THE BURDEN OF ADULT ALCOHOL USE IN INDIANA 2012

GLOBAL HEALTH INSTITUTE

BRFSS

Acknowledgement: This work was partially supported by a grant from the National Institute on Alcohol Abuse and Alcoholism R01AA017890-03.

THE BURDEN OF ADULT ALCOHOL USE IN INDIANA

Quick Facts

An estimated 2.3 million adults in Indiana report being a current drinker.

Over time, excessive alcohol use can lead to the development of chronic diseases, neurological impairments and social problems (CDC, 2012).

The harmful use of alcohol results in 2.5 million deaths globally each year (WHO, 2011).

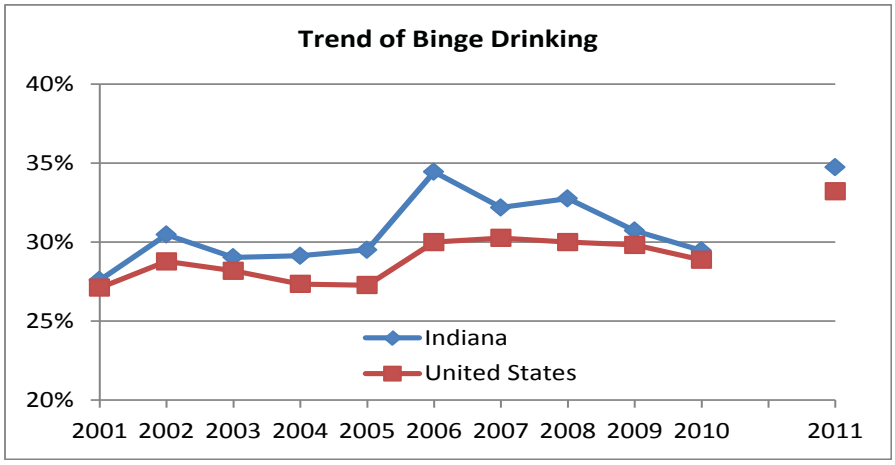
PERSPECTIVE

- 51.6% of the adult population of Indiana, or about 2.3 million, report being a current alcohol drinker; of which, 34.7% are binge drinkers[1] and 11.8% are heavy drinkers[2].
- Indiana has the 32nd highest percentage of binge drinkers and the 39th highest percentage of heavy drinkers among the 50 states and the District of Columbia.
- Adults aged 22-25 are more likely to binge drink (38.0%) and to drink heavily (13.7%).
- More males report being either heavy or binge drinkers compared to females.
- Excessive alcohol use[3] has immediate effects that increase the risk of many harmful health conditions such as unintentional injuries, violence, risky sexual behaviors, alcohol poisoning, and pregnancy complications (CDC, 2012).
- Over time, excessive alcohol use can lead to the development of chronic diseases, neurological impairments, and social problems (CDC, 2012).

BINGE DRINKING

Trend

The following figure[4] displays the trend in the percentage of adults in Indiana and the United States who report being a binge drinker.



DEMOGRAPHICAL BREAKDOWN

SEX	23.4% of males report being a binge drinker compared to 12.5% of females.
AGE	19.6% of 18-21 year olds, 38.0% of 22-25 year olds, 24.1% of 26-44 year olds, 14.8% of 45-64 year olds, and 3.5% of 65+ year olds report being a binge drinker.
RACE/ETHNICITY	17.3% of white, non-Hispanic adults, 18.0% of black, non-Hispanic adults, 23.4% of Hispanic adults, and 19.6% of other adults report being a binge drinker.
INCOME	13.3% of adults with annual household incomes of less than $15,000, 16.5% of those with household incomes between $15,000-$24,999, 19.3% of those with household incomes between $25,000-$49,999, 21.3% of those with household incomes between $50,000-$74,999, and 20.4% of those with household income over $75,000 report being a binge drinker.
EDUCATION	15.7% of adults with less than a high school education, 18.2% of those with a high school education, 19.3% of those with some college education, and 16.3% of those with a college education report being a binge drinker.

THE BURDEN OF ADULT ALCOHOL USE IN INDIANA

Quick Facts

Drinking too much, including binge drinking, cost the United States $223.5 billion in 2006, or $1.90 a drink, from losses in productivity, health care, crime, and other expenses (CDC, 2012).

Binge drinking cost federal, state, and local governments about 62 cents per drink in 2006, while federal and state income from taxes on alcohol totaled only about 12 cents per drink (CDC, 2012).

