

# The Hardcore Drunk Driving Offender

Siegal, H.A., Falck, R.S., Carlson, R.G., Rapp, R.C., Wang, J. Cole, P.A.

Center for Interventions, Treatment, and Addictions Research, Wright State University School of Medicine

3640 Colonel Glenn Highway, Dayton, Ohio, 45435, USA

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## **Abstract**

This study was undertaken to determine the sociodemographic and psychiatric characteristics of hardcore DUI offenders incarcerated in Ohio prisons and to offer treatment recommendations accordingly.

## **Introduction**

Driving under the influence of alcohol and/or other drugs continues to be a significant threat to the health and safety of people in the United States. Sustained campaigns in public health education, deterrence-oriented environmental changes, such as "designated driver initiatives," and laws raising the legal drinking age, have contributed to a decline in alcohol-related traffic fatalities.<sup>1</sup> Nevertheless, many people still place themselves and others at risk for injury and death by operating a motor vehicle while intoxicated.

A recent review of the research on the causes and correlates of drinking and driving suggests that two main causes of persistent, impaired driving are problem drinking and antisocial attitudes.<sup>2</sup> Research comparing first time DUI offenders with those individuals who have committed multiple offenses has suggested that multiple DUI offenders have higher levels of alcoholism, hostility, psychopathic deviance, and depression than first time offenders.<sup>3</sup> Within the population of repeat offenders are those who have multiple convictions. This "hardcore" drinking driver population appears impervious to general deterrence measures such as informational campaigns and apparently unresponsive to specific deterrence activities emphasizing legal sanctions.

## **Materials and methods**

### **Sample**

A total of 126 male inmates, recently remanded to the custody of the Ohio Department of Rehabilitation and Correction (ODRC) under new legislation targeting multiple DUI offenders, were interviewed for this study. This sample represented more than half of inmates who were potentially eligible to participate in the study during the time frame it was conducted- -late August 1998 through early May 1999. There is no reason to believe that individuals interviewed were not representative of the initial wave of offenders entering prison under the new legislation. Approximately 65% of those inmates approached agreed to participate.

## **Data Collection**

The interviews were conducted within the prisons. Trained interviewers who, after obtaining written informed consent, administered the research questionnaires on a one-to-one basis. The Diagnostic Interview Schedule (DIS) - IV was employed to assess the lifetime and current prevalence of psychiatric disorders including substance abuse and dependence, anxiety disorders, mood disorders, hyperactivity, conduct disorder, antisocial personality disorder, pathological gambling, and dementia.<sup>4</sup> Not all sections of the DIS were used; the section on schizophrenia was not administered because the ODRC intake evaluation process identified psychotic individuals. Other DIS sections, such as somatization disorders and anorexia/bulimia, were not administered because they have virtually no clinical relevance to the DUI population.

A supplemental questionnaire, designed by the authors, was administered to collect data not captured by the DIS such as pre-incarceration residency, living arrangements, employment and occupational practices, prior arrest and incarceration history, driver intervention program involvement, and alcohol and other drug treatment history.

The DIS and the supplemental questionnaire were pilot tested with a dozen prisoners in late June 1998. Subsequently, revisions were made in the supplemental questionnaire. Administration of the DIS and the supplement began in earnest in late August 1998. On average, interviews took between 2 ½ and 3 hours to complete.

## **Analyses**

Descriptive statistics were used to present the sociodemographic characteristics of the sample as well as the lifetime and current prevalence of the previously specified psychiatric disorders. In order to identify distinct groups within the overall sample that might have clinical relevance, a cluster analysis was performed using the PROC FASTCLUS procedure in SAS 6.12.<sup>5</sup> Four variables, all derived from the DIS and based on DSM-IV diagnostic categories, were used to organize the clusters: 1) lifetime history of a psychiatric disorder, other than antisocial personality disorder; 2) antisocial personality disorder; 3) history of drug abuse other than alcohol abuse; and 4) history of drug dependence other than alcohol dependence.

Drug abuse and dependence were combined since they represent variations of the same phenomenon. Alcohol abuse and dependence were not used as organizing variables in the cluster analysis because all subjects had either histories of alcohol abuse or alcohol dependence; consequently, alcohol had no discriminative utility. Multinomial logistic regression models were then used to examine what characteristics affected the likelihood of an individual being classified into a specific cluster.

