

# STATUS REPORT

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## Death Rates Vary Among Cars by More Than 800 Percent

Occupant deaths occur far more often in some cars than in others. Insurance Institute for Highway Safety researchers computed death rates for 1984-88 model cars during calendar years 1985-89 and found that, among 134 series, the one with the lowest death rate was Volvo's 240 station wagon with 0.5 deaths for each 10,000 of these cars registered. The highest rate? Chevrolet's Corvette Coupe, a small sports car (4.7 per 10,000). The Corvette's death rate was more than 9 times as high as the Volvo's (see table, pages 4-5).

For each car series, rates were computed from the total number of occupant deaths and registrations in the 5 calendar years, 1985-89. (A car series is a family within a make with the same wheelbase and a degree of commonality in construction such as body, chassis, etc.) Results for 1984-88 series are presented only for those with at least 150,000 registrations during 1985-89 (1989 model cars aren't included because registrations are counted midyear when new cars are still being sold). Results for all cars and for each car size/body style group were computed from death and registration counts for all car series, regardless of numbers registered.

Car size is an important influencing factor on death rates. Of the 14 vehicle series with the lowest death rates, 5 are large, and 7 are midsize. Only 2 are small. Nine of  
*(See 800% Variation, p. 2)*



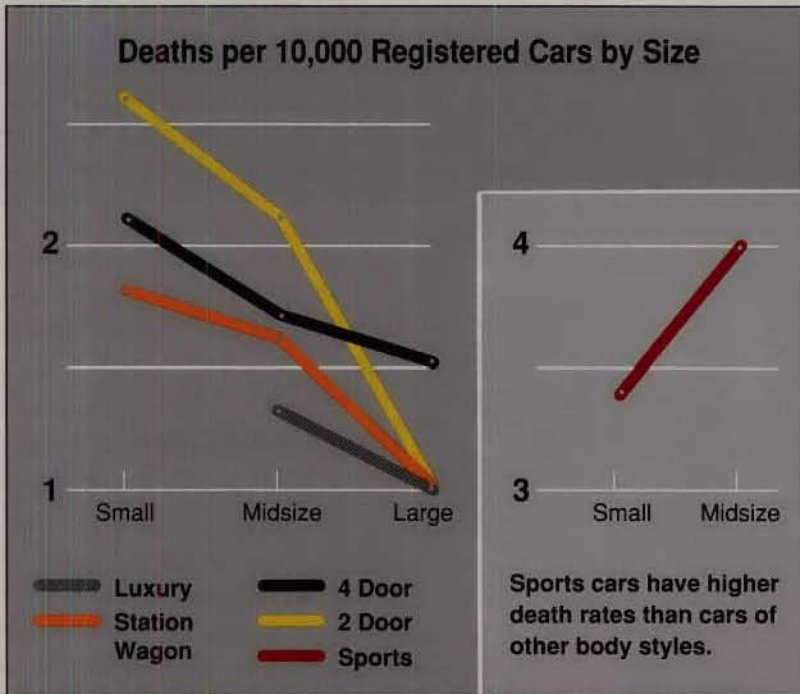
*This special issue of Status Report marks the second time the Insurance Institute for Highway Safety has published passenger car occupant deaths per 10,000 registered cars by individual car make and series. These are actual, on-the-road death rates, not test results. And, in this report, more passenger car series are included than the first time the rates were reported — 134 series instead of 103. The table on pages 4 and 5 includes more cars with lower sales, hence less exposure per year.*

## Many Cars Perform Better (or Worse) Than Predicted

Actual death rates for individual car series tell only part of the story (see Death Rates Vary Among Cars by More Than 800 Percent) because they're influenced by the age and sex of the people who drive them, as well as by the size of the cars. So Insurance Institute for Highway Safety researchers computed for each of 134 popular car series a predicted as well as an actual death rate, with the predicted rate taking into account three important factors influencing the actual death rate. The researchers developed a regression model that relates actual death rates to car size, driver age, and driver sex. Because vehicle registration information cannot be broken down by owner age or sex, the researchers' model uses information about the drivers who were involved in the fatal crashes.

Specifically, the researchers estimated a nonlinear relationship between the death rates of individual vehicle series and their wheelbases, the proportion of occupant deaths that occurred with drivers under 30 years old, and the proportion of male drivers. (A detailed explanation of the research methods is available from the Institute on request.)

From this model, the researchers computed a predicted death rate for each car series using its actual wheelbase, proportion of young drivers, and proportion of  
*(See Better or Worse, p. 3)*



### Deaths per 10,000 Cars by Age

| Model Years | 1985 | 1986 | 1987 | 1988 | 1989 |
|-------------|------|------|------|------|------|
| 1988        |      |      |      | 2.1  |      |
| 1987        |      |      | 2.1  | 1.8  |      |
| 1986        |      | 2.0  | 2.0  | 1.8  |      |
| 1985        | 2.0  | 1.9  | 1.9  | 1.8  |      |
| 1984        | 2.0  | 2.0  | 1.9  | 1.9  | 1.9  |

Calendar Years: 1985, 1986, 1987, 1988, 1989

Car occupant death rates vary a lot by the size of the vehicle. However occupant death rates do not vary much as cars get older.

## 800% Variation

(Cont'd from p. 1)

the 13 cars with the highest death rates are small. The other 4 are midsize. None is large.

Large station wagons, large two-door cars, and large luxury cars are the groups with the fewest deaths per 10,000 registered cars. The group with the highest number of deaths per 10,000 registrations is midsize sports cars.

Death rates vary not only by car size but also *within* size and body style groups. Among small four-door cars, for example, the Saab 900 had the lowest rate (0.6). The rate for the four-door Chevrolet Sprint, was more than 7 times as high (4.5).

The mix of occupant deaths between single- and multiple-vehicle crashes varied considerably, too, with small cars usually having higher proportions of deaths in single-vehicle crashes than large cars. Chevrolet's Corvette Coupe had the highest proportion of single-vehicle crash deaths (83 percent) among all 134 cars. Buick's Century two-door and Electra station wagon had the lowest (13 percent).

