

Maryland Traffic Safety Facts 2003

ALCOHOL



Maryland Department of Transportation
State Highway Administration
Office of Traffic and Safety



Driving Safely in Maryland

“179 persons were killed in the 9,089 alcohol-related accidents, and accounted for 27.4% of total statewide fatalities.”

“On average, one person per 2 days was killed in an alcohol-related traffic accident; one person every 1.7 hours was injured in an alcohol-related traffic accident.”

Introduction

According to the definition of “alcohol-related” by the National Highway Traffic Safety Administration, a fatal traffic accident is alcohol related if either a driver or a non-occupant (e.g., pedestrian) had a blood alcohol concentration (BAC) of 0.01 grams per deciliter (g/dl) or greater in a police-reported traffic accident. The BAC levels required for conviction in Maryland’s drunk driving law are (1) Driving Under the Influence (DUI): persons with a level of 0.08 g/dl or greater, and (2) Driving While Impaired By Alcohol (DWI): persons with a level of 0.07 g/dl.

Summary

- ❑ In 2003, there were 179 persons that lost their lives in alcohol-related accidents – a decrease of 8.2 percent from 2002. The 179 alcohol-related fatalities accounted for 27.4% of 651 total statewide fatalities.
- ❑ From 2002 to 2003, fatal alcohol-related accidents decreased by 10.4%, while total alcohol-related accidents slightly increased by 0.4%
- ❑ On average, one person every 2 days was killed in an alcohol-related accident.
- ❑ There were 5,187 persons injured in alcohol-related accidents.
- ❑ On average, one person every 1.7 hours was injured in an alcohol-related accident. 14.2 persons per day were injured in motorcycle-involved accidents
- ❑ The alcohol-related fatality rates were 0.33 per 100 million VMT and 0.32 per 10,000 population.
- ❑ The highest alcohol-related fatality rates were 1.1 per 100 million VMT and 1.31 per 10,000 population in Dorchester County.

Alcohol-Related Accidents by Severity

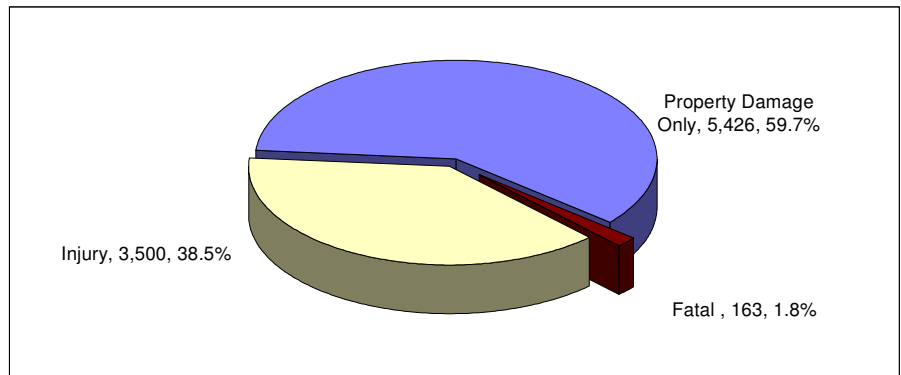
- Fatal accidents accounted for 1.8% of alcohol-related accidents, which is significantly higher than for other accidents. Only 0.6 % of all traffic accidents resulted in a fatality.
- From 2002 to 2003, fatal alcohol-related accidents decreased by 10.4%, while total alcohol-related accidents slightly increased by 0.4%.

“Fatal accidents accounted for 1.8% of alcohol-related accidents, which is significantly higher than for other accidents.”

Table 1 Alcohol-Related Accidents by Accident Severity, 1997-2003

| Year | Fatal Accidents | Fatalities | Injury Accidents | Number Injured | Property Damage Only | Total |
|------|-----------------|------------|------------------|----------------|----------------------|-------|
| 1997 | 197 | 205 | 4,036 | 6,688 | 4,564 | 8,797 |
| 1998 | 166 | 178 | 3,600 | 5,667 | 4,179 | 7,945 |
| 1999 | 192 | 205 | 3,679 | 5,894 | 4,669 | 8,540 |
| 2000 | 179 | 195 | 3,675 | 5,806 | 4,996 | 8,850 |
| 2001 | 197 | 216 | 3,762 | 5,844 | 5,086 | 9,045 |
| 2002 | 182 | 195 | 3,765 | 5,821 | 5,109 | 9,056 |
| 2003 | 163 | 179 | 3,500 | 5,187 | 5,426 | 9,089 |

Figure 1 Alcohol Related Accidents by Accident Severity, 2003



- Drugs accounted for 3.1% of fatal alcohol-related accidents and 13.2% of total alcohol-related accidents. Both of alcohol and drugs accounted for 11.0% of fatal alcohol-related accidents and 2.9% of total alcohol-related accidents.

