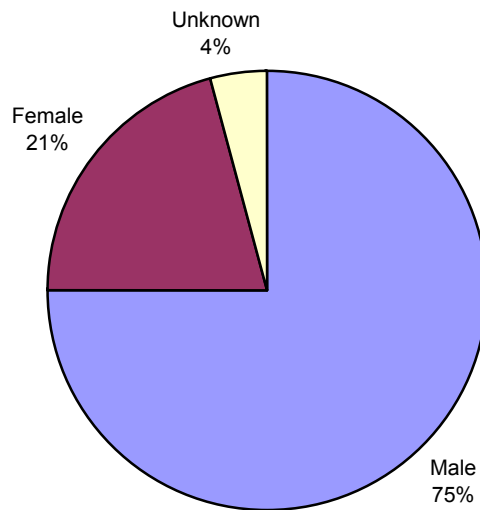


### Chapter 3 - ALCOHOL AND/OR DRUG USE

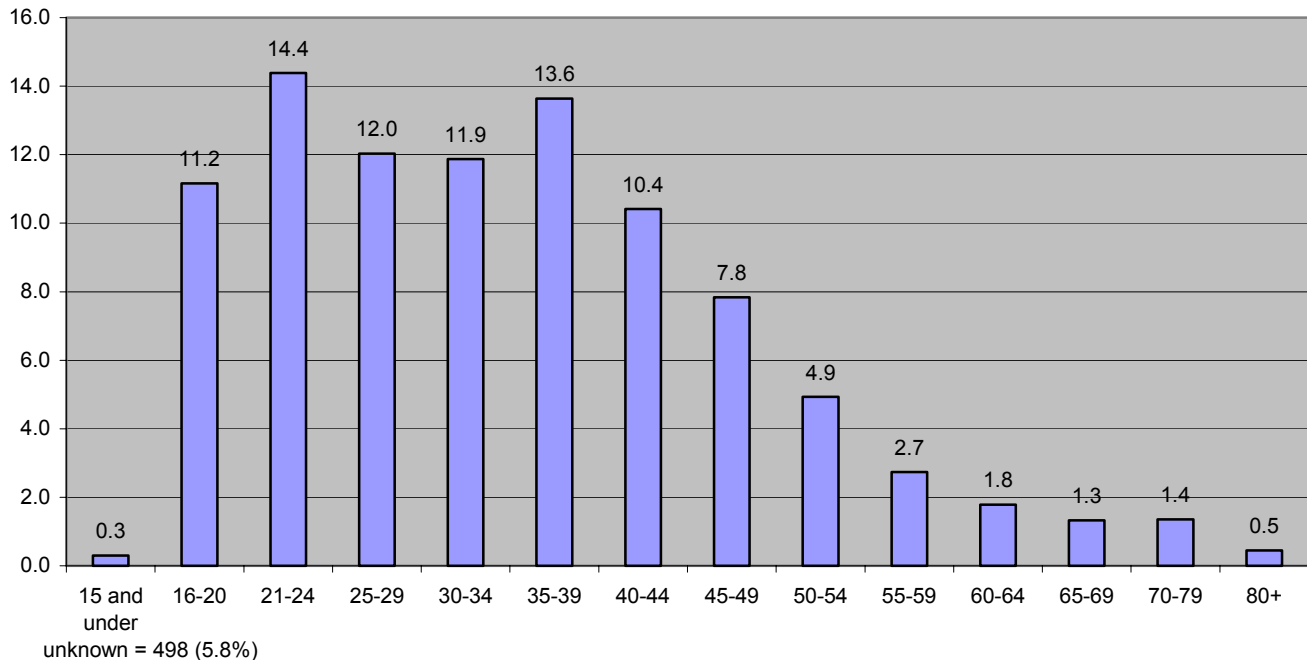
A total of 8,625 intoxicated drivers (*excluding motorcyclists*) were involved in 8,401 alcohol or drug-related crashes, approximately 8.5% of all motor vehicle crashes. Compared to a national alcohol involvement fatality rate of 38% (NHTSA, 1999), alcohol or drugs were involved in 22.8% (n=131) of all fatal crashes in Maryland during 2000. Substance use among these drivers, therefore, was a factor in 23.8% (n=147) of statewide traffic deaths. The vast majority (79.7%) of intoxicated drivers were deemed to be at fault for the crash, as compared to only 39.8% of all drivers who were not under the influence of alcohol or drugs.