## **Results**

The all male sample was predominately white (77.8%), with a mean age of 35.7 years. Not surprisingly, this is a population that lacks primary potentially stabilizing relationships: 41.6 % reported they were divorced or separated, 38.4% were single, and only 20% claimed to be married. Educationally, the largest proportion of the sample reported having less than a high school education (43.7%). Areas of residency were split nearly evenly between rural/small town and urban areas. The majority of the sample (77%) reported having worked full-time in the year before the present incarceration. Occupationally, the majority (57.9%) worked in the building trades. Income was split nearly evenly between those with annual incomes under \$10,000 (20.2%), \$10-20,000 (25.0%), \$20-30,000 (25.8%), and over \$30,000 (29.0%).

The population had heavy involvement with the criminal justice system. Aside from alcohol-related driving violations and technical violations such as contempt of court, the most commonly reported arrests were for disorderly conduct/public intoxication, drug-related, and assault charges. More than half of the arrests categorized as "other" were for domestic violence. All 126 men in the sample had been arrested for DUI. The mean number of DUI arrests was 7.6; the mean number of DUI convictions was 7.1. The mean number of arrests for any offense was 29.0; the mean number of convictions was 25.2.

Table 1 shows the prevalence and age of onset of DSM-IV alcohol and other drug abuse and/or dependence for the sample. The data indicate that persons in this sample were heavily involved at a relatively young age. For those who abused alcohol, the average age at which the first symptom appeared was about 19 years of age. The average age of meeting the diagnostic criteria for alcohol dependence was 21.2 years.

**Table 1 DSM-IV Diagnoses for Drug Abuse, Drug Dependence and Mean Age When First Symptom Appeared (n=126)**

Drug	Abuse (%)	Mean Age *	Dependence (%)	Mean Age *
Alcohol	98.3	19.3	75.4	21.2
Amphetamine	24.0	18.1	19.8	19.1
Cannabis	48.2	16.6	30.6	17.4
Cocaine	36.5	23.8	25.2	24.2
Hallucinogens	21.6	18.0	11.4	17.1
Opiates	20.6	20.8	14.4	20.6
PCP	10.3	17.2	5.6	16.9
Sedatives/Tranqs.	33.9	19.2	19.7	20.6
Inhalants	5.8	14.5	1.6	15.5
Any Drug except Alcohol	60.3	17.3	44.4	17.7

\*Among those who ever had drug abuse or dependence symptoms for a specific class of drugs.

Table 2 shows the *lifetime and current prevalence* of selected DSM-IV disorders in the sample. For purposes of perspective, data on the lifetime prevalence of these disorders in the general population is included.

**Table 2. Percent of Prevalence of DSM-IV Disorders among Hardcore DUI and United States Populations**

Disorder	Lifetime Prevalence		Current Prevalence
	Hardcore DUI	United States Population	Hardcore DUI
<b>Anxiety Disorder</b>			
Panic Attack	4.1	1.5 - 3.5	2.4
Social Phobia	8.7	3.0 - 13.0	6.3
Gen. Anxiety Disorder	13.5	5.0	1.6
PTSD	18.4	14.0	9.6
<b>Mood Disorder</b>			
Major Depression	31.7	5.0 - 12.0	19.0
Manic Episode	18.5	1.0	0.0
<b>Disorders First Diagnosed in Childhood</b>			
AD/HD	20.0	3.0 - 5.0	20.0
Conduct Disorder	34.1	6.0 - 16.0	N/A
<b>Personality Disorder</b>			
ASPD	28.6	3.0	28.6

Other Impulse Control Disorders			
Pathological Gambling	8.7	1.0 - 3.0	N/A
Cognitive Disorders			
Dementia	3.2	3.0	3.2
Had At Least 1 Disorder	69.0	N/A	30.2

Current psychiatric disorders (i.e., symptoms occurring within the past year) are prevalent in this DUI inmate population as well. At the time of the interview, 30.2% were experiencing a current psychiatric disorder. The most common *current disorders* were antisocial personality disorder (28.6%), major depressive disorder (19.0%), and post-traumatic stress disorder (9.6%).

