

# Traffic Safety Facts

## Crash • Stats



DOT HS 810 759

A Brief Statistical Summary

May 2007

# Comparison Analysis of Fatality Trend by Age Group – 1996 to 2005

## Major Findings

- The overall fatality rate (per 100,000 population) declined by an average of 0.9 percent per year. The number of people killed increased by an average of 0.4 percent per year compared to an average annual population increase of 1.2 percent.
- The largest decline in fatality rate (per 100,000 population) was seen in the under-16 age group, where the fatality rate declined by an average of 4.3 percent per year. The number of people killed in this age group decreased by an average of 3.7 percent per year compared to an average annual population increase of 0.6 percent.
- The highest increase in fatality rate (per 100,000 population) was seen in the 51- to 55-year-old age group: the fatality rate increased by an average of 1.1 percent per year. The number of people killed for this age group increased by an average of 5.2 percent per year compared to an average annual population increase of 4.1 percent.

## Data and Analysis

The population data used in this analysis is from the U.S. Census Bureau and fatality data is from the Fatality Analysis

Reporting System (FARS). All tables in this paper include the average percent change per year between 1996 and 2005, fatality rate (per 100,000 population), number of people killed, and U.S. resident population.

Table 1 shows the fatality rate distribution among 12 age groups between 1996 and 2005. The total fatality rate per 100,000 population decreased by an average of 0.9 percent per year. The fatality rate for those under 16 declined by an average of 4.3 percent per year (from 5.37 in 1996 to 3.61 in 2005). It is the highest decline among all age groups. The fatality rate and its changes among the under-16 age group are depicted in Figure 1 for comparison. The fatality rate for people ages 51 to 55 increased by an average of 1.1 percent per year (from 13.25 in 1996 to 14.56 in 2005). It is the highest increase among all age groups. The fatality rate and its changes among the 51-55 age group are shown in Figure 2. The only other age groups that had an increase in fatality rate were the 41-45 and 46-50 age groups. All other age groups had a decrease in fatality rate over the 10-year period. Consistently during the 10-year period the highest fatality rate among all age groups was for 16- to 20-year-olds (27.40) followed by 21- to 25-year-olds (26.14), and the lowest fatality rate was for those under the age of 16 (3.61).

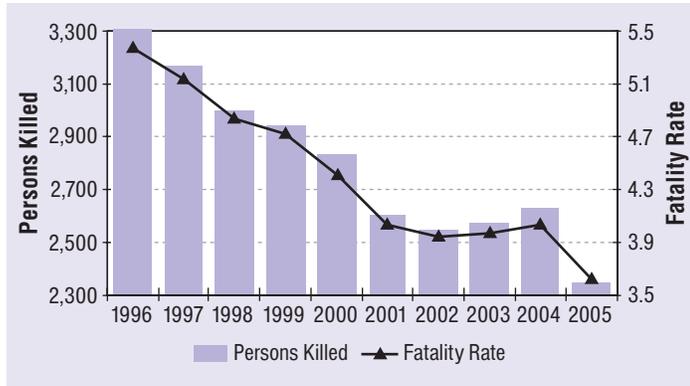
**Table 1: Distribution of Fatality Rate\* by Age Group and Year**

Age Group	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Average Yearly % Change
<b>Under 16</b>	5.37	5.13	4.83	4.72	4.40	4.04	3.94	3.97	4.03	3.61	-4.3
<b>16-20</b>	31.38	30.49	29.54	29.89	29.39	29.72	30.88	29.41	28.76	27.40	-1.5
<b>21-25</b>	28.67	27.04	26.26	26.51	25.57	26.13	26.22	25.32	25.63	26.14	-1.0
<b>26-30</b>	19.63	19.35	18.33	19.02	18.17	18.08	18.38	17.78	18.15	18.30	-0.8
<b>31-35</b>	16.68	16.37	16.24	15.68	15.33	15.27	15.12	15.07	15.05	15.69	-0.7
<b>36-40</b>	15.42	15.14	15.38	15.43	15.21	15.40	15.41	14.95	14.33	14.87	-0.4
<b>41-45</b>	14.47	14.11	14.26	14.54	15.01	15.02	15.16	15.51	14.90	15.06	0.4
<b>46-50</b>	13.39	13.48	14.23	13.91	13.94	13.56	14.35	14.26	14.54	14.41	0.8
<b>51-55</b>	13.25	14.52	13.67	13.65	13.20	13.38	13.41	14.01	13.75	14.56	1.1
<b>56-60</b>	14.03	14.72	13.93	13.91	13.86	13.34	12.99	13.52	13.26	13.49	-0.4
<b>61-65</b>	14.88	14.56	14.34	13.90	13.34	13.15	14.25	13.69	13.61	13.90	-0.8
<b>Over 65</b>	21.36	22.07	21.55	20.99	19.50	19.50	19.01	18.91	18.17	17.94	-1.9
<b>Total</b>	<b>15.86</b>	<b>15.69</b>	<b>15.36</b>	<b>15.30</b>	<b>14.86</b>	<b>14.80</b>	<b>14.93</b>	<b>14.74</b>	<b>14.58</b>	<b>14.66</b>	<b>-0.9</b>

Source: FARS 1996-2004 (Final), 2005 (ARF); Census Bureau

\*Per 100,000 Population

**Figure 1: 1996–2005 Fatal Trend for Under–16 Age Group**



**Figure 2: 1996–2005 Fatal Trend for 51–55 Age Group**



Table 2 presents the number of people killed among 12 age groups over a 10-year period. This table also displays annual total fatalities for the age groups between 1996 and 2005 and the average annual percent change. Overall, the number of people killed has increased by an average of 0.4 percent per year. The data—when compared among age groups—indicates fatalities among the 51-55 age group have increased each year (from 1,789 in 1996 to 2,825 in 2005). The annual average increase was 5.2 percent per year—the highest among all age groups. The 56-60 and 46-50 age groups have the second-highest and the third-highest increases in fatalities per year, (4.1% and 3.5%, respectively). The largest decline in fatalities was among the under-16 age group followed by the 31-35 age group. Their fatalities reduced by an annual average of 3.7 percent and 1.3 percent, respectively.

for all ages between 1996 and 2005 and annual average percent change are also presented in Table 3. Data from Table 3 indicate increases in population for all age groups except the 31-35 and 36-40 age groups. The population for the 56-60 age group increased by an average of 4.5 percent per year (from 11 million in 1996 to 16.4 million in 2005)—the highest among all age groups—followed by the 51-55 age group with an increase of 4.1 percent per year.

