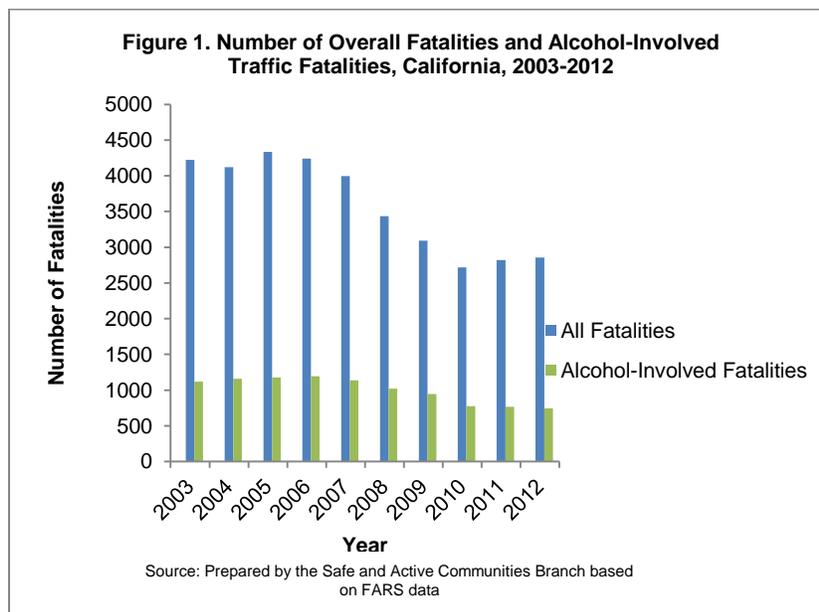


Fatal Alcohol-Involved Crashes in California

In California, 10,033 persons lost their lives in alcohol-involved* motor vehicle crashes during the ten-year period from 2003 through 2012. During this time period, overall traffic fatalities decreased by 32.4% (from 4,224 to 2,857 annually) and alcohol-involved fatalities declined 33.5% (Figure 1). In addition, the percentage of fatal crashes in California in which at least one driver had a BAC of 0.08 g/dL or greater (alcohol-impaired†) remained fairly flat, ranging from 27% to 30% from 2003 through 2012 (Figure 2). This proportion has decreased nationally from nearly half in 1982, when data are first available, to a plateau at about 30% to 32% beginning in 1995, and continuing until the present.‡ Although all fatal crashes and alcohol-involved fatal crashes have continued to decrease at similar rates, special efforts will be needed to overcome this longstanding leveling off in the proportion of fatal crashes that are alcohol-involved.

This report presents the latest available California data to help inform prevention and intervention efforts around drinking and driving. We derived the California data from the National Highway Transportation Safety Administration's (NHTSA) Fatality Analysis Reporting System (FARS) (<http://www.nhtsa.gov/FARS>). Information is provided on alcohol-involved crashes including who the drivers are, who dies in these crashes, and when these crashes occur.