Table 3 shows offenders' experience with substance abuse treatment and state-certified Driver Intervention Programs.

**Table 3. Hardcore DUI Sample Participation in Driver Intervention Programs**

Program Type	n	%
DUI Program		
Never	78	61.9
1 Time	27	21.4
2 Times	15	11.9
More Than 3 Times	6	4.8
Alcohol &/Or Drug Treatment Program		
Never	41	32.5
1 Time	33	26.2
2 Times	17	13.5
More Than 3 Times	35	27.8

Most of the sample (60.3%) reported having attended a self-help group (e.g., Alcoholics Anonymous) meeting at least once in the year before incarceration.

The results of the cluster analysis are shown in Table 4. This analysis was undertaken to determine if there were any naturally occurring subgroups in the sample. Such a perspective could prove useful in designing and implementing therapeutic interventions for the population. Recall that every person in the sample met the DSM-IV criteria for diagnosis for alcohol abuse or dependence.

**Table 4. Results of Cluster Analysis – Percent of Sample by Group and Disorder**

Cluster	Disorders Except ASP Dependence	ASP	Drug Abuse/Depend.
Contemporary Alcohol Dependent (n=72)	43%	0%	67%
Dually Diagnosed Alcohol Dependent (n=18)	100%	0%	0%
Antisocial Polysubstance Dependent (n=30)	75%	100%	89%

Three distinct clusters, or groups, emerged. They were: *Contemporary Alcohol Dependent*. This was the largest of the sub-groups representing some 57% of the sample (n=72). This group was characterized by the high representation of persons meeting diagnostic criteria of drug abuse and/or dependence (66.6%) and a substantial representation of persons manifesting a history of psychiatric morbidity (43.1%). None had antisocial personality disorder. The characteristics of this group are similar to persons presenting for alcoholism treatment today.

*Dually Diagnosed Alcohol Dependent.* This constituted the smallest of the groups. It was definitively characterized by containing no members meeting the diagnostic criteria for drug abuse/dependence or antisocial personality disorder; however, all (100%) manifested a history of psychiatric illness. *Antisocial Poly-Substance Dependent.* This was the second largest group containing 29% of the sample. It was clearly the most troubled group in the sample with 89% manifesting histories of drug abuse/dependence; 75% meeting diagnostic criteria for a history of psychiatric illness; and, all (100%) meeting the diagnostic criteria for Antisocial Personality Disorder.

As expected, the rates for diagnosis of a "current" (i.e. within the past year) psychiatric disorder varied between the groups. Twenty-two percent (22.2%) of the Contemporary Alcohol Dependent group met diagnostic criteria for a current disorder. Thirty-nine percent (38.9%) of the Antisocial Poly-Substance Dependent group met such criteria. And, 44.4% of the Dually Diagnosed group had a current psychiatric disorder.

In the multinomial logistic regression models the clusters were compared against one another across a number of variables: age, ethnicity, education, marital status, religiosity, DUI program attendance, alcohol/drug treatment involvement, arrests, and incarcerations lasting at least two weeks. The multinomial results revealed that older offenders were more likely to be in the Dually Diagnosed group; that offenders with higher levels of education were more likely to be in the Contemporary Alcohol Dependent group; and that offenders with a higher than average number of arrests were more likely to be in the Antisocial Poly-Substance Dependent group.

## **Discussion**

The inmate population represented in this sample can be characterized as one that is profoundly challenged. Virtually all of the sample could be described as alcohol dependent, almost two-thirds manifest a concurrent substance abuse disorder, and the rates of psychiatric illness are many times that which could be found in a general population sample. Additionally, as a group, educational achievement was low with only a single subject reporting any college experience and 43% indicating less than a high school education. This is a population that has had much involvement with the criminal justice system. In addition to their multiple arrests/convictions for alcohol and/or drug related vehicular offenses, 61% of the sample reported arrests for disorderly conduct/public intoxication. The average number of such arrests was 5.5 times. Drug charges were filed against 41% of the sample on average of 2.4 times. It is important to note that most of the criminal charges filed against members of the sample likely relate to their substance abuse. For example, the connection between domestic violence and substance abuse is well recognized. It is also likely that many of the charges described as "technical violations" involved violation of probation conditions such as a requirement to abstain from alcohol consumption.

