



November 9th, 2011

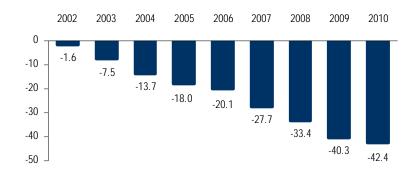
# Year 2010

# ROAD ACCIDENTS

- In 2010 road accidents resulting in deaths or injuries in Italy are 211,404, with 4,090 killed and 302,735 injured.
- Compared to the previous year (2009), a decrease of 1.9% for accidents, 1.5% for injuries is recorded, while the death toll is 3.5% down.
- As to the target established in the White Paper submitted by the European Commission on 13 September 2001 (a 50% reduction in fatalities by 2010), Italy records a 42.4% decrease in the number of deaths, the same as the EU27 average (-42.8%), (Chart 1).
- In 2010, 160,049 road accidents, 218,383 injured and 1,759 killed persons are counted on the roads in urban areas. As to the motorways, 12,079 road accidents are counted (injured 20,667 persons and 376 killed persons. On the other rural roads (motorways excluded), 39,276 road accidents, 63,685 injured and 1,955 killed are recorded.
- The mortality index (the ratio between deaths and road accidents per 100), shows that the most dangerous accidents occur on the rural roads (motorways excluded), 5 deaths every 100 road accidents. Accidents on roads in urban areas are the less dangerous (1.1 deaths per 100 accidents). On motorways, the index is equal to 3.1 per 100.

- The mortality index is higher than the daily average (1.9 deaths per 100 accidents) from 8 p.m to 7 a.m, with a peak at 4 in the morning (5.7 deaths per 100 accidents). Sunday is the day of the week with the highest mortality index (3.1 deaths per 100 accidents).
- During the night-time (between 10 p.m. and 6 a.m.), the highest mortality index is reached on Wednesday and Friday night (4.0 deaths per 100 accidents) and Saturday night (3.8 deaths per 100 accidents).
- The frontal-lateral crash is the most frequent type of accident between vehicles (73,272 accidents, 994 deaths and 109,017 injuries), followed by rear end collisions (38,541 accidents, 395 deaths and 64,181 injuries). High speed, breaking of the rules and driver's distraction are the main causes of road accidents.
- In road accidents, the death of the driver represents 69.4% of the total deaths, the death of passengers are 15% and the death of pedestrians are 15.6%. Among drivers deceased in road accidents (2,837 in total), young people aged 20- 24 are the most hit compared with other age classes (282 deaths and 25.885 injuries).
- Cars represent the vehicle category mainly involved in road accidents (67.8%), motorcycles represent the 13.2% out of total vehicles involved, moped 5.6% and bicycles 3.9%.

CHART 1. PERCENTAGE CHANGE IN THE DEATHS NUMBER. Years 2002-2010 (2001=100)



#### Road accidents trend in Italy

In 2010, the number of **road accidents** resulting in deaths or injuries **in Italy was 211,404**, with **4,090 killed** and **302,735 injured persons**.

Every day, in 2010, an average of **579** road accidents, **11** deaths and **829** injuries occurred on Italian roads. Comparing this data with the previous year (2009), a **decrease** of 1.9% for accidents, 1.5% for injuries and 3.5% for killed persons is recorded (Table 1).

TABLE 1. ROAD ACCIDENTS, KILLED AND INJURED PERSONS IN ITALY. Years 2009 and 2010 (absolute values and percentage changes 2010/2009)

ROAD ACCIDENTS, KILLED AND INJURED (a)	Absolute	% change	
ROAD ACCIDENTS, KILLED AND INJURED (a)	2009	2010	2010/2009
Road accidents	215,405	211,404	-1,9
Killed persons	4,237	4,090	-3,5
Injured persons	307,258	302,735	-1,5

<sup>(</sup>a) Source: Istat – Survey on road accidents resulting in deaths or injuries 2009 – 2010

The mortality index in 2010, calculated as the ratio between deaths and road accidents number per 100, is equal to 1.9 (mortality index was 2.0 in 2009) (Table 2).