Another important influence on death rates, besides car size, is driver age. Cars with high percentages of fatal-crash-involved drivers who are under 30 years old tended to have higher death rates. The sex of the driver is important, too. Cars with high percentages

### Lowest Death Rates

- Volvo 240 station wagon (0.5)
- Saab 900 4-door (0.6)
- Volkswagen Vanagon (0.6)
- Olds Cutlass Cruiser sw (0.7)
- Pontiac Safari/Parisienne sw (0.7)
- Volvo 740/760 4-door (0.7)
- Mercury Grand Marquis sw (0.8)
- Honda Accord 2-door (0.8)
- Volvo 240 4-door (0.8)
- Acura Legend 4-door (0.8)
- Audi 5000 4-door (0.9)
- Lincoln Town Car (0.9)
- Mercedes SDL/SEL series (0.9)
- Toyota Cressida 4-door (0.9)

### Highest Death Rates

- Chevrolet Corvette Coupe (4.7)
- Chevrolet Sprint 4-door (4.5)
- Chevrolet Sprint 2-door (4.3)
- Chevrolet Camaro (4.3)
- Ford Mustang (4.3)
- Ford Mustang convertible (4.0)
- Nissan 300ZX (4.0)
- Yugo 2-door (3.6)
- Chevrolet Spectrum 2-door (3.5)
- Pontiac Fiero (3.5)
- Hyundai Excel/ Mitsubishi Precis 2-door (3.3)
- Pontiac Firebird (3.2)
- Ford Escort 2-door (3.1)

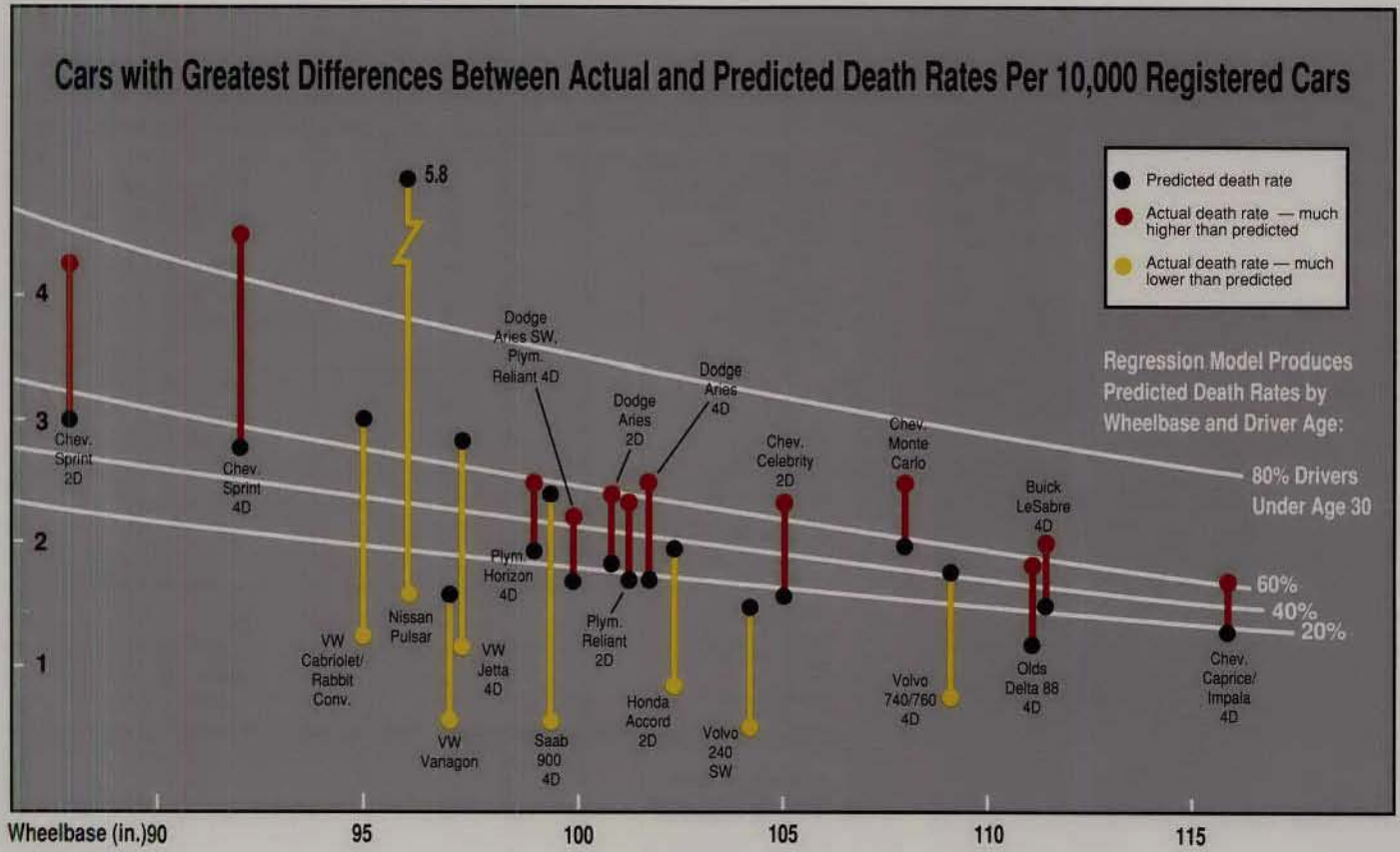
of female drivers tended to have lower rates (see table, pages 6-7).

These three factors — car size, driver age and sex — explain some differences in death rates among cars. But they don't explain them all. Volkswagen's Cabriolet/Rabbit convertible, for example, had a relatively low death rate (1.3), even though it's small and had a relatively high percentage of drivers under 30 (71 percent).

Still another influencing factor involves the presence or absence of automatic restraints. Most of the 134 car series were *not* equipped with automatic restraints during 1984-88, but *all* 1990 and later models of the same cars (not passenger vans) *do* have such restraints. Death rates for the newer models equipped with air bags can be expected to be lower than the rates shown for corresponding 1984-88 models.

The cars included in the study range from one to five years old and, within that age range, the older cars had only slightly lower death rates than the newer cars.

To account for the effects of car size and driver age and sex, Institute researchers computed a predicted death rate for each car series. Then they compared predicted and actual rates (see Many Cars Perform Better (or Worse) Than Predicted, page 1).



## Better or Worse

(Cont'd from p. 1)

male drivers. What's especially interesting are the differences that the Institute's researchers found between individual car series' predicted and actual death rates. This comparison tells us how much better or worse each of the car series performed than we would have expected, given the car's size and the age and the sex of the drivers who were in its fatal crashes.

Among the 134 vehicle series for which Institute researchers computed actual and predicted occupant death rates, 81 series (1984-88 models) performed better than predicted during calendar years 1985-89. Forty-four car series performed worse than predicted, and 9 had actual occupant death rates that match their predicted rates.



Volvo's 240 station wagon (above) had the lowest occupant death rate among all 1984-88 model cars studied. Chevrolet's Corvette Coupe had the highest occupant death rate.