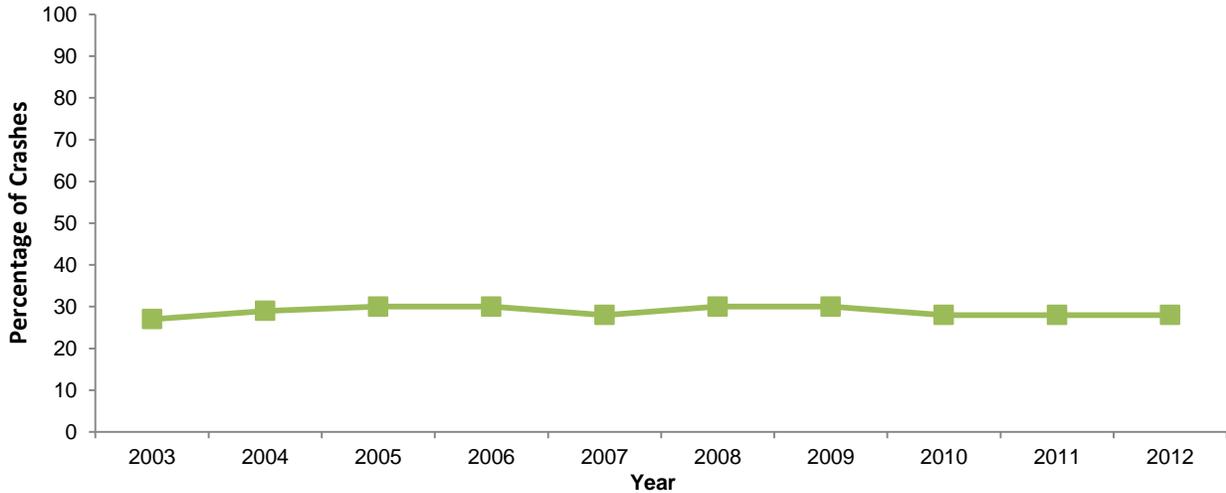


*Alcohol-involved crashes are defined as crashes in which at least one driver had a BAC of 0.01 g/dL or higher. Any fatality that occurs in an alcohol-involved crash is considered an alcohol-involved fatality.

†Alcohol-impaired crashes are defined as crashes in which at least one driver had a BAC of 0.08 g/dL or higher, which is the legal limit for adults in all 50 states. Any fatality that occurs in an alcohol-impaired crash is considered to be an alcohol-impaired fatality.

‡NHTSA report: "Traffic Safety Facts 2011" (<http://www-nrd.nhtsa.dot.gov/Pubs/811754AR.pdf>).

Figure 2. Percentage of Fatal Crashes Where at least One Driver Had a BAC of 0.08 g/dL or Higher, California, 2003-2012



Source: Prepared by the Safe and Active Communities Branch, based on FARS data.

How Do Alcohol-Involved Fatal Crashes Compare With Non-Alcohol-Involved Fatal Crashes in California?

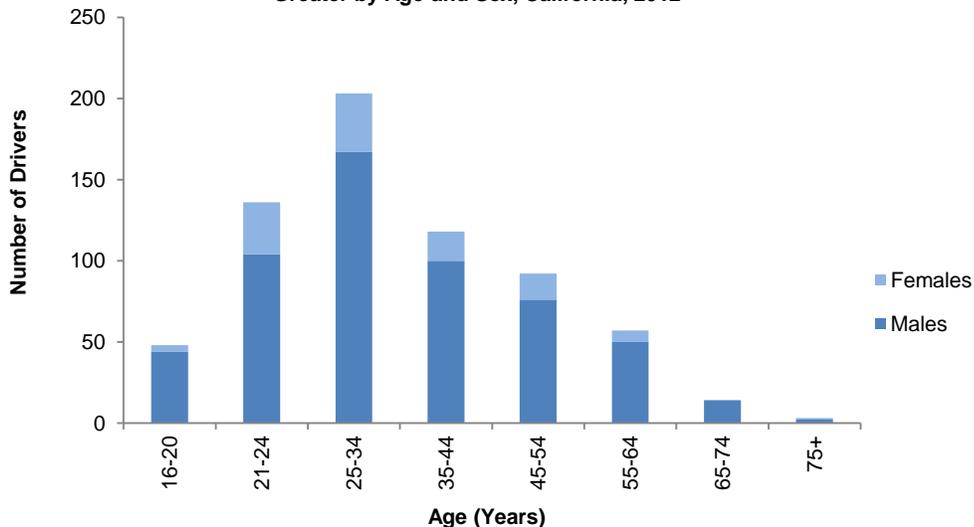
In 2012, one-quarter (664) of 2,632 fatal crashes in California involved at least one driver with a BAC of 0.01 g/dL or higher. These alcohol-involved crashes were more likely than non-alcohol-involved fatal crashes to occur in a rural area (45.0% versus 38.3%, respectively[§]), be a single-vehicle crash (67.0% versus 62.3%[§]), and be a head-on crash (9.6% versus 6.8%[§]). They were less likely to involve pedestrians (6.5% versus 28.8%[§]) and bicyclists (0.6% versus 6.2%[§]), and equally likely to involve young drivers ages 16-19 (7.4% versus 8.0%).

Who are the Alcohol-Involved Drivers?

A total of 672 alcohol-involved drivers were part of the 664 fatal 2012 crashes in California where at least one driver had a BAC of 0.01 g/dL or higher. (More than one alcohol-involved driver can be part of a single crash.) Males outnumbered females across every age group by far, accounting for 82.9% of alcohol-involved drivers (Figure 3). Drivers aged 25-34 outnumbered other age groups among drivers with a BAC of 0.01 g/dL or higher.