TABLE 2. ROAD ACCIDENTS, KILLED AND INJURED PERSONS - Years 2001-2010 (absolute values, mortality index and percentage changes)

YEARS	Road accidents	Killed	Injured	Mortality Index (a)	Variations in change of the number of deaths in respect to the previous year (b)	% change of the number of deaths with respect to 2001 (c)
2001	263.100	7.096	373.286	2,7	-	-
2002	265.402	6.980	378.492	2,6	-1,6	-1,6
2003	252.271	6.563	356.475	2,6	-6,0	-7,5
2004	243.490	6.122	343.179	2,5	-6,7	-13,7
2005	240.011	5.818	334.858	2,4	-5,0	-18,0
2006	238.124	5.669	332.955	2,4	-2,6	-20,1
2007	230.871	5.131	325.850	2,2	-9,5	-27,7
2008	218.963	4.725	310.745	2,2	-7,9	-33,4
2009	215.405	4.237	307.258	2,0	-10,3	-40,3
2010	211.404	4.090	302.735	1,9	-3,5	-42,4

<sup>(</sup>a) The mortality index is the ratio between the number of killed persons in road accidents out of total road accidents (per 100)

<sup>(</sup>b) The % change of the number of deaths in respect to the previous year is:  $(\frac{M'}{M'^{-1}}-1)*100$ 

<sup>(</sup>c) The % change of the number of deaths in respect to 2001 (2001=100) is:  $(\frac{M^{-t}}{M^{-2001}}-1)*100$ 

# The European Union 2010 goal

Concerning the 50% reduction in fatalities by 2010, targeted by the White Paper submitted by the European Commission on September 13 2001, **Italy** registered a **decrease of the number of killed persons of 42.4%**. The average value of the percentage change 2010/2001 in EU27 is -42.8% (Table 3).

TABLE 3. KILLED PERSONS IN ROAD ACCIDENTS, EU27 COUNTRIES OF EUROPEAN UNION Years 2001, 2009 and 2010 (absolute numbers and % change) (a)

EU27 COUNTRIES		Absolute numbers		% chan	ge (b)
EU2/ COUNTRIES	2001	2009	2010	2010/2001	2010/2009
Austria	958	633	552	-42.4	-12.8
Belgium	1,486	944	840	-43.5	-11.0
Bulgaria	1,011	901	775	-23.3	-14.0
Cyprus	98	71	60	-38.8	-15.5
Denmark	431	303	265	-38.5	-12.5
Estonia	199	100	78	-60.8	-22.0
Finland	433	279	270	-37.6	-3.2
France	8,162	4,273	3,992	-51.1	-6.6
Germany	6,977	4,152	3,651	-47.7	-12.1
Greece	1,880	1,456	1,281	-31.9	-12.0
Ireland	411	238	212	-48.4	-10.9
Italy	7,096	4,237	4,090	-42.4	-3.5
Latvia	558	254	218	-60.9	-14.2
Lithuania	706	370	300	-57.5	-18.9
Luxembourg	70	48	32	-54.3	-33.3
Malta	16	21	15	-6.3	-28.6
The Netherlands	1,083	720	640	-40.9	-11.1
Poland	5,534	4,572	3,907	-29.4	-14.5
Portugal	1,670	840	845	-49.4	0.6
United Kingdom	3,598	2,337	1,943	-46.0	-16.9
Czech Republic	1,334	901	802	-39.9	-11.0
Romania	2,454	2,796	2,377	-3.1	-15.0
Slovakia	625	385	353	-43.5	-8.3
Slovenia	278	171	138	-50.4	-19.3
Spain	5,517	2,714	2,470	-55.2	-9.0
Sweden	531	341	266	-49.9	-22.0
Hungary	1,239	822	739	-40.4	-10.1
EU27	54,355	34,879	31,111	-42.8	-10.8

<sup>(</sup>a) Source: European Transport Safety Council, Annual PIN report. Year 2011

In European Union Countries (EU27), the number of killed persons in road accidents in 2010 was 31,111, 10.8% less than the previous year (Source: European Transport Safety Council, Annual PIN report. Year 2011).

