



# Traffic Safety Facts 1999

## Alcohol



The National Highway Traffic Safety Administration (NHTSA) defines a fatal traffic crash as being alcohol-related if either a driver or a nonoccupant (e.g., pedestrian) had a blood alcohol concentration (BAC) of 0.01 grams per deciliter (g/dl) or greater in a police-reported traffic crash. Persons with a BAC of 0.10 g/dl or greater involved in fatal crashes are considered to be intoxicated. This is the legal limit of intoxication in most states.

Traffic fatalities in alcohol-related crashes fell by 1 percent from 1998 to 1999. The 15,786 alcohol-related fatalities in 1999 (38 percent of total traffic fatalities for the year) represent a 30 percent reduction from the 22,404 alcohol-related fatalities reported in 1989 (49 percent of the total).

NHTSA estimates that alcohol was involved in 38 percent of fatal crashes and in 7 percent of all crashes in 1999.

The 15,786 fatalities in alcohol-related crashes during 1999 represent an average of one alcohol-related fatality every 33 minutes.

An estimated 308,000 persons were injured in crashes where police reported that alcohol was present — an average of one person injured approximately every 2 minutes.

Approximately 1.4 million drivers were arrested in 1998 for driving under the influence of alcohol or narcotics. This is an arrest rate of 1 for every 132 licensed drivers in the United States (1999 data not yet available).

About 3 in every 10 Americans will be involved in an alcohol-related crash at some time in their lives.

In 1999, 30 percent of all traffic fatalities occurred in crashes in which at least one driver or nonoccupant had a BAC of 0.10 g/dl or greater. Seventy percent of the 12,321 people killed in such crashes were themselves intoxicated. The remaining 30 percent were passengers, nonintoxicated drivers, or nonintoxicated nonoccupants.

**Table 1. Types of Fatalities in Fatal Crashes Involving at Least One Intoxicated Driver or Nonoccupant, 1999**

| Type of Fatality  | Number        | Percent of Total |
|---|---------------|------------------|
| Intoxicated Drivers   | 6,960         | 56               |
| Nonintoxicated Drivers                                      | 752           | 6                |
| Passengers  | 2,443         | 20               |
| Intoxicated Nonoccupants<br>(Pedestrians and Pedalcyclists) | 1,691         | 14               |
| Nonintoxicated Nonoccupants                                 | 476           | 4                |
| <b>Total Fatalities</b>                                     | <b>12,321</b> | <b>100</b>       |

**“There were 15,786 alcohol-related fatalities in 1999 — 38 percent of the total traffic fatalities for the year.”**

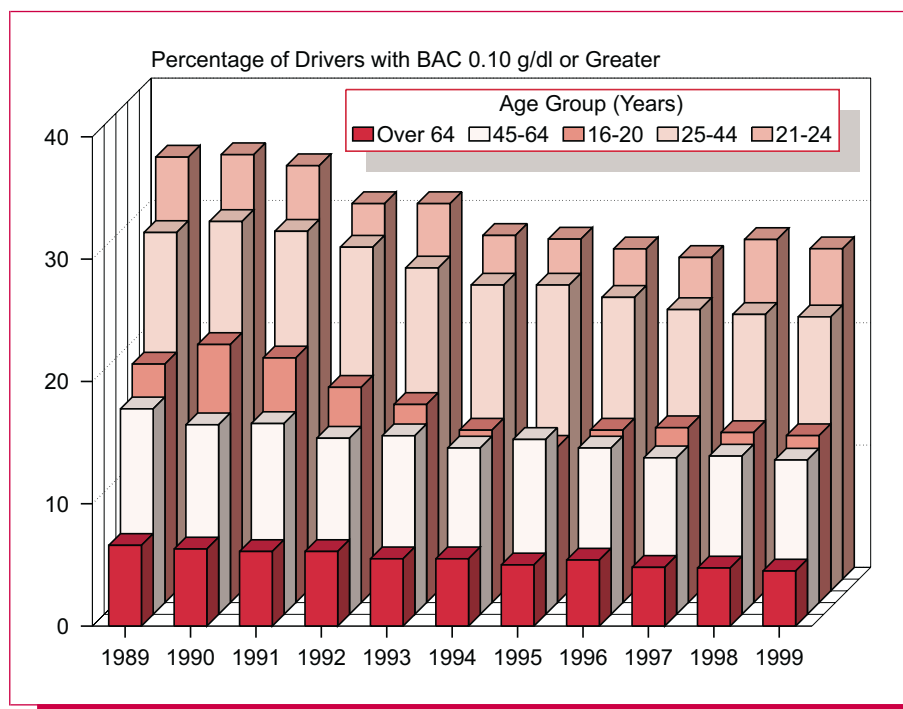
The rate of alcohol involvement in fatal crashes is more than 3 times as high at night as during the day (60 percent vs. 17 percent). For all crashes, the alcohol involvement rate is more than 5 times as high at night (17 percent vs. 3 percent).

