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**NIAAA**

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**National Institute on Alcohol Abuse and Alcoholism  
National Institutes of Health  
Department of Health and Human Services**

# **The Prevalence of Drinking and Driving United States, 2001-2002**

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# OBJECTIVES

- To present national data on the 12-month prevalence of drinking and driving
- To identify high-risk subgroups and examine sociodemographic correlates

# IMPORTANCE

- Drinking and driving among strongest predictors of traffic fatalities worldwide
- Major gap in our knowledge of drinking and driving from passengers' perspective
- $\approx$  40% of traffic fatalities alcohol-related
- Steady decline in alcohol-related traffic fatalities stalled/reversed in past few years

# National Epidemiologic Survey on Alcohol and Related Conditions 2001 - 2002



- N= 43,093.
- Nationally-representative survey.
- Response rate: 81%.
- Oversampling of Blacks, Hispanics/ Latinos, young adults.
- Longitudinal: second wave fielded July 2004.
- DSM-IV based diagnoses of substance use, mood, anxiety and personality disorders.

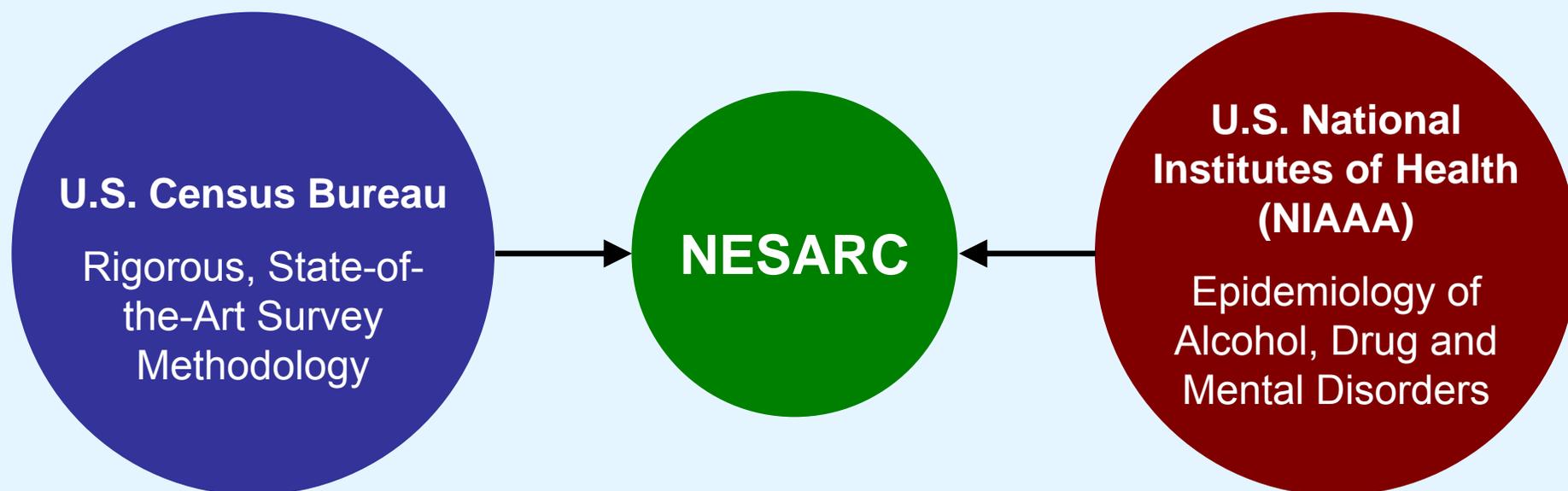
# Unique Aspects of the NESARC

- Largest alcohol and psychiatric comorbidity survey ever conducted in the U.S. and, in fact, worldwide (n=43,093)
- The large sample size of the NESARC, with its high data quality in terms of response rates, coverage and precision of the survey estimates, allowed for:
  - Assessment of current (past year) alcohol, drug and mental disorders
  - Examination of rates of disorder by important sociodemographic variables (especially for Native Americans, Asian and Hispanic subgroups)

# Unique Aspects of the NESARC

- Included the largest proportion of Blacks and Hispanics/Latinos of any survey ever conducted in the United States
- Included a nationally representative sample of college students
- First national survey in the U.S. to measure DSM-IV personality disorders

# Unique Aspects of the NESARC



**NIAAA's  
Alcohol Use Disorder and  
Associated Disabilities  
Interview Schedule — DSM-IV  
Version (AUDADIS-IV)**

# Reliability Studies of the AUDADIS-IV

- Five test-retest reliability studies in U.S. general population samples:
  - Atlanta, Georgia (n=450).
  - Essex County, New Jersey (n=500).
  - Tampa, Florida (n=400).
  - Concurrent with NESARC-Wave 1 (n=2,592).
  - Concurrent with NESARC-Wave 2 (n=2,500).
- Two test-retest reliability studies in U.S. clinical samples:
  - Primary care sample (n=169).
  - Substance-using sample (n=296).
- Three test-retest reliability studies in other countries (n=800).

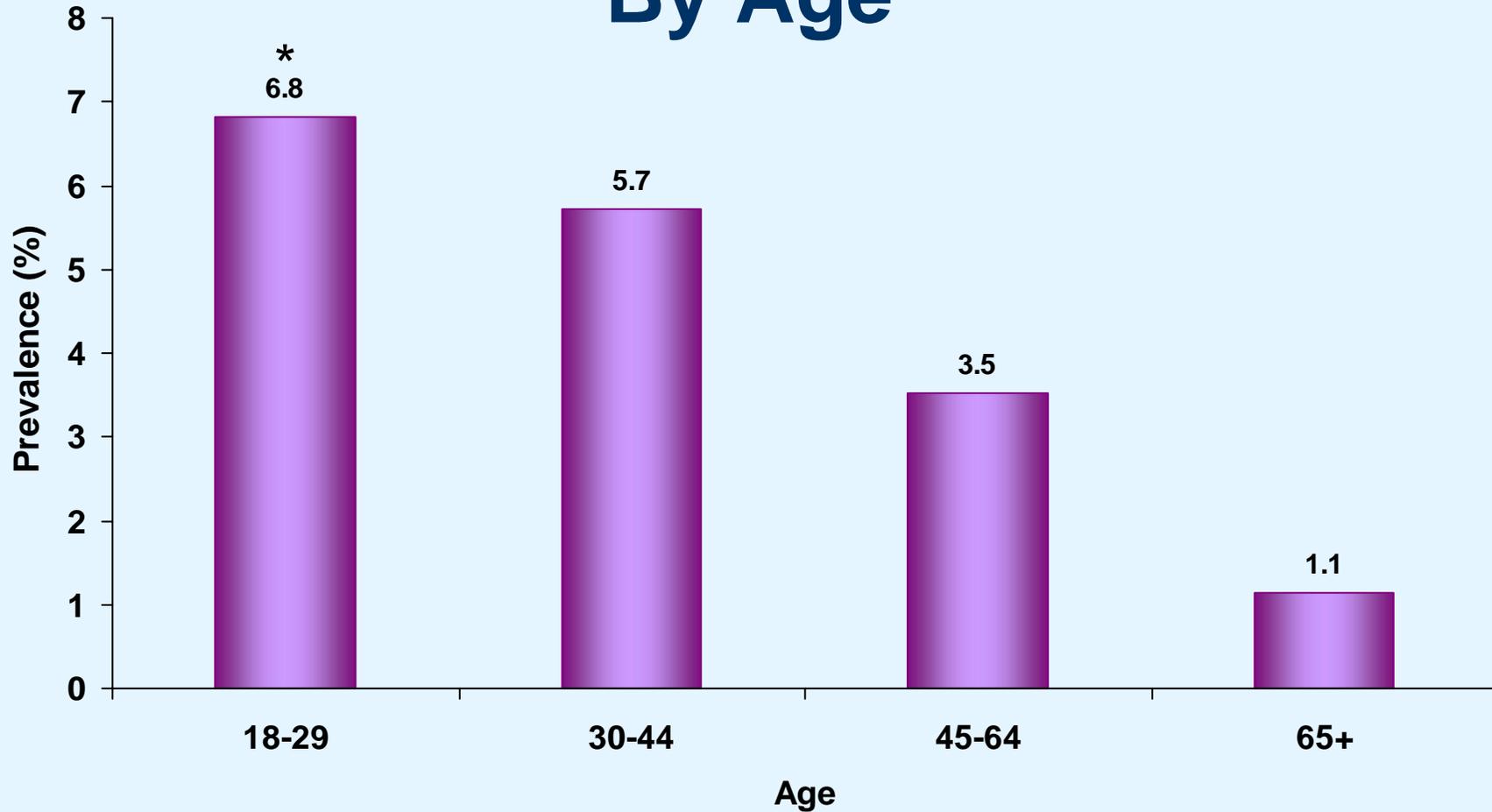
# Validity Studies of the AUDADIS-IV

- Criterion-oriented validity — Three clinical reappraisal studies conducted in the general population (n=450 each)
  - Compared the AUDADIS-IV with clinical interviews administered by psychiatrists
- Over 25 analytic studies:
  - Convergent validity
  - Population validity
  - Predictive validity
  - Validation through family history
  - Validation through follow-up
  - Construct validation