Some of the 134 car series performed much *better* than predicted after taking into account vehicle size and the age and sex of the drivers: Saab 900 four-door, Nissan Pulsar, Volvo 240 station wagon, Volkswagen Vanagon, Volvo 740/760 four-door, Volkswagen Cabriolet/Rabbit convertible, Honda Accord two-door, and Volkswagen Jetta four-door.

The following 13 cars performed much *worse* than predicted: Chevrolet Sprint four-door, Dodge Aries four-door, Oldsmobile Delta 88 four-door, Chevrolet Celebrity two-door, Chevrolet Sprint two-door, Plymouth Reliant two-door, Buick LeSabre four-door, Dodge Aries two-door, Plymouth Reliant four-door, Dodge Aries station wagon, Chevrolet Caprice/Impala four-door, Plymouth Horizon four-door, and Chevrolet Monte Carlo.

## Actual and Predicted Deaths per 10,000 Registered Passenger Cars

|                                       | Actual Rate | Predicted Rate | Actual Diff. from Predicted |       |
|---------------------------------------|-------------|----------------|-----------------------------|-------|
|                                       |             |                | Better                      | Worse |
| <b>STATION WAGONS &amp; VANS</b>      |             |                |                             |       |
| <b>LARGE</b>                          |             |                |                             |       |
| All                                   | 1.0         | 1.3            |                             |       |
| 84-88 Oldsmobile Custom Cruiser       | 0.7         | 1.4            | 50%                         |       |
| 84-88 Pontiac Safari/Parisienne       | 0.7         | 1.5            | 53%                         |       |
| 84-88 Mercury Grand Marquis           | 0.8         | 1.3            | 38%                         |       |
| 84-88 Dodge Caravan                   | 1.0         | 1.3            | 23%                         |       |
| 84-88 Ford Crown Victoria             | 1.0         | 1.2            | 17%                         |       |
| 84-88 Plymouth Voyager                | 1.0         | 1.3            | 23%                         |       |
| 84-88 Chevrolet Caprice               | 1.1         | 1.4            | 21%                         |       |
| 84-88 Buick Electra                   | 1.1         | 1.4            | 21%                         |       |
| 85-88 GMC Safari Van                  | 1.1         | 1.2            | 8%                          |       |
| 86-88 Ford Aerostar                   | 1.1         | 1.2            | 8%                          |       |
| 85-88 Chevrolet Astro Van             | 1.2         | 1.6            | 25%                         |       |
| <b>MIDSIZE</b>                        |             |                |                             |       |
| All                                   | 1.6         | 1.7            |                             |       |
| 84-88 Volvo 240                       | 0.5         | 1.5            | 67%                         |       |
| 86-88 Ford Taurus                     | 1.1         | 1.5            | 27%                         |       |
| 84-88 Buick Century                   | 1.2         | 1.5            | 20%                         |       |
| 84-88 Pontiac 6000                    | 1.2         | 1.4            | 14%                         |       |
| 84-88 Chevrolet Celebrity             | 1.4         | 1.7            | 18%                         |       |
| 84-88 Oldsmobile Cutlass Ciera        | 1.4         | 1.4            |                             |       |
| 84-88 American Eagle                  | 1.5         | 1.3            |                             | 15%   |
| 84-88 Plymouth Reliant                | 1.6         | 1.7            | 6%                          |       |
| 84-88 Chevrolet Cavalier              | 1.8         | 1.7            |                             | 6%    |
| 84-88 Dodge Aries                     | 2.2         | 1.6            |                             | 38%   |
| <b>SMALL</b>                          |             |                |                             |       |
| All                                   | 1.8         | 2.1            |                             |       |
| 84-88 Volkswagen Vanagon              | 0.6         | 1.6            | 62%                         |       |
| 85-88 Subaru DL/GL 4WD                | 1.3         | 2.0            | 35%                         |       |
| 84-88 Toyota Tercel 4WD               | 1.4         | 1.8            | 22%                         |       |
| 84-88 Toyota Van                      | 1.5         | 2.3            | 35%                         |       |
| 85-88 Subaru DL/GL                    | 1.7         | 1.7            |                             |       |
| * 87-88 Ford Escort                   | 1.8         | 2.4            | 25%                         |       |
| <b>FOUR DOOR CARS</b>                 |             |                |                             |       |
| <b>LARGE</b>                          |             |                |                             |       |
| All                                   | 1.5         | 1.4            |                             |       |
| 84-88 Mercury Grand Marquis           | 1.3         | 1.3            |                             |       |
| 85-88 Buick Electra                   | 1.5         | 1.4            |                             | 7%    |
| 85-88 Oldsmobile Ninety-Eight         | 1.5         | 1.4            |                             | 7%    |
| 84-88 Ford Crown Victoria             | 1.6         | 1.5            |                             | 7%    |
| 84-88 Chevrolet Caprice/Impala        | 1.7         | 1.3            |                             | 31%   |
| * 87-88 Oldsmobile Delta 88           | 1.8         | 1.2            |                             | 50%   |
| * 87-88 Pontiac Bonneville            | 1.9         | 1.6            |                             | 19%   |
| * 87-88 Buick LeSabre                 | 2.0         | 1.5            |                             | 33%   |
| <b>MIDSIZE</b>                        |             |                |                             |       |
| All                                   | 1.7         | 1.7            |                             |       |
| 84-88 Volvo 240                       | 0.8         | 1.7            | 53%                         |       |
| * 85-88 Toyota Cressida               | 0.9         | 1.9            | 53%                         |       |
| * 87-88 Toyota Camry                  | 1.2         | 1.5            | 20%                         |       |
| 84-88 Peugeot 505                     | 1.3         | 1.9            | 32%                         |       |
| 84-88 Oldsmobile Firenza              | 1.4         | 1.8            | 22%                         |       |
| 86-88 Honda Accord                    | 1.4         | 2.0            | 30%                         |       |
| 86-88 Ford Taurus                     | 1.4         | 1.7            | 18%                         |       |
| 85-88 Chrysler LeBaron GTS            | 1.4         | 1.9            | 26%                         |       |
| 87-88 Nissan Stanza                   | 1.5         | 2.1            | 29%                         |       |
| 86-88 Mercury Sable                   | 1.5         | 1.6            | 6%                          |       |
| 84-88 Pontiac 6000                    | 1.5         | 1.7            | 12%                         |       |
| 84-88 Chrysler New Yorker (E Body)    | 1.5         | 1.6            | 6%                          |       |
| 84-88 Oldsmobile Cutlass Ciera        | 1.5         | 1.6            | 6%                          |       |
| 84-88 Cadillac Cimarron               | 1.5         | 1.6            | 6%                          |       |
| 84-88 Buick Century                   | 1.5         | 1.5            |                             |       |
| * 88 Ford Tempo                       | 1.7         | 2.0            | 15%                         |       |
| 84-88 Buick Skyhawk                   | 1.8         | 1.6            |                             | 13%   |
| 85-88 Dodge Lancer                    | 1.8         | 2.0            | 10%                         |       |
| 84-88 Chevrolet Celebrity             | 1.8         | 1.6            |                             | 13%   |
| 85-88 Plymouth Caravelle              | 1.9         | 1.5            |                             | 27%   |
| 84-88 Chrysler LeBaron                | 2.0         | 1.7            |                             | 18%   |
| 84-88 Dodge 600                       | 2.0         | 1.7            |                             | 18%   |
| 87-88 Chevrolet Corsica               | 2.0         | 2.1            | 5%                          |       |
| 84-88 Plymouth Reliant                | 2.2         | 1.7            |                             | 29%   |
| 84-88 Pontiac Sunbird                 | 2.3         | 1.9            |                             | 21%   |
| * 87-88 Nissan Maxima                 | 2.4         | 2.2            |                             | 9%    |
| 84-88 Chevrolet Cavalier              | 2.4         | 1.9            |                             | 26%   |
| 84-88 Dodge Aries                     | 2.5         | 1.7            |                             | 47%   |
| <b>SMALL</b>                          |             |                |                             |       |
| All                                   | 2.1         | 2.3            |                             |       |
| 84-88 Saab 900                        | 0.6         | 2.4            | 75%                         |       |
| 85-88 Volkswagen Jetta                | 1.2         | 2.8            | 57%                         |       |
| 87-88 Nissan Sentra                   | 1.6         | 2.3            | 30%                         |       |
| 85-88 Plymouth Colt                   | 1.9         | 2.4            | 21%                         |       |
| 85-88 Volkswagen Golf                 | 1.9         | 2.5            | 24%                         |       |
| 86-88 Mazda 323                       | 1.9         | 2.6            | 27%                         |       |
| 85-88 Subaru DL/GL Sedan              | 2.0         | 2.1            | 5%                          |       |
| 85-88 Dodge Colt                      | 2.2         | 2.5            | 12%                         |       |
| 84-88 Dodge Omni                      | 2.2         | 2.3            | 4%                          |       |
| 85-88 Chevrolet Nova                  | 2.2         | 2.1            |                             | 5%    |
| * 87-88 Ford Escort                   | 2.5         | 2.1            |                             | 19%   |
| 84-88 Plymouth Horizon                | 2.5         | 1.9            |                             | 32%   |
| 86-88 Hyundai Excel/Mitsubishi Precis | 2.7         | 2.9            | 7%                          |       |
| 85-88 Chevrolet Spectrum              | 2.8         | 2.6            |                             | 8%    |
| 86-88 Chevrolet Sprint                | 4.5         | 2.8            |                             | 61%   |