In 1999, 29 percent of all fatal crashes during the week were alcohol-related, compared to 51 percent on weekends. For all crashes, the alcohol involvement rate was 5 percent during the week and 13 percent during the weekend.

From 1989 to 1999, intoxication rates decreased for drivers of all age groups involved in fatal crashes. Drivers over 64 years old experienced the largest decrease in intoxication rates (29 percent), followed by drivers 16 to 20 years old (30 percent).

**“From 1989 to 1999, intoxication rates decreased for drivers of all age groups involved in fatal crashes.”**

**Figure 1. Intoxicated Drivers in Fatal Crashes by Age Group, 1989-1999**



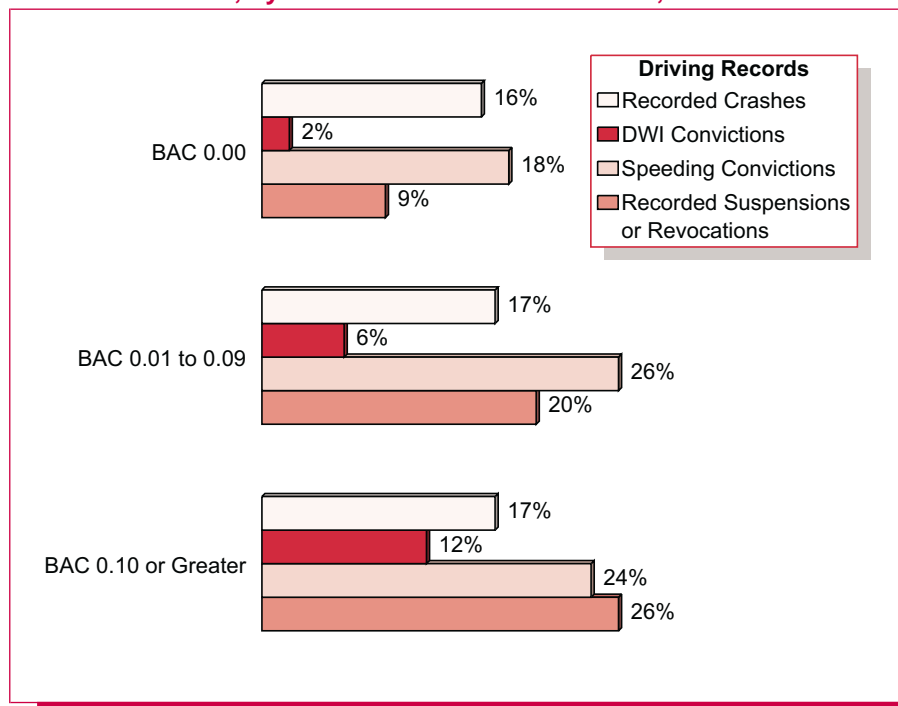
The highest intoxication rates in fatal crashes in 1999 were recorded for drivers 21-24 years old (27 percent), followed by ages 25-34 (24 percent) and 35-44 (21 percent).