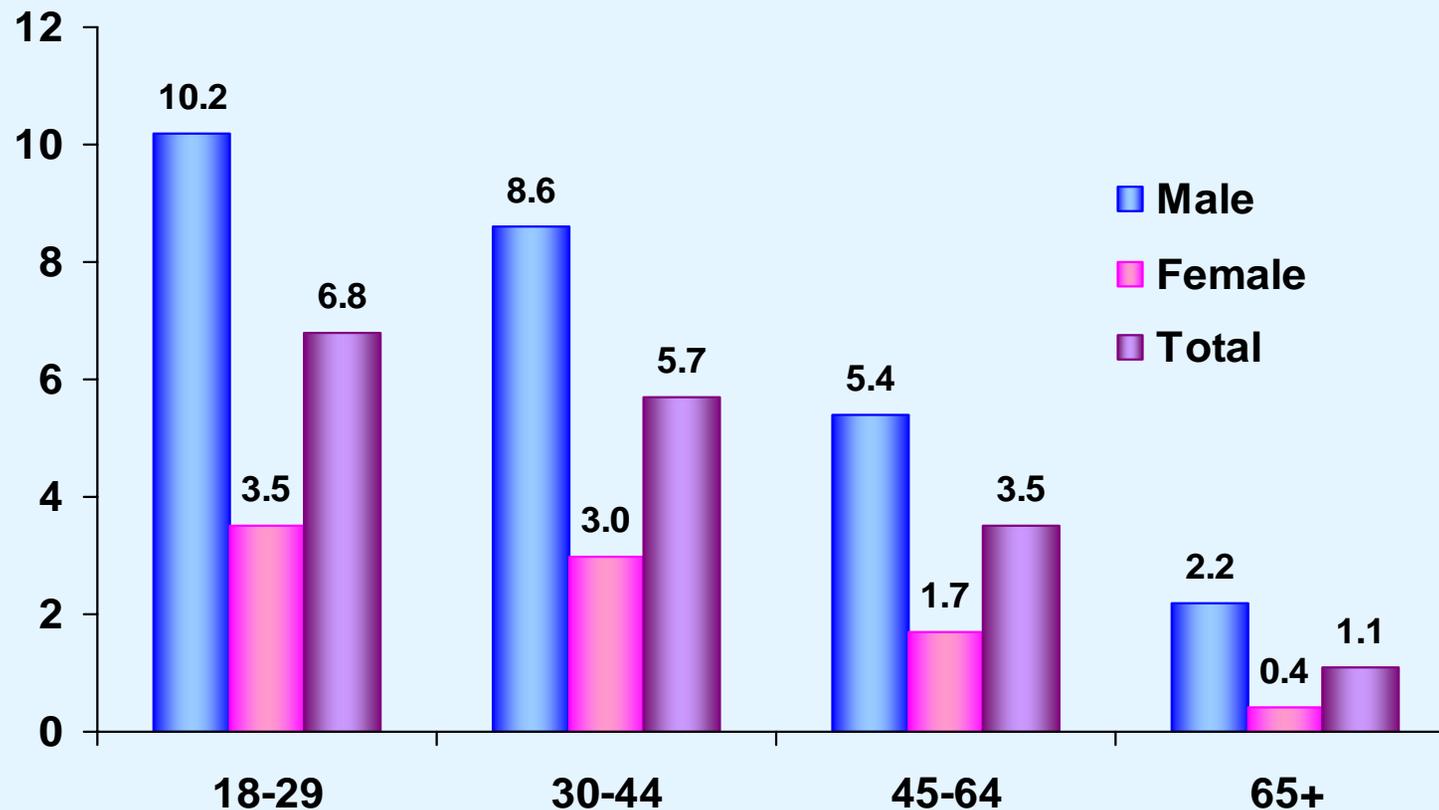
# MEASURES OF DRINKING AND DRIVING

- DRIVER-based alcohol-impaired driving
  - Driving while drinking
  - Driving after having too much to drink
- PASSENGER-based alcohol-impaired driving
  - Riding with a drinking driver
  - Riding as a passenger while drinking

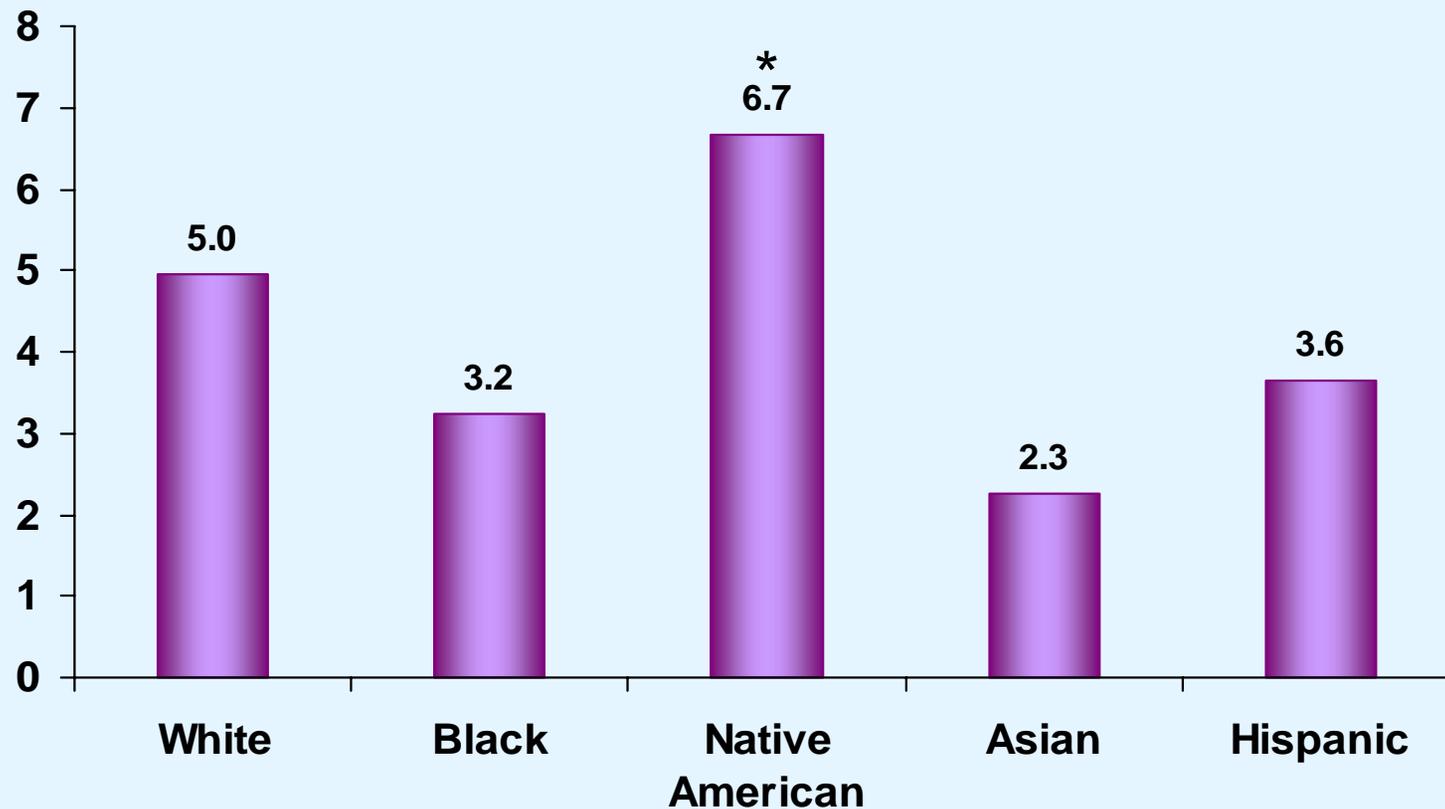
# Prevalence of Driving While Drinking By Age