**Figure 3a - Gender of Intoxicated Drivers**  
(n = 8,625)



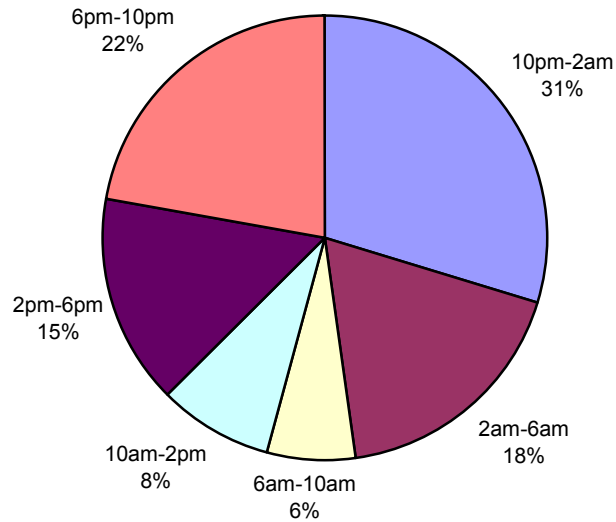
As shown in Figure 3a, three-quarters of intoxicated drivers were male, a significantly higher proportion than that shown for all drivers in Chapter 2 (53%).

**Figure 3b - Age Distribution of Intoxicated Drivers  
(n = 8,625)**



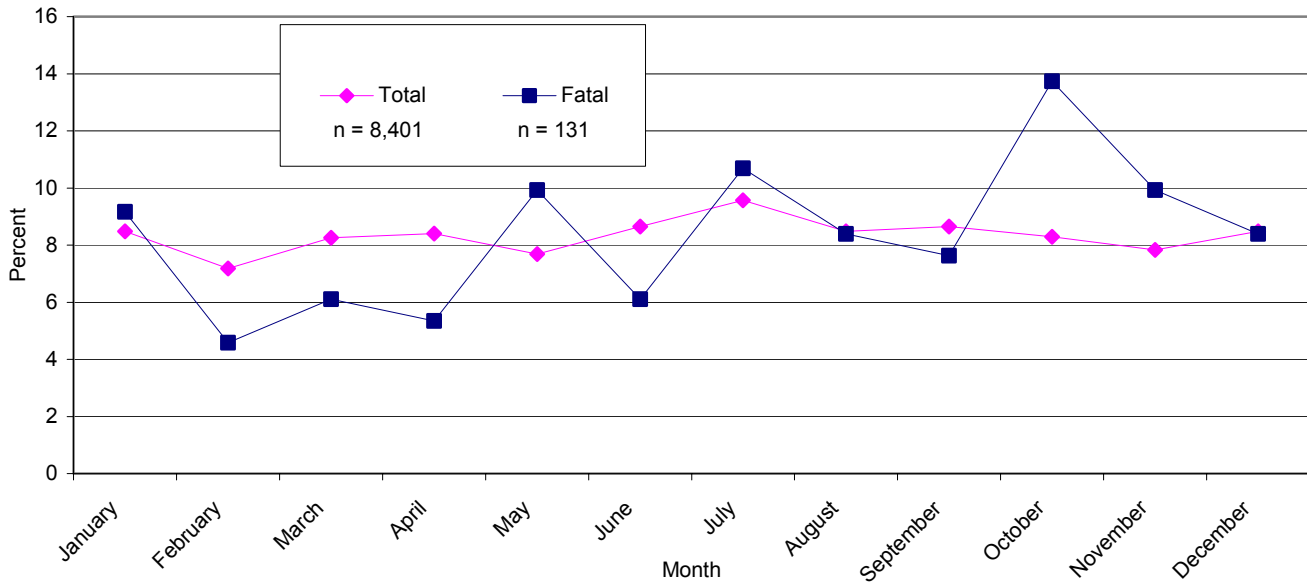
More than 25% of intoxicated drivers were younger than 25 years of age, and 63% were younger than age 40 (Figure 3b). The highest rates were noted among those 21 to 24 (14.4%) and 35 to 39 (13.6%) years of age; after age 40, the rates declined significantly.

