Socio-Cultural Perspectives on Drinking

I. Patterns of Use
II. Measures of Problem Drinking
III. Societal Costs and “2nd Hand Effects”
IV. Causes of Use and Misuse
V. Prevention Strategies and Issues
I. Patterns of Use

For example:

Age
Gender
Race
College/NonCollege
Type of Alcohol
Skewed concentration
U.S./International
Alcohol Sales in the United States

Purchases of alcoholic beverages represent over 50% of total dollars spent on beverages in the United States.

While 61% of U.S. Adults Are Current Drinkers . . .

- Former Regular Drinker: 6%
- Former Infrequent Drinker: 8%
- Current Drinker: 61%
- Lifetime Abstainer: 25%

. . . the Majority Are Infrequent or Light Drinkers

- Moderate Drinker: 24%
- Light Drinker: 48%
- Infrequent Drinker: 20%
- Heavier Drinker: 8%

NOTES: Data are annual averages from the 2005 to 2007 National Health Interview Survey (NHIS), a survey of the U.S. civilian noninstitutionalized population collected using computer-assisted personal interviews of adults aged 18 years and older. Lifetime Abstainer: had fewer than 12 drinks in entire lifetime; Former Infrequent Drinker: had 12 drinks or more in lifetime, but never as many as 12 drinks in a single year, and had no drinks in the past year; Former Regular Drinker: had 12 drinks or more in one year, but no drinks in the past year; Current Drinker: had at least 12 drinks in lifetime and at least 1 drink in the past year; Infrequent Drinker: had at least 12 drinks in lifetime and 1-11 drinks in past year; Light Drinker: had 3 drinks or less per week, on average, in the past year; Moderate Drinker: had more than 3 and up to and including 14 drinks per week for men, and more than 3 and up to and including 7 drinks per week for women, on average, in the past year; Heavier Drinker: had more than 14 drinks per week for men and more than 7 drinks per week for women, on average, in the past year.

Percentage of U.S. 12th Grade Students Reporting Past Month Use of Top Ten Drugs, 2004 (N=15,222 12th graders in 128 schools)

- Alcohol: 48.0%
- Cigarettes: 25.0%
- Marijuana: 19.9%
- Smokeless Tobacco: 6.7%
- Amphetamines: 4.6%
- Other Narcotics: 4.3%
- Tranquilizers: 3.1%
- Sedatives: 2.9%
- Cocaine: 2.3%
- Hallucinogens: 1.9%

A. Alcohol is the drug of choice among adolescents.
Estimated Number of Arrests in the United States, 2011 (Top Ten Offenses)

Drug Abuse Violations: 1,531,251
Larceny-Theft: 1,264,986
Driving Under the Influence: 1,215,077
Disorderly Conduct: 582,158
Drunkenness: 534,218
Liquor Laws: 500,648
Aggravated Assault: 397,707
Burglary: 296,707
Vandalism: 237,638
Fraud: 168,217

Student Alcohol Expenditures

(Annual Expenses in $ Billions)

$5.5

$6.0

$4.0

$2.0

$0.0

Student Alcohol

$1.7

College Libraries

$1.6

Scholarships & Fellowships

Figure 1. Total per capita ethanol consumption, United States, 1935–94.
Trends in Alcohol Use, 1850–1997

Annual per Capita Consumption in Gallons of Ethanol

- 1860: Civil War
- 1874: Women’s Christian Temperance Union formed
- 1897: Carrie Nation begins anti-saloon campaign
- 1914–1918: World War I
- 1919–1922: Prohibition
- 1930: The Great Depression
- 1939: Alcoholics Anonymous founded
- 1939–1945: World War II
- 1950–1953: Korean War
- 1954: Alcoholism declared a disease by the AMA
- Early 1970s: Drinking age lowered in 29 states
- 1980: Mothers Against Drunk Driving (MADD) founded
- 1984: National Minimum Drinking Age Act
- 1987: All states comply with age 21 drinking requirement
- 1989: Alcohol implicated in Exxon Valdez oil spill off Alaska
- 1992: Widespread rates of binge drinking documented in first College Alcohol Study by Harvard
- 1994: Naltrexone approved for treatment of alcoholism
- 1996: Radio and TV advertising ban reversed by liquor industry
- 1999: National Alcohol Screening Day launched by Surgeon General
- 2000: Low-sugar for 0.08 BAC national standard for alcohol-impaired driving

Source: Substance Abuse The Nation’s Number One Health Problem (Robert Wood Johnson Foundation).
Trends in estimated mean alcohol concentration for beer and wine in the United States. ●, wine alcohol content by volume (%ABV); ◆, beer %ABV.