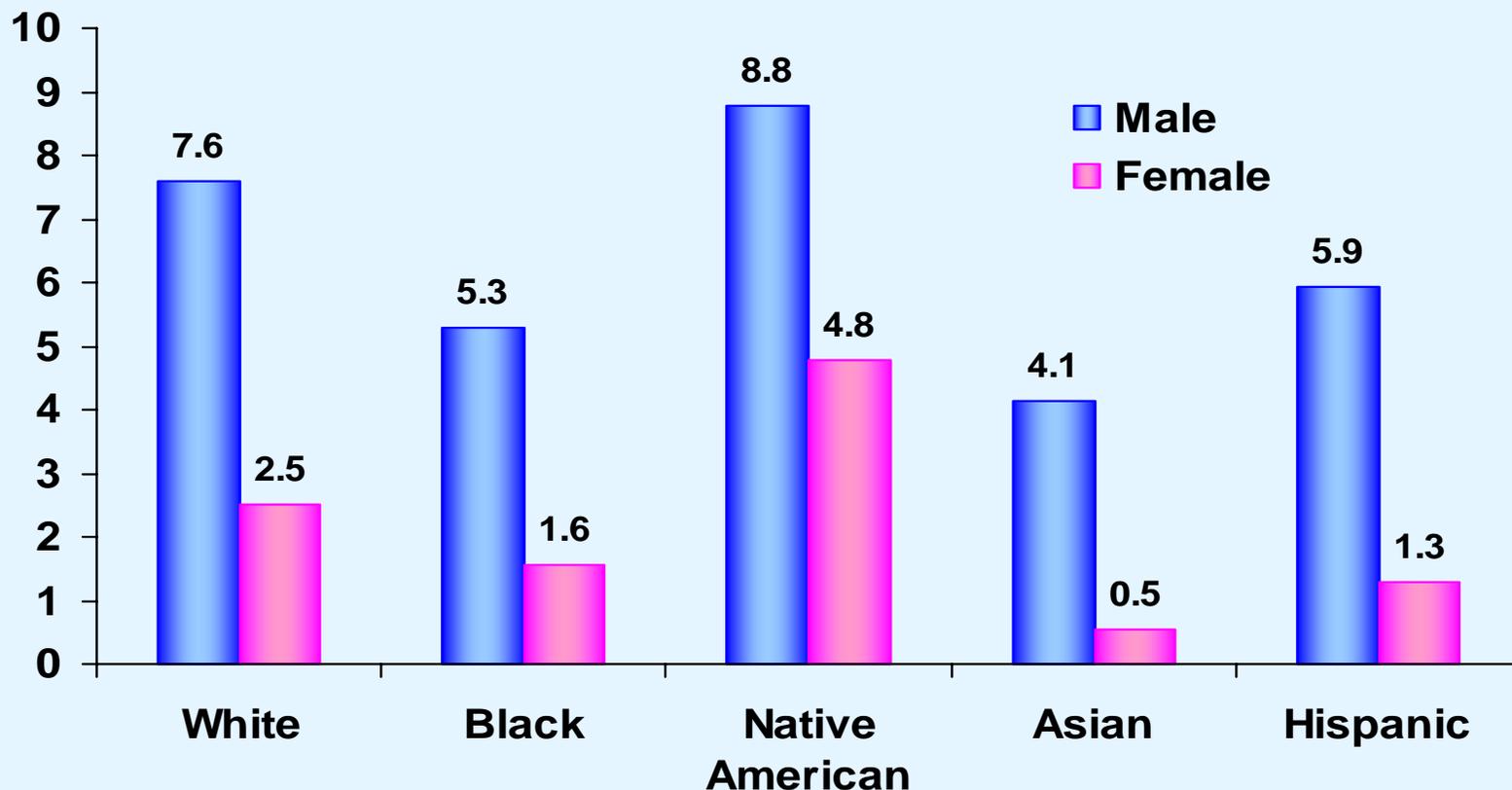
# Prevalence of Driving While Drinking By Age and Sex



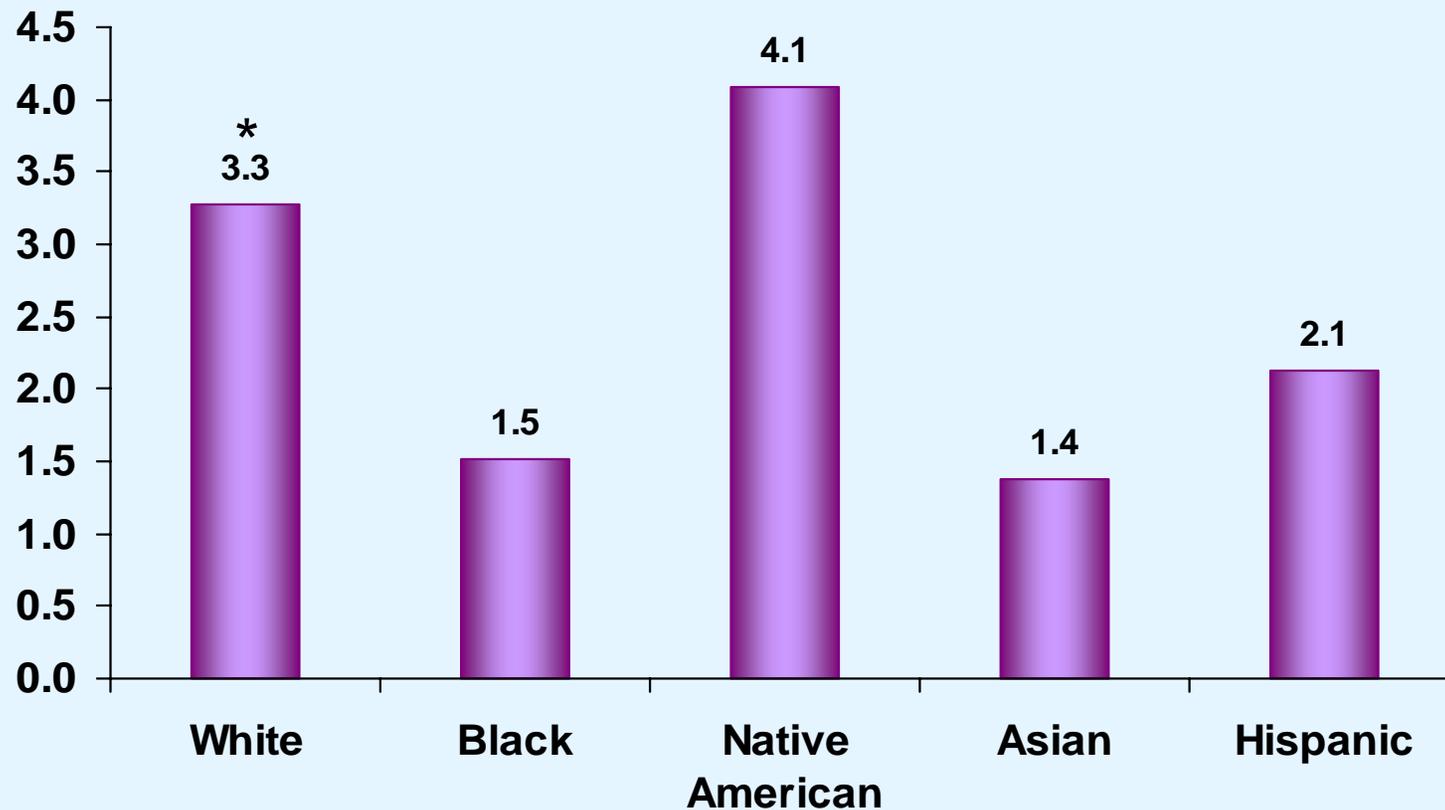
# Prevalence of Driving While Drinking By Race-ethnicity



