# Traffic Safety Facts

DOT HS 809 762

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# Children

"Motor vehicle crashes are the leading cause of death for children from 2 to 14 years old." In 2003, there were more than 60 million children under 15 years old in the United States. This age group (0-14 years) made up 21 percent of the total U.S. resident population in 2003.

Motor vehicle crashes are the leading cause of death for children of every age from 2 to 14 years old (based on 2001 figures, which are the latest mortality data currently available from the National Center for Health Statistics).

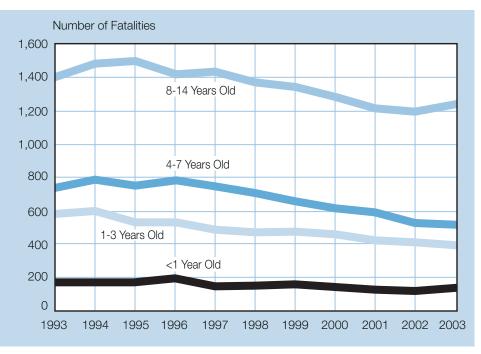
In 2003, there were a total of 42,643 traffic fatalities in the United States. The 0-14 age group accounted for 5 percent (2,136) of those traffic fatalities. In addition, children under 15 years old accounted for 4 percent (1,591) of all vehicle occupant fatalities, 9 percent (253,000) of all the people injured in motor vehicle crashes, and 8 percent (220,000) of all the vehicle occupants injured in crashes.

In the United States, an average of 6 children 0-14 years old were killed and 694 were injured every day in motor vehicle crashes during 2003.

In the 0-14 year age group, males accounted for 59 percent of the fatalities and 50 percent of those injured in motor vehicle crashes during 2003.

## Figure 1

# Total Traffic Fatalities Among Children 0-14 Years Old by Age Group, 1993-2003





# **Child Endangerment**

In 2003, 21 percent of the children under 15 years old who were killed in motor vehicle crashes were killed in alcohol-related crashes.

Of the children 0-14 years old who were killed in alcohol-related crashes during 2003, almost half (209) were passengers in vehicles with drivers who had been drinking, with blood alcohol concentration (BAC) levels of 0.01 gram per deciliter (g/dl) or higher. An additional 118 children were killed as passengers in vehicles with drivers who had not been drinking.

Another 59 children under 15 years old who were killed in traffic crashes in 2003 were pedestrians or pedalcyclists who were struck by drinking drivers (BAC 0.01 g/dl or higher).

# **Pedestrians**

In 1993, there were 768 pedestrian fatalities in the 0-14 year age group. From 1993 to 2003, the number of pedestrian fatalities in this age group decreased by 49 percent, with the 4-7 year age group showing the largest decrease.

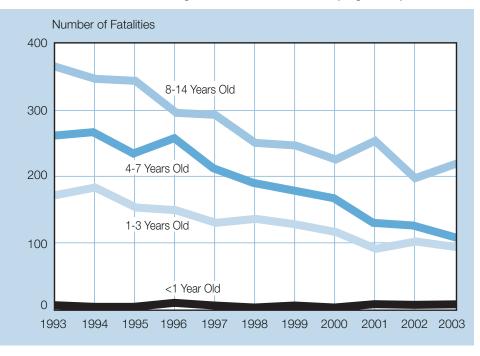
There were 4,749 pedestrian fatalities in 2003. The 0-14 age group accounted for 390 (8 percent) of those fatalities, and 65 percent of the pedestrian fatalities in this age group were males.

In addition to the pedestrians under 15 years old who died, 17,000 were injured in motor vehicle crashes. These young pedestrians accounted for 24 percent of the total pedestrians injured in motor vehicle crashes in 2003.

Almost one-fifth (18 percent) of the traffic fatalities in the 0-14 year age group were pedestrians.

#### Figure 2

## Total Pedestrian Fatalities Among Children 0-14 Years Old by Age Group, 1993-2003



"In 2003, 21 percent of the children under 15 years old killed in crashes were killed in alcohol-related crashes." During 2003, 42 percent of the young pedestrian fatalities occurred between the hours of 4 pm and 8 pm, and 78 percent occurred at non-intersection locations.

# **Pedalcyclists**

A total of 622 pedalcyclists were killed in motor vehicle crashes in 2003. Children 0-14 years old accounted for 130 (21 percent) of those fatalities.

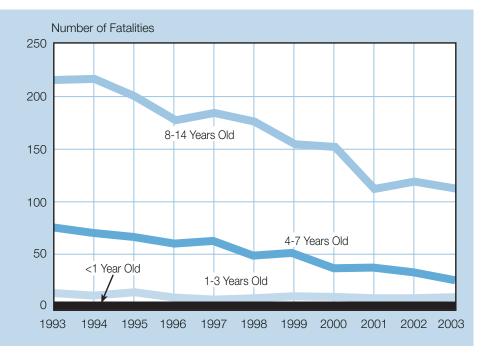
In 2003, 32 percent of the pedalcyclists injured in motor vehicle crashes were under 15 years old.