Percentage of U.S. Adults Reporting That They Drink Alcohol, 1939 to 2010

Year of Survey

NOTES: Respondents were asked “Do you have occasion to use alcoholic beverages such as liquor, wine, or beer, or are you a total abstainer?” Data for 2010 are based on national telephone (land-line and cellular) interviews conducted July 8-11, 2010 with a random sample of 1,020 adults (ages 18 and older) living in the continental U.S. The margin of error is ±4 percentage points. If more than one poll was conducted in a year, the poll that occurred closest to the month of July was used in the above graph. Surveys were only conducted in years that have a data point marker.

Fig. 5. Per capita consumption of beer, wine, and spirits in the United States: new estimates and Alcohol Epidemiologic Data System (AEDS) estimates for comparison. ◆, spirits; □, wine; ●, beer. Dark lines show new estimates and lighter lines are AEDS estimates.

Fig. 6. Per capita consumption of alcohol in the United States from 1950 to 2002: new estimates and Alcohol Epidemiologic Data System (AEDS) estimates for comparison. ●, new estimates of per capita consumption; *, estimates based on AEDS conversion factors.

Percentage of U.S. 8th, 10th, and 12th Grade Students Reporting Past Month Alcohol Use, 1975-2010

*The Monitoring the Future survey began surveying 12th graders in 1975. Surveys of 8th and 10th graders were added in 1991.

Indicator 7
Young Adults Use Substances More than Any Other Group, 1998

Percent of Users in Past Month

<table>
<thead>
<tr>
<th>Age</th>
<th>Cigarettes</th>
<th>Marijuana</th>
<th>Heavy Alcohol</th>
<th>Alcohol</th>
</tr>
</thead>
<tbody>
<tr>
<td>12-17</td>
<td>19</td>
<td>9</td>
<td>3</td>
<td>20</td>
</tr>
<tr>
<td>18-25</td>
<td>41</td>
<td>13</td>
<td>13</td>
<td>59</td>
</tr>
<tr>
<td>26-34</td>
<td>33</td>
<td>6</td>
<td>7</td>
<td>61</td>
</tr>
<tr>
<td>35+</td>
<td>27</td>
<td>3</td>
<td>4</td>
<td>53</td>
</tr>
</tbody>
</table>

Source: Substance Abuse The Nation's Number One Health Problem (Robert Wood Johnson Foundation).
B. Youth drink less frequently than adults, but drink more per occasion.

- Drums per Occasion
- Drinking Days per Month

<table>
<thead>
<tr>
<th>Number of Drinks</th>
<th>Underage (12-17)</th>
<th>Adults (26+)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underage (12-17)</td>
<td>Drums per Occasion: 4 Drinking Days per Month: 5</td>
<td></td>
</tr>
<tr>
<td>Adults (26+)</td>
<td>Drums per Occasion: 3 Drinking Days per Month: 9</td>
<td></td>
</tr>
</tbody>
</table>
Figure 1 Percentages of current drinking and episodic heavy drinking by age (graph on the left), and mean frequency and quantity of drinking by age (graph on the right), NESARC, 2001–2002.
Percentage of U.S. Adults Reporting 12-Month Prevalence of Alcohol Abuse and Alcohol Dependence, by Age, 2001-2002
(N = 43,093)

NOTE: Data are combined annual averages from 79,096 completed interviews from the 2005 to 2007 National Health Interview Surveys (NHIS), an annual computer-assisted in-person survey of the U.S. civilian noninstitutionalized population ages 18 and older.