# 1984-88 Models During 1985-89, by Car Size and Body Style

|                      |                                   | Actual Rate | Predicted Rate | Actual Diff. from Predicted |       |
|----------------------|-----------------------------------|-------------|----------------|-----------------------------|-------|
|                      |                                   |             |                | Better                      | Worse |
| <b>All</b>           |                                   | <b>1.0</b>  | <b>1.5</b>     |                             |       |
| <b>TWO DOOR CARS</b> |                                   |             |                |                             |       |
| <b>All</b>           |                                   | <b>2.1</b>  | <b>2.1</b>     |                             |       |
| * 87-88              | Honda Accord                      | 0.8         | 1.9            | 58%                         |       |
| 84-88                | Oldsmobile Cutlass Ciera          | 1.4         | 1.5            | 7%                          |       |
| 84-88                | Oldsmobile Cutlass RWD            | 1.6         | 1.8            | 11%                         |       |
| 84-88                | Buick Century                     | 1.8         | 1.5            |                             | 20%   |
| 84-88                | Mercury Cougar                    | 2.1         | 2.1            |                             |       |
| 84-88                | Ford Thunderbird                  | 2.2         | 2.2            |                             |       |
| 84-88                | Buick Skyhawk                     | 2.2         | 2.2            |                             |       |
| 84-88                | Chevrolet Celebrity               | 2.3         | 1.6            |                             | 44%   |
| 84-88                | Pontiac Sunbird                   | 2.3         | 2.5            | 8%                          |       |
| * 87-88              | Pontiac Grand Am                  | 2.3         | 2.5            | 8%                          |       |
| 84-88                | Plymouth Reliant                  | 2.3         | 1.7            |                             | 35%   |
| 84-88                | Dodge Aries                       | 2.4         | 1.8            |                             | 33%   |
| 84-88                | Chevrolet Monte Carlo             | 2.5         | 1.9            |                             | 32%   |
| 84-88                | Oldsmobile Firenza                | 2.6         | 2.4            |                             | 8%    |
| 84-88                | Chevrolet Cavalier                | 2.8         | 2.7            |                             | 4%    |
| <b>MIDSIZE</b>       |                                   |             |                |                             |       |
| <b>All</b>           |                                   | <b>2.6</b>  | <b>3.0</b>     |                             |       |
| 84-88                | Volkswagen Cabriolet/Rabbit Conv. | 1.3         | 3.0            | 57%                         |       |
| 85-88                | Volkswagen Golf                   | 1.5         | 2.9            | 48%                         |       |
| 87-88                | Nissan Pulsar                     | 1.6         | 5.8            | 72%                         |       |
| 86-88                | Toyota Celica                     | 1.7         | 2.8            | 39%                         |       |
| 87-88                | Nissan Sentra                     | 1.7         | 2.9            | 41%                         |       |
| 84-88                | Subaru Hatchback                  | 1.8         | 2.7            | 33%                         |       |
| 84-88                | Saab 900                          | 1.9         | 2.6            | 27%                         |       |
| 87-88                | Toyota Tercel                     | 2.2         | 2.9            | 24%                         |       |
| 85-88                | Plymouth Colt                     | 2.4         | 3.1            | 23%                         |       |
| 85-88                | Dodge Colt                        | 2.6         | 2.3            |                             | 13%   |
| 84-88                | Nissan 200SX                      | 2.7         | 3.5            | 23%                         |       |
| 84-88                | Volkswagen Scirocco               | 3.0         | 4.1            | 27%                         |       |
| * 87-88              | Ford Escort                       | 3.1         | 3.2            | 3%                          |       |
| 86-88                | Hyundai Excel/Mitsubishi Precis   | 3.3         | 2.8            |                             | 18%   |
| 85-88                | Chevrolet Spectrum                | 3.5         | 3.2            |                             | 9%    |
| 86-88                | Yugo                              | 3.6         | 3.3            |                             | 9%    |
| 85-88                | Chevrolet Sprint                  | 4.3         | 3.0            |                             | 43%   |
| <b>SMALL</b>         |                                   |             |                |                             |       |