Great progress has been made across the EU: Latvia, Estonia, Lithuania, Spain, Luxembourg, Sweden, France and Slovenia all reached the EU 2010 target. Portugal and Sweden almost reached the goal with a reduction of 49.9% and 49.4%. Bulgaria, Malta and Romania changes were very far from the EU 2010 goal (reductions respectively -23.3%, -6.1% e -3.1%).

With the year 2010, the first decade dedicated to 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 11<sup>th</sup> 2011, starts up the new decade 2011-2020 for the road safety.

<sup>(</sup>b) The % change 2010/2001 and 2010/2009 are calculated as:  $(\frac{M^{2010}}{M^{2001}} - 1)*100; (\frac{M^{2010}}{M^{2009}} - 1)*100;$ 

# Tables and charts collection:

TABLE 4. ROAD ACCIDENTS, KILLED AND INJURED PERSONS BY ROAD TYPE . Year 2010 (absolute values, mortality index and variations in change 2010/2009)

ROAD TYPE	Road accidents	Killed	Injured	Mortality Index (a)	% change Accidents 2010/2009	% change Killed 2010/2009	% change Injured 2010/2009
Roads in urban area	160,049	1,759	218,383	1.1	-2.2	-7.0	-2.1
Motorways	12,079	376	20,667	3.1	-1.0	7.4	0.6
Rural roads	39,276	1,955	63,685	5.0	-0.5	-2.0	0.2
Total	211,404	4,090	302,735	1.9	-1.9	-3.5	-1.5

<sup>(</sup>a) The mortality index is the ratio between the number of killed persons in road accidents out of total road accidents (per 100).

TABLE 5. ROAD ACCIDENTS AND KILLED PERSONS BY MONTH. Year 2010 (absolute values, daily average and mortality index)

	Road Acc	cidents	Ki	Mortality Index	
MONTHS	Absolute numbers	Daily average	Absolute numbers	Daily average	by month (a)
January	15,243	492	289	9	1.9
February	14,411	515	282	10	2.0
March	16,864	544	314	10	1.9
April	18,485	616	332	11	1.8
May	19,405	626	336	11	1.7
June	19,840	661	407	14	2.1
July	21,272	686	450	15	2.1
August	16,253	524	372	12	2.3
September	18,047	602	343	11	1.9
October	18,751	605	328	11	1.7
November	17,306	577	292	10	1.7
December	15,527	501	345	11	2.2
Year 2010	211,404	579	4,090	11	1.9

<sup>(</sup>a) The mortality index is the ratio between the number of killed persons in road accidents out of total road accidents (per 100).

TABLE 6. ROAD ACCIDENTS AND KILLED PERSONS BY MONTH AND ROAD TYPE. Year 2010 (absolute values and mortality index)

		Inside Urban area		Rural roads (a)			
MONTHS	Road accidents	Killed persons	Mortality Index (b)	Road accidents	Killed persons	Mortality Index (b)	
January	11,254	117	1.0	3,989	172	3.8	
February	10,811	122	1.3	3,600	160	4.4	
March	12,948	119	1.1	3,916	195	4.2	
April	14,198	147	0.9	4,287	185	4.3	
May	15,002	156	1.1	4,403	180	5.0	
June	15,115	170	1.0	4,725	237	4.5	
July	15,815	176	1.3	5,457	274	5.0	
August	11,719	153	1.4	4,534	219	5.2	
September	13,880	154	1.2	4,167	189	4.2	
October	14,379	139	1.2	4,372	189	4.6	
November	13,275	141	1.1	4,031	151	4.6	
December	11,653	165	1.1	3,874	180	4.2	
Year 2010	160,049	1,759	1.2	51,355	2,331	4.5	

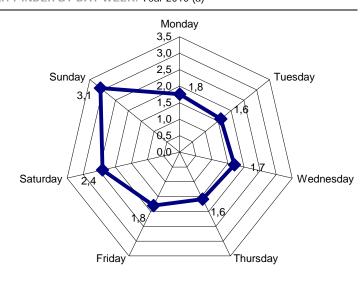
<sup>(</sup>a) Motorways included.

<sup>(</sup>b) The mortality index is the ratio between the number of killed persons in road accidents out of total road accidents (per 100).