Table 2 Accidents by Accident Condition, 2003

| Accident Condition | Fatal Accidents | | Total Accidents | |
|------------------------|-----------------|--------------|-----------------|--------------|
| | Number | Percent | Number | Percent |
| Alcohol | 140 | 85.9 | 7,630 | 83.9 |
| Drugs | 5 | 3.1 | 1,197 | 13.2 |
| Both (Alcohol & Drugs) | 18 | 11.0 | 262 | 2.9 |
| No | - | - | - | - |
| Unknown | - | - | - | - |
| Total | 163 | 100.0 | 9,089 | 100.0 |

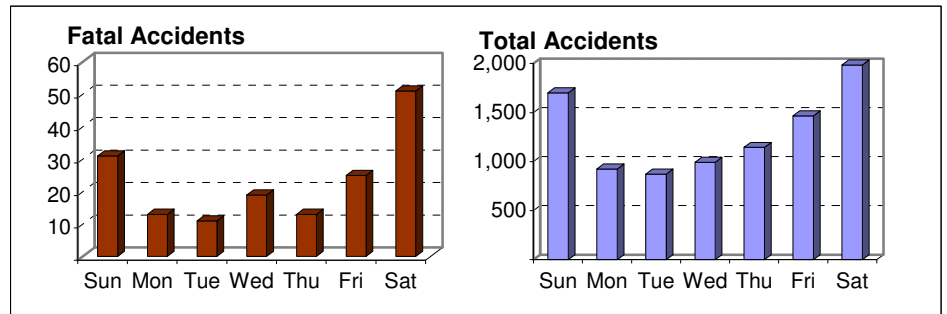
“Both of alcohol and drugs accounted for 11.0% of fatal alcohol-related accidents and 2.9% of total alcohol-related accidents.”

Temporal Patterns

- The highest numbers of fatal and total motorcycle accidents occurred in November (12.9%) and May (9.7%), respectively. The highest percentage of fatal and total motorcycle accidents occurred on Saturdays (31.3% and 21.9%, respectively).

“The highest percentage of fatal and total motorcycle accidents occurred on Saturdays (31.3% and 21.9%, respectively).”

Figure 2 Alcohol-related Accidents by Day of Week, 2003



- Fatal and total alcohol-related accidents were most frequent between midnight and 4:00 AM (37.4% and 30.8%, respectively).

Table 3 Alcohol-Related Accidents by Time of Day, 2003

| Time of Day | Fatal Accidents | | Total Accidents | |
|-----------------|-----------------|--------------|-----------------|--------------|
| | Number | Percent | Number | Percent |
| 12:00AM-03:59AM | 61 | 37.4 | 2,800 | 30.8 |
| 04:00AM-07:59AM | 9 | 5.5 | 639 | 7.0 |
| 08:00AM-11:59AM | 8 | 4.9 | 524 | 5.8 |
| 12:00PM-03:59PM | 8 | 4.9 | 849 | 9.3 |
| 04:00PM-07:59PM | 28 | 17.2 | 1,783 | 19.6 |
| 08:00PM-11:59PM | 49 | 30.1 | 2,492 | 27.4 |
| Unknown | - | - | 2 | 0.0 |
| Total | 163 | 100.0 | 9,089 | 100.0 |