Figure 10. Per capita consumption from all beverages in gallons of ethanol by State,
Indicator 11
Heavy Alcohol Use by Youth Varies by Race and Ethnic Group

Percent of High School Seniors Who Are Heavy Users

<table>
<thead>
<tr>
<th>Year</th>
<th>White</th>
<th>Hispanic</th>
<th>Black</th>
</tr>
</thead>
<tbody>
<tr>
<td>1976</td>
<td>39</td>
<td>34</td>
<td>19</td>
</tr>
<tr>
<td>1978</td>
<td>42</td>
<td>37</td>
<td>19</td>
</tr>
<tr>
<td>1980</td>
<td>44</td>
<td>33</td>
<td>18</td>
</tr>
<tr>
<td>1982</td>
<td>45</td>
<td>33</td>
<td>17</td>
</tr>
<tr>
<td>1984</td>
<td>44</td>
<td>33</td>
<td>17</td>
</tr>
<tr>
<td>1986</td>
<td>40</td>
<td>31</td>
<td>16</td>
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<tr>
<td>1988</td>
<td>40</td>
<td>34</td>
<td>15</td>
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<td>1990</td>
<td>37</td>
<td>26</td>
<td>14</td>
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<td>32</td>
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<td>1994</td>
<td>32</td>
<td>27</td>
<td>15</td>
</tr>
<tr>
<td>1996</td>
<td>33</td>
<td>28</td>
<td>15</td>
</tr>
<tr>
<td>1998</td>
<td>36</td>
<td>29</td>
<td>12</td>
</tr>
<tr>
<td>1999</td>
<td>36</td>
<td></td>
<td>12</td>
</tr>
</tbody>
</table>

Source: Substance Abuse The Nation's Number One Health Problem (Robert Wood Johnson Foundation).
Who Is Most Likely To Drink?

Percent Using Alcohol in Last 30 Days

Race/Ethnicity

White | Black | Mexican | PR/Lat. | Asian | Indian

Male | Female

National Spirit

Average alcohol consumption has fallen in many nations, but it has gone up in the U.K.

<table>
<thead>
<tr>
<th>Country</th>
<th>Annual alcohol consumption, liters per capita (15 years and older), 2007</th>
<th>Percentage change in annual per capita alcohol consumption, 1980-2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turkey</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Norway</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sweden</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iceland</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Korea</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canada*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>United States*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Netherlands*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OECD average</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poland</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finland</td>
<td></td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Czech Republic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denmark</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Austria*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>France*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hungary*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ireland</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*2006

Source: Organization for Economic Cooperation and Development
**What's Your Country Drinking?**

**Vodka**
- **Country**: Russia 45.0%
- **Country**: U.S. 13.2%
- **Country**: Ukraine 8.1%
- **Country**: Poland 6.2%
- **Country**: Uzbekistan 2.8%
- **Country**: Others 24.8%

**Whiskey**
- **Country**: India 46.7%
- **Country**: U.S. 14.4%
- **Country**: France 4.8%
- **Country**: Japan 3.4%
- **Country**: U.K. 2.5%
- **Country**: Others 28.2%

**Brandy**
- **Country**: India 26.7%
- **Country**: Philippines 16.1%
- **Country**: Russia 7.4%
- **Country**: U.S. 6.3%
- **Country**: Brazil 4.7%
- **Country**: Others 38.8%

**Gin**
- **Country**: Philippines 36.0%
- **Country**: U.S. 21.2%
- **Country**: Spain 6.6%
- **Country**: U.K. 5.1%
- **Country**: India 4.3%
- **Country**: Others 26.9%

**Tequila**
- **Country**: U.S. 50.2%
- **Country**: Mexico 33.6%
- **Country**: Russia 1.5%
- **Country**: Germany 1.5%
- **Country**: Canada 1.1%
- **Country**: Others 12.0%

**Rum**
- **Country**: India 31.8%
- **Country**: U.S. 15.8%
- **Country**: Philippines 10.9%
- **Country**: Cuba 4.1%
- **Country**: Spain 3.0%
- **Country**: Others 34.3%
Frequency of drinking and getting drunk during the last 30 days among European and American 15- and 16-year-olds, 2003. Data on European adolescents were taken from the 2003 European School Project on Alcohol and Other Drugs (ESPAD).