TABLE 7. ROAD ACCIDENTS, KILLED AND INJURED PERSONS BY DAY WEEK. Year 2010 (absolute values and percentage distribution)

DAY WEEK	Ak	solute number	S	Pero	Percentage distribution			
DAY WEEK	Road accidents	Killed	Injured	Road accidents	Killed	Injured		
Monday	31,448	553	44,155	14.9	13.5	14.6		
Tuesday	31,555	505	43,099	14.9	12.3	14.2		
Wednesday	31,240	531	43,175	14.8	13.0	14.3		
Thursday	31,927	506	43,765	15.1	12.4	14.5		
Friday	33,570	604	46,677	15.9	14.8	15.4		
Saturday	29,319	702	44,459	13.9	17.2	14.7		
Sunday	22,345	689	37,405	10.6	16.8	12.4		
Total	211,404	4,090	302,735	100.0	100.0	100.0		

CHART 1. MORTALITY INDEX BY DAY WEEK. Year 2010 (a)



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

CHART 2. ROAD ACCIDENTS BY DAY TIME. Year 2010 (absolute values)

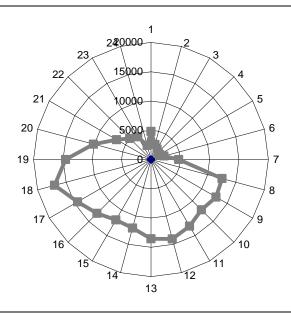
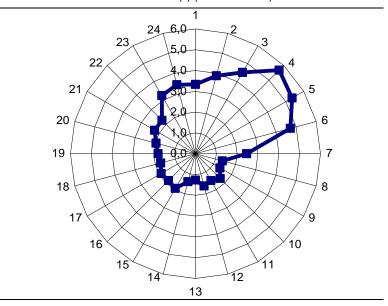


CHART 3. MORTALITY INDEX BY DAY TIME. Year 2010 (a) (absolute values)



<sup>(</sup>a) The mortality index is the ratio between the number of killed persons in road accidents out of total road accidents (per 100).

TABLE 8. KILLED AND INJURED PERSONS IN ROAD ACCIDENTS BY SEX AND AGE CLASS. Year 2010 (absolute values)

ACE CLASSES		Killed			Injured	
AGE CLASSES	Males	Females	Total	Males	Females	Total
0 - 4	14	6	20	1,451	1,213	2,664
5 - 9	10	11	21	2,048	1,781	3,829
10 -14	22	6	28	3,638	2,635	6,273
15 -19	217	58	275	19,877	10,121	29,998
20 -24	321	68	389	22,760	13,999	36,759
25 -29	293	54	347	19,937	12,456	32,393
30 - 34	287	49	336	18,982	11,366	30,348
35 - 39	260	44	304	18,423	11,115	29,538
40 - 44	255	47	302	16,308	10,144	26,452
45 - 49	232	41	273	14,115	9,036	23,151
50 -54	200	46	246	10,647	6,892	17,539
55 -59	160	35	195	8,087	5,341	13,428
60 -64	144	58	202	6,755	4,430	11,185
65 -69	147	38	185	4,815	3,472	8,287
70 - 74	180	62	242	4,616	3,197	7,813
75 - 79	174	72	246	3,738	2,423	6,161
80 - 84	175	70	245	2,373	1,567	3,940
85 - 89	75	40	115	957	618	1,575
90 - 94	13	8	21	111	80	191
95 - 99	4	1	5	23	18	41
unknown	66	27	93	5,604	5,566	11,170
Total	3,249	841	4,090	185,265	117,470	302,735

CHART 4. KILLED PERSONS IN ROAD ACCIDENTS BY SEX AND AGE CLASS. Year 2010 (percentage distribution)

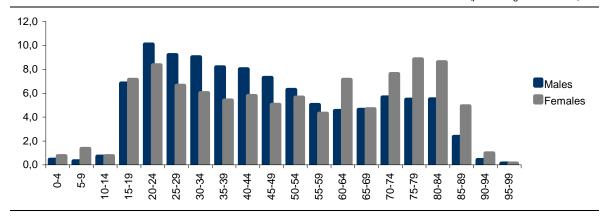


TABLE 9. KILLED AND INJURED DRIVERS, BY SEX AND AGE CLASS-Year 2010 (a) (absolute values)

