

National Highway Traffic Safety Administration

# TRAFFIC SAFETY FACTS

DOT HS 811 387

# Children

In 2009, there were nearly 62 million children age 14 and younger in the United States. This age group made up 20 percent of the total U.S. resident population in 2009.

Motor vehicle crashes are the leading cause of death for ages 3 to 14 (based on 2007 figures, which are the latest mortality data currently available from the National Center for Health Statistics).

During 2009, there were a total of 33,808 traffic fatalities in the United States. The 14-and-younger age group accounted for 1,314 (4%) of those traffic fatalities, which is a 3-percent decrease from the 1,350 fatalities in 2008. In 2009, there were an additional 179,000 children age 14 and younger injured, which is a 7-percent decrease from the 193,000 children injured in 2008.

An average of 4 children age 14 and younger were killed and 490 were injured every day in the United States in motor vehicle crashes during 2009.

In the 14-and-younger age group, males accounted for 56 percent of the fatalities and 50 percent of those injured in motor vehicle crashes during 2009.

#### Figure 1 Total Traffic Fatalities Among Children Age 14 and Younger, by Age Group, 2000-2009



Motor vehicle crashes are the leading cause of death for children from 3 to 14 years old.

## **Restraint Use and Its Effectiveness**

Research has shown that lap/shoulder seat belts, when used, reduce the risk of fatal injury to front seat occupants (age 5 and older) of passenger cars by 45 percent and the risk of moderate-to-critical injury by 50 percent. For light-truck occupants, seat belts reduce the risk of fatal injury by 60 percent and the risk of moderate-to-critical injury by 60 percent and the risk of moderate-to-critical injury by 60 percent.

During 2009, 5,366 passenger vehicle occupants age 14 and younger were involved in fatal crashes. For those children where restraint use was known, 23 percent were unrestrained; among those who were fatally injured, 46 percent were unrestrained.

Table 1

# Percent of Passenger Vehicle Occupants Involved in Fatal Crashes, by Restraint Use and Age Group, 2009

	Age Group (Years)						
Restraint Use (%)	<1	1-3	4–7	8–14	15–20	All Other	Total
Restraint Used	89	86	78	71	58	68	67
Restraint Not Used	11	14	22	29	42	32	33

Note: Excluding unknown age and unknown restraint use.

Research on the effectiveness of child safety seats has found them to reduce fatal injury by 71 percent for infants (younger than 1 year old) and by 54 percent for toddlers (1 to 4 years old) in passenger cars. For infants and toddlers in light trucks, the corresponding reductions are 58 percent and 59 percent, respectively.

In 2009, there were 322 passenger vehicle occupant fatalities among children age 4 and younger. Of those 322 fatalities, where restraint use was known (298), 92 (31%) were totally unrestrained.

#### Table 2

# Children Age 4 and Younger Killed in Passenger Vehicle Crashes, by Type of Restraint and Age Group, 2009

	Age Grou		
Type of Restraint	<1	1–4	Total
None Used	16	76	92
Adult Seat Belt	1	26	27
Child Seat	48	130	178
Restraint Used-Unknown	0	1	1
Unknown	3	21	24
Total	68	254	322

Among children under age 5 in passenger vehicles, an estimated 309 lives were saved in 2009 by restraint use. Of these 309 lives saved, 284 were associated with the use of child safety seats and 26 with the use of adult seat belts. At 100 percent child safety seat use for children under age 5, an estimated 372 lives (that is, an additional 63) could have been saved in 2009.

Over the period 1975 through 2009 an estimated 9,310 lives were saved by child restraints (child safety seats or adult seat belts).

Child safety seats reduce the risk of fatal injury by 71 percent for infants and by 54 percent for toddlers in passenger cars. NHTSA conducted the National Survey of the Use of Booster Seats (NSUBS) and produced a Research Note (DOT HS 811 148) in June 2009 titled "Child Restraint Use in 2008—Demographic Results." Table 3 provides data on the use of child restraints by age and race/ethnicity in 2008. Child restraints include child safety seats, seat belts, and booster seats.