II. Measures of Problem Drinking

Self –identity
Reasons
Frequency
Quantity
BAC levels
Consequences
### Percentage of People Injured in Their Lifetime and in the Past Year While Under the Influence, by Age of Drinking Onset

(N=26,797)

<table>
<thead>
<tr>
<th>Age of Drinking Onset</th>
<th>Lifetime Injury</th>
<th>Past Year Injury</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>24%</td>
<td>5%</td>
</tr>
<tr>
<td>&lt;14</td>
<td>22%</td>
<td>5%</td>
</tr>
<tr>
<td>14</td>
<td>20%</td>
<td>5%</td>
</tr>
<tr>
<td>15</td>
<td>14%</td>
<td>5%</td>
</tr>
<tr>
<td>16</td>
<td>11%</td>
<td>4%</td>
</tr>
<tr>
<td>17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td></td>
<td></td>
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<tr>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21+</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Source:
Percentage of U.S. Adults Aged 18 and Older Dependent on Alcohol, By Age of Drinking Onset

NOTES: The NESARC was a face-to-face survey of a multistage probability sample of 43,093 adults age 18 years and older conducted in 2001–2002. Data in the figure are based on the 26,829 respondents who reported ever drinking alcohol.

Percentage of Adults (Ages 21 or Older) Who Abused or Were Dependent on Alcohol in the Past Year, by Age of First Alcohol Use, 2009

![Bar graph showing percentage of adults by age of first alcohol use in 2009. The categories are 14 or Younger (16.5%), 15 to 17 (9.4%), 18 to 20 (4.4%), and 21 or Older (2.3%).]

NOTE: Abuse or dependence are defined using DSM-IV criteria.

SOURCE: Adapted by CESAR from Substance Abuse and Mental Health Services Administration, Results from the 2009 National Survey on Drug Use and Health: Detailed Tables, 2010. Available online at http://oas.samhsa.gov/WebOnly.htm#NSDUHtabs.
Indicator 40

**Arrests for Alcohol Offenses Have Decreased since the Early '80s**

Source: Substance Abuse The Nation's Number One Health Problem (Robert Wood Johnson Foundation).
Alcohol and Health

Thirty to fifty percent of all hospital admissions are for alcohol and other drug related diseases.

A partial list includes:

- Ulcers
- Colitis
- Birth Defects
- High Blood Pressure
- Damage to the Immune System
- Cancers of the Liver, Larynx, Esophagus, Stomach, Colon, and Breast
- Renal Failure
- Stroke

Source: DASPOP (Drug and Alcohol Service Providers Organization of Pennsylvania). Suite III, Host Inn, 4751 Lindle Road, Harrisburg, PA, 17111.
Cancers Associated With Drinking

- Lip
- Tongue
- Oral Cavity
- Pharynx
- Larynx
- Esophagus
- Lung
- Stomach
- Colon
- Rectum
- Pancreas
- Liver
Alcohol Involvement in Injuries and Deaths

- Aviation deaths: 14% to 32%
- Drownings: 34% to 62%
- Fatal falls: 21% to 48%
- Fatal fires: 30% to 54%
- Traffic fatalities: 41%
- ATV fatalities: 75%
- Passenger and pedestrian deaths: 33%
- Nonfatal bicycle injuries: 25% to 50%

Alcohol Involvement in Injuries and Deaths as Estimated by Various Studies

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homicides</td>
<td>50%</td>
</tr>
<tr>
<td>Suicides</td>
<td>33-50%</td>
</tr>
<tr>
<td>Wife Beating Injuries</td>
<td>50%</td>
</tr>
<tr>
<td>Nonfatal Intentional Injuries</td>
<td>25-50%</td>
</tr>
<tr>
<td>Industrial/Occupational Deaths</td>
<td>9-40%</td>
</tr>
<tr>
<td>Nonfatal Unintentional Injuries Up to</td>
<td>50%</td>
</tr>
</tbody>
</table>

Estimated Percentage of Weekend Nighttime Drivers with BACs ≥0.08 g/dL

<table>
<thead>
<tr>
<th>Year of National Roadside Survey (NRS)</th>
<th>Percent of Drivers with BAC ≥0.08 g/dL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1973</td>
<td>7.5%</td>
</tr>
<tr>
<td>1986</td>
<td>5.4%</td>
</tr>
<tr>
<td>1996</td>
<td>4.3%</td>
</tr>
<tr>
<td>2007</td>
<td>2.2%</td>
</tr>
</tbody>
</table>

*The National Roadside Survey (NRS) is a stratified random sample of weekend nighttime drivers in the contiguous 48 states conducted by either the National Highway Traffic Safety Administration and/or the Insurance Institute for Highway Safety. In the 2007 survey, breath-alcohol measurements were obtained from 9,413 drivers.

