Alcohol Marketing and Youth:
State of the Evidence

David H. Jernigan Ph.D.
Associate Professor
Department of Health, Behavior and Society
and Director, Center on Alcohol Marketing and Youth
Johns Hopkins Bloomberg School of Public Health
As required by the Alcohol Policy 17 Conference, I/we have signed a disclosure statement and note the following conflict(s) of interest:

No conflicts of interest
Acknowledgment of colleagues

• Incredible team at the Center on Alcohol Marketing and Youth – Cassie, Molly, Elyse, Rebecca, Kelsey, Pamela, Raimee, Gabrielle

• Colleagues at BU – Craig Ross, Mike Siegel, lBill DeJong, Tim Naimi, etc.

• Colleagues from around the world who are doing so much to advance this piece of our work

• Funding: Supported in part by CDC and NIAAA; views do not necessarily reflect their opinions
Why do young people drink?

• At the state level, highly correlated with adult drinking
• Price and availability of alcohol
• Religious and cultural factors
• Exposure to alcohol marketing
“While many factors may influence an underage person’s drinking decisions, including among other things parents, peers and the media, there is reason to believe that advertising also plays a role.”
Industry self-regulation: Actual placement data

• Magazines 2011:
  – Compared to adults 21+, youth ages 12-20 saw per capita 7% more beer ads, 11% more alcopop ads, 82% fewer wine ads

• Radio 2009:
  – 32% of ads on programming with disproportionately youthful audiences

• Television:
  – In 2012, 19% of 350,868 ads aired at times when youth 12-20 per-capita exposure exceeded that of adults 21+
  – In local TV markets in 2010, nearly 1 in 4 ads on programs popular among youth violate industry’s standard.
  – Average exposure for 12-20s in 2009: 366 ads
Part 1: What do we know?

Effects of youth exposure
Alcohol Advertising and Youth: Published systematic reviews

• **Anderson et al. 2009 (Alcohol and Alcoholism):**
  – 13 longitudinal studies following up more than 38,000 young people
  – “Longitudinal studies consistently suggest that exposure to media and commercial communications on alcohol is associated with the likelihood that adolescents will start to drink alcohol, and with increased drinking amongst baseline drinkers”

• **Smith and Foxcroft 2009 (BMC Public Health):**
  – 7 cohort studies following up more than 13,000 young people aged 10 to 26 years
  – “…data from prospective cohort studies suggest there is an association between exposure to alcohol advertising or promotional activity and subsequent alcohol consumption in young people. Inferences about the modest effect sizes found are limited by the potential influence of residual or unmeasured confounding.”
European Commission’s European Forum on Alcohol and Health

• Required to include industry and public health
• Expert Science Group (also including industry and public health) reviewed alcohol marketing literature in 2008. Their finding:
  – “Based on the consistency of findings across the studies, the confounders controlled for, the dose-response relationships, as well as the theoretical plausibility and experimental findings regarding the impact of media exposure and commercial communications,...alcohol marketing increases the likelihood that adolescents will start to use alcohol, and to drink more if they are already using alcohol”
• Twelve longitudinal studies
  • All found significant associations between exposure to, awareness of, engagement with and/or receptivity to alcohol marketing at baseline, and initiation of alcohol use, initiation of binge drinking, drinking in the past 30 days, and/or alcohol problems at follow-up

• Three RCTs (experimental)
  • Two of three find immediate effects on drinking of exposure to alcohol advertisements embedded in commercial breaks in films

• 24 cross-sectional studies
  • 22 of 24 find significant associations between exposure to alcohol marketing and youth drinking, but cannot address causality
Effects of Alcohol Advertising on Drinking Beliefs and Behaviors

(5th – 11th Graders)

Scaled $\chi^2 (795) = 899.36, p < .01$
NFI = .85, Robust CFI = .96
RMSEA = .036

Source: Grube et al., 2005
Music, people, story
Alcohol Marketing
A Major Risk Factor for Underage Drinking

• Forms of alcohol advertising and marketing that predict drinking onset among youth
  – Alcohol advertisements in magazines
  – Beer advertisements on television
  – Alcohol advertisements on radio
  – Alcohol advertisements on billboards
  – In-store beer displays and sports concessions
  – Alcohol use in movies
  – Ownership of alcohol promotional items

• Alcohol companies have moved rapidly into social media – research has not kept up

Collins et al., Journal of Adolesc Health 2007:40:527-34;
Stacy et al., Am J Health Behav 2004:38:498-509
Stoolmiller et al., BMJ Open 2012:Feb 20;2:e000543;
Model of marketing receptivity

- Exposed to Marketing
- Notices Marketing
- Remembers/Recognizes Marketing
- Likes Marketing
- Interactive Marketing Participation*
- Communicates Preferences to Friends
- Consumer Generated Marketing

* E.G., purchase of alcohol branded merchandise or going to alcohol company website

Initiation of Alcohol Use

- Norms & Expectancies
- Drinker Identity
- Brand Allegiance

Progression to Problem Drinking

- More distal to behavior, more indicative of exposure
- More proximal to behavior, mixture of exposure and cognitive response
McClure et al. 2015

• Measured internet marketing “receptivity”:
  – Recall web advertising for alcohol
  – Been to alcohol company website
  – Could recognize any of 5 brand home pages
  – Had become on-line fan of alcohol brand