BINGE DRINKING

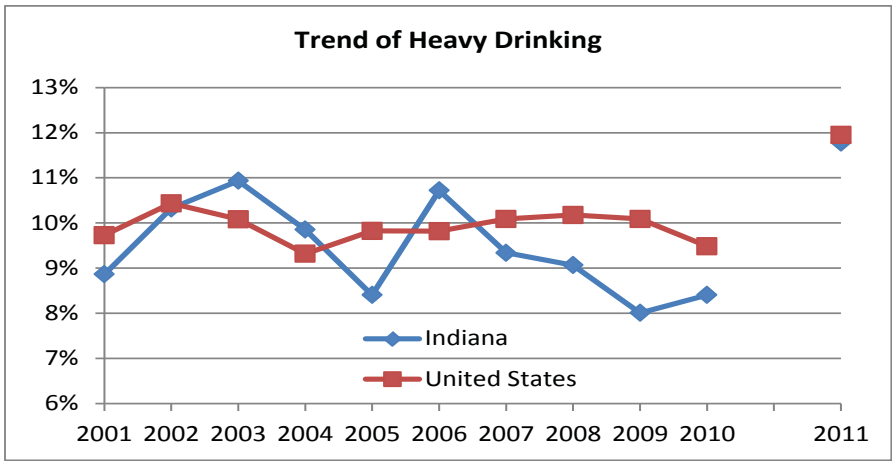
STATISTICAL ANALYSIS

SEX	The male and female groups are significantly different from each other.
AGE	All age groups are significantly different from each other, except the 18-21 year old group is not significantly different from the 26-44 and 45-64 year old groups.
RACE/ETHNICITY	The Hispanic group is significantly different from the Non-Hispanic group. No other race/ethnicity groups are significantly different from each other.
INCOME	The less than $15,000 group is significantly different from all the income groups except the $15,000-24,999 group. No other income groups are significantly different from each other.
EDUCATION	No education groups are significantly different from each other.

HEAVY DRINKING

TREND

The following figure[4] displays the trend in the percentage of adults in Indiana and the United States who report being a heavy drinker.



DEMOGRAPHICAL BREAKDOWN

SEX	8.5% of males report being a heavy drinker compared to 3.8% of females.
AGE	4.9% of 18-21 year olds, 13.7% of 22-25 year olds, 7.1% of 26-44 year olds, 5.6% of 45-64 year olds, and 2.8% of 65+ year olds report being a binge drinker.
RACE/ETHNICITY	6.0% of white, non-Hispanic adults, 2.9% of black, non-Hispanic adults, 10.0% of Hispanic adults, and 9.4% of other adults report being a heavy drinker.
INCOME	5.7% of adults with annual household incomes of less than $15,000, 6.1% of those with household incomes between $15,000-$24,999, 6.4% of those with household incomes between $25,000-$49,999, 7.4% of those with household incomes between $50,000-$74,999, and 6.1% of those with household incomes over $75,000 report being a heavy drinker.
EDUCATION	5.4% of adults with less than a high school education, 5.9% of those with a high school education, 6.4% of those with some college education, and 6.1% of those with a college education report being a heavy drinker.

THE BURDEN OF ADULT ALCOHOL USE IN INDIANA

Quick Facts

More than half of the alcohol consumed by adults in the United States is in the form of binge drinks (CDC, 2012).

After age 25, the percentage of adults in Indiana who report being either binge or heavy drinkers decreases as age increases.

The health, safety and socioeconomic problems attributable to alcohol can be effectively reduced (WHO, 2011).

HEAVY DRINKING

STATISITCAL ANALYSIS

SEX	The male and female groups are significantly different from each other.
AGE	The 65+ year old group is significantly different from all other age groups, except for the 18-21 year old group. The 22-25 year old group is significantly different from the 18-21 and 45-64 year old groups. No other age groups are significantly different from each other.
RACE/ETHNICITY	The black non-Hispanic group is significantly different from all other race/ethnicity groups. No other race/ethnicity groups are significantly different from each other. The Hispanic group is significantly different from the non-Hispanic group.
INCOME	No income groups are significantly different from each other.
EDUCATION	No education groups are significantly different from each other.

APPENDIX

FOOTNOTES

[1]Binge drinking is defined as: males having five or more drinks on one occasion, females having four or more drinks on one occasion.

[2]Heavy drinking is defined as: adult men having more than two drinks per day and adult women having more than one drink per day.

[3]Excessive drinking includes heavy drinking, binge drinking, and any drinking by pregnant women or underage youth.

[4]Beginning in 2011, the CDC made a methodological change to their data collection procedures for BRFSS. Therefore, data prior to 2011 cannot be accurately compared with 2011 and subsequent year's data (CDC, 2012).

STATISTICAL ANALYSIS

Tests for statistically significant differences across the groups listed below were performed at the 5% significance level. Tests comparing two groups, for example: male vs female, were performed using a two sample z-test for proportions. For the categories that utilize multiple groups, for example: age, the Marascuilo procedure was employed to perform pairwise comparisons. The time series data were not tested due to a methodological change made by the CDC detailed in the footnotes section.

BIBLIOGRAPHY

Centers for Disease Control and Prevention. (2012). Alcohol Use and Health Fact Sheets. Retrieved from http://www.cdc.gov/alcohol/fact-sheets/alcohol-use.htm

The World Health Organization. (2012). Alcohol Factsheet. Retrieved from http://www.who.int/mediacentre fact sheets/fs349/en/index.html

ABOUT THE GLOBAL HEALTH INSTITUTE

Ball State University's Global Health Institute (GHI) focuses on various issues related to the function of health care systems and the promotion of health. The interdisciplinary institute concentrates on: public and community health; public, business and science policy; information systems and communication technology; architecture and design. The study of health-related issues is a key research and educational priority for Ball State.

The Global Health Institute's mission is to encourage interdisciplinary investigation of critical issues that impact local and global health.

Director: Kerry Anne McGeary, Ph.D.
(765) 285-GHI0 (4440)
globalhealth@bsu.edu

Research Assistants: Ian Patrick Reid
Senzeni Mhlanga-Fichani