**Figure 3c - Alcohol and/or Drug Influenced Crashes by Time of Day  
(n = 8,401)**



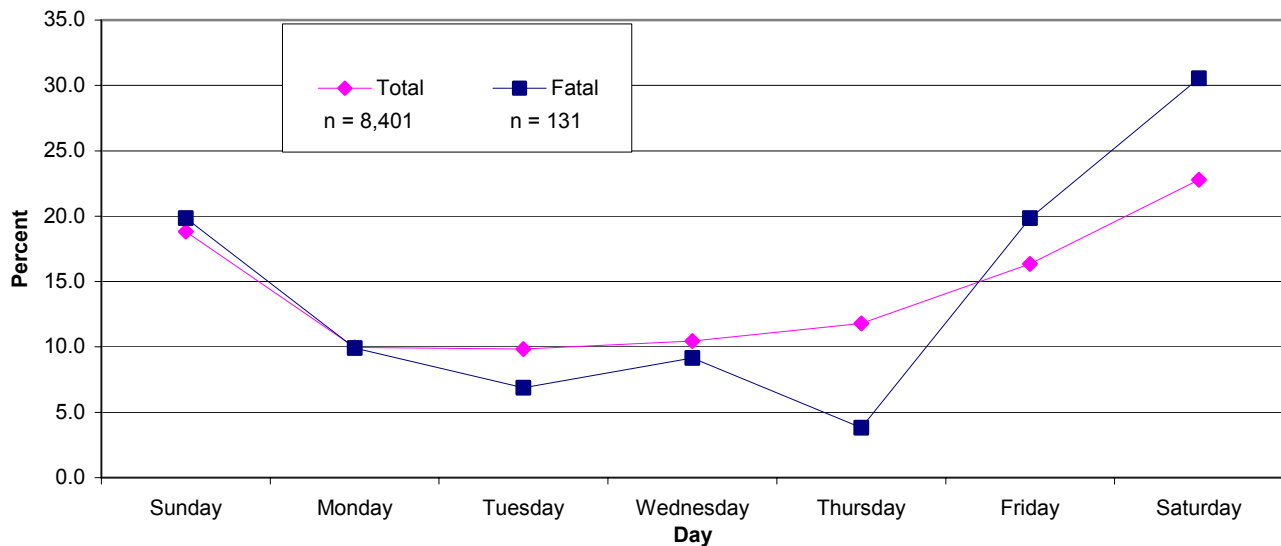
Overall, 71% of alcohol and drug related crashes occurred between 6 p.m. and 6 a.m., with the majority occurring within the 10 p.m. to 2 a.m. time period (Figure 3c).

**Figure 3d - Percent Total and Fatal Alcohol/Drug Crashes by Month**



Alcohol and drug related crashes were slightly higher in the summer months (Figure 3d). Fatal collisions associated with substance use, however, increased markedly in the fall of the year, with smaller peaks occurring in May and August. Both fatal and total crashes associated with substance use were higher on weekends and were lowest between Monday and Thursday (Figure 3e).