AGE CLASSES		Killed drivers			Injured drivers	
AGE CLASSES	Males	Females	Total	Males	Females	Total
0 – 9	2	1	3	132	40	172
10 -14	12	0	12	1,350	344	1,694
15 -19	156	20	176	14,773	4,173	18,946
20 -24	250	32	282	17,916	7,969	25,885
25 -29	245	27	272	16,427	7,836	24,263
30 - 34	248	25	273	16,147	7,622	23,769
35 - 39	230	28	258	15,962	7,819	23,781
40 - 44	226	31	257	14,296	7,092	21,388
45 - 49	204	22	226	12,379	5,939	18,318
50 -54	163	19	182	9,330	4,065	13,395
55 -59	134	18	152	7,094	2,854	9,948
60 -64	120	16	136	5,692	2,006	7,698
65 -69	121	8	129	3,908	1,423	5,331
70 - 74	122	13	135	3,662	1,141	4,803
75 - 79	122	20	142	2,848	716	3,564
80 - 84	108	14	122	1,664	380	2,044
85 - 89	39	8	47	596	90	686
90 - 94	2	1	3	32	5	37
95 - 99	-	-	-	3	1	4
Unknown	29	1	30	1,628	717	2,345
Total	2,533	304	2,837	145,839	62,232	208,071

<sup>(</sup>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 SEX AND AGE CLASS. Year 2010 - Anno 2010 (percentage distribution)

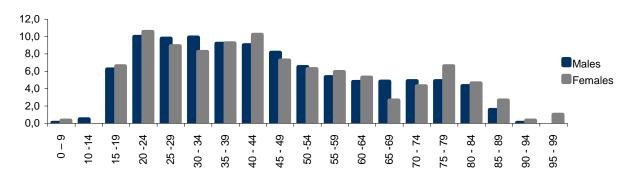


TABLE 10. KILLED AND INJURED DRIVERS, BY SEX AND VEHICLES TYPE. Year 2010 (absolute values)

VEHICLES TYPE		Killed drivers		_	Injured drivers		
VEHICLES TIPE	Males	Females	Total	Females	Total	Males	
Cars	1,083	212	1,295	71,556	46,052	117,608	
Trucks	161	1	162	6,982	486	7,468	
Bicycles	215	48	263	9,652	4,820	14,472	
Moped	175	17	192	14,973	5,048	20,021	
Motorcycles	865	24	889	41,257	5,233	46,490	
Mini cars	7	2	9	331	163	494	
Other vehicles	27	-	27	1,088	430	1,518	
Total	2,533	304	2,837	145,839	62,232	208,071	

TABLE 11. KILLED AND INJURED DRIVERS, BY SEX AND ROAD TYPE . Year 2010 (absolute values)

ROAD TYPE	Killed drivers			Injured drivers		
ROAD TIPE	Males	Females	Total	Males	Females	Total
Inside Urban Area Roads	1,007	110	1,117	105,615	46,376	151,991
Motorway	202	23	225	9,041	3,262	12,303
Rural roads	1,324	171	1,495	31,183	12,594	43,777
Total	2,533	304	2,837	145,839	62,232	208,071

TABLE 12. KILLED AND INJURED PEDESTRIANS ,BY SEX AND AGE CLASS . Year 2010 (absolute values)

ACE CL ACCEC		Killed pedestrian	S	In	jured pedestrian	S
AGE CLASSES	Males	Females	Total	Males	Females	Total
0-4	2	2	4	238	170	408
5-9	2	4	6	428	259	687
10 -14	0	1	1	596	489	1,085
15 -19	6	6	12	545	694	1,239
20 -24	19	4	23	496	614	1,110
25 -29	9	5	14	513	643	1,156
30 - 34	15	6	21	558	595	1,153
35 - 39	15	6	21	574	651	1,225
40 - 44	18	2	20	567	700	1,267
45 - 49	12	6	18	567	731	1,298
50 -54	19	9	28	548	785	1,333
55 -59	22	4	26	444	766	1,210
60 -64	16	21	37	561	832	1,393
65 -69	22	14	36	575	772	1,347
70 - 74	47	28	75	655	890	1,545
75 - 79	46	33	79	655	880	1,535
80 - 84	64	39	103	533	716	1,249
85 - 89	35	22	57	280	346	626
90 - 94	10	6	16	61	49	110
95 - 99	4	1	5	14	7	21
Unknown	9	3	12	179	191	370
Total	392	222	614	9,587	11,780	21,367

