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Alcohol and Highway Safety: A Special Report On Race/Ethnicity and Impaired Driving

This report reviews the state of knowledge of alcoholimpaired driving among major racial and ethnic groups living in the United States. Although it primarily focuses on the relationship between impaired driving and race/ethnicity, this review also covers patterns of alcohol use and misuse among various racial and ethnic groups within the United States. This report focuses on concepts such as *race*, *ethnicity*, and *acculturation*; discusses how the concepts are linked with health-related disparities; and describes how they relate to impaired driving. The review was performed by the Pacific Institute for Research and Evaluation, Inc., (PIRE), of Calverton, Maryland.

Findings

There is evidence suggesting that race and ethnicity play important roles in shaping the prevalence of health-related disparities such as those associated with impaired driving. Yet it is important to note that there are large variations in culture, norms, and behaviors *within* each racial/ethnic group that are larger than the differences between groups.

Defining Terms. In 1997, the Office of Management and Budget (OMB) differentiated between the concept of race (e.g., Asian, Black, Native American, White) and ethnicity (e.g., Hispanic and non-Hispanic). In this report the authors followed the basic 1997 OMB guidelines with the understanding that (a) any group other than Hispanics or Latinos are non-Hispanic; and that (b) labels such as African-American and Black, Hispanic and Latino, and Native American and American Indian could be used interchangeably. Aside from agreeing on proper group naming and ethnic membership definitions, traffic safety researchers concerned with racial/ethnic issues must face other analytical considerations. Researchers must isolate culturally related behavior from other confounding factors (such as socioeconomic status (SES), gender, or age).

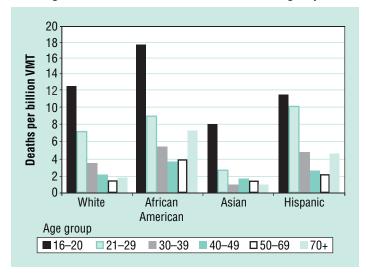
Health-Related Disparities. Members of racial and ethnic minorities in the United States, particularly African-Americans, Hispanic Americans, and Native Americans experience poorer physical health than their White and Asian

counterparts. While it generally is agreed that inequalities in socioeconomic status explain many health disparities in the United States, SES alone cannot explain some of the observed health disparities.

Alcohol Consumption. There is a strong consensus that alcohol abstention is high among Asian adults and low among Whites. Most reports also agree that abstention rates are relatively higher among African-American and Hispanic adults, but lower among Native Americans. Among those who drink, the rates of binge drinking and heavy drinking tend to be high among Native Americans, followed closely by Hispanics and Whites, with Asians showing the lowest rates of binge drinking and heavy drinking. For African-Americans, the literature shows some conflicting results. Some reports indicate African-American drinkers have relatively low rates of binge/heavy drinking; others report rates comparable to (or higher than) those for Whites or Hispanics. These latter studies postulate the notion of "two worlds" of alcohol use for both African-Americans and Hispanics, characterized by a large majority of relative light drinkers and a much smaller group of heavy/binge drinkers. Besides these generalizations, there is a large variation in patterns of drinking within each of these groups. There are variations by country of origin, by gender, by age, by acculturation level, and even by genetic factors.

Impaired Driving. Information on the role of race/ethnicity on impaired driving shows Native American and White drivers being consistently among those most at risk for alcohol impaired driving, while Asians are among the least vulnerable. For Hispanic and African-American drivers, the picture is less clear. Use of certain data and measures yield different levels of crash involvement. Based on vehicle miles traveled (VMT), African-American and Hispanic drivers appear to have higher crash involvement than White drivers. The Crash Incidence Ratio (CIR) measure suggests that the risk for Hispanic drivers is substantially higher than it is for African-American and White drivers. Figures 1 and 2 show the different outcomes.

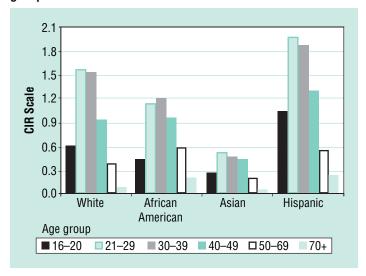
Figure 1: VMT-based measure (fatalities per VMT) of drinking drivers killed in crashes across ethnic groups



This broad picture also is affected by several moderators. Age, gender, and marital status seem to play a similar role across racial/ethnic groups, with impaired driving being more prevalent among young, single males. However, gender-related gaps in impaired driving seem to be larger among Hispanics than among Whites. Differences in the rates of impaired driving may be related to differences in the way members of different racial/ethnic groups perceive the associated risk, with Hispanics less likely to consider DUI a safety problem and/or believe they will be arrested or punished. Fatalism (the perception by the driver that the driver has no control over the likelihood of a crash), which has been reported higher among Hispanics and African-Americans than among other groups, has also been suggested as a contributor to the DUI problem. Machismo has been suggested as a reason for the much greater prevalence of impaired driving among Hispanic males (than among Hispanic females). However, there is no clear evidence to support this hypothesis.

Vulnerability to impaired driving has been shown to vary geographically, being higher around alcohol outlets, with the density of these outlets increasing in low-income neighborhoods. Similarly, the Mexican/U.S. border is a region in which Hispanics returning from Mexican bars are at a high risk of impaired driving. Rural settings also are a contributing factor to DUI. This factor

Figure 2: CIR of male drivers by age and racial/ethnic group



might be particularly relevant to Native Americans living on "dry" reservations.

Summary/Discussion

Peer-reviewed studies on whether policy changes differentially affect impaired driving in minority populations are rare. However, there is consensus about the need to develop culturally sensitive messages, though there is no clear understanding of the content of such messages. The few suggestions provided by the literature include use of peers and friends to disseminate positive information among Hispanic and White teenagers (but not as much among Asians); and the need to incorporate law enforcement officers into prevention programs, although this may not be appropriate for all groups. In addition, the literature suggests the need to find adequate channels of communication for the target audience.

How to Order

For a copy of *Alcohol and Highway Safety 2006: A Special Report on Race/Ethnicity and Impaired Driving* prepared by the Pacific Institute for Research Evaluation, write to the Office of Behavioral Safety Research, NHTSA, NTI-130, 1200 New Jersey Avenue SE., Washington, DC 20590, or send a fax to 202-366-7394, or download from www.nhtsa. gov. Dr. Dereece Smither was the project manager.



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