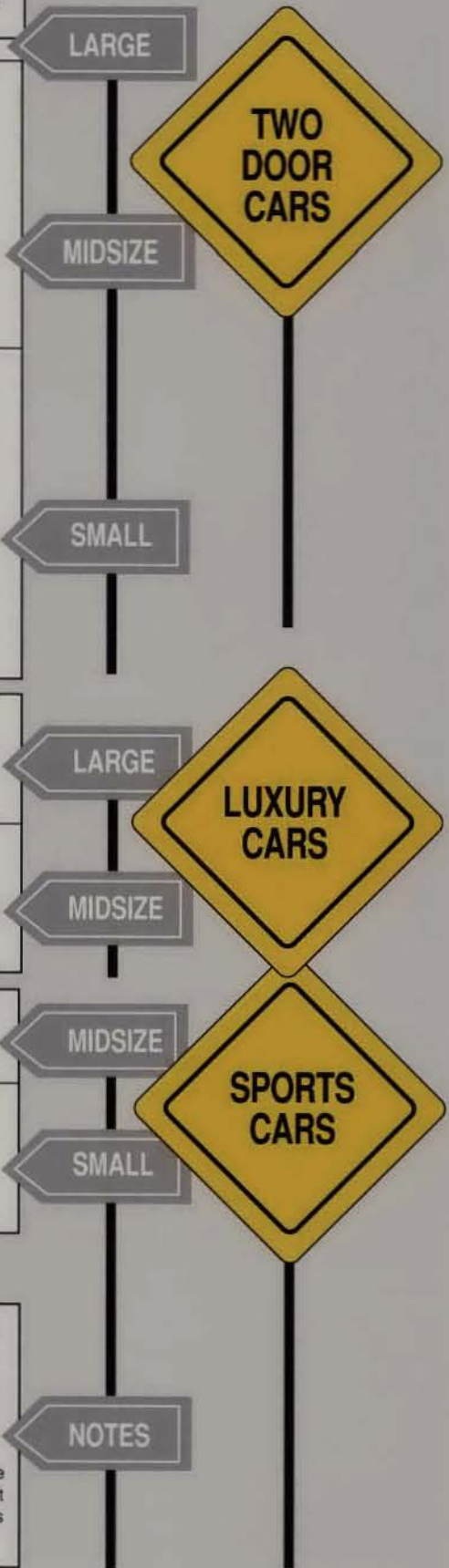
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|--------------------|-----------------------------|------------|------------|-----|-----|
| <b>All</b>         |                             | <b>1.0</b> | <b>1.3</b> |     |     |
| 84-88              | Lincoln Town Car            | 0.9        | 1.1        | 18% |     |
| ** 84-88           | Mercedes SDL/SEL Series     | 0.9        | 1.8        | 50% |     |
| 85-88              | Cadillac Fl'wood/Deville 2D | 1.0        | 1.3        | 23% |     |
| ** 86-88           | Mercedes 260E/300D/E        | 1.1        | 1.8        | 39% |     |
| 85-88              | Cadillac Fl'wood/Deville 4D | 1.2        | 1.3        | 8%  |     |
| 84-88              | Cadillac Brougham 4D        | 1.3        | 1.2        |     | 8%  |
| <b>LUXURY CARS</b> |                             |            |            |     |     |
| <b>All</b>         |                             | <b>1.3</b> | <b>1.9</b> |     |     |
| 84-88              | Volvo 740/760 4D            | 0.7        | 1.8        | 61% |     |
| 86-88              | Acura Legend 4D             | 0.8        | 1.7        | 53% |     |
| 84-88              | Audi 5000 4D                | 0.9        | 1.8        | 50% |     |
| 84-88              | BMW 500 Series              | 1.0        | 1.9        | 47% |     |
| 84-88              | Lincoln Mark VII            | 1.4        | 1.8        | 22% |     |
| 85-88              | BMW 300 Series 4D           | 2.0        | 1.8        |     | 11% |
| 84-88              | BMW 300 Series 2D           | 2.1        | 2.9        | 28% |     |
| <b>MIDSIZE</b>     |                             |            |            |     |     |

|                    |                          |            |            |     |     |
|--------------------|--------------------------|------------|------------|-----|-----|
| <b>All</b>         |                          | <b>4.0</b> | <b>3.5</b> |     |     |
| 84-88              | Pontiac Firebird         | 3.2        | 3.2        |     |     |
| 84-88              | Ford Mustang Conv.       | 4.0        | 3.8        |     | 5%  |
| 84-88              | Ford Mustang             | 4.3        | 3.8        |     | 13% |
| 84-88              | Chevrolet Camaro         | 4.3        | 3.5        |     | 23% |
| <b>SPORTS CARS</b> |                          |            |            |     |     |
| <b>All</b>         |                          | <b>3.4</b> | <b>3.7</b> |     |     |
| 84-88              | Porsche 944 Coupe        | 2.2        | 2.9        | 24% |     |
| 84-88              | Nissan 300ZX 2+2         | 2.7        | 2.7        |     |     |
| 86-88              | Mazda RX-7 Coupe         | 2.9        | 3.0        | 3%  |     |
| 85-88              | Toyota MR2               | 3.0        | 4.1        | 27% |     |
| 84-88              | Pontiac Fiero            | 3.5        | 3.8        | 8%  |     |
| 84-88              | Nissan 300ZX             | 4.0        | 3.8        |     | 5%  |
| 84-88              | Chevrolet Corvette Coupe | 4.7        | 3.7        |     | 27% |
| <b>SMALL</b>       |                          |            |            |     |     |

|                             |            |
|-----------------------------|------------|
| <b>Average for All Cars</b> | <b>2.0</b> |
|-----------------------------|------------|







Unless otherwise noted, results shown in the table are for cars that were equipped with manual lap/shoulder safety belts. Results for cars equipped with air bags are identified with two asterisks (\*\*). Results for cars equipped with automatic safety belts are identified with a single asterisk (\*). Earlier models of these cars equipped with manual belts are excluded. For example, Ford's Escort was equipped with automatic safety belts beginning early in the 1987 model year. Therefore, results are shown *only* for the 1987-88 model Escorts that had automatic belts.