CHART 6. KILLED PEDESTRIAN BY SEX AND AGE CLASS . Year 2010(percentage distribution)

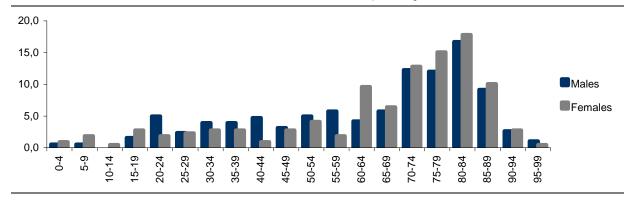


TABLE 13., KILLED AND INJURED PASSENGERS, BY SEX AND AGE CLASS. Year 2010 (absolute values)

AGE CLASSES	Killed passengers			Injured passengers			
	Males	Females	Total	Males	Females	Total	
0 - 4	12	4	16	1,210	1,042	2,252	
5 – 9	6	6	12	1,491	1,483	2,974	
10 -14	10	5	15	1,692	1,802	3,494	
15 -19	55	32	87	4,559	5,254	9,813	
20 -24	52	32	84	4,348	5,416	9,764	
25 -29	39	22	61	2,997	3,977	6,974	
30 - 34	24	18	42	2,277	3,149	5,426	
35 - 39	15	10	25	1,887	2,645	4,532	
40 - 44	11	14	25	1,445	2,352	3,797	
45 - 49	16	13	29	1,169	2,366	3,535	
50 -54	18	18	36	769	2,042	2,811	
55 -59	4	13	17	549	1,721	2,270	
60 -64	8	21	29	502	1,592	2,094	
65 -69	4	16	20	332	1,277	1,609	
70 - 74	11	21	32	299	1,166	1,465	
75 - 79	6	19	25	235	827	1,062	
80 - 84	3	17	20	176	471	647	
85 - 89	1	10	11	81	182	263	
90 - 94	1	1	2	18	26	44	
95 - 99	-	-	-	6	10	16	
Unknown	28	23	51	3,797	4,658	8,455	
Total	324	315	639	29,839	43,458	73,297	

CHART 7. PASSENGERS, KILLED AND INJURED, BY SEX AND AGE CLASS. Year 2010 (percentage distribution)

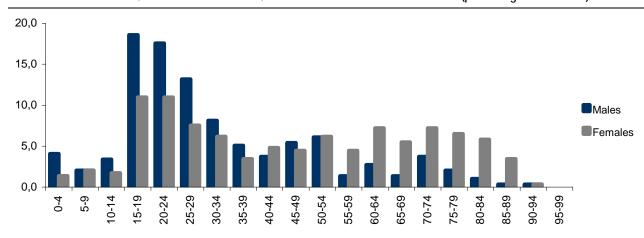


TABLE 14. VEHICLES INVOLVED IN ROAD ACCIDENTS, KILLED AND INJURED PERSON BY VEHICLES TYPE. Year 2010 (a) (absolute values and percentage distribution)

VEHICLES TYPE		Absolute value	S	Percentage distribution		
	Vehicles	Killed	Injured	Vehicles	Killed	Injured
Cars	267,481	1,817	178,309	67.8	52.3	63.4
Trucks	27,346	202	10,144	6.9	5.8	3.6
Bicycles	15,565	263	14,655	3.9	7.6	5.2
Moped	22,208	203	21,940	5.6	5.8	7.8
Motorcycles	52,159	943	52,026	13.2	27.1	18.5
Mini cars	744	10	625	0.2	0.3	0.2
Other vehicles	9,181	38	3,669	2.3	1.1	1.3
Total	394,684	3,476	281,368	100.0	100.0	100.0

<sup>(</sup>a) Pedestrian excluded.