The population for all ages increased by an average of 1.2 percent per year during the 10-year time period, whereas the fatalities increased by an average of 0.4 percent per year (from 42,065 in 1996 to 43,443 in 2005). The fatality rate for all age groups declined by an average of 0.9 percent per year from 15.86 to 14.66 per 100,000 population.

Table 3 shows the distribution of total population among 12 age groups between 1996 and 2005. Annual total population

**Table 2: Distribution of Fatalities by Age Group and Year**

Age Group	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Average Yearly % Change
Under 16	3,305	3,170	2,997	2,942	2,831	2,603	2,550	2,579	2,622	2,348	-3.7
16-20	5,805	5,794	5,730	5,919	5,966	6,063	6,299	6,030	5,924	5,699	-0.2
21-25	5,104	4,705	4,543	4,640	4,808	5,043	5,244	5,191	5,357	5,515	0.9
26-30	3,729	3,696	3,482	3,557	3,616	3,526	3,511	3,396	3,502	3,606	-0.4
31-35	3,653	3,503	3,394	3,184	3,174	3,161	3,161	3,149	3,130	3,233	-1.3
36-40	3,454	3,421	3,491	3,502	3,483	3,495	3,437	3,273	3,080	3,138	-1.1
41-45	2,922	2,920	3,037	3,169	3,332	3,379	3,472	3,568	3,427	3,480	2.0
46-50	2,343	2,480	2,619	2,615	2,746	2,740	2,970	3,023	3,155	3,185	3.5
51-55	1,789	2,004	2,050	2,115	2,218	2,368	2,495	2,605	2,612	2,825	5.2
56-60	1,543	1,663	1,630	1,725	1,802	1,801	1,792	2,028	2,068	2,213	4.1
61-65	1,488	1,441	1,434	1,418	1,414	1,407	1,568	1,561	1,633	1,737	1.7
Over 65	6,813	7,107	7,003	6,844	6,436	6,493	6,387	6,391	6,213	6,207	-1.0
<b>Total*</b>	<b>42,065</b>	<b>42,013</b>	<b>41,501</b>	<b>41,717</b>	<b>41,945</b>	<b>42,196</b>	<b>43,005</b>	<b>42,884</b>	<b>42,836</b>	<b>43,443</b>	<b>0.4</b>

Source: FARS 1996-2004 (Final), 2005 (ARF)

\*Includes unknown age group

**Table 3: Distribution of U.S. Resident Population (thousands) by Age Group and Year**

Age Group	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Average Yearly % Change
<b>Under 16</b>	61,535	61,838	62,053	62,258	64,343	64,535	64,684	64,867	65,016	65,087	0.6
<b>16-20</b>	18,481	19,000	19,430	19,826	20,304	20,391	20,442	20,493	20,599	20,834	1.3
<b>21-25</b>	17,808	17,369	17,331	17,496	18,777	19,329	20,009	20,534	20,941	21,145	1.9
<b>26-30</b>	19,028	19,076	18,954	18,719	19,857	19,498	19,129	19,095	19,295	19,705	0.4
<b>31-35</b>	21,921	21,434	20,856	20,289	20,687	20,662	20,852	20,930	20,831	20,562	-0.7
<b>36-40</b>	22,376	22,646	22,724	22,716	22,910	22,727	22,347	21,906	21,472	21,101	-0.6
<b>41-45</b>	20,189	20,745	21,313	21,821	22,163	22,538	22,856	22,958	22,997	23,056	1.5
<b>46-50</b>	17,482	18,409	18,449	18,840	19,685	20,196	20,681	21,245	21,732	22,084	2.6
<b>51-55</b>	13,504	13,798	14,977	15,547	16,828	17,710	18,595	18,627	18,970	19,423	4.1
<b>56-60</b>	11,028	11,311	11,708	12,357	13,043	13,466	13,837	14,981	15,618	16,380	4.5
<b>61-65</b>	9,964	9,923	9,991	10,191	10,557	10,731	10,977	11,370	11,977	12,453	2.5
<b>Over 65</b>	31,913	32,235	32,461	32,631	33,040	33,324	33,576	33,845	34,210	34,581	0.9
<b>Sub Total</b>	<b>265,229</b>	<b>267,784</b>	<b>270,248</b>	<b>272,691</b>	<b>282,193</b>	<b>285,108</b>	<b>287,985</b>	<b>290,850</b>	<b>293,657</b>	<b>296,410</b>	<b>1.2</b>

Source: Census Bureau



U.S. Department of Transportation  
**National Highway Traffic Safety  
Administration**

1200 New Jersey Ave. SE., NPO-120  
Washington, DC 20590

For questions regarding the data reported in this publication, contact Dow Chang at 202-366-4128 or e-mail to [dow.chang@dot.gov](mailto:dow.chang@dot.gov). Internet users may access this publication and other general information on highway traffic safety at [www-nrd.nhtsa.dot.gov/CATS](http://www-nrd.nhtsa.dot.gov/CATS)