**Figure 3e - Percent Total and Fatal Alcohol/Drug Crashes by Day**



**Figure 3f - Driver Safety Equipment in Alcohol/Drug Crashes  
(n = 8,625)**

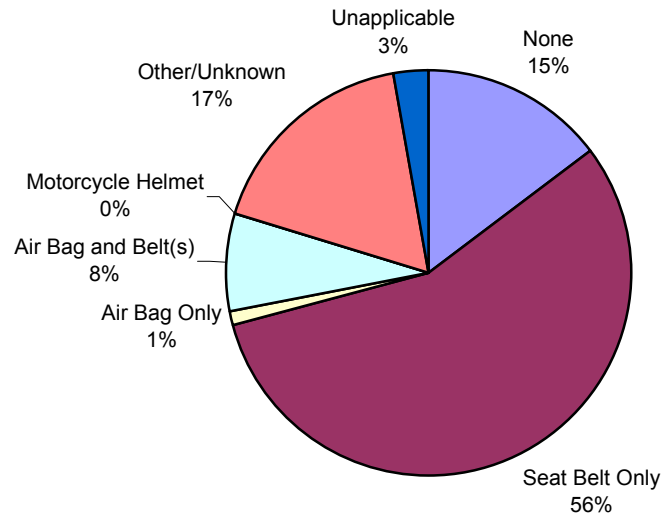
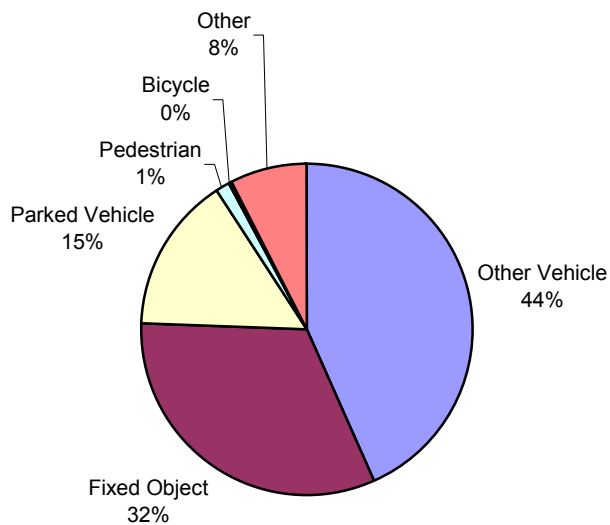


Figure 3f indicates that only 64% of intoxicated drivers were reported to be wearing seatbelts at the time of the crash. This number was slightly lower than that reported for all drivers (68%). However, missing data regarding safety equipment use for intoxicated drivers was much lower than that reported for all drivers (17% vs. 29%).