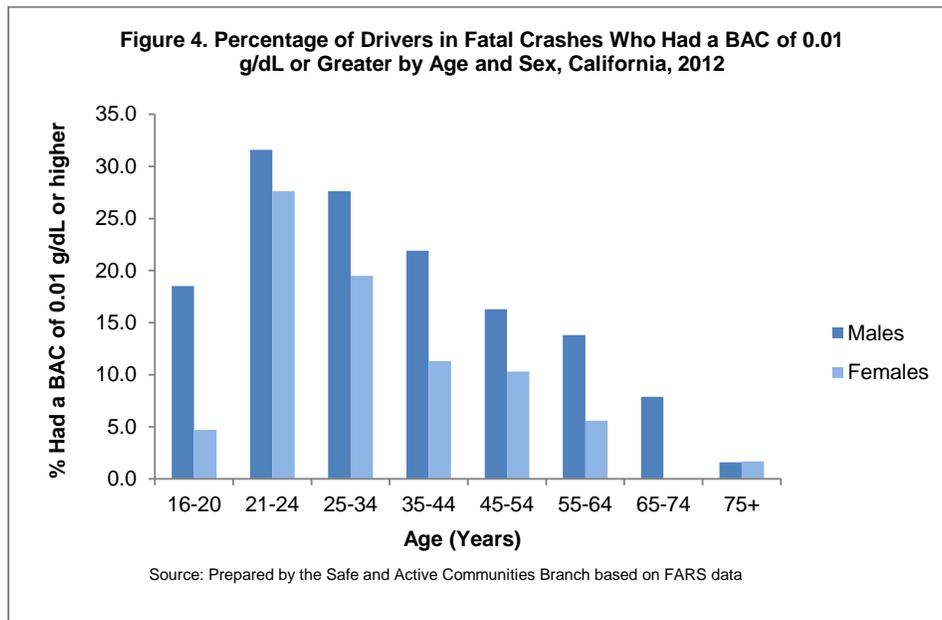
[§]p ≤ .05

Figure 3. Number of Drivers Involved in Fatal Crashes Who Had a BAC of 0.01 g/dL or Greater by Age and Sex, California, 2012



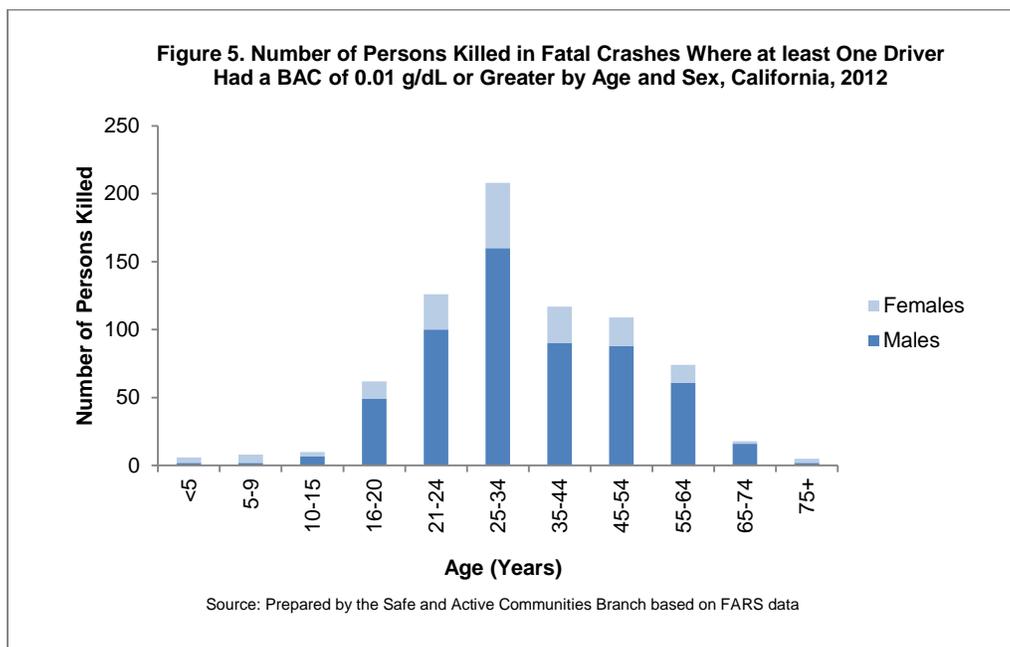
Source: Prepared by the Safe and Active Communities Branch, based on FARS data