Most car series shown in the table had neither air bags nor automatic safety belts. They were equipped with manual lap/shoulder belts. Beginning with 1990 models, however, *all* cars (but not most vans) *do* have automatic restraints as standard equipment. Death rates for the newer models with air bags can be expected to be lower than the results shown in this table.



**NOTES**

## Additional Information About Cars Listed on Pages 4 and 5

|   |                           | Wheelbase                             | Registration Counts | Percent Young   | Percent Male | Percent Single-Vehicle |           |
|---|---------------------------|---------------------------------------|---------------------|-----------------|--------------|------------------------|-----------|
|    | <b>LARGE</b>              | <b>All</b>                            | <b>114</b>          | <b>6468281</b>  | <b>16</b>    | <b>65</b>              | <b>32</b> |
|   |                           | 84-88 Oldsmobile Custom Cruiser       | 116                 | 339058          | 13           | 74                     | 35        |
|   |                           | 84-88 Pontiac Safari/Parisienne       | 116                 | 204619          | 21           | 79                     | 36        |
|   |                           | 84-88 Mercury Grand Marquis           | 114                 | 180205          | 7            | 71                     | 43        |
|   |                           | 84-88 Dodge Caravan                   | 112                 | 1392416         | 13           | 61                     | 22        |
|   |                           | 84-88 Ford Crown Victoria             | 114                 | 346344          | 6            | 52                     | 16        |
|   |                           | 84-88 Plymouth Voyager                | 112                 | 1329106         | 13           | 62                     | 35        |
|   |                           | 84-88 Chevrolet Caprice               | 116                 | 732464          | 21           | 70                     | 41        |
|   |                           | 84-88 Buick Electra                   | 116                 | 151789          | 25           | 69                     | 13        |
|   |                           | 85-88 GMC Safari Van                  | 111                 | 152030          | 18           | 29                     | 18        |
|   | 86-88 Ford Aerostar       | 119                                   | 731838              | 17              | 68           | 45                     |           |
|   | 85-88 Chevrolet Astro Van | 111                                   | 651367              | 23              | 73           | 39                     |           |
|   | <b>All</b>                | <b>103</b>                            | <b>6813204</b>      | <b>19</b>       | <b>61</b>    | <b>31</b>              |           |
|    |                           | 84-88 Volvo 240                       | 104                 | 364887          | 19           | 41                     | 29        |
|   |                           | 86-88 Ford Taurus                     | 106                 | 417575          | 27           | 51                     | 36        |
|   |                           | 84-88 Buick Century                   | 105                 | 322840          | 18           | 56                     | 21        |
|   |                           | 84-88 Pontiac 6000                    | 105                 | 236446          | 10           | 48                     | 24        |
|   |                           | 84-88 Chevrolet Celebrity             | 105                 | 1117741         | 20           | 66                     | 33        |
|   |                           | 84-88 Oldsmobile Cutlass Ciera        | 105                 | 505232          | 9            | 51                     | 17        |
|   |                           | 84-88 American Eagle                  | 109                 | 169885          | 12           | 48                     | 32        |
|   |                           | 84-88 Plymouth Reliant                | 100                 | 456660          | 19           | 54                     | 26        |
|   |                           | 84-88 Chevrolet Cavalier              | 101                 | 1006980         | 18           | 57                     | 23        |
|   |                           | 84-88 Dodge Aries                     | 100                 | 395738          | 13           | 56                     | 19        |
|   | <b>All</b>                | <b>94</b>                             | <b>4645306</b>      | <b>31</b>       | <b>57</b>    | <b>30</b>              |           |
|    |                           | 84-88 Volkswagen Vanagon              | 97                  | 164476          | 0            | 50                     | 20        |
|   |                           | 85-88 Subaru DL/GL 4WD                | 97                  | 493683          | 32           | 53                     | 37        |
|   |                           | 84-88 Toyota Tercel 4WD               | 96                  | 262586          | 26           | 37                     | 24        |
|   |                           | 84-88 Toyota Van                      | 88                  | 398611          | 30           | 49                     | 39        |
|   |                           | 85-88 Subaru DL/GL                    | 97                  | 312004          | 14           | 51                     | 22        |
|   | 87-88 Ford Escort         | 94                                    | 150090              | 35              | 69           | 24                     |           |
|  | <b>LARGE</b>              | <b>All</b>                            | <b>113</b>          | <b>15049038</b> | <b>13</b>    | <b>67</b>              | <b>29</b> |
|   |                           | 84-88 Mercury Grand Marquis           | 114                 | 1608967         | 3            | 72                     | 28        |
|   |                           | 85-88 Buick Electra                   | 111                 | 1042965         | 12           | 63                     | 24        |
|   |                           | 85-88 Oldsmobile Ninety-Eight         | 111                 | 1121383         | 21           | 62                     | 30        |
|   |                           | 84-88 Ford Crown Victoria             | 114                 | 1605127         | 17           | 74                     | 33        |
|   |                           | 84-88 Chevrolet Caprice/Impala        | 116                 | 2437385         | 11           | 70                     | 29        |
|   |                           | 87-88 Oldsmobile Delta 88             | 111                 | 309888          | 4            | 51                     | 25        |
|   |                           | 87-88 Pontiac Bonneville              | 111                 | 235169          | 32           | 66                     | 25        |
|   |                           | 87-88 Buick LeSabre                   | 111                 | 238853          | 7            | 74                     | 30        |
|   |                           | <b>All</b>                            | <b>103</b>          | <b>39888368</b> | <b>25</b>    | <b>59</b>              | <b>29</b> |
|  |                           | 84-88 Volvo 240                       | 104                 | 589175          | 23           | 65                     | 31        |
|   |                           | 85-88 Toyota Cressida                 | 105                 | 349017          | 25           | 75                     | 32        |
|   |                           | 87-88 Toyota Camry                    | 102                 | 485712          | 14           | 51                     | 37        |
|   |                           | 84-88 Peugeot 505                     | 108                 | 174617          | 45           | 68                     | 41        |
|   |                           | 84-88 Oldsmobile Firenza              | 101                 | 365936          | 35           | 51                     | 27        |
|   |                           | 86-88 Honda Accord                    | 102                 | 1503618         | 41           | 62                     | 37        |
|   |                           | 86-88 Ford Taurus                     | 106                 | 1261176         | 25           | 69                     | 34        |
|   |                           | 85-88 Chrysler LeBaron GTS            | 103                 | 533109          | 33           | 64                     | 39        |
|   |                           | 87-88 Nissan Stanza                   | 100                 | 224039          | 47           | 56                     | 53        |
|   |                           | 86-88 Mercury Sable                   | 106                 | 432474          | 15           | 69                     | 35        |
|   |                           | 84-88 Pontiac 6000                    | 105                 | 1813225         | 28           | 60                     | 30        |
|   |                           | 84-88 Chrysler New Yorker (E Body)    | 103                 | 816382          | 8            | 63                     | 27        |
|   |                           | 84-88 Oldsmobile Cutlass Ciera        | 105                 | 3195918         | 22           | 56                     | 26        |
|   |                           | 84-88 Cadillac Cimarron               | 101                 | 280930          | 19           | 52                     | 36        |
|   |                           | 84-88 Buick Century                   | 105                 | 2615794         | 16           | 56                     | 20        |
|   |                           | 88 Ford Tempo                         | 100                 | 201512          | 24           | 70                     | 16        |
|   |                           | 84-88 Buick Skyhawk                   | 101                 | 386778          | 24           | 48                     | 25        |
|   |                           | 85-88 Dodge Lancer                    | 103                 | 383163          | 41           | 62                     | 37        |
|   |                           | 84-88 Chevrolet Celebrity             | 105                 | 3395562         | 19           | 60                     | 24        |
|   |                           | 85-88 Plymouth Caravelle              | 103                 | 349074          | 16           | 50                     | 25        |
|   | 84-88 Chrysler LeBaron    | 100                                   | 648612              | 14              | 56           | 27                     |           |
|   | 84-88 Dodge 600           | 103                                   | 489358              | 13              | 66           | 27                     |           |
|   | 87-88 Chevrolet Corsica   | 103                                   | 284029              | 46              | 65           | 26                     |           |
|   | 84-88 Plymouth Reliant    | 100                                   | 1139463             | 12              | 60           | 26                     |           |
|   | 84-88 Pontiac Sunbird     | 101                                   | 670327              | 43              | 51           | 22                     |           |
|   | 87-88 Nissan Maxima       | 100                                   | 242187              | 48              | 63           | 43                     |           |
|   | 84-88 Chevrolet Cavalier  | 101                                   | 2374298             | 40              | 54           | 29                     |           |
|   | 84-88 Dodge Aries         | 100                                   | 971051              | 15              | 57           | 27                     |           |
|   | <b>All</b>                | <b>96</b>                             | <b>18732112</b>     | <b>44</b>       | <b>57</b>    | <b>35</b>              |           |
|  |                           | 84-88 Saab 900                        | 99                  | 232016          | 46           | 69                     | 58        |
|   |                           | 85-88 Volkswagen Jetta                | 97                  | 634174          | 60           | 66                     | 54        |
|   |                           | 87-88 Nissan Sentra                   | 96                  | 293840          | 45           | 62                     | 43        |
|   |                           | 85-88 Plymouth Colt                   | 94                  | 182849          | 47           | 56                     | 50        |
|   |                           | 85-88 Volkswagen Golf                 | 97                  | 243272          | 33           | 80                     | 22        |
|   |                           | 86-88 Mazda 323                       | 95                  | 280081          | 53           | 64                     | 48        |
|   |                           | 85-88 Subaru DL/GL Sedan              | 97                  | 378677          | 37           | 59                     | 36        |
|   |                           | 85-88 Dodge Colt                      | 94                  | 197713          | 49           | 60                     | 28        |
|   |                           | 84-88 Dodge Omni                      | 99                  | 971081          | 49           | 60                     | 41        |
|   |                           | 85-88 Chevrolet Nova                  | 96                  | 997443          | 38           | 51                     | 36        |
|   |                           | 87-88 Ford Escort                     | 94                  | 249123          | 39           | 48                     | 33        |
|   |                           | 84-88 Plymouth Horizon                | 99                  | 1133782         | 36           | 54                     | 26        |
|   |                           | 86-88 Hyundai Excel/Mitsubishi Precis | 94                  | 689276          | 58           | 65                     | 42        |
|   |                           | 85-88 Chevrolet Spectrum              | 95                  | 438701          | 60           | 54                     | 34        |
|   | 86-88 Chevrolet Sprint    | 92                                    | 152211              | 60              | 52           | 28                     |           |