**Figure 3g - Percent Alcohol/Drug Crashes by First Harmful Event  
(n = 8,401)**



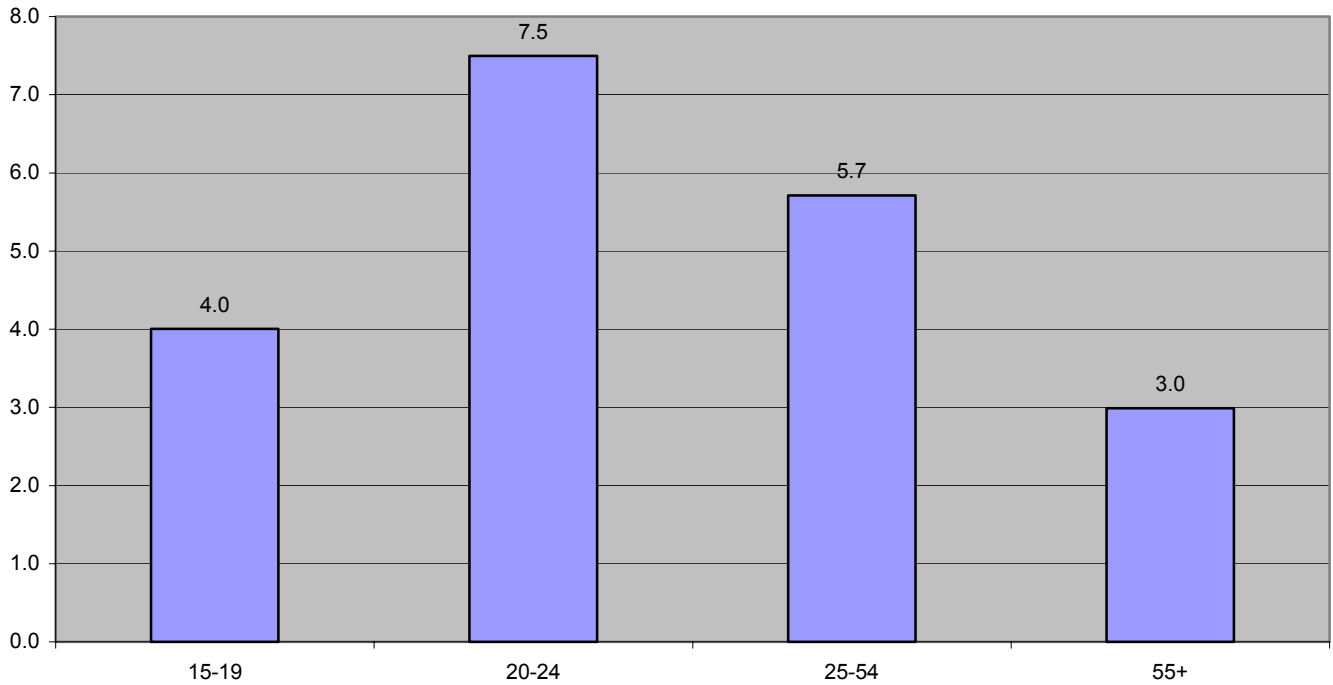
Alcohol involved collisions were evenly divided between single and multiple vehicle crashes (Figure 3g). Single vehicle crashes were twice as likely to involve a fixed object than a parked vehicle.

**Figure 3h – County of Alcohol/Drug Crash**

| <i>County</i>          | <i>Total Crashes</i> | <i>Percentage</i> |
|------------------------|----------------------|-------------------|
| <i>Allegany</i>        | 127                  | 1.5               |
| <i>Anne Arundel</i>    | 836                  | 10.0              |
| <i>Baltimore</i>       | 1,093                | 13.0              |
| <i>Calvert</i>         | 101                  | 1.2               |
| <i>Caroline</i>        | 35                   | 0.4               |
| <i>Carroll</i>         | 178                  | 2.1               |
| <i>Cecil</i>           | 186                  | 2.2               |
| <i>Charles</i>         | 254                  | 3.0               |
| <i>Dorchester</i>      | 55                   | 0.7               |
| <i>Frederick</i>       | 284                  | 3.4               |
| <i>Garrett</i>         | 73                   | 0.9               |
| <i>Harford</i>         | 339                  | 4.0               |
| <i>Howard</i>          | 341                  | 4.1               |
| <i>Kent</i>            | 27                   | 0.3               |
| <i>Montgomery</i>      | 1,034                | 12.3              |
| <i>Prince George's</i> | 1,252                | 14.9              |
| <i>Queen Anne's</i>    | 71                   | 0.8               |
| <i>St. Mary's</i>      | 126                  | 1.5               |
| <i>Somerset</i>        | 56                   | 0.7               |
| <i>Talbot</i>          | 61                   | 0.7               |
| <i>Washington</i>      | 243                  | 2.9               |
| <i>Wicomico</i>        | 216                  | 2.6               |
| <i>Worcester</i>       | 188                  | 2.2               |
| <i>Baltimore City</i>  | 1,225                | 14.6              |
| <i>Total</i>           | <b>8,401</b>         | <b>100</b>        |