Intoxication rates for drivers in fatal crashes in 1999 were highest for motorcycle operators (28 percent) and lowest for drivers of large trucks (1 percent). The intoxication rate for drivers of light trucks was higher than that for passenger car drivers (20 percent and 17 percent, respectively).

Safety belts were used by only 19 percent of the fatally injured *intoxicated* drivers (BAC of 0.10 g/dl or greater), compared to 30 percent of fatally injured *impaired* drivers (BAC between 0.01 g/dl and 0.09 g/dl) and 48 percent of fatally injured sober drivers.

Fatally injured drivers with BAC levels of 0.10 g/dl or greater were 6 times as likely to have a prior conviction for driving while intoxicated compared to fatally injured sober drivers (12 percent and 2 percent, respectively).

**Figure 2. Previous Driving Records of Drivers Killed in Traffic Crashes, by Blood Alcohol Concentration, 1999**



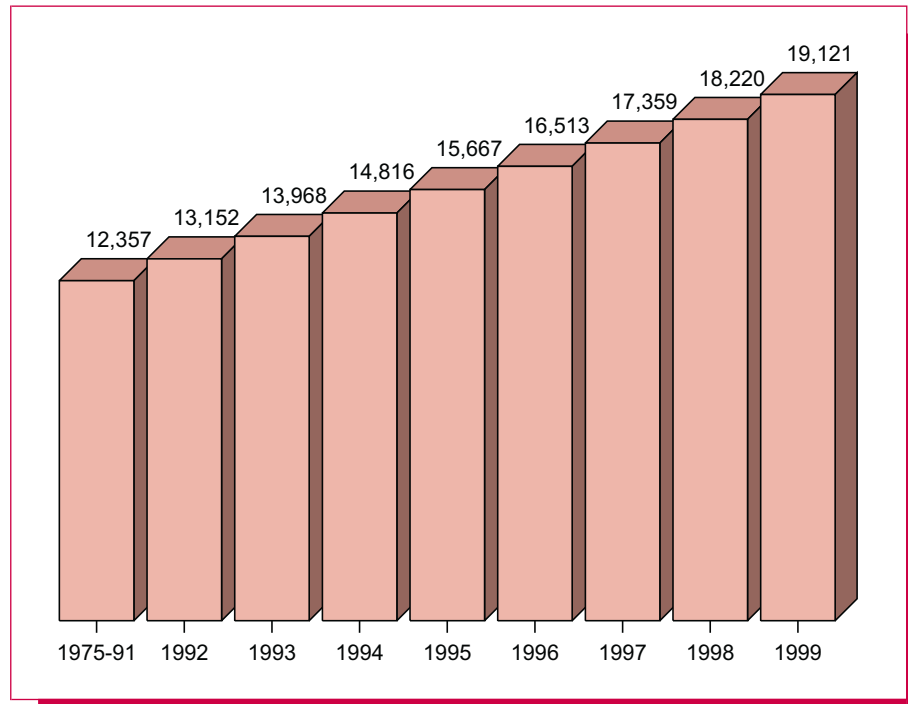
**“More than one-third of all pedestrians 16 years of age or older killed in traffic crashes in 1999 were intoxicated.”**

More than one-third (34 percent) of all pedestrians 16 years of age or older killed in traffic crashes in 1999 were intoxicated. By age group, the percentages ranged from a low of 10 percent for pedestrians 65 and over to a high of 50 percent for those 35 to 44 years old.

The driver, pedestrian, or both were intoxicated in 38 percent of all fatal pedestrian crashes in 1999. In these crashes, the intoxication rate for pedestrians was more than double the rate for drivers — 31 percent and 12 percent, respectively. Both the pedestrian and the driver were intoxicated in 5 percent of the crashes that resulted in a pedestrian fatality.

All states and the District of Columbia now have 21-year-old minimum drinking age laws. NHTSA estimates that these laws have reduced traffic fatalities involving drivers 18 to 20 years old by 13 percent and have saved an estimated 19,121 lives since 1975. In 1999, an estimated 901 lives were saved by minimum drinking age laws.