A higher percentage of male drivers (20.1%) than female drivers (12.3%) in fatal crashes had a BAC of 0.01 g/dL or higher in California in 2012 (Figure 4), especially in the 16-20 year age group, where 18.5% of male drivers compared to 4.7% of female drivers had a positive alcohol test (0.01 g/dL BAC or higher). The highest percentage of drivers who had a BAC of 0.01 g/dL or higher occurred in the 21-24 year age group with 31.6% of male drivers and 27.6% of female drivers having a positive alcohol test (Figure 4).



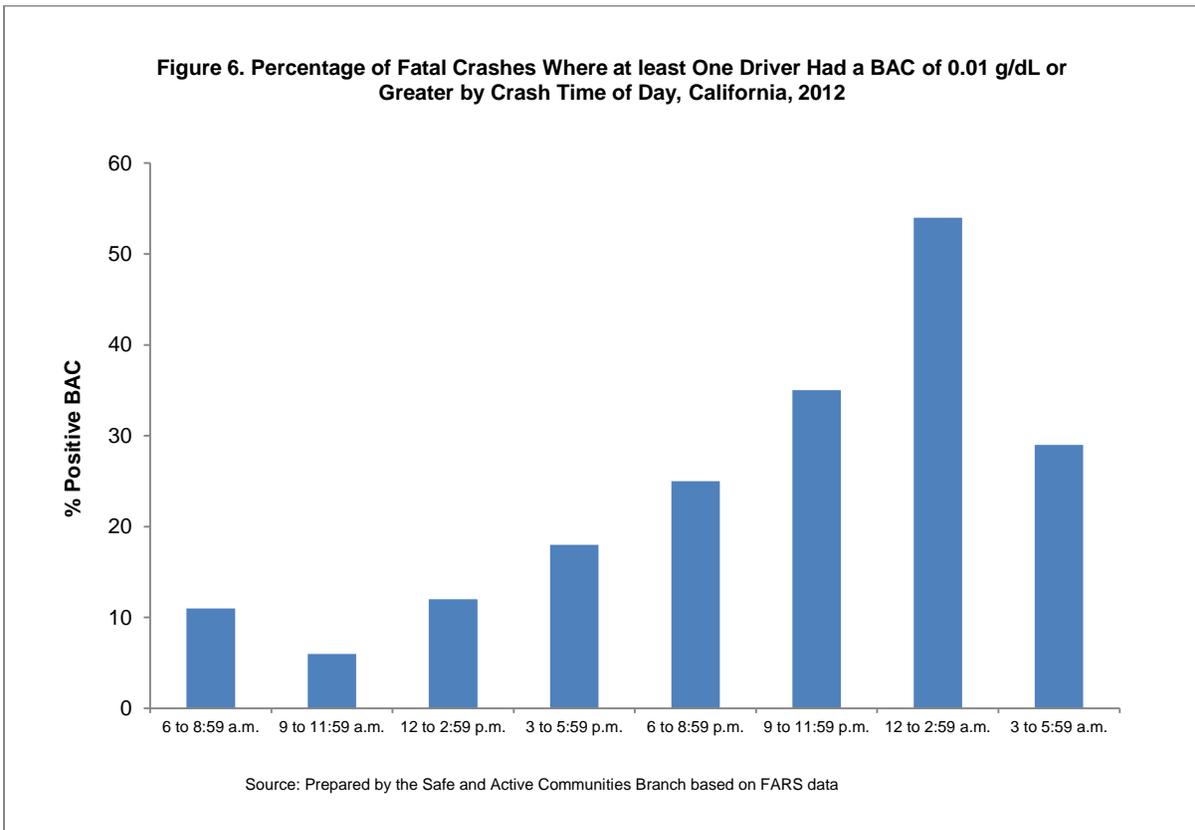
Who Dies in Alcohol-Involved Crashes?

A total of 744 persons were killed in alcohol-involved crashes in 2012, including 521 drivers, 172 other vehicle occupants, 43 pedestrians, 3 bicyclists and 5 other persons. More males (577 or 77.6%) than females (167 or 22.4%) were killed in these crashes across all age groups except the 0-9 year age group and persons 75 years and older (Figure 5).



