ALCOHOL AND RISK FOR VIOLENCE: MAJOR RESEARCH FINDINGS

July, 2013

Substantial research evidence demonstrates an increase in risk for fatal and nonfatal violence associated with both acute alcohol intoxication and pre-existing alcohol abuse or dependence. This increase in risk extends to both perpetrators and victims and to both interpersonal and self-directed violence. Some of the largest and most recent studies are briefly reviewed here, as are a few others with particularly salient findings. Copies of these studies are available from VPRP; please see the contact information at the end of the document.

Violence and Acute Intoxication

Perpetrators

Nationwide surveys of state prison inmates by the Bureau of Justice Statistics (BJS) in 1993 and 2004 found that 37% of inmates convicted of violent crimes were under the influence of alcohol at the time the crime was committed, according to the inmates’ own reports. Inmates reported drinking an average of 9 ounces of alcohol in the hours before committing the crimes for which they were incarcerated. The rate of acute alcohol intoxication increased to 39% for homicide perpetrators.1,2

Similarly, a 2002 BJS survey of jail inmates reported that 37.6% of inmates incarcerated for violent crimes had used alcohol at the time those crimes were committed.2

In these surveys, inmates incarcerated for violent crimes reported acute alcohol use more often than did inmates incarcerated for other crimes.1,2

A systematic review of forensic toxicology studies of homicide offenders confirms the findings from inmate reports. It found rates of acute alcohol use or intoxication ranging from 33% to 60% in the United States.3

Hate crime victims interviewed for the National Crime Victimization Survey report that perpetrators were “drunk or on drugs” in 30.6% of cases.4 More than 200,000 hate crimes occurred annually during the reporting period, and 84% involved violence.
In the National Crime Victimization Survey, victims of violent crimes of any type in which the perpetrator had used alcohol were more likely to report being injured than were victims of perpetrators who had not used alcohol (36% and 28%, respectively).²

Victims

In 2009, according to data from the National Violent Death Reporting System (NVDRS), 34.2% of homicide victims and 33.3% of suicide victims had toxicology studies that were positive for alcohol. Among those whose tests were positive, 60.9% of homicide victims and 64.5% of suicide victims met legal criteria for intoxication (blood alcohol concentration ≥ 0.08 g/dL).⁵

A systematic review of toxicology studies of homicide victims in the US found rates of alcohol use or intoxication ranging from 18% to 57%.³

Studies in several sites and a systematic literature review found that acute alcohol use increased risk for suicide by a factor of 5 to 6. Acute heavy alcohol use increased suicide risk by a factor of at least 15 and in one study by a factor of 75 to 85.⁶⁻⁸

According to NVDRS data, the increased suicide risk related to acute alcohol intoxication is greatest for firearm suicide.⁹

Violence and Pre-Existing Alcohol Abuse or Dependence

Perpetrators

In the 1993 BJS inmate survey referred to above, approximately 35% of violent offenders had previously participated in an alcohol abuse program. Among all inmates in the survey, 29% of men and 19% of women had been daily drinkers in the year before their incarceration offenses (results specific to violent offenders were not reported).¹¹

In the National Epidemiologic Survey on Alcohol and Related Conditions, sponsored by the National Institute on Alcohol Abuse and Alcoholism, a prior history of alcohol abuse increased risk of subsequent violence against others by a factor of 4.4.¹⁰

Data from that survey also showed that a history of alcohol abuse or dependence increased the risk of committing intimate partner violence by a factor of 1.5 to 2.6 for both men and women.¹¹

In the National Institute on Mental Health’s Epidemiologic Catchment Area Study, a prior history of abuse or dependence increased risk for subsequent child abuse by a factor of 4.7 and risk of child neglect by a factor of 5.3.¹²

Victims

A multi-city study sponsored by the Centers for Disease Control and Prevention reported that persons who died from homicide were 2.2 times as likely as others to consume alcohol, 17.9 times as likely to have had trouble at work related to drinking, and 10.0 times as likely to have been
hospitalized for complications of alcohol use.\textsuperscript{13}

That same study found that persons who died from suicide were 1.8 times as likely as others to consume alcohol, 6.1 times as likely to have had trouble at work related to drinking, and 10.2 times as likely to have been hospitalized for complications of alcohol use.\textsuperscript{13}

In the Congressionally mandated National Comorbidity Survey, pre-existing alcohol abuse and alcohol dependence increased risk for a subsequent first suicide attempt by factors of 3.3 and 5.9, respectively.\textsuperscript{14}