The 130 pedalcyclist fatalities in 2003 for the 0-14 year age group represent a decrease of 54 percent from the 282 killed in 1993.

Bicycle helmets are 85 to 88 percent effective in mitigating head and brain injuries in all types of bicycle incidents, making the use of helmets the **single most effective countermeasure** available to reduce head injuries and fatalities resulting from bicycle crashes. (Source: Robert Thompson, A Case Control Study of the Effectiveness of Bicycle Safety Helmets, Centers for Disease Control.)

# Figure 3

#### Total Pedalcyclist Fatalities Among Children 0-14 Years Old by Age Group, 1993-2003



"In 2003, 32 percent of the pedalcyclists injured in motor vehicle crashes were under 15 years old."

# Restraints

Research has shown that lap/shoulder safety belts, when used, reduce the risk of fatal injury to front seat occupants (age 5 years and older) of passenger cars by 45 percent and the risk of moderate-to-critical injury by 50 percent. For light truck occupants, safety belts reduce the risk of fatal injury by 60 percent and the risk of moderate-to-critical injury by 65 percent.

During 2003, 8,089 passenger vehicle occupants under 15 years old were involved in fatal crashes. For those children, where restraint use was known, 30 percent were unrestrained; among those who were fatally injured, 53 percent were unrestrained.

Table 1

Restraint Use by Passenger Vehicle Occupants Involved in Fatal Crashes by Age Group, 2003

	Age Group (Years)								
						All			
	<1	1-3	4-7	8-14	15-20	Other	Total		
Percentage Unrestrained	15	19	28	39	47	37	38		

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

In 2003, there were 471 passenger vehicle occupant fatalities among children under 5 years of age. Of those 471 fatalities, an estimated 167 (35 percent) were totally unrestrained.

#### Table 2

Children Under 5 Years Old Fatally Injured in Passenger Vehicle Crashes by Age Group and Type of Restraint, 2003

Type of Restraint	Infants (Under Age 1)	Toddlers (Age 1-4)	Total
None Used	31	135	167
Child Seat	87	173	260
Adult Seat Belt	0	45	45
Total	118	353	471

*Note:* In this table, fatalities with unknown restraint use have been distributed proportionally across the known restraint use categories.

From 1975 through 2003, an estimated 7,020 lives were saved by the use of child restraints (child safety seats or adult belts). In 2003, an estimated 446 children under age 5 were saved as a result of child restraint use.

If 100 percent of motor vehicle occupants under 5 years old were protected by child safety seats, an estimated 550 lives (that is, an additional 106) could have been saved in 2003.

"Child safety seats reduce the risk of fatal injury by 71 percent for infants and by 54 percent for toddlers in passenger cars." In 2002, NHTSA conducted the National Occupant Protection Use Survey (NOPUS). One of the studies in the survey was the Controlled Intersection Study, which provided more detailed information about child restraint use for children under 5 years old.

# Table 3 Restraint Use by Children 0 to 7 Years Old

Grouping	Restraint Use (Percent)	Grouping	Restraint Use (Percent)
Overall	88	Rush Hour	90
Infants (<1 Year)	99	Non-Rush Hour	87
Toddlers (1 to 3 Years)	94	Weekday	89
Booster Age (4 to 7 Year	s) 83	Weekend	85
Passenger Cars	88	City	84
Vans and SUVs	91	Suburban	85
Pickups	77	Rural	87
Front Seat	83		
Back Seat	90		

Failure to read the child safety seat instructions, in addition to vehicle owner manual instructions regarding safety belts, could result in serious injury or death as a result of a failure of the child safety seat to be securely 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 under sit in the rear seat away from the force of a deploying air bag.

"Children in rear-facing child seats should not be placed in the front seat of vehicles with passenger air bags. The impact of a deploying air bag on a rear-facing child seat could injure the child."

#### For more information:

Information on young drivers is available from the National Center for Statistics and Analysis, NPO-101, 400 Seventh Street, S.W., Washington, D.C. 20590. NCSA information can also be obtained by telephone or by fax-ondemand at 1-800-934-8517. FAX messages should be sent to (202) 366-7078. General information on highway traffic safety can be accessed by Internet users at http://www.nhtsa.dot.gov/people/ncsa. To report a safety-related problem or to inquire about motor vehicle safety information, contact the DOT Vehicle Safety Hotline at 1-888-327-4236.

Other fact sheets available from the National Center for Statistics and Analysis are Overview, Alcohol, Occupant Protection, Older Population, Speeding, Children, Pedestrians, Pedalcyclists, Large Trucks, Motorcycles, School Transportation-Related Crashes, State Traffic Data, and State Alcohol Estimates. 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.