**Figure 3. Cumulative Estimated Number of Lives Saved by Minimum Drinking Age Laws, 1975-1999**



***“NHTSA estimates that minimum drinking age laws have saved 19,121 lives since 1975.”***

On the following pages, Tables 2, 3, 4, and 5 present summary data on alcohol involvement in fatal crashes in 1999, compared with 1989 data. Table 6 shows alcohol involvement in fatal traffic crashes by state.

**For more information:**

Information on alcohol involvement in traffic fatalities is available from the National Center for Statistics and Analysis, NRD-31, 400 Seventh Street, S.W., Washington, D.C. 20590. NCSA information can also be obtained by telephone or by fax-on-demand 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/nrsa>. To report a safety-related problem or to inquire about motor vehicle safety information, contact the Auto Safety Hotline at 1-800-424-9393.

**Table 2. Alcohol Involvement in Fatal Crashes, 1989 and 1999**

|                  | 1989   |   | 1999   |   | Change in Percentage, 1989-1999 |
|------------------|--------|---|--------|---|---------------------------------|
|                  | Number | Percentage with BAC 0.10 g/dl or Greater* | Number | Percentage with BAC 0.10 g/dl or Greater* |                                 |
| Fatal Crashes    | 40,741 | 39  | 37,043 | 30  | -23%                            |
| Total Fatalities | 45,582 | 39  | 41,611 | 30  | -23%                            |

\*For any person (occupant or nonoccupant) involved in the fatal crash.

**Table 3. Alcohol Involvement for Drivers in Fatal Crashes, 1989 and 1999**

| Drivers Involved in Fatal Crashes   | 1989              |  | 1999              |  | Change in Percentage, 1989-1999 |
|-------------------------------------|-------------------|--|-------------------|--|---------------------------------|
|                                     | Number of Drivers | Percentage with BAC 0.10 g/dl or Greater | Number of Drivers | Percentage with BAC 0.10 g/dl or Greater |                                 |
| <i>Total Drivers</i>                |                   |  |                   |  |                                 |
| Total*                              | 60,435            | 24                                       | 56,352            | 17                                       | -29%                            |
| <i>Drivers by Age Group (Years)</i> |                   |  |                   |  |                                 |
| 16–20                               | 9,442             | 20                                       | 7,973             | 14                                       | -30%                            |
| 21–24                               | 7,723             | 35                                       | 5,620             | 27                                       | -23%                            |
| 25–34                               | 15,928            | 32                                       | 11,734            | 24                                       | -25%                            |
| 35–44                               | 10,106            | 25                                       | 11,023            | 21                                       | -16%                            |
| 45–64                               | 10,240            | 17                                       | 12,292            | 13                                       | -24%                            |
| Over 64                             | 5,431             | 7  | 6,559             | 5  | -29%                            |
| <i>Drivers by Sex</i>               |                   |  |                   |  |                                 |
| Male                                | 45,448            | 27                                       | 40,900            | 20                                       | -26%                            |
| Female                              | 14,054            | 14                                       | 14,792            | 10                                       | -29%                            |
| <i>Drivers by Vehicle Type</i>      |                   |  |                   |  |                                 |
| Passenger Cars                      | 35,204            | 24                                       | 27,806            | 17                                       | -29%                            |
| Light Trucks                        | 15,579            | 28                                       | 19,801            | 20                                       | -29%                            |
| Large Trucks                        | 4,903             | 3  | 4,847             | 1  | -67%                            |
| Motorcycles                         | 3,182             | 40                                       | 2,515             | 28                                       | -30%                            |

\*Numbers shown for groups of drivers do not add to the total number of drivers due to unknown or other data not included.