In the National Mortality Followback Survey, conducted by the National Center for Health Statistics, a history of alcohol misuse increased risk of suicide by 50\% among persons with no history of violence and by a factor of 6.9 among persons with a history of violence.\textsuperscript{15}

The National Epidemiologic Survey on Alcohol and Related Conditions found that a prior history of alcohol abuse increased risk of subsequent self-directed nonfatal violence by 40\%.\textsuperscript{10}

**Findings Related to Persons with Repeated Driving Under the Influence (DUI) Offenses**

In a multi-site study funded by the National Institute on Alcohol Abuse and Alcoholism, 89.2\% of subjects with 2 or more self-reported DUI arrests met standard criteria for alcohol dependence. In this group, 15.7\% reported 3 or more motor vehicle crashes while drinking; 14.7\% reported 3 or more arrests while drinking. These percentages are higher than those for subjects with a single DUI arrest.\textsuperscript{16}

In a large recent study of data supplied by the Texas Department of State Health Services, DUI offenders with multiple prior DUI arrests reported more intensive alcohol use (measured by frequency of consumption and extent of related problems), more arrests for alcohol-related offenses, and more arrests overall than did offenders with a single DUI arrest.\textsuperscript{17}

A United States Army study provided unusual detail on criminal activity by comparing soldiers with repeat DUI offenses to those with a single DUI offense or no DUI offenses and using military police records to determine arrests. Among repeat offenders, 16\% had been arrested for a violent crimes; 5\% of the 1-time offenders and none of the non-offenders had arrests for violent crimes. In addition, 7\% of repeat offenders had been arrested for carrying a concealed weapon; none of the others had been.\textsuperscript{18}

An early study in Colorado and Mississippi found that persons with multiple DUI arrests reported on average 3 times as many arrests for non-traffic offenses as did persons with a single DUI arrest.\textsuperscript{19}

**Findings Related to Firearms**

The Behavioral Risk Factor Surveillance Survey, conducted by the Centers for Disease Control and Prevention, found that firearm owners who reported that they drink and drive were twice as likely as other firearm owners to drive or ride in a vehicle with a loaded firearm. They were also twice as likely to have firearms at home that were loaded and not locked away. Firearm owners
who drank heavily (5 or more drinks at least once in the prior month or at least 60 drinks a month on average) were also more likely to engage in risk behaviors with firearms than were other firearm owners.\textsuperscript{20}

The National Opinion Research Center at the University of Chicago found in a 2001 nationwide survey that persons reporting that they “sometimes drink more than they should” were more likely than others to carry firearms in public.\textsuperscript{21}

In the nationally-representative National Comorbidity Study Replication, persons who reported threatening others with a firearm were 3 times as likely as others to report a history of alcohol consumption that met standard criteria for alcohol abuse or dependence.\textsuperscript{22}

\textbf{Additional Points Relevant to Current Policy Considerations}

\textit{Are Alcohol-Related Offenses Common in California?}

The California Department of Justice reports that approximately 250,000 people were arrested for DUI offenses (23152 VC) in 2012; approximately 28,000 were arrested for disorderly conduct while intoxicated (647(f) PC).

\textit{Would Denial Work?}

Screening firearm purchasers prevented 7,524 purchases by prohibited persons in California in 2012. Such a policy will be particularly effective where all transfers of firearms are routed through licensed retailers and subject to background checks, as is true in California.

In 1991, California extended its criteria for denying the purchase and possession of firearms to include persons convicted of most violent misdemeanors. A controlled study found that this policy change reduced risk for future violent and firearm-related crime among those directly affected by at least 25\%.\textsuperscript{23} Similar evidence of the effectiveness of screening and denial in California has been found for felons.\textsuperscript{24}

\textit{Does the Public Support Denying Purchase and Possession of Firearms by Alcohol Abusers?}

Nationwide public opinion survey research conducted earlier this year found that 75\% of the general population, 71\% of self-identified firearm owners, and 64\% self-identified NRA members endorsed “prohibiting a person convicted of 2 or more crimes involving alcohol or drugs within a 3-year period from having a gun for 10 years.”\textsuperscript{25}
REFERENCES


Further Information:

Garen Wintemute, MD, MPH
Susan P. Baker and Stephen P. Teret Chair in Violence Prevention
Professor, Emergency Medicine
Director, Violence Prevention Research Program
UC Davis School of Medicine/ UC Davis Medical Center
2315 Stockton Blvd.
Sacramento, CA 95817
916.734.3539
jgwintemute@ucdavis.edu
http://www.ucdmc.ucdavis.edu/vprp