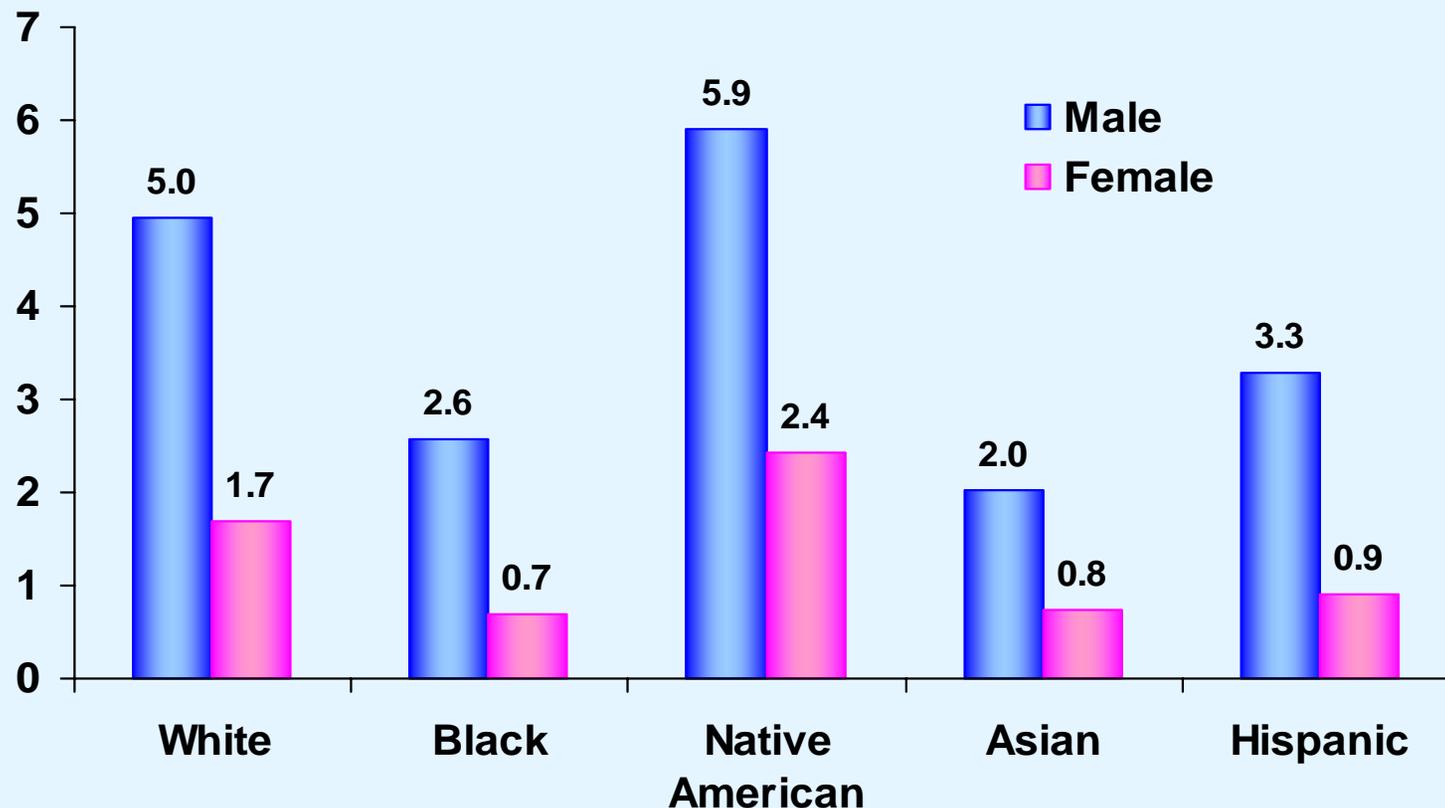
# Prevalence of Driving While Drinking By Race-ethnicity and Sex



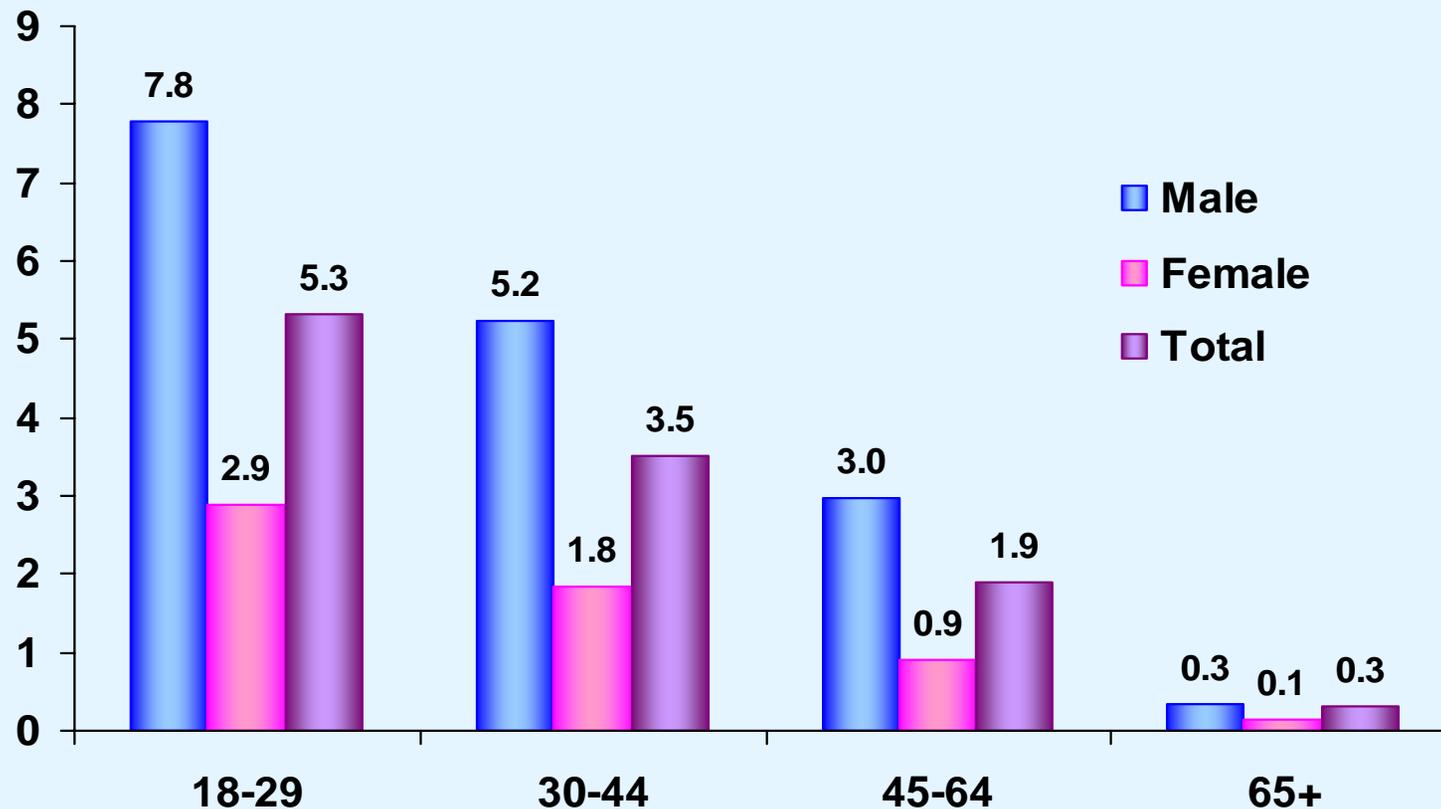
# Prevalence of Driving After Drinking Too Much By Race-ethnicity