Table 4. Alcohol Involvement for Drivers Killed in Fatal Crashes, 1989 and 1999

| Driver Fatalities                                       | 1989                        |  | 1999                        |  | Change in Percentage, 1989-1999 |
|---|-----------------------------|--|-----------------------------|--|---------------------------------|
|   | Number of Driver Fatalities | Percentage with BAC 0.10 g/dl or Greater | Number of Driver Fatalities | Percentage with BAC 0.10 g/dl or Greater |                                 |
| <i>Total Driver Fatalities</i>                          |                             |  |                             |  |                                 |
| Total   | 26,389                      | 37                                       | 25,210                      | 28                                       | -24%                            |
| <i>Driver Fatalities by Crash Type and Time of Day</i>  |                             |  |                             |  |                                 |
| Single-Vehicle  | 12,999                      | 53                                       | 12,118                      | 43                                       | -19%                            |
| Daytime*  | 4,393                       | 27                                       | 4,896                       | 19                                       | -30%                            |
| Nighttime**   | 8,362                       | 66                                       | 6,980                       | 59                                       | -11%                            |
| Multiple-Vehicle  | 13,390                      | 22                                       | 13,092                      | 14                                       | -36%                            |
| Daytime*  | 7,747                       | 9  | 8,435                       | 6  | -33%                            |
| Nighttime**   | 5,637                       | 40                                       | 4,645                       | 28                                       | -30%                            |
| <i>Driver Fatalities by Day of Week</i>                 |                             |  |                             |  |                                 |
| Weekday***  | 15,007                      | 29                                       | 15,095                      | 20                                       | -31%                            |
| Weekend****   | 11,324                      | 49                                       | 10,058                      | 39                                       | -20%                            |
| <i>Driver Fatalities by Time of Day</i>                 |                             |  |                             |  |                                 |
| Daytime*  | 12,140                      | 15                                       | 13,331                      | 11                                       | -27%                            |
| Nighttime**   | 13,999                      | 56                                       | 11,625                      | 46                                       | -18%                            |
| <i>Driver Fatalities by Day of Week and Time of Day</i> |                             |  |                             |  |                                 |
| Weekday***  |                             |  |                             |  |                                 |
| Daytime*  | 8,854                       | 12                                       | 9,634                       | 8  | -33%                            |
| Nighttime**   | 6,078                       | 52                                       | 5,377                       | 41                                       | -21%                            |
| Weekend****   |                             |  |                             |  |                                 |
| Daytime*  | 3,286                       | 24                                       | 3,696                       | 18                                       | -25%                            |
| Nighttime**   | 7,921                       | 59                                       | 6,248                       | 51                                       | -14%                            |

\*6:00 AM to 6:00 PM.

\*\*6:00 PM to 6:00 AM.

\*\*\*Monday 6:00 AM to Friday 6:00 PM.

\*\*\*\*Friday 6:00 PM to Monday 6:00 AM.

Table 5. Alcohol Involvement for Nonoccupants Killed in Fatal Crashes, 1989 and 1999

| Nonoccupant Fatalities                            | 1989                             |  | 1999                             |  | Change in Percentage, 1989-1999 |
|---|----------------------------------|--|----------------------------------|--|---------------------------------|
|   | Number of Nonoccupant Fatalities | Percentage with BAC 0.10 g/dl or Greater | Number of Nonoccupant Fatalities | Percentage with BAC 0.10 g/dl or Greater |                                 |
| <i>Pedestrian Fatalities by Age Group (Years)</i> |                                  |  |                                  |  |                                 |
| 16-20   | 383                              | 37                                       | 273                              | 34                                       | -8%                             |
| 21-24   | 387                              | 50                                       | 231                              | 44                                       | -12%                            |
| 25-34   | 1,165                            | 54                                       | 620                              | 46                                       | -15%                            |
| 35-44   | 911                              | 49                                       | 905                              | 50                                       | +2%                             |
| 45-64   | 1,244                            | 38                                       | 1,175                            | 37                                       | -3%                             |
| Over 64   | 1,467                            | 9  | 1,084                            | 10                                       | +11%                            |
| <b>Total*</b>                                     | <b>6,556</b>                     | <b>32</b>                                | <b>4,906</b>                     | <b>31</b>                                | <b>-3%</b>                      |
| <i>Pedalcyclist Fatalities</i>                    |                                  |  |                                  |  |                                 |
| Total   | 832                              | 14                                       | 750                              | 22                                       | +57%                            |

\*Includes pedestrians under 16 years old and pedestrians of unknown age.

