

PASSENGER VEHICLES

2002

By far the largest number of motor vehicle deaths are occupants of passenger vehicles including cars, the popular passenger vans often referred to as minivans, pickups, SUVs, and cargo/large passenger vans. The likelihood of crash death varies markedly among these vehicle types according to size. Small/light vehicles have less structure and size to absorb crash energy, so more injurious forces can reach their occupants in crashes. People in lighter vehicles are at a disadvantage in collisions with heavier vehicles. Pickups and SUVs are proportionally more likely than cars to be in fatal single-vehicle crashes, especially rollovers. However, pickups and SUVs generally are heavier than cars, so occupant deaths are less likely to occur in multiple-vehicle crashes.

Guide to car size groups	
CARS	SIZE GROUPS
Mini	wheelbase 100 inches or shorter; length 165 inches or shorter
Small	wheelbase 101-105 inches; length 166-180 inches
Midsize	wheelbase 106-110 inches; length 181-195 inches
Large	wheelbase 111-115 inches; length 196-210 inches
Very large	wheelbase longer than 115 inches; length longer than 210 inches

Notes: If the wheelbase of a car fits one size group but the overall length fits another size group, the vehicle is grouped in the larger category. Passenger versions of vans often referred to as minivans are classified as cars.

The following facts are based on analysis of data from the U.S. Department of Transportation's Fatality Analysis Reporting System and The Polk Company's National Vehicle Population Profile:

- 32,480 passenger vehicle occupants died in 2002, up 2 percent from 2001 and 6 percent more than in 1975.
- Passenger vehicle occupant deaths represented 76 percent of motor vehicle deaths in 2002.
- One third of passenger vehicle occupants dying in 2002 were under age 25.
- About 2 out of every 3 passenger vehicle occupant deaths in 2002 were drivers; 71 percent of these drivers were males.

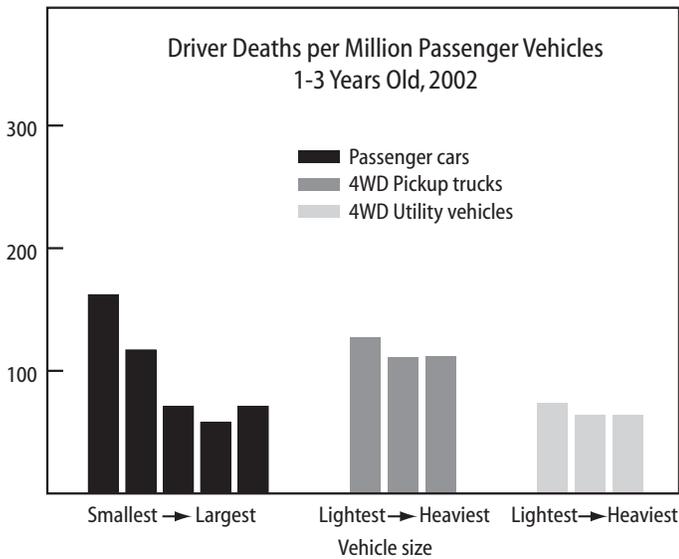
Passenger vehicle deaths					
Year	Car drivers	Pickup and SUV drivers	Cargo and large passenger van drivers	All drivers	All passenger vehicle occupants
1975	16,141	2,751	450	19,349	30,601
1976	16,385	3,237	452	20,091	31,724
1977	16,903	3,510	510	20,941	32,823
1978	18,047	4,054	629	22,758	34,923
1979	18,064	4,330	696	23,109	35,026
1980	17,847	4,460	666	22,990	34,995
1981	17,553	4,310	628	22,506	33,711
1982	15,234	3,894	517	19,663	29,653
1983	15,056	3,794	465	19,336	29,151
1984	15,785	3,979	498	20,298	30,091
1985	15,429	4,091	487	20,056	29,846
1986	16,503	4,454	493	21,503	32,224
1987	16,722	4,847	544	22,157	33,145
1988	17,182	5,182	496	22,883	34,104
1989	16,775	5,242	516	22,554	33,599
1990	16,200	5,258	485	21,953	32,711
1991	14,938	5,199	402	20,551	30,810
1992	14,337	4,821	410	19,573	29,457
1993	14,547	5,082	403	20,036	29,994
1994	14,911	5,270	456	20,642	30,813
1995	15,322	5,679	452	21,455	31,912
1996	15,379	5,801	446	21,631	32,353
1997	15,307	5,913	469	21,701	32,329
1998	15,035	6,138	452	21,627	31,779
1999	14,809	6,644	439	21,899	32,008
2000	14,717	6,623	475	21,819	32,109
2001	14,552	6,907	400	21,862	31,938
2002	14,789	7,195	383	22,369	32,480

Note: Passenger versions of vans often referred to as minivans are classified as cars.