#### Table 3 Child Restraint Use by Race/Ethnicity and Age, 2008

Race/Ethnicity (Percent)	Age Birth– 12 Months	Age 1–3 Years	Age 4–7 Years	Age 8–12 Years
Hispanic	96%	84%	82%	79%
African American Non-Hispanic	94%	74%	84%	72%
White Non-Hispanic	100%	99%	93%	90%
Asian Non-Hispanic	NA	99%	95%	91%
Other	NA	86%	76%	77%

NA: Data not sufficient to produce a reliable estimate

Source: National Survey of the Use of Booster Seats, NCSA/NHTSA, 2008 (DOT HS 811 148)

## **Pedestrians**

There were a total of 4,092 pedestrian fatalities in 2009, the 14-and-younger age group accounted for 244 (6%) of those fatalities. About one-fifth (19%) of the traffic fatalities in the 14-and-younger age group were pedestrians.

In 2000, there were 475 pedestrian fatalities in the 14-and-younger age group. From 2000 to 2009, the number of pedestrian fatalities in this age group decreased by about 49 percent, with the 4- to 7-year-old age group showing the largest decrease (58%).

Of the 244 pedestrian fatalities among children age 14 and younger in 2009, 159 (65%) of those killed were males.

In 2009, an estimated 59,000 pedestrians were injured, 13,000 of those injured were age 14 and younger, and males accounted for 55 percent (7,000) of those 13,000 injured.

### **Important Safety Reminders**

Failure to read the child safety seat instructions, in addition to vehicle owner's manual instructions regarding seat belts, could result in death or serious injury as a result of a failure of the child safety seat to be properly secured and/or properly restrained.

Children in rear-facing child seats should not be placed in the front seat of vehicles equipped with passenger-side air bags. The impact of a deploying air bag striking a rear-facing child seat could result in injury to the child. NHTSA also recommends that children 12 and younger sit in the rear seat away from the force of a deploying air bag.

Children age 12 and younger are safest when properly buckled in the back seat of a motor vehicle.

Always read the child restraint manufacturer instructions and the vehicle owner manual instructions.

#### Figure 2

Total Pedestrian Fatalities Among Children Age 14 and Younger, by Age Group, 2000-2009



During 2009, the highest percentage of fatalities among pedestrians 14 and younger occurred between 4 p.m. and 7:59 p.m. (42%). The second highest percentage of fatalities among young pedestrians were between the hours of noon and 3:59 p.m. (21%), which is a 4-percent increase from 2008 during those same hours. Between the hours of 8 p.m. and 11:59 p.m. the 14-and-younger age group accounted for 16 percent of the pedestrian fatalities as compared to 2008, which was more during this same time at 21 percent.

Seventy-four percent of the pedestrian fatalities among the 14-and-younger age group occurred at non-intersection locations, which is a slight decrease from 2008 (76%).

### **Pedalcyclists**

Pedalcyclists are riders of bicycles (two-wheel non-motorized cycles) and other cycles (tricycles and unicycles) powered solely by pedals.

A total of 630 pedalcyclists were killed in motor vehicle crashes in 2009. The 14-and-younger age group accounted for 12 percent (74) of those fatalities, and males accounted for 76 percent (56) of the fatalities among pedalcyclists age 14 and younger.

The 74 pedalcyclist fatalities in 2009 for the 14-and-younger age group represent a decrease of 58 percent from the 178 killed in 2000.

In 2009, an estimated 51,000 pedalcyclists were injured in motor vehicle traffic crashes. Seventeen percent (or an estimated 8,000) of the pedalcyclists who were injured were age 14 and younger.

In 2009, 17 percent of the pedalcyclists injured in motor vehicle crashes were 14 years old and younger.

#### Figure 3 Total Pedalcyclist Fatalities Among Children 14 and Younger, by Age Group, 2000-2009



In 2009, 14 percent of the children age 14 and younger killed in crashes were killed in alcohol-impaired driving crashes.