Table 6. Traffic Fatalities by State and Highest Blood Alcohol Concentration in the Crash, 1999

| State                | Total Fatalities | No Alcohol<br>(BAC = 0.00 g/dl) |           | Low Alcohol<br>(BAC = 0.01-0.09 g/dl) |          | High Alcohol<br>(BAC ≥ 0.10 g/dl) |           | Any Alcohol<br>(BAC ≥ 0.01 g/dl) |           |
|----------------------|------------------|---------------------------------|-----------|---------------------------------------|----------|-----------------------------------|-----------|----------------------------------|-----------|
|                      |                  | Number                          | Percent   | Number                                | Percent  | Number                            | Percent   | Number                           | Percent   |
| Alabama              | 1,138            | 708                             | 62        | 77                                    | 7        | 353                               | 31        | 430                              | 38        |
| Alaska               | 76               | 36                              | 47        | 8                                     | 10       | 32                                | 43        | 40                               | 53        |
| Arizona              | 1,024            | 618                             | 60        | 78                                    | 8        | 328                               | 32        | 406                              | 40        |
| Arkansas             | 604              | 414                             | 69        | 49                                    | 8        | 140                               | 23        | 190                              | 31        |
| California           | 3,559            | 2,208                           | 62        | 343                                   | 10       | 1,009                             | 28        | 1,351                            | 38        |
| Colorado             | 626              | 406                             | 65        | 49                                    | 8        | 171                               | 27        | 220                              | 35        |
| Connecticut          | 301              | 167                             | 55        | 33                                    | 11       | 101                               | 34        | 134                              | 45        |
| Delaware             | 100              | 60                              | 60        | 6                                     | 6        | 34                                | 34        | 40                               | 40        |
| District of Columbia | 41               | 19                              | 47        | 6                                     | 14       | 16                                | 39        | 22                               | 53        |
| Florida              | 2,918            | 1,875                           | 64        | 214                                   | 7        | 829                               | 28        | 1,043                            | 36        |
| Georgia              | 1,508            | 1,002                           | 66        | 137                                   | 9        | 368                               | 24        | 506                              | 34        |
| Hawaii               | 98               | 55                              | 56        | 11                                    | 12       | 31                                | 32        | 43                               | 44        |
| Idaho                | 278              | 176                             | 63        | 26                                    | 9        | 76                                | 28        | 102                              | 37        |
| Illinois             | 1,456            | 819                             | 56        | 134                                   | 9        | 504                               | 35        | 637                              | 44        |
| Indiana              | 1,013            | 671                             | 66        | 77                                    | 8        | 265                               | 26        | 342                              | 34        |
| Iowa                 | 490              | 330                             | 67        | 41                                    | 8        | 119                               | 24        | 160                              | 33        |
| Kansas               | 537              | 351                             | 65        | 43                                    | 8        | 143                               | 27        | 186                              | 35        |
| Kentucky             | 814              | 533                             | 65        | 51                                    | 6        | 229                               | 28        | 281                              | 35        |
| Louisiana            | 924              | 497                             | 54        | 101                                   | 11       | 326                               | 35        | 427                              | 46        |
| Maine                | 181              | 122                             | 68        | 8                                     | 5        | 51                                | 28        | 59                               | 32        |
| Maryland             | 590              | 411                             | 70        | 42                                    | 7        | 137                               | 23        | 179                              | 30        |
| Massachusetts        | 414              | 211                             | 51        | 63                                    | 15       | 140                               | 34        | 203                              | 49        |
| Michigan             | 1,382            | 835                             | 60        | 106                                   | 8        | 442                               | 32        | 547                              | 40        |
| Minnesota            | 625              | 424                             | 68        | 39                                    | 6        | 162                               | 26        | 201                              | 32        |
| Mississippi          | 927              | 565                             | 61        | 62                                    | 7        | 300                               | 32        | 362                              | 39        |
