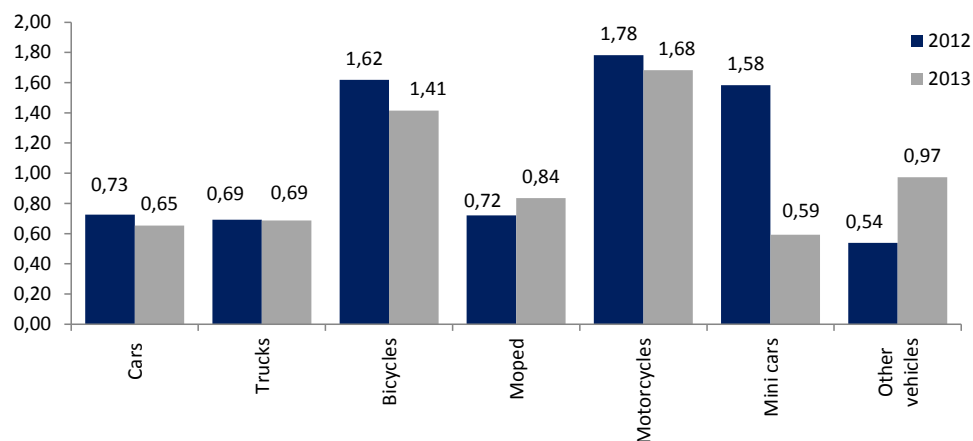
AGE CLASSES	Killed passengers			Injured passengers		
	Males	Females	Total	Males	Females	Total
0 - 4	8	6	14	1.184	1.038	2.222
5 - 9	5	3	8	1.492	1.425	2.917
10 -14	8	3	11	1.679	1.722	3.401
15 -19	34	20	54	3.382	4.033	7.415
20 -24	44	20	64	3.836	4.747	8.583
25 -29	32	6	38	2.613	3.485	6.098
30 -34	23	9	32	1.972	2.811	4.783
35 -39	9	14	23	1.608	2.505	4.113
40 -44	11	13	24	1.413	2.345	3.758
45 -49	15	9	24	1.102	2.135	3.237
50 -54	10	16	26	784	2.083	2.867
55 -59	9	7	16	592	1.694	2.286
60 -64	10	11	21	503	1.502	2.005
65 -69	10	15	25	388	1.232	1.620
70 -74	10	20	30	328	1.105	1.433
75 -79	15	12	27	263	858	1.121
80 -84	10	11	21	189	469	658
85 -89	6	15	21	81	202	283
90 -94	5	4	9	35	58	93
95 -99	0	2	2	3	3	6
Unknown	26	23	49	1.312	1.760	3.072
Total	300	239	539	24.759	37.212	61.971

TABLE 13. VEHICLES INVOLVED IN ROAD ACCIDENTS, KILLED AND INJURED PERSON BY VEHICLES TYPE. Year 2013
(a) (absolute values and percentage distribution)

VEHICLES TYPE	Absolute values			Percentage distribution		
	Vehicles	Killed	Injured	Vehicles	Killed	Injured
Cars	226.185	1.479	148.862	67,5	52,2	63,0
Trucks	21.525	148	7.380	6,4	5,2	3,1
Bicycles	17.748	251	16.819	5,3	8,9	7,1
Moped	14.968	125	15.042	4,5	4,4	6,4
Motorcycles	43.010	724	43.317	12,8	25,5	18,3
Mini cars	675	4	517	0,2	0,1	0,2
Other vehicles	10.795	105	4.250	3,2	3,7	1,8
Total	334.906	2.836	236.187	100,0	100,0	100,0

(a) Pedestrians excluded.

CHART 7. MORTALITY INDEX BY VEHICLE CATEGORY. Years 2012 e 2013, (a),(b).



(a) Pedestrians excluded.

(b) The mortality index is the ratio between the number of killed persons in road accidents out of number of vehicles involved(per 100)

For more details please refer to the Italian version

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