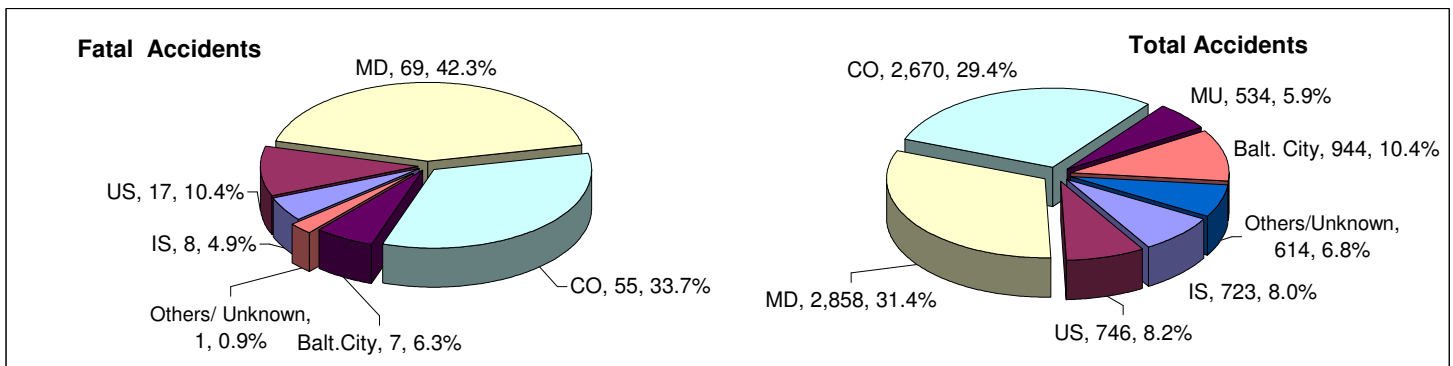
“Fatal and total alcohol-related accidents were most frequent between midnight and 4:00 AM (37.4% and 30.8%, respectively).”

“Most fatal alcohol-related accidents occurred on MD and County highways (42.3% and 33.7%, respectively).”

Spatial Patterns

- Most fatal alcohol-related accidents occurred on MD and County highways (42.3% and 33.7%, respectively). Most total alcohol-related accidents occurred on MD and County highways (31.4% and 29.4%, respectively).

Figure 3 Alcohol Related Accidents by Route Type, 2003



Driver and Pedestrian

- Male drivers accounted for 83.1% of alcohol-impaired driver fatalities and 75.0% of drivers involved in alcohol-related accidents.

Table 4 Alcohol-Impaired Drivers by Gender, 2003

| Driver Gender | Driver Fatalities | | Drivers Involved in Accidents | |
|---------------|-------------------|--------------|-------------------------------|--------------|
| | Number | Percent | Number | Percent |
| Male | 59 | 83.1 | 6,700 | 75.0 |
| Female | 12 | 16.9 | 1,927 | 21.6 |
| Unknown | - | 0.0 | 306 | 3.4 |
| Total | 71 | 100.0 | 8,933 | 100.0 |

“Male drivers accounted for 83.1% of alcohol-impaired driver fatalities and 75.0% of drivers involved in alcohol-related accidents.”

- 84.5% of driver fatalities and 80.8% of drivers involved in alcohol-related accidents were alcohol or drug-impaired drivers.

Table 5 Drivers Involved in Alcohol-related Accidents by Driver Condition, 2003

| Driver Condition | Driver Fatalities | | Drivers Involved in Accidents | |
|---------------------|-------------------|--------------|-------------------------------|--------------|
| | Number | Percent | Number | Percent |
| Not Stated | - | - | 118 | 1.3 |
| No Apparent Defects | 6 | 8.5 | 1,070 | 12.0 |
| Alcohol | 59 | 83.1 | 6,776 | 75.9 |
| Drugs | 1 | 1.4 | 439 | 4.9 |
| Physical Handicap | - | - | 8 | 0.1 |
| Illness | - | - | 2 | 0.0 |
| Fatigue | - | - | 11 | 0.1 |
| Apparently Asleep | 1 | 1.4 | 17 | 0.2 |
| Unknown | 4 | 5.6 | 492 | 5.5 |
| Total | 71 | 100.0 | 8,933 | 100.0 |

“84.5% of driver fatalities and 80.8% of drivers involved in alcohol-related accidents were alcohol or drug-impaired drivers.”

- 78.6% of pedestrian fatalities and 80.6% of pedestrians involved in alcohol-related accidents were alcohol or drug-impaired pedestrians.