Passenger vehicle deaths, 2002						
Age	Drivers			All occupants		
	Male	Female	Total	Male	Female	Total
<16	80	45	125	966	815	1,783
16-19	1,862	866	2,728	2,980	1,540	4,520
20-24	2,462	756	3,218	3,478	1,272	4,751
25-29	1,538	464	2,002	2,050	723	2,773
30-34	1,337	486	1,823	1,675	688	2,363
35-39	1,278	551	1,829	1,552	790	2,343
40-44	1,311	588	1,899	1,542	816	2,358
45-49	1,140	491	1,631	1,336	712	2,048
50-54	931	456	1,387	1,075	655	1,730
55-59	736	304	1,040	836	449	1,285
60-64	609	321	930	705	506	1,211
65-69	502	240	742	582	427	1,009
70+	1,973	1,020	2,994	2,323	1,903	4,227
Unknown	18	2	21	59	14	79
All	15,777	6,590	22,369	21,159	11,310	32,480

Note: Total includes gender unknowns.

VEHICLE TYPES



Driver deaths per million passenger vehicles 1-3 years old, 2002	
Vehicle size	Rate
Car — mini	162
Car — small	117
Car — midsize	71
Car — large	58
Car — very large	71
Pickup — small	127
Pickup — large	111
Pickup — very large	112
SUV— 4WD, <= 3,500 lbs.	74
SUV— 4WD, 3,501-4,500 lbs.	64
SUV— 4WD, 4,501-6,000 lbs.	64
SUV— 4WD, >6,000 lbs.	*

* SUVs >6,000 pounds had insufficient exposure for estimating reliable death rates

- Since 1982, driver and occupant deaths per registered vehicle have declined in all kinds of passenger vehicles. (Death rates per registered vehicle are based on 1-3 year old vehicles only so as to minimize the effects of vehicle aging.)

Driver deaths per million registered passenger vehicles 1-3 years old			
	1982	1992	2002
All cars	155	102	83
All pickups	188	151	122
All SUVs	229	88	75
Cargo and large passenger vans	78	64	49
All passenger vehicles	159	108	88

Passenger versions of vans often referred to as minivans are classified as cars.

Occupant deaths per million registered passenger vehicles 1-3 years old			
	1982	1992	2002
All cars	231	160	124
All pickups	263	200	161
All SUVs	392	151	120
Cargo and large passenger vans	137	129	108
All passenger vehicles	236	165	130

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- Sixty-six percent of passenger vehicle driver deaths in 2002 were car drivers. However, the proportion of deaths involving pickup and SUV drivers is growing as the popularity of these vehicles increases.

CRASH TYPES

- Frontal impacts accounted for 43 driver deaths per million registered passenger vehicles in 2002 compared with 25 deaths per million in side impacts and 3 deaths per million in rear impacts.
- Multiple-vehicle crashes accounted for 41 driver deaths per million registered passenger vehicles in 2002 compared with 46 deaths per million in single-vehicle crashes. In single-vehicle crashes, four-wheel-drive pickups had the highest number of deaths per registered vehicle (81 per million) in 2002. In multiple-vehicle crashes, two-wheel-drive pickups had the highest number of deaths per registered vehicle (49 per million).
- Single-vehicle crashes involving rollover accounted for 28 driver deaths per million registered passenger vehicles in 2002.

Driver deaths per million registered passenger vehicles 1-3 years old, by crash type, 2002								
	Single vehicle		Single vehicle rollover		Multiple vehicle		All crashes	
CARS								
Mini cars	54		31		108		162	
Small cars	54		29		62		117	
Midsized cars	33		15		38		71	
Large cars	22		10		36		58	
Very large cars	28		10		43		71	
All cars	37		18		46		83	
PICKUPS	2WD	4WD	2WD	4WD	2WD	4WD	2WD	4WD
Small pickups	80	95	49	68	61	32	141	127
Large pickups	79	76	47	53	42	35	121	111
Very large pickups	58	81	37	61	41	31	99	112
All pickups	76	81	46	58	49	34	126	115
SUVS	2WD	4WD	2WD	4WD	2WD	4WD	2WD	4WD
Weight <=3,500 lbs	42	38	29	28	34	36	76	74
Weight 3,501-4,500 lbs	74	40	62	30	30	24	105	64
Weight 4,501-6,000 lbs	40	46	29	37	29	18	70	64
Weight >6,000 lbs	*	*	*	*	*	*	*	*
All SUVs	59	42	47	31	31	25	90	66
CARGO AND LARGE PASSENGER VANS	26		16		23		49	
ALL PASSENGER VEHICLES	46		28		41		88	
Notes:								
Passenger versions of vans often referred to as minivans are classified as cars.								
2WD and 4WD are two- and four-wheel-drive, respectively.								
* SUVs >6,000 lbs had insufficient exposure for estimating reliable driver death rates.								