|                                       | Wheelbase  | Registration Counts | Percent Young | Percent Male | Percent Single-Vehicle |
|---------------------------------------|------------|---------------------|---------------|--------------|------------------------|
| <b>All</b>                            | <b>115</b> | <b>1582755</b>      | <b>17</b>     | <b>78</b>    | <b>31</b>              |
| <b>All</b>                            | <b>103</b> | <b>21878352</b>     | <b>49</b>     | <b>63</b>    | <b>44</b>              |
| 87-88 Honda Accord                    | 102        | 163633              | 23            | 69           | 23                     |
| 84-88 Oldsmobile Cutlass Ciera        | 105        | 508115              | 16            | 51           | 26                     |
| 84-88 Oldsmobile Cutlass RWD          | 108        | 2418705             | 42            | 65           | 39                     |
| 84-88 Buick Century                   | 105        | 167979              | 20            | 53           | 13                     |
| 84-88 Mercury Cougar                  | 104        | 1707324             | 44            | 68           | 46                     |
| 84-88 Ford Thunderbird                | 104        | 2143819             | 47            | 71           | 47                     |
| 84-88 Buick Skyhawk                   | 101        | 780112              | 56            | 54           | 36                     |
| 84-88 Chevrolet Celebrity             | 105        | 375852              | 31            | 49           | 33                     |
| 84-88 Pontiac Sunbird                 | 101        | 787313              | 63            | 58           | 49                     |
| 87-88 Pontiac Grand Am                | 103        | 283437              | 62            | 65           | 52                     |
| 84-88 Plymouth Reliant                | 100        | 261194              | 23            | 54           | 33                     |
| 84-88 Dodge Aries                     | 100        | 217605              | 29            | 51           | 33                     |
| 84-88 Chevrolet Monte Carlo           | 108        | 1551685             | 47            | 68           | 53                     |
| 84-88 Oldsmobile Firenza              | 101        | 154587              | 58            | 63           | 38                     |
| 84-88 Chevrolet Cavalier              | 101        | 1982913             | 70            | 54           | 41                     |
| <b>All</b>                            | <b>95</b>  | <b>21072432</b>     | <b>65</b>     | <b>61</b>    | <b>46</b>              |
| 84-88 VW Cabriolet/Rabbit Conv.       | 95         | 185605              | 71            | 50           | 50                     |
| 85-88 Volkswagen Golf                 | 97         | 179720              | 58            | 73           | 69                     |
| 87-88 Nissan Pulsar                   | 96         | 163089              | 92            | 50           | 58                     |
| 86-88 Toyota Celica                   | 98         | 538424              | 67            | 58           | 47                     |
| 87-88 Nissan Sentra                   | 96         | 589648              | 67            | 54           | 42                     |
| 84-88 Subaru Hatchback                | 94         | 164753              | 62            | 48           | 34                     |
| 84-88 Saab 900                        | 99         | 285808              | 49            | 77           | 57                     |
| 87-88 Toyota Tercel                   | 94         | 240779              | 65            | 57           | 54                     |
| 85-88 Plymouth Colt                   | 94         | 188884              | 67            | 60           | 40                     |
| 85-88 Dodge Colt                      | 94         | 207420              | 48            | 50           | 38                     |
| 84-88 Nissan 200SX                    | 96         | 743858              | 75            | 66           | 52                     |
| 84-88 Volkswagen Scirocco             | 95         | 182229              | 79            | 70           | 60                     |
| 87-88 Ford Escort                     | 94         | 511352              | 70            | 59           | 49                     |
| 86-88 Hyundai Excel/Mitsubishi Precis | 94         | 312389              | 62            | 55           | 64                     |
| 85-88 Chevrolet Spectrum              | 95         | 245432              | 71            | 58           | 43                     |
| 86-88 Yugo                            | 85         | 212148              | 62            | 53           | 44                     |
| 85-88 Chevrolet Sprint                | 88         | 306360              | 54            | 61           | 29                     |
| <b>All</b>                            | <b>115</b> | <b>7449270</b>      | <b>9</b>      | <b>65</b>    | <b>39</b>              |
| 84-88 Lincoln Town Car                | 117        | 1546927             | 6             | 60           | 32                     |
| 84-88 Mercedes SDL/SEL Series         | 121        | 197057              | 11            | 94           | 50                     |
| 85-88 Cadillac Fl'wood/Deville 2D     | 111        | 353482              | 8             | 58           | 28                     |
| 86-88 Mercedes 260E/300D/E            | 110        | 156594              | 18            | 82           | 71                     |
| 85-88 Cadillac Fl'wood/Deville 4D     | 111        | 1300122             | 6             | 57           | 34                     |
| 84-88 Cadillac Brougham 4D            | 122        | 677521              | 5             | 75           | 24                     |
| <b>All</b>                            | <b>105</b> | <b>4251137</b>      | <b>34</b>     | <b>71</b>    | <b>53</b>              |
| 84-88 Volvo 740/760 4D                | 109        | 434236              | 10            | 83           | 50                     |
| 86-88 Acura Legend 4D                 | 109        | 170103              | 36            | 64           | 57                     |
| 84-88 Audi 5000 4D                    | 106        | 603319              | 34            | 70           | 53                     |
| 84-88 BMW 500 Series                  | 103        | 257768              | 31            | 69           | 38                     |
| 84-88 Lincoln Mark VII                | 109        | 332554              | 22            | 82           | 53                     |
| 85-88 BMW 300 Series 4D               | 101        | 187461              | 25            | 58           | 61                     |
| 84-88 BMW 300 Series 2D               | 101        | 609695              | 59            | 80           | 63                     |
| <b>All</b>                            | <b>101</b> | <b>6610120</b>      | <b>75</b>     | <b>76</b>    | <b>62</b>              |
| 84-88 Pontiac Firebird                | 101        | 1335092             | 70            | 75           | 59                     |
| 84-88 Ford Mustang Conv.              | 101        | 266223              | 81            | 70           | 66                     |
| 84-88 Ford Mustang                    | 101        | 1867144             | 79            | 75           | 58                     |
| 84-88 Chevrolet Camaro                | 101        | 2553090             | 75            | 76           | 64                     |
| <b>All</b>                            | <b>92</b>  | <b>5111199</b>      | <b>67</b>     | <b>75</b>    | <b>60</b>              |
| 84-88 Porsche 944 Coupe               | 95         | 197853              | 36            | 86           | 40                     |
| 84-88 Nissan 300ZX 2+2                | 99         | 240384              | 50            | 79           | 65                     |
| 86-88 Mazda RX-7 Coupe                | 96         | 268642              | 53            | 81           | 65                     |
| 85-88 Toyota MR2                      | 91         | 226872              | 72            | 76           | 56                     |
| 84-88 Pontiac Fiero                   | 93         | 1145198             | 73            | 70           | 52                     |
| 84-88 Nissan 300ZX                    | 91         | 633512              | 64            | 80           | 69                     |
| 84-88 Chevrolet Corvette Coupe        | 96         | 470313              | 56            | 90           | 83                     |