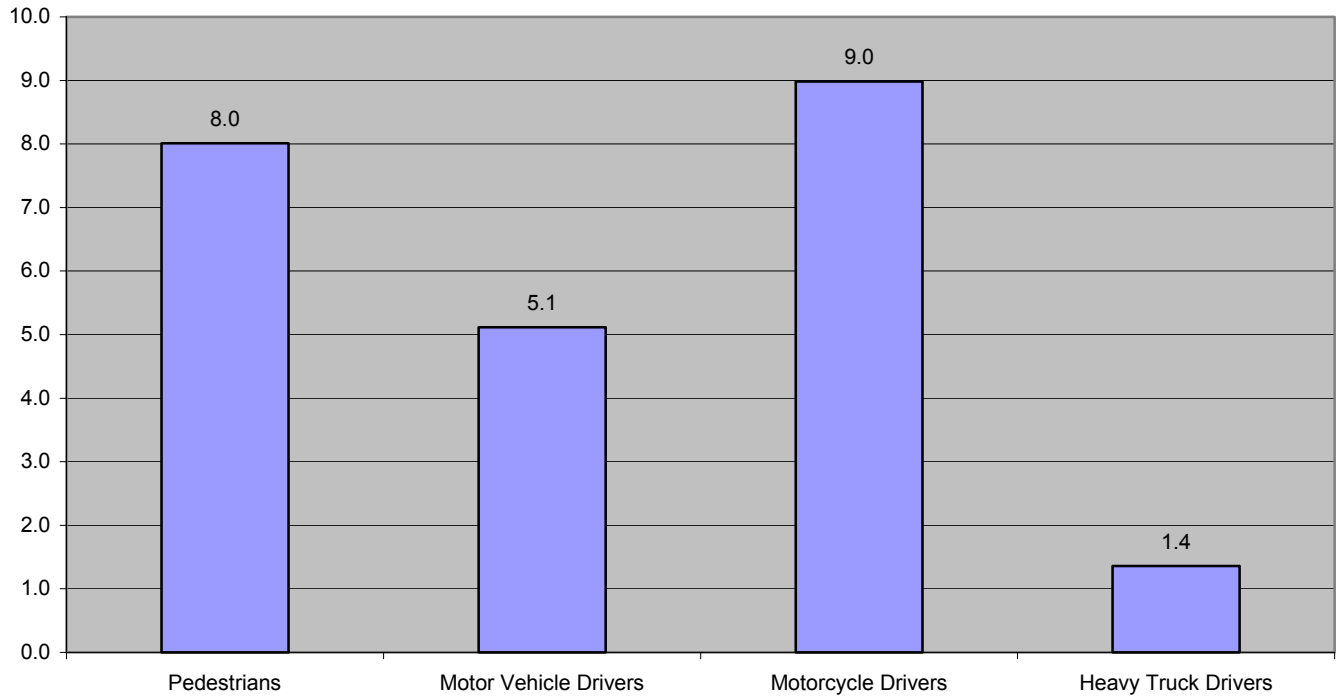
The vast majority of alcohol/drug-involved crashes occurred in the Baltimore and Washington, D.C. metropolitan areas (i.e., Baltimore City, Prince Georges County, Baltimore County, Montgomery County, Anne Arundel County, in order). The Eastern Shore counties of Kent, Caroline, Dorchester, Somerset and Talbot had the fewest (Figure 3h).

**Figure 3i - Percent Intoxicated Drivers by Age Group**



The distribution of intoxicated drivers as a percentage of all drivers involved in a traffic crash is displayed by age group in Figure 3i. Seven and one-half percent of young drivers between 20 and 24 years of age were reportedly intoxicated, which was approximately twice the percentage found in the teenage and older age groups. The second highest percentage of intoxicated drivers, found in the 25 to 54 year age group, was also fairly high when compared with drivers of age 55 years or older.

**Figure 3j - Percent Intoxication**



The bar chart displayed in Figure 3j indicates that, according to police, nine percent of all motorcycle drivers were intoxicated at the time of their crash. Pedestrians had the second highest rate (8.0%), followed by drivers of automobiles, station wagons, recreational vehicles, pick-up trucks and vans (5.1%).