Multiple-vehicle crash driver deaths per million registered passenger vehicles 1-3 years old, 2002

	Frontal impacts	Side impacts	Rear impacts	Other	All
CARS					
Mini cars	69	29	10	0	108
Small cars	29	29	2	0	62
Midsize cars	20	15	2	<1	38
Large cars	18	15	2	0	36
Very large cars	21	20	2	0	43
All cars	23	20	2	<1	46
PICKUPS					
Two-wheel-drive					
Small	37	18	3	0	61
Large	26	14	2	<1	42
Very large	27	8	2	2	41
All two-wheel-drive pickups	30	15	2	<1	49
Four-wheel-drive					
Small	22	9	1	0	32
Large	23	8	3	0	35
Very large	20	9	<1	0	31
All four-wheel-drive pickups	22	9	2	0	34
SUVS					
Two-wheel-drive					
Weight <=3,500 lbs	20	5	10	0	34
Weight 3,501-4,500 lbs	17	9	3	1	30
Weight 4,501-6,000 lbs	19	9	0	0	29
Weight >6,000 lbs	*	*	*	*	*
All two-wheel-drive SUVs	18	9	3	<1	31
Four-wheel-drive					
Weight <=3,500 lbs	16	13	5	0	36
Weight 3,501-4,500 lbs	12	8	2	0	24
Weight 4,501-6,000 lbs	12	5	0	0	18
Weight >6,000 lbs	*	*	*	*	*
All four-wheel-drive SUVs	13	8	3	0	25
CARGO AND LARGE PASSENGER VANS	16	5	0	0	23
ALL PASSENGER VEHICLES	22	16	2	<1	41

Notes:

"All" includes unknown crash types. Passenger versions of vans often referred to as minivans are classified as cars.

* SUVs >6,000 lbs had insufficient exposure for estimating reliable driver death rates.

Single-vehicle crash driver deaths per million registered passenger vehicles 1-3 years old, 2002

	Frontal impacts	Side impacts	Rear impacts	Other	All
CARS					
Mini cars	23	10	2	8	54
Small cars	24	14	2	9	54
Midsize cars	17	8	<1	4	33
Large cars	11	5	1	2	22
Very large cars	19	2	2	2	28
All cars	18	9	1	5	37
PICKUPS					
Two-wheel- drive					
Small	37	12	<1	18	80
Large	38	16	<1	16	79
Very large	33	12	2	6	58
All two-wheel-drive pickups	36	14	<1	16	76
Four-wheel-drive					
Small	35	10	1	34	95
Large	33	10	0	25	76
Very large	37	13	2	20	81
All four-wheel-drive pickups	34	11	<1	26	81
SUVS					
Two-wheel-drive					
Weight <=3,500 lbs	27	5	0	10	42
Weight 3,501-4,500 lbs	21	8	2	37	74
Weight 4,501-6,000 lbs	16	4	1	17	40
Weight >6,000 lbs	*	*	*	*	*
All two-wheel-drive SUVs	20	6	2	27	59
Four-wheel-drive					
Weight <=3,500 lbs	22	2	0	8	38
Weight 3,501-4,500 lbs	17	6	<1	15	40
Weight 4,501-6,000 lbs	16	9	0	20	46
Weight >6,000 lbs	*	*	*	*	*
All four-wheel-drive SUVs	18	5	<1	15	42
CARGO AND LARGE PASSENGER VANS	15	2	0	6	26
All passenger vehicles	21	9	1	10	46

Notes:

"All" includes unknown crash types. Passenger versions of vans often referred to as minivans are classified as cars.

* SUVs >6,000 lbs had insufficient exposure for estimating reliable driver death rates.

Deaths in single-vehicle rollover crashes as a percent of all occupant deaths, 2002

	Drivers		All occupants	
CARS				
Mini cars	17		17	
Small cars	22		21	
Midsize cars	19		19	
Large cars	19		20	
Very large cars	13		11	
All cars	20		20	
PICKUPS	2WD	4WD	2WD	4WD
Small	27	47	28	50
Large	33	46	33	46
Very large	45	49	45	48
All pickups	31	47	31	47
SUVS	2WD	4WD	2WD	4WD
Weight <=3,500 lbs	36	41	39	42
Weight 3,501-4,500 lbs	57	47	57	49
Weight 4,501-6,000 lbs	38	52	41	55
Weight >6,000 lbs	0	67	0	71
All SUVs	49	46	50	49
CARGO AND LARGE PASSENGER VANS	26		30	

Notes:

Passenger versions of vans often referred to as minivans are classified as cars.
 2WD and 4WD are two- and four-wheel-drive, respectively.

OTHER FATALITY FACTS TOPICS: General | Alcohol | Bicycles | Children | Gender | Large Trucks | Motorcycles
 Older People | Pedestrians | Roadside Hazards | State by State | Teenagers