| Missouri             | 1,094            | 653                             | 60        | 116                                   | 11       | 325                               | 30        | 441                              | 40        |
| Montana              | 220              | 117                             | 53        | 16                                    | 7        | 87                                | 40        | 103                              | 47        |
| Nebraska             | 295              | 170                             | 58        | 38                                    | 13       | 87                                | 30        | 125                              | 42        |
| Nevada               | 350              | 194                             | 55        | 52                                    | 15       | 105                               | 30        | 156                              | 45        |
| New Hampshire        | 141              | 75                              | 53        | 24                                    | 17       | 42                                | 30        | 66                               | 47        |
| New Jersey           | 727              | 436                             | 60        | 79                                    | 11       | 211                               | 29        | 291                              | 40        |
| New Mexico           | 460              | 254                             | 55        | 37                                    | 8        | 169                               | 37        | 206                              | 45        |
| New York             | 1,548            | 1,204                           | 78        | 92                                    | 6        | 252                               | 16        | 344                              | 22        |
| North Carolina       | 1,505            | 969                             | 64        | 123                                   | 8        | 413                               | 27        | 536                              | 36        |
| North Dakota         | 119              | 63                              | 53        | 11                                    | 10       | 45                                | 38        | 56                               | 47        |
| Ohio                 | 1,430            | 972                             | 68        | 78                                    | 5        | 380                               | 27        | 458                              | 32        |
| Oklahoma             | 739              | 494                             | 67        | 49                                    | 7        | 196                               | 27        | 245                              | 33        |
| Oregon               | 414              | 244                             | 59        | 29                                    | 7        | 141                               | 34        | 170                              | 41        |
| Pennsylvania         | 1,549            | 944                             | 61        | 111                                   | 7        | 494                               | 32        | 605                              | 39        |
| Rhode Island         | 88               | 52                              | 59        | 12                                    | 14       | 23                                | 27        | 36                               | 41        |
| South Carolina       | 1,065            | 732                             | 69        | 50                                    | 5        | 283                               | 27        | 333                              | 31        |
| South Dakota         | 150              | 85                              | 57        | 9                                     | 6        | 56                                | 37        | 65                               | 43        |
| Tennessee            | 1,285            | 796                             | 62        | 107                                   | 8        | 382                               | 30        | 489                              | 38        |
| Texas                | 3,518            | 1,784                           | 51        | 393                                   | 11       | 1,341                             | 38        | 1,734                            | 49        |
| Utah                 | 360              | 286                             | 79        | 18                                    | 5        | 56                                | 15        | 74                               | 21        |
| Vermont              | 90               | 56                              | 62        | 9                                     | 10       | 25                                | 28        | 34                               | 38        |
| Virginia             | 877              | 557                             | 64        | 74                                    | 8        | 246                               | 28        | 320                              | 36        |
| Washington           | 634              | 369                             | 58        | 41                                    | 6        | 225                               | 35        | 265                              | 42        |
| West Virginia        | 395              | 250                             | 63        | 26                                    | 7        | 119                               | 30        | 145                              | 37        |
| Wisconsin            | 745              | 436                             | 59        | 53                                    | 7        | 256                               | 34        | 309                              | 41        |
| Wyoming              | 189              | 119                             | 63        | 15                                    | 8        | 56                                | 29        | 70                               | 37        |
| <b>U.S. Total</b>    | <b>41,611</b>    | <b>25,825</b>                   | <b>62</b> | <b>3,466</b>                          | <b>8</b> | <b>12,321</b>                     | <b>30</b> | <b>15,786</b>                    | <b>38</b> |
| Puerto Rico          | 558              | 299                             | 54        | 63                                    | 11       | 196                               | 35        | 259                              | 46        |

Note: Percentages are calculated from unrounded data. Totals may not equal sum of components due to independent rounding.