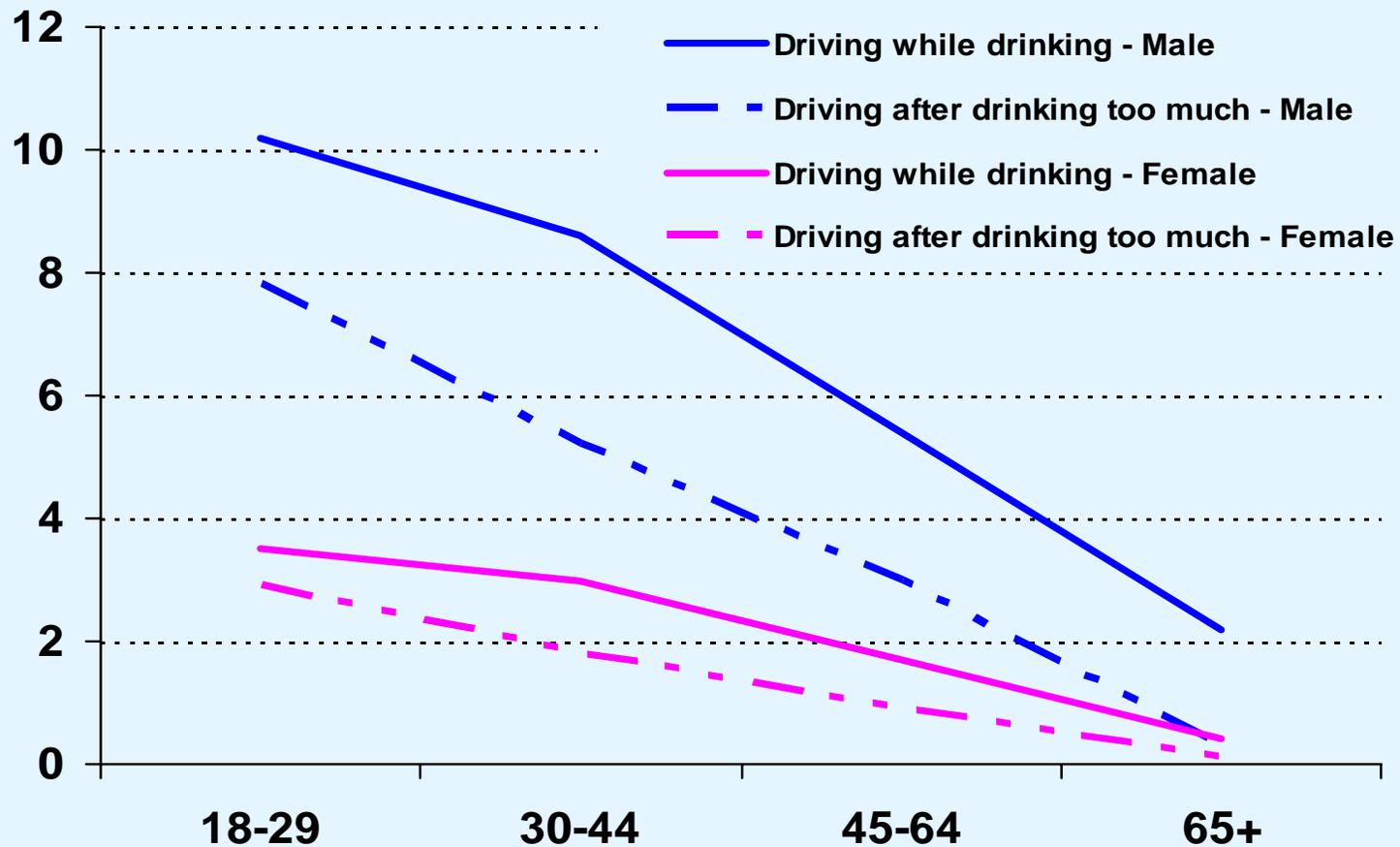
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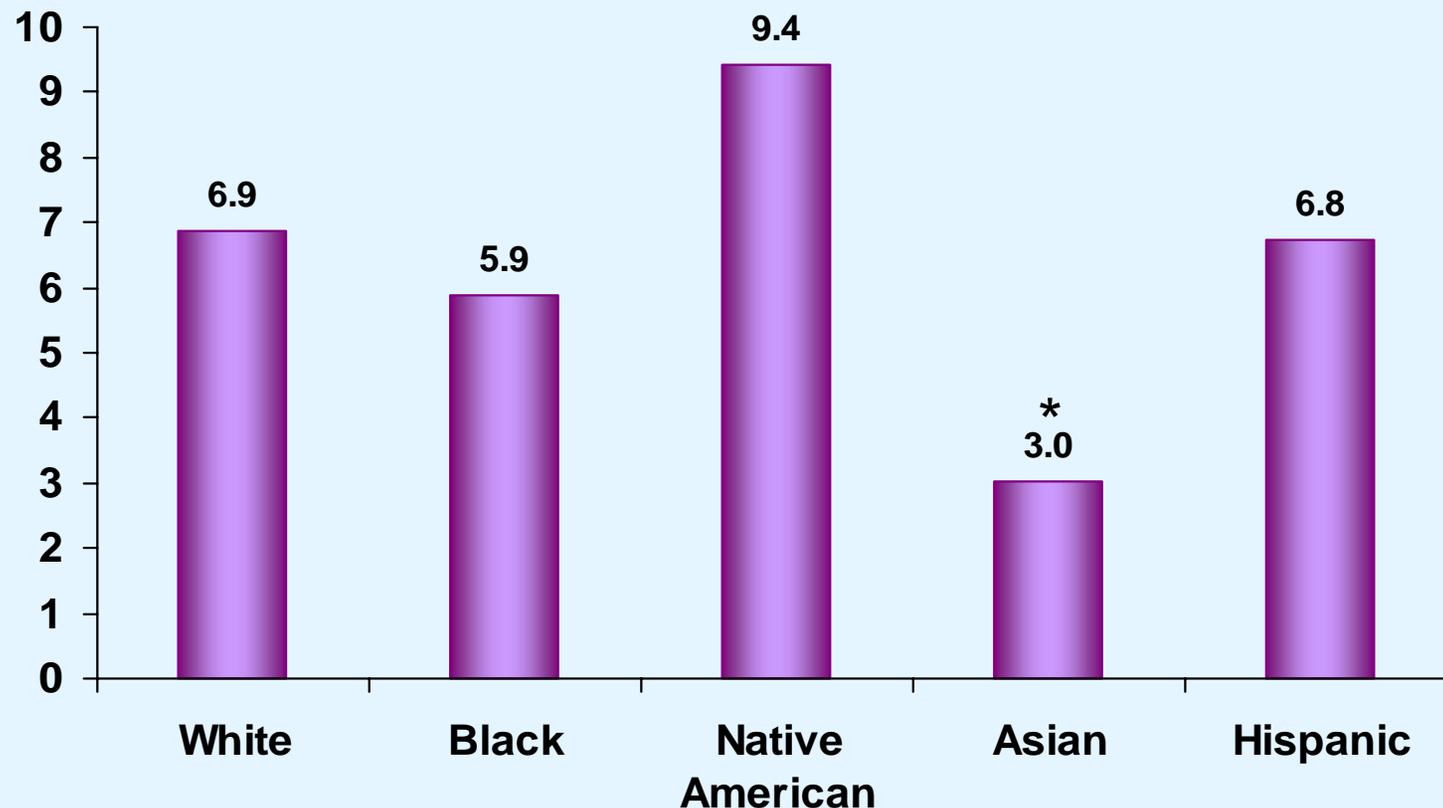
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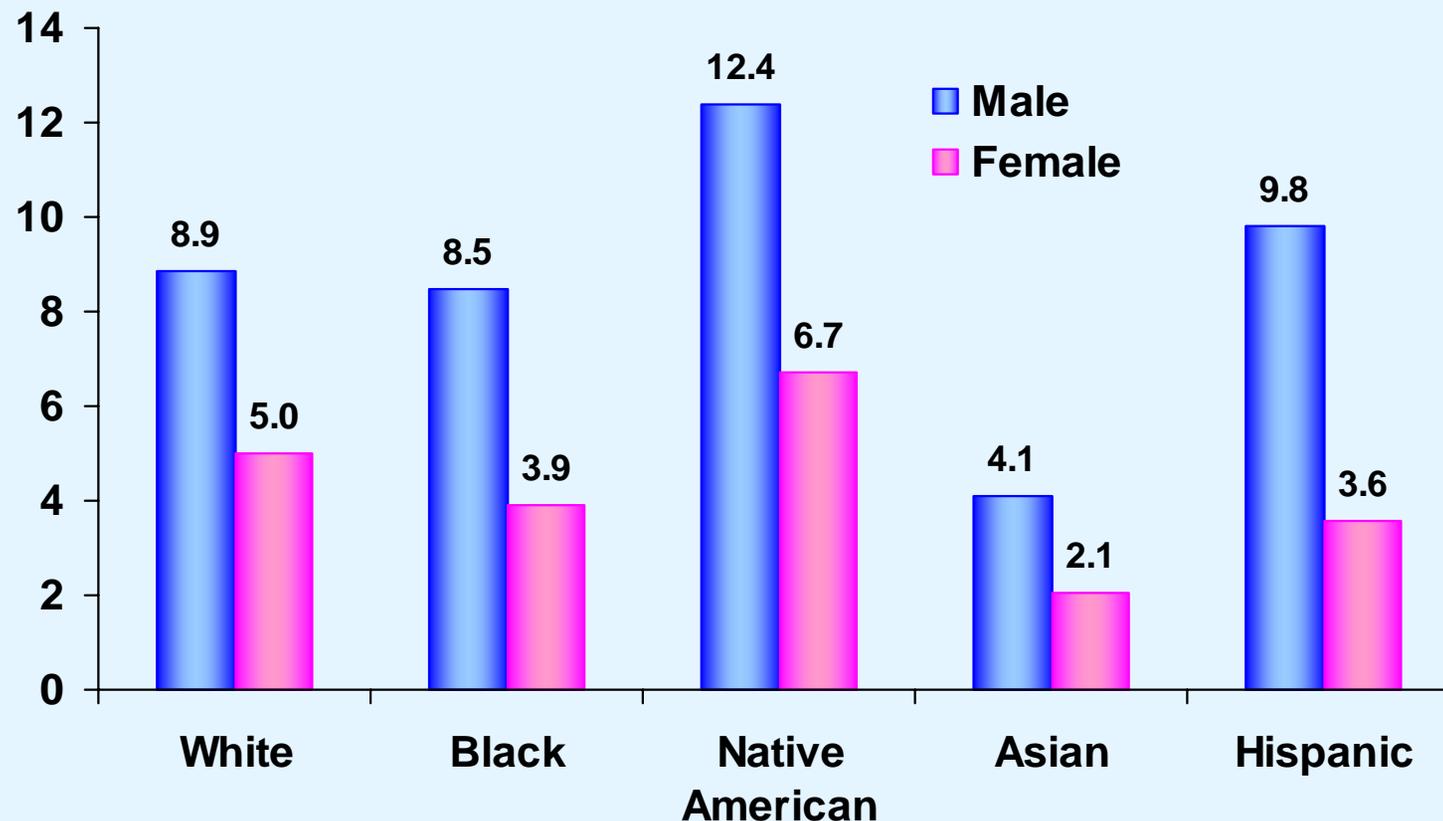
# 12-Month Prevalence of Driver-Based Risky Driving Behaviors By Age and Sex