LARGE

TWO  
DOOR  
CARS

MIDSIZE

SMALL

LARGE

LUXURY  
CARS

MIDSIZE

MIDSIZE

SPORTS  
CARS

SMALL

NOTES

Wheelbase — length of vehicle in inches

Registration Counts — sum of vehicles registered during calendar years 1985-89

Percent Young — percent of deaths in cars with drivers under age 30

Percent Male — percent of deaths in cars with male drivers

Percent Single-Vehicle — percent of deaths in single-vehicle crashes

This special issue of *Status Report* focuses on death rates by car make and series. Other special issues have focused on the following subjects:

|                              |             |
|------------------------------|-------------|
| Low-Speed Crash Tests        | 26:2, 1991  |
| Fuel Economy, Safety         | 25:8, 1990  |
| Antilock Brakes for Trucks   | 25:5, 1990  |
| Speeds on Rural Interstates  | 25:2, 1990  |
| Death Rates by Car Series    | 24:11, 1989 |
| Designing Safer Vehicles     | 24:8, 1989  |
| Truck Crash Congestion       | 23:12, 1988 |
| Making Traffic Laws Work     | 23:6, 1988  |
| Seat Belt and Helmet Laws    | 22:13, 1987 |
| NHTSA Safety Rules           | 22:9, 1987  |
| Vehicle Size and Death Rates | 22:2, 1987  |
| U.S. Safety Acts             | 21:11, 1986 |
| Seat Belt Use Laws           | 20:12, 1985 |
| School Bus Safety            | 20:5, 1985  |
| Seat Belt Use Laws           | 19:14, 1984 |
| Teenagers' Driving           | 19:10, 1984 |



# STATUS INSURANCE INSTITUTE FOR HIGHWAY SAFETY REPORT

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