## **Alcohol-Impaired Driving Crashes and Children**

In 2009, of the 1,314 children age 14 and younger killed, 181 (14%) were killed in alcohol-impaired driving crashes. Out of those 181 deaths, around half (92) were passengers of a vehicle with a driver who had a blood alcohol concentration (BAC) level of .08 or higher.

Another 27 children age 14 and younger who were killed in traffic crashes in 2009 were pedestrians or pedalcyclists who were struck by drivers with a BAC of .08 or higher.

## For more information:

Information on traffic fatalities is available from the National Center for Statistics and Analysis (NCSA), NVS-424, 1200 New Jersey Avenue SE., Washington, DC 20590. NCSA can be contacted on 800-934-8517 or via the following email address: ncsaweb@dot.gov. General information on highway traffic safety can be accessed by Internet users at www.nhtsa.gov/portal/site/nhtsa/ncsa. To report a safety-related problem or to inquire about motor vehicle safety information, contact the Vehicle Safety Hotline at 888-327-4236.

Other fact sheets available from the National Center for Statistics and Analysis are Alcohol-Impaired Driving, Bicyclists and Other Cyclists, Large Trucks, Motorcycles, Occupant Protection, Older Population, Overview, Passenger Vehicles, Pedestrians, Race and Ethnicity, Rural/Urban Comparisons, School Transportation-Related Crashes, Speeding, State Alcohol Estimates, State Traffic Data, and Young Drivers. Detailed data on motor vehicle traffic crashes are published annually in Traffic Safety Facts: A Compilation of Motor Vehicle Crash Data from the Fatality Analysis Reporting System and the General Estimates System. The fact sheets and annual Traffic Safety Facts report can be accessed online at www-nrd.nhtsa.dot.gov/CATS/index.aspx.

# Table 4Total Traffic Fatalities Among Children Age 14 and Under, by State and Age Group, 2009

Age (Years)					
State	<1	1–3	4–7	8–14	Total
Alabama	0	8	8	21	37
Alaska	0	2	2	1	5
Arizona	2	15	8	19	44
Arkansas	0	6	5	14	25
California	10	32	41	63	146
Colorado	2	2	1	10	15
Connecticut	0	1	1	2	4
Delaware	0	1	3	9	13
Dist of Columbia	0	0	0	1	1
Florida	4	11	20	35	70
Georgia	3	7	14	26	50
Hawaii	0	1	2	0	3
Idaho	1	1	3	11	16
Illinois	1	7	11	15	34
Indiana	3	2	5	18	28
lowa	0	5	2	8	15
Kansas	1	4	3	3	11
Kentucky	1	8	7	10	26
Louisiana	0	10	11	21	42
Maine	0	0	2	1	3
Maryland	0	1	3	12	16
Massachusetts	0	2	4	4	10
Michigan	1	6	4	18	29
Minnesota	2	6	5	6	19
Mississippi	1	8	6	15	30
Missouri	1	7	8	12	28
Montana	0	2	3	5	10
Nebraska	0	1	1	6	8
Nevada	1	1	4	3	9
New Hampshire	0	0	3	0	3
New Jersey	0	2	3	8	13
New Mexico	3	4	6	10	23
New York	2	9	13	26	50
North Carolina	4	9	16	20	50
North Dakota	1	1	1	3	6
Ohio	5	6	6	22	39
	3	6	6	22	39
Oklahoma	1	1	3	7	12
Oregon Deppeydyania	2	•	12	15	32
Pennsylvania		3			
Rhode Island	0	0	0 7	0	0
South Carolina	0	5		15	27
South Dakota	0	2	3	3	8
Tennessee	1	9	5	14	29
Texas	11	29	41	66	147
Utah	1	3	4	11	19
Vermont	0	1	0	0	1
Virginia	3	5	3	12	23
Washington	2	3	5	8	18
West Virginia	0	2	2	1	5
Wisconsin	1	3	2	16	22
Wyoming	0	1	1	2	4
National	74	261	329	650	1,314
Puerto Rico	1	0	3	15	19