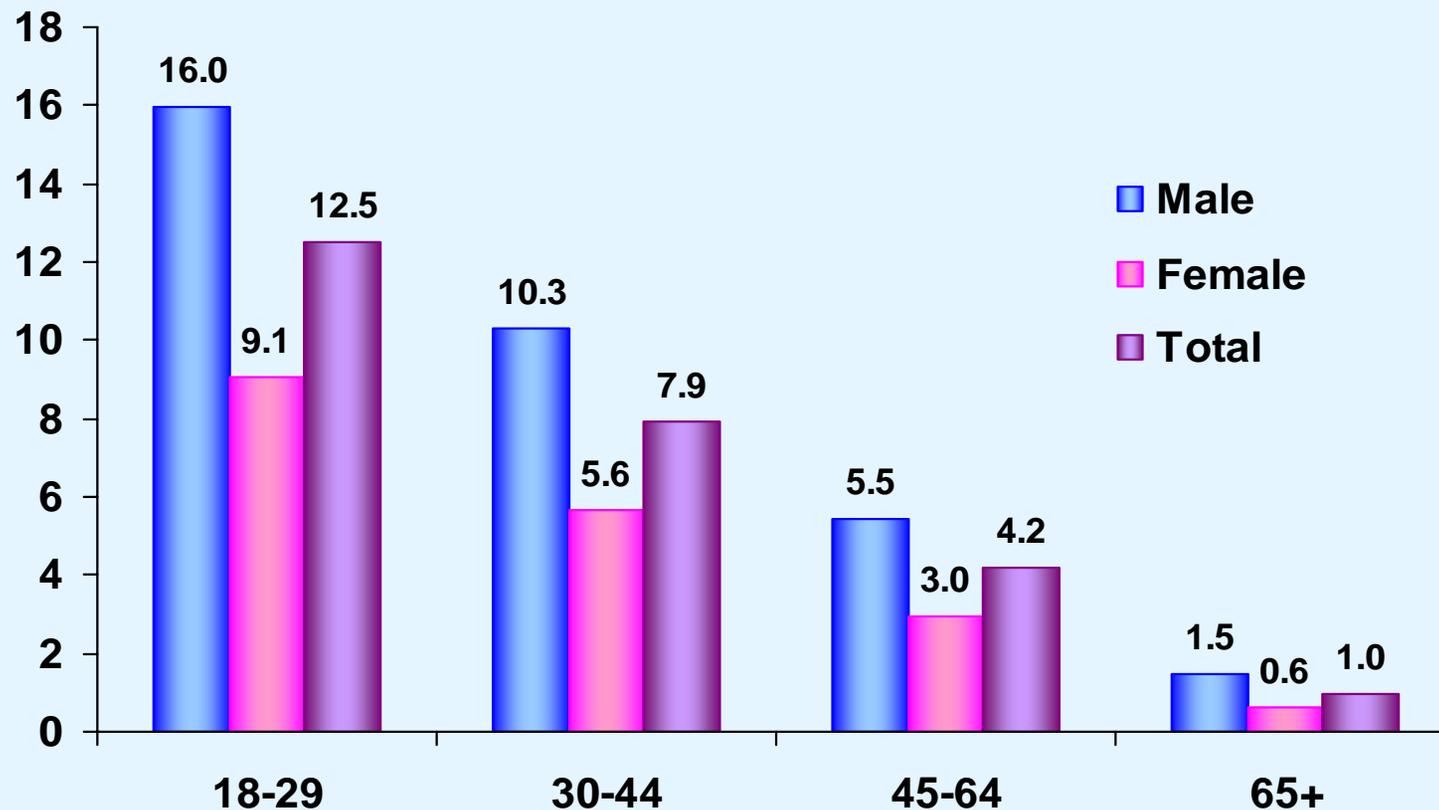
# Prevalence of Riding with a Drinking Driver By Race-ethnicity