Table 6 Pedestrians Involved in Alcohol-related Accidents by Pedestrian Condition, 2003

| Pedestrian Condition | Pedestrian Fatalities | | Pedestrians Involved in Accidents | |
|----------------------|-----------------------|--------------|-----------------------------------|--------------|
| | Number | Percent | Number | Percent |
| Not Stated | - | - | 6 | 1.5 |
| No Apparent Defects | 5 | 17.8 | 59 | 14.9 |
| Alcohol | 21 | 75.0 | 307 | 77.6 |
| Drugs | 1 | 3.6 | 12 | 3.0 |
| Physical Handicap | - | - | - | - |
| Illness | - | - | - | - |
| Fatigue | - | - | - | - |
| Apparently Asleep | - | - | - | - |
| Unknown | 1 | 3.6 | 12 | 3.0 |
| Total | 28 | 100.0 | 396 | 100.0 |

- The driver age group of 20-24 years had the highest percentage of driver fatalities and drivers involved in alcohol-related accidents (18.3% and 19.3%, respectively).

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Table 7 Drivers Involved in Alcohol-related Accidents by Driver Age, 2003

| Driver Age | Driver Fatalities | | Drivers Involved in Alcohol-related Accidents | |
|--------------|-------------------|--------------|---|--------------|
| | Number | Percent | Number | Percent |
| 15 and Under | - | - | 13 | 0.1 |
| 16 - 19 | 5 | 7.0 | 751 | 8.4 |
| 20 - 24 | 13 | 18.3 | 1,726 | 19.3 |
| 25 - 29 | 12 | 16.9 | 1,109 | 12.4 |
| 30 - 34 | 10 | 14.1 | 960 | 10.7 |
| 35 - 39 | 8 | 11.3 | 1,008 | 11.3 |
| 40 - 44 | 8 | 11.3 | 972 | 10.9 |
| 45 - 49 | 5 | 7.0 | 765 | 8.6 |
| 50 - 54 | 3 | 4.2 | 463 | 5.2 |
| 55 - 59 | 2 | 2.8 | 316 | 3.5 |
| 60 - 64 | 2 | 2.8 | 164 | 1.8 |
| 65 - 69 | 2 | 2.8 | 103 | 1.2 |
| 70 - 79 | 1 | 1.4 | 105 | 1.2 |
| 80 + | - | - | 36 | 0.4 |
| Unknown | - | - | 442 | 4.9 |
| Total | 71 | 100.0 | 8,933 | 100.0 |

- Automobiles had the highest percentages of vehicles involved in fatal alcohol-related accidents and total alcohol-related accidents (46.5% and 60.0%, respectively). Recreational vehicles had the second highest percentage among the vehicles involved in fatal alcohol-related accidents (22.5%).

“Recreational vehicles had the second highest percentage among the vehicles involved in fatal alcohol-related accidents (22.5%).”

Table 8 Vehicles Involved in Alcohol-related Accidents by Vehicle Type, 2003

| Vehicle Type | Vehicles Involved in Fatal Alcohol-related Accidents | | Vehicles Involved in Total Alcohol-related Accidents | |
|----------------------|--|--------------|--|--------------|
| | Number | Percent | Number | Percent |
| Automobile | 33 | 46.5 | 5,359 | 60.0 |
| Pickup Truck | 11 | 15.5 | 1,321 | 14.8 |
| Recreational Vehicle | 16 | 22.5 | 1,160 | 13.0 |
| Van | 2 | 2.8 | 570 | 6.4 |
| Station Wagon | 1 | 1.4 | 162 | 1.8 |
| Motorcycle | 7 | 9.9 | 104 | 1.2 |
| Single TRK 2 Axles | - | 0.0 | 51 | 0.6 |
| Truck Tractor | - | 0.0 | 30 | 0.3 |
| Transit Bus | - | 0.0 | 14 | 0.2 |
| School Bus | - | 0.0 | 14 | 0.2 |
| Single TRK 3 Axles | - | 0.0 | 12 | 0.1 |
| Other/Unknown | 1 | 1.4 | 136 | 1.5 |
| Total | 71 | 100.0 | 8,933 | 100.0 |

County

- The number of total alcohol-related accidents was highest in Baltimore County (15.4%). The highest percentage of fatal alcohol-related accidents occurred in Prince George's County (16.0%).
- The highest alcohol-related fatality rates were 1.1 per 100 million VMT and 1.31 per 10,000 population in Dorchester County.