In addition to being pervasive within this population, their substance abuse problems are long standing. The average age of the sample was nearly 36 years, and the age of the first alcohol dependency symptoms was about 21 years of age. For other drugs, abuse and/or dependence could be established at around 14 (inhalants) or 16 (marijuana) years of age.

One of the study's most striking findings involves the relatively small number of subjects who have been exposed to identification and early intervention for their alcoholism or substance abuse. The driver intervention mechanism was established in Ohio in 1983 to serve a safety net function by identifying convicted DUI offenders who have drinking problems and referring them for service. Some 62% of the sample report never attending such a program. For whatever reason, this hardcore DUI population is avoiding the very mechanism established to affect early identification and intervention.

The lifetime and current prevalence rates for psychiatric disorders are dramatically higher in the sample than what would be found in a general population. This simply means that the men in the sample have problems in addition to their alcohol and other chemical dependency. These problems need to be addressed if the expectation that these people will ultimately become autonomous and

productive citizens is to be realized. Virtually all of the disorders are amenable to psychiatric and psychosocial interventions.

The results of this study have demonstrated that the hardcore population was, in fact, not a homogeneous group but three distinct groups each exhibiting specific clinical needs.

*Contemporary Alcohol Dependent-* is consistent with problem drinking populations currently presenting at chemical dependency treatment facilities. They can be characterized as poly-substance users who routinely abuse other drugs in addition to alcohol. Many present or have histories of other psychiatric and/or behavioral disorders. The absence of antisocial personality disorder is significant. The central clinical task for members of this group will be the resolution of their drinking and drug use and addressing psychological/psychiatric issues.

*Dually Diagnosed Alcohol Dependent-* is somewhat older than the other two groups and contains no members with significant histories of drug abuse/dependence (beyond alcohol) or antisocial personality disorder. Much like the Contemporary Alcoholic Dependent group, clinical goals should be directed towards helping these people become and remain alcohol abstinent and resolving their psychiatric/psychological problems.

*Antisocial Poly-Substance Dependent-* is the most deeply troubled group. All are alcohol dependent, 90% meet diagnostic criteria for substance abuse or dependence, 75% have a history of psychiatric illness and all carry the diagnosis of antisocial personality disorder. Other analyses indicate that members of this group have been arrested more frequently than other groups in the sample. Clinically, a profound, extensive program of resocialization is indicated.

The emergence of three groups has important clinical implications. At the most fundamental level, and for hardcore offenders to have a reasonable chance of rehabilitation, it means that different treatment tracks must be developed to meet the varying needs of the individuals in the groups. It also means that the treatment provider will need to develop a screening mechanism to identify the psychiatric characteristics of incoming inmates so they may be assigned to the most appropriate treatment track. The clustering of psychiatric pathologies by group also has therapeutic implications for inmate interactions as well as housing. Although a variety of therapeutic models have been used in the treatment of chemically dependent people, two models are recommended here. We suggest Cognitive Behavior Therapy for the Contemporary Alcohol and the Dually Diagnosed Dependents and a prosocial modified Therapeutic Community for the Antisocial Poly-Substance Dependents. Psychiatric and psychological treatment should be provided as indicated. In addition, the need for various types of post-release monitoring and supportive care cannot be overemphasized.

Finally, few hardcore women offenders have been imprisoned in Ohio. Separate studies will be needed for women.

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#### References:

1. Macdonald, S. & Mann, R. (1996). Distinguishing causes and correlates of drinking and driving. *Contemporary Drug Problems*, 23(2):259-290.
2. McMillen, D., Adams, M., Wells-Parker, E., Pang, M. & Anderson, B. (1992). Personality traits and behaviors of alcohol-impaired drivers: A comparison of first and multiple offenders. *Addictive Behaviors*, 17:407-414.
3. National Highway Traffic Safety Administration. (1999). Traffic safety facts 1998. Washington, D.C.
4. Robins, L., Helzer, J., Croughan, J. & Ratcliff, K. National Institute of Mental Health diagnostic interview schedule. *Archives of General Psychiatry*, 38(4):381-389.
5. SAS Institute. (1988). *SAS/STAT User's Guide (Release 6.03)*. Cary, NC.