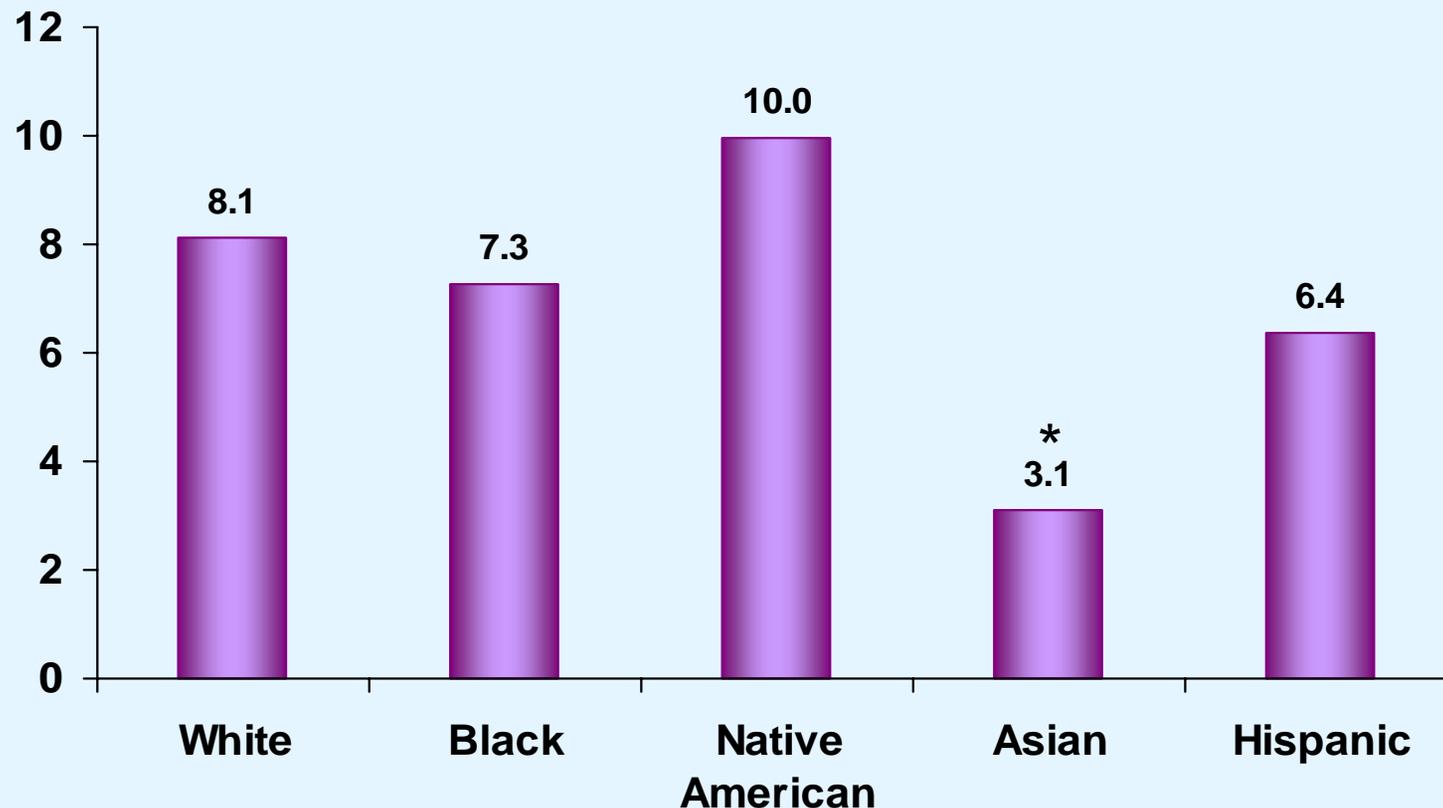
# Prevalence of Riding with a Drinking Driver By Race-ethnicity and Sex



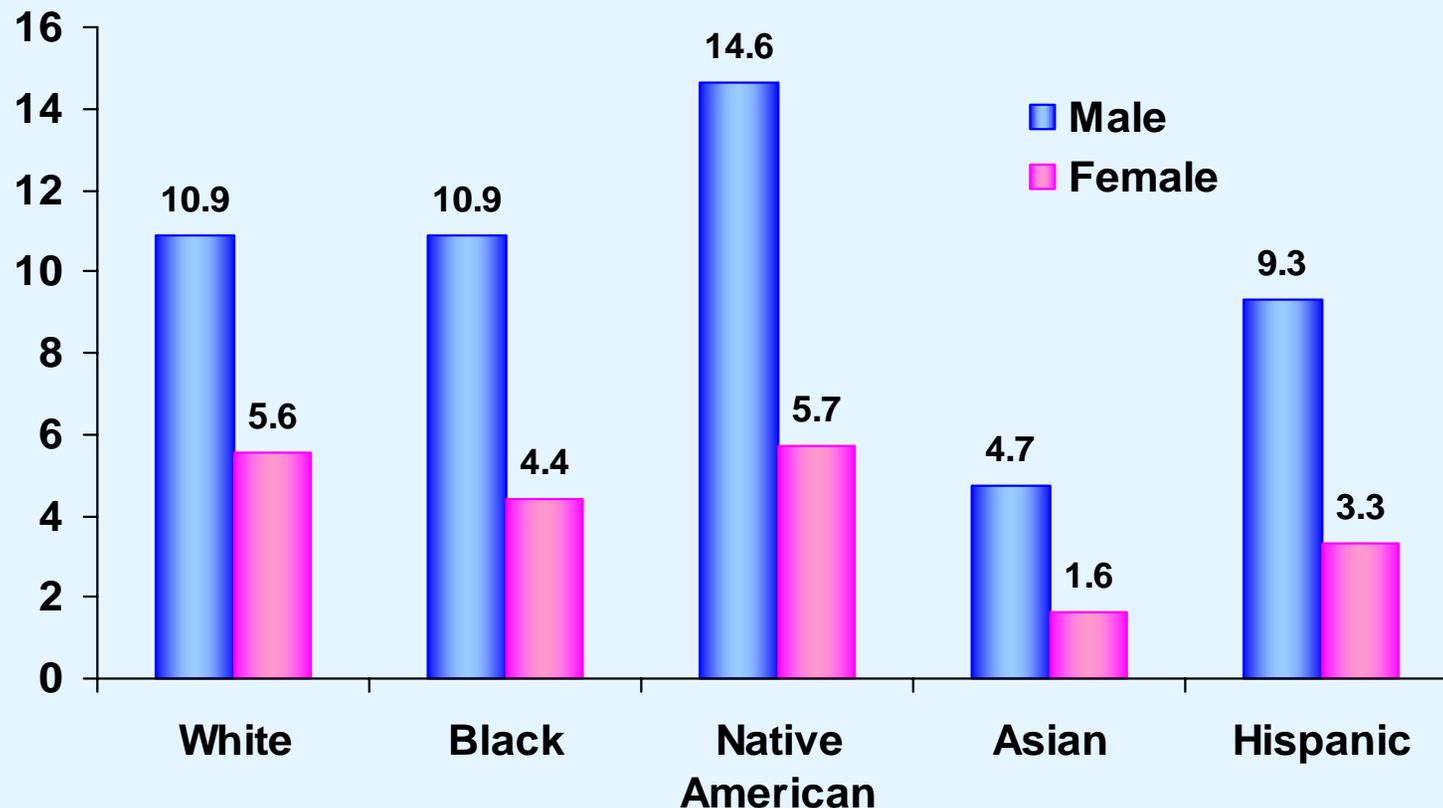
# Prevalence of Riding with a Drinking Driver By Age and Sex