When Do These Crashes Occur?

In 2012, the percentage of drivers who had a BAC of 0.01 g/dL or higher varied greatly by crash time of day (Figure 6). A higher percentage of drivers had a positive alcohol test in crashes occurring at night: 54.0% of fatal crashes occurring from midnight to 3 a.m. involved a driver who had a positive alcohol test, while, in contrast, 6.3% of crashes occurring from 9 a.m. to noon involved a driver who had a positive alcohol test. Overall, 72.7% of the 664 alcohol-involved fatal crashes occurred at night (6 p.m. to 6 a.m.), whereas 52.6% of all fatal crashes occurred during this time period. Over half (57.1%) of alcohol-involved fatal crashes occurred during the weekend (defined as 6 p.m. Friday to 6 a.m. Monday). A smaller proportion (42.2%) of all fatal crashes occurred during the weekend.



Summary

- Overall traffic fatalities and alcohol-involved fatalities decreased by 32.4% and 33.5% respectively from 2003 through 2012.
- Total fatal crashes and alcohol-involved fatal crashes have continued to decrease at similar rates.
- The proportion of fatal crashes in California that are alcohol-involved has remained essentially the same from 2003 through 2012.
- A total of 744 persons were killed in alcohol-involved crashes in California in 2012.
- Alcohol-involved crashes were more likely than non-alcohol-involved crashes to occur in a rural area (45.0% versus 38.3%, respectively), be a single-vehicle crash (67.0% versus 62.3%) and be a head-on crash (9.6% versus 6.8%).
- Most (82.9%) alcohol-involved drivers were male. Males outnumbered females across every age group.
- The 21-24 year age group had the highest percentage of drivers in fatal crashes who had a BAC of 0.01 g/dL or higher (31.6% of male and 27.6% of female drivers).
- Almost three-fourths (72.7%) of alcohol-involved fatal crashes occurred at night (6 p.m. to 6 a.m.).
- Over half (57.1%) of the alcohol-involved fatal crashes occurred during the weekend (defined as 6 p.m. Friday to 6 a.m. Monday).

Comments

The primary finding highlighted in this report based on FARS data indicates the proportion of fatal crashes that are alcohol-involved has not declined in recent years. This is consistent with data from the California Statewide Integrated Traffic Records System (SWITRS).¹

In California, efforts are underway to reduce alcohol-involved and alcohol-impaired driving. For example, the California Strategic Highway Safety Plan (SHSP) (<http://www.dot.ca.gov/hq/traffops/shsp/>), a statewide collaborative effort to reduce fatalities and serious injuries on public roads, has as one of its objectives to reduce impaired driving in California. This group has done work in the areas of education, restricting access to alcohol (and other drugs) to persons under 21, detection of impaired roadway users, enhancing sanctions against and adjudication of impaired drivers, and finding ways to work effectively with repeat offenders. Additional work in the areas of education, prevention, and enforcement will be necessary to continue the downward trend in alcohol-involved and alcohol-impaired crash fatalities. Special efforts are needed to overcome the longstanding leveling off of the proportion of fatal crashes that are alcohol-involved.

¹e.g., <http://www.tims.berkeley.edu/resources/shsp/CA01DataSummary2012.pdf>

About the data

This fact sheet uses FARS data to describe various aspects of fatal alcohol-involved motor vehicle crashes in California. FARS is a nationwide census providing NHTSA, Congress and the American public yearly data regarding fatal injuries suffered in motor vehicle traffic crashes.

This fact sheet was developed under the guidance of the Crash Medical Outcomes Data (CMOD) Project, Safe and Active Communities Branch, California Department of Public Health. For further information about this fact sheet contact Cathy.Saiki@cdph.ca.gov.

Additionally, CMOD provides an online query using Linked Crash-Medical Data on persons injured in motor vehicle crashes in California. This query is part of the EpiCenter California Injury Data Online accessed at <http://EpiCenter.cdph.ca.gov>. There you may create tables, using any of the 25 variables to see how victim characteristics and crash circumstances affect the victim's medical outcome. For technical assistance on using the online query or for other questions related to the CMOD project, contact Lynn.Walton-Haynes@cdph.ca.gov

Funding for the CMOD Project and online query is provided by a grant from the California Office of Traffic Safety through the National Highway Traffic Safety Administration.