“The highest percentage of fatal alcohol-related accidents occurred in Prince George’s County (16.0%).”

Table 9 Total and Fatal Alcohol-Related Accidents, Fatalities and Fatality Rates by County, 2003

| County | Alcohol-related Accidents | | | | Alcohol-related Fatalities | VMT (millions) | Fatality Rates (per 100 MVMT) | Population* | Fatality Rates (per 10,000 Pop.) |
|-----------------|---------------------------|--------------|------------|--------------|----------------------------|----------------|-------------------------------|------------------|----------------------------------|
| | Total | % | Fatal | % | | | | | |
| Allegany | 111 | 1.2 | 2 | 1.2 | 2 | 838 | 0.24 | 73,668 | 0.27 |
| Anne Arundel | 1,005 | 11.1 | 23 | 14.1 | 25 | 5,587 | 0.45 | 506,620 | 0.49 |
| Baltimore | 1,402 | 15.4 | 25 | 15.3 | 27 | 8,078 | 0.33 | 777,184 | 0.35 |
| Calvert | 146 | 1.6 | 5 | 3.1 | 5 | 722 | 0.69 | 84,110 | 0.59 |
| Caroline | 81 | 0.9 | 3 | 1.8 | 3 | 344 | 0.87 | 30,861 | 0.97 |
| Carroll | 235 | 2.6 | 4 | 2.5 | 4 | 1,248 | 0.32 | 163,207 | 0.25 |
| Cecil | 232 | 2.6 | 7 | 4.3 | 11 | 1,230 | 0.89 | 92,746 | 1.19 |
| Charles | 260 | 2.9 | 6 | 3.7 | 6 | 1,174 | 0.51 | 133,049 | 0.45 |
| Dorchester | 51 | 0.6 | 4 | 2.5 | 4 | 362 | 1.10 | 30,612 | 1.31 |
| Frederick | 332 | 3.7 | 4 | 2.5 | 4 | 2,746 | 0.15 | 213,662 | 0.19 |
| Garrett | 58 | 0.6 | 3 | 1.8 | 3 | 486 | 0.62 | 30,049 | 1.00 |
| Harford | 391 | 4.3 | 3 | 1.8 | 3 | 2,257 | 0.13 | 232,175 | 0.13 |
| Howard | 350 | 3.9 | 2 | 1.2 | 2 | 3,620 | 0.06 | 264,265 | 0.08 |
| Kent | 28 | 0.3 | - | 0.0 | - | 228 | - | 19,680 | - |
| Montgomery | 1,120 | 12.3 | 7 | 4.3 | 8 | 7,427 | 0.11 | 918,881 | 0.09 |
| Prince George's | 1,279 | 14.1 | 26 | 16.0 | 29 | 8,631 | 0.34 | 838,716 | 0.35 |
| Queen Anne's | 91 | 1.0 | 4 | 2.5 | 4 | 910 | 0.44 | 44,108 | 0.91 |
| St. Mary's | 145 | 1.6 | 6 | 3.7 | 8 | 778 | 1.03 | 92,754 | 0.86 |
| Somerset | 37 | 0.4 | 1 | 0.6 | 1 | 285 | 0.35 | 25,447 | 0.39 |
| Talbot | 83 | 0.9 | 1 | 0.6 | 1 | 623 | 0.16 | 34,670 | 0.29 |
| Washington | 228 | 2.5 | 6 | 3.7 | 7 | 1,968 | 0.36 | 136,796 | 0.51 |
| Wicomico | 190 | 2.1 | 7 | 4.3 | 7 | 842 | 0.83 | 87,375 | 0.80 |
| Worcester | 231 | 2.5 | 4 | 2.5 | 4 | 674 | 0.59 | 49,604 | 0.81 |
| Baltimore City | 1,003 | 11.0 | 10 | 6.1 | 11 | 3,620 | 0.30 | 628,670 | 0.17 |
| Total | 9,089 | 100.0 | 163 | 100.0 | 179 | 54,678 | 0.33 | 5,508,909 | 0.32 |

1. Source: * Maryland Department of Planning

“The highest alcohol-related fatality rates were 1.1 per 100 million VMT and 1.31 per 10,000 population in Dorchester County.”

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