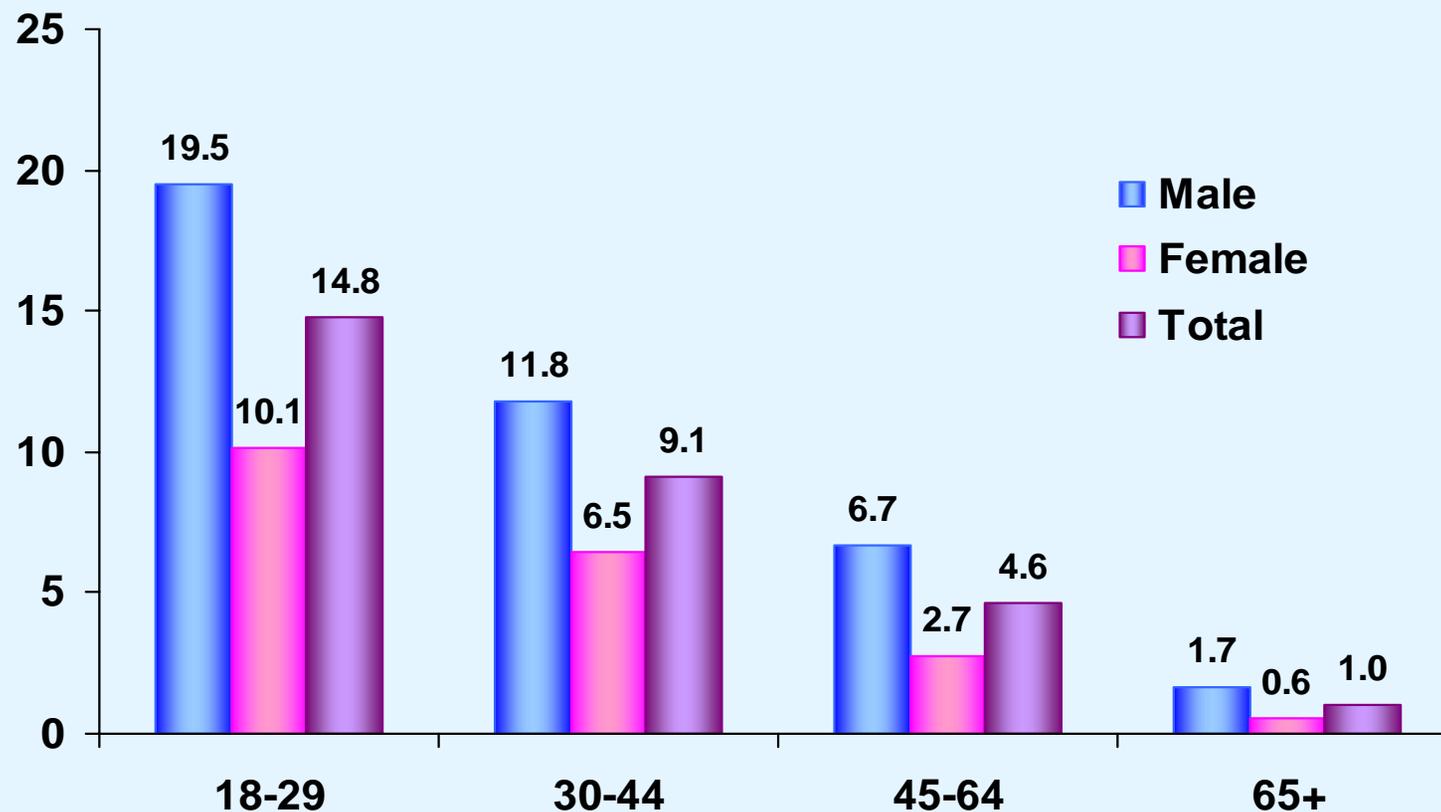
# Prevalence of Riding While Drinking By Race-ethnicity



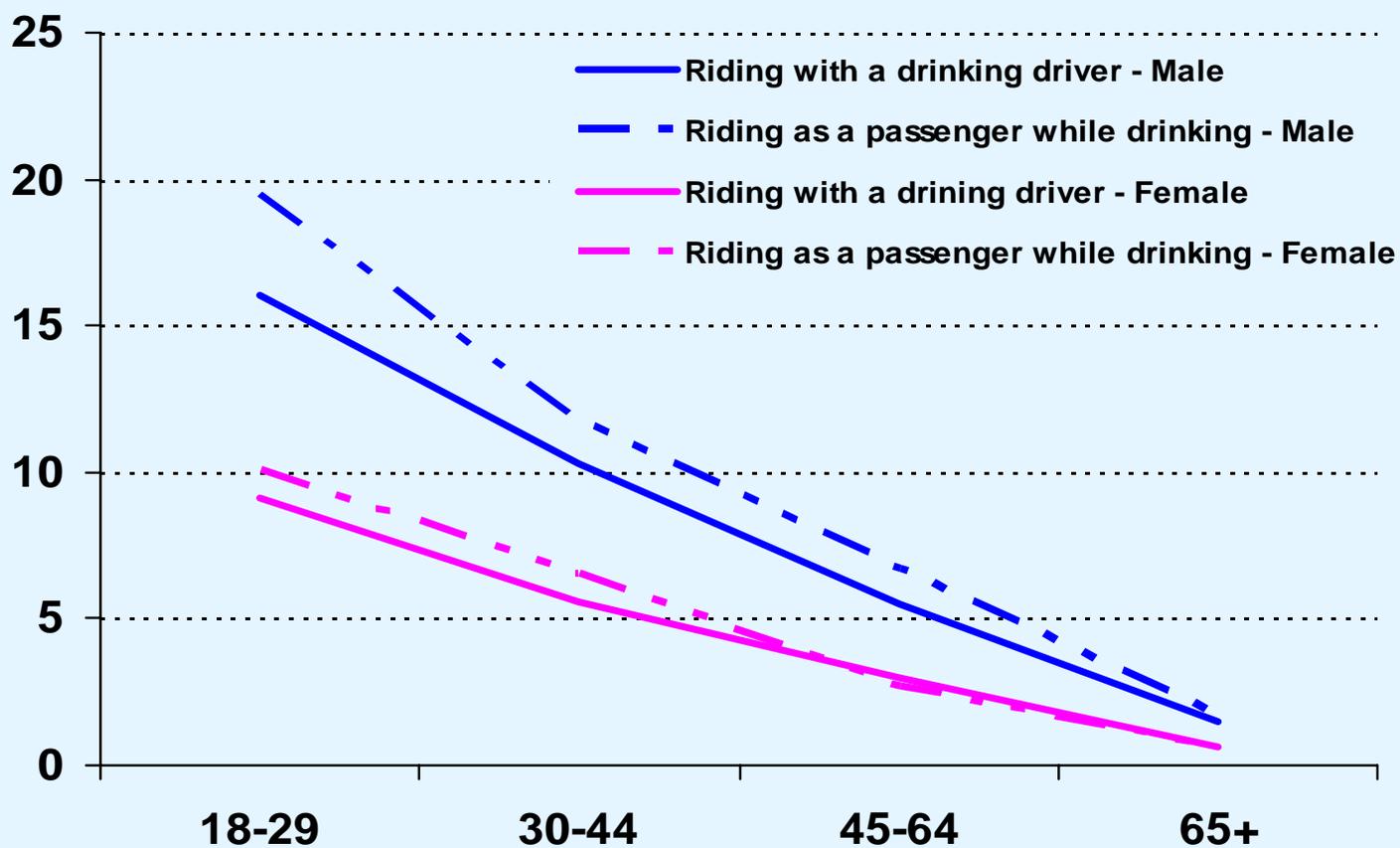
# Prevalence of Riding While Drinking By Race-ethnicity and Sex



# Prevalence of Riding While Drinking By Age and Sex



# 12-Month Prevalence of Passenger-Based Risky Driving Behaviors By Age and Sex



# Prevalence of Driving While Drinking by Age – Male



# Prevalence of Driving While Drinking by Age – Female



# SUMMARY OF RESULTS:

- 23.4 million (11.3%) American adults reported engaging in at least one of the four risky drinking-driving behaviors in 2001-2002
- Prevalence rates of drinking-and-driving were 2- to 3-fold greater among males than among females

# SUMMARY OF RESULTS:

- Alcohol-impaired driving and riding with a drinking driver continued to be pervasive among youths and young adults
- Prevalence of drinking-driving behaviors highest among Native Americans and lowest among Asian Americans

# SUMMARY OF RESULTS:

- > 80% of individuals engaging in risky drinking practices in the past year were binge drinkers
- 30-43% were alcohol dependent as assessed by DSM-IV criteria.
- These findings suggest a more comprehensive approach to reduce alcohol-impaired driving behaviors by focusing on reductions in binge drinking and alcohol dependence.
- The findings also underscore the need for screening for binge drinking and dependence, especially among youth and young adults, and the development of relevant age-specific intervention programs.

# CONCLUSIONS

- Male risky driving behaviors coupled with their greater rates of drinking-and-driving contributed to the overwhelming male traffic fatality rate (78%)
- The close link between bingeing and drinking-driving, and elevated rates in rural areas warrant further investigation

# CONCLUSIONS

- Native Americans had consistently greater rates of risky drinking and driving practices compared with other race-ethnic subgroups of the population (even though these elevated rates did not always reach the statistically significant level).
- Factors affecting the race-ethnic differential are complex and further research in this area is warranted.

# CONCLUSIONS

- With the exception of the riding as a passenger while drinking measure, all other risky drinking practices were significantly associated with living in the Midwest region relative to other regions of the country.
- These findings underscore the need to identify the determinants of the drinking and driving phenomena in rural regions of the country to curtail road crash injuries and fatalities.

# CONCLUSIONS

- Very little is known regarding the prevalence and determinants of passenger-based drinking and driving behaviors.
- Passenger-based drinking and driving behaviors may be a precursor to driver-based drinking and driving practices.
- Attention to risk factors of passenger-based measures may be important to future prevention and intervention efforts.