Percentage of U.S. High School Seniors Reporting Driving After Heavy Drinking and/or Illicit Drug Use or Riding in a Vehicle After Such Use by the Driver, 2001 to 2006

Campus Problems Associated With Alcohol

- Academic Problems: 34%
- Dropouts: 25%
- Violent Behavior: 64%
- Damage to Residence Halls: 69%

III. Societal Costs and “2nd Hand Effects”

For example:
  Date rape and violence
  Alcohol-related vehicle crashes
  Transportation workers
  Lost work hours
  Medical service costs and organs
  FAS
Percentage Reporting That Drinking Has Ever Been a Cause of Trouble in Their Family, by Year of Survey

Year of Survey


15% 12% 12% 17% 22% 22% 18% 21% 24% 19% 23% 24% 27% 23% 30% 36%

Indicator 28

Alcohol and Drug Users Have Problems Working, 1997

Full-Time Employees, Ages 18–49

Worked for Three or More Employers in the Past Year

- **Heavy Alcohol Users**
  - 8% Yes
  - 4% No

- **Current Drug Users**
  - 9% Yes
  - 4% No

Voluntarily Left an Employer in the Past Year

- **Heavy Alcohol Users**
  - 20% Yes
  - 16% No

- **Current Drug Users**
  - 25% Yes
  - 15% No

Skipped Work (Past 30 Days)

- **Heavy Alcohol Users**
  - 11% Yes
  - 5% No

- **Current Drug Users**
  - 13% Yes
  - 5% No

Source: Substance Abuse The Nation's Number One Health Problem (Robert Wood Johnson Foundation).
Alcohol and Other Drug Problems in Business

- Alcohol use alone accounts for more than half of the estimated $102 billion lost each year to reduced and lost productivity\(^1\)

- Alcohol is involved in 47% of industrial accidents\(^2\)


Indicator 4

Economic Costs of Substance Abuse Are High, 1995

<table>
<thead>
<tr>
<th>Substance</th>
<th>Cost</th>
<th>Breakdown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol Abuse</td>
<td>$166.5 billion</td>
<td>46% Illness, 21% Deaths, 12% Medical, 11% Other Related Costs, 9% Crime, 1% Special Conditions</td>
</tr>
<tr>
<td>Smoking</td>
<td>$138.0 billion</td>
<td>58% Medical, 36% Deaths, 6% Illness</td>
</tr>
<tr>
<td>Drug Abuse</td>
<td>$109.9 billion</td>
<td>58% Crime, 16% Illness, 15% Deaths, 7% Medical, 4% Special Conditions</td>
</tr>
</tbody>
</table>

Source: Substance Abuse The Nation's Number One Health Problem (Robert Wood Johnson Foundation).
Results of Alcohol Misuse

- 50% of Spouse Abuse
- 20-35% of Suicides
- 62% of Assaults
- 52% of Rapes
- 38% of Child Abuse
- 69% of Drownings
- 68% of Manslaughter Charges
- 49% of Murders
- 50% of Traffic Fatalities

Source: As reported in the NIAAA Sixth Special Report to Congress, 1987, 1993

FACE
Truth and Clarity on Alcohol
Fetal Alcohol Syndrome is the third leading cause of birth defects in the United States affecting 1 out of every 750 live births.

FAS is caused by women drinking alcohol during pregnancy.

Fetal Alcohol Syndrome is 100 percent preventable.

IV. Causes of Use and Misuse

- Family
  - genetic
  - social psychological
  - socio-cultural
- Peer influence
- Social control
- Media influence
V. Prevention Strategies and Issues

• Moral and medical models
• Education, legal control and counseling
• Social ecology
• Media advocacy
• Norms interventions
• Intervention levels: Universal, selective, and indicated
<table>
<thead>
<tr>
<th>Tier</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universal prevention</td>
<td>addresses the entire population (national, local community, school, district) to prevent or delay the abuse of alcohol.</td>
</tr>
<tr>
<td>Selective prevention</td>
<td>focuses on groups whose risk of developing problems of alcohol abuse or dependence is above average and may be distinguished by characteristics such as age, gender, family history, or economic status.</td>
</tr>
<tr>
<td>Indicated prevention</td>
<td>involves a screening process and targets individuals who exhibit early signs of alcohol abuse.</td>
</tr>
</tbody>
</table>