• After two years, high receptivity youth 1.7 to 2.15 times more likely to report binge drinking

• High receptivity scores also associated with initiation among non-drinkers at follow-up
Other media

• Movies
  – Dartmouth Medical School
  – Top 100 box-office hits per year, 1996-2009
  – 1400 movies
    • 500 tobacco brand appearances
    • 2433 alcohol brand appearances
    • Tobacco screen time and brand appearances dropped
    • Alcohol brand appearances rise from 80 to 145 per year
Trend in Tobacco Brand Appearances

Trend in tobacco brand appearances in the top 100 movies with the highest US box-office gross revenues from 1996 through 2009. Points show the actual data, and the bold line shows the post-1999 trend estimate. Rate of decline is 7.0% per year.

Figure Legend:
Trends of Movie Alcohol Brand Counts

Trends of movie alcohol brand counts from (A) youth-rated and (B) R-rated movies, with a linear trend line. For youth-rated movies, slope = 4.97 (P = .002); for R-rated movies, slope = −0.99 (P = .52).
Other media

- Popular music (Siegel et al. 2014)
  - 720 most popular urban, pop, country and rock songs, 2009-2011
  - 38% of urban songs mentioned alcohol, 12% a specific brand
  - 22% of country songs mentioned alcohol, 6% a specific brand
  - Most common brands mentioned: Patron, Hennessy, Grey Goose, Jack Daniel’s
Other media

• Sponsorships:
  – From 2010 to 2013, top 75 alcohol brands consumed by underage drinkers sponsored:
    • 945 events
    • Most popular brands among youth much more likely to sponsor more events
    • Sponsorships most likely to associate brands with sports, music, the arts and entertainment
The importance of brands

• Alcohol marketing is branded.
• Different products or brands clearly target different audiences
• Half or more of youth exposure to alcohol advertising comes from less than 10% of brands advertising
• Putting all brands together can wash out effects on young people
  – Diageo: Smirnoff Ice; Johnnie Walker; Ciroc
  – AB/Inbev: Bud Light; Tilt; Beck’s
  – Pernod Ricard: Absolut; Chivas; Malibu
Importance of Monitoring at Brand Level

A small percentage of alcohol brands is responsible for half of youth exposure

<table>
<thead>
<tr>
<th>Medium</th>
<th>Year</th>
<th>Total number of brands advertising</th>
<th>Brands responsible for half of youth exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magazines</td>
<td>2008</td>
<td>333</td>
<td>16 (5%)</td>
</tr>
<tr>
<td>Television</td>
<td>2009</td>
<td>151</td>
<td>12 (8%)</td>
</tr>
<tr>
<td>Radio</td>
<td>2009</td>
<td>77</td>
<td>3 (4%)</td>
</tr>
</tbody>
</table>
Filling the brand gap

- First-ever national study of youth alcohol consumption by brand
- Internet-based survey of 1,031 young people ages 13-20
- Asked specifically about 898 brands
- Also collected wide range of other data to enable controlling for other variables
### RESULTS

**Top 10 Youth Brands By Gender**
*(Percent of Population Consuming This Brand)*

<table>
<thead>
<tr>
<th>Rank</th>
<th>Male (%)</th>
<th>Female (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bud Light (28.1)</td>
<td>Bud Light (27.7)</td>
</tr>
<tr>
<td>2</td>
<td>Budweiser (17.0)</td>
<td>Smirnoff Malt Beverages (22.7)</td>
</tr>
<tr>
<td>3</td>
<td>Jack Daniels Whiskeys (14.2)</td>
<td>Mikes (14.4)</td>
</tr>
<tr>
<td>4</td>
<td>Coors Light (13.7)</td>
<td>Smirnoff Vodkas (13.3)</td>
</tr>
<tr>
<td>5</td>
<td>Heineken (13.2)</td>
<td>Bud (12.2)</td>
</tr>
<tr>
<td>6</td>
<td>Captain Morgan Rums (13.1)</td>
<td>Coors Light (11.7)</td>
</tr>
<tr>
<td>7</td>
<td>Smirnoff Vodkas (12.2)</td>
<td>Absolut Vodkas (11.3)</td>
</tr>
<tr>
<td>8</td>
<td>Smirnoff Malt Beverages (11.6)</td>
<td>Corona Extra (11.2)</td>
</tr>
<tr>
<td>9</td>
<td>Corona Extra (11.3)</td>
<td>Bacardi Malt Beverages (10.3)</td>
</tr>
<tr>
<td>10</td>
<td>Blue Moon (10.2)</td>
<td>Jose Cuervo Tequilas (9.5)</td>
</tr>
</tbody>
</table>

Siegel et al., *J Substance Use*, 2014
## RESULTS

### Top 10 Youth Brands By Race/Ethnicity

(Percent of Population Consuming This Brand)

<table>
<thead>
<tr>
<th>Non-Hispanic White</th>
<th>Black (%)</th>
<th>Hispanic (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bud Light (26.6%)</td>
<td>Hennessy Cognacs (30.2%)</td>
<td>Bud Light (38.2%)</td>
</tr>
<tr>
<td>Coors Light (15.0%)</td>
<td>Smirnoff Malt Beverages (25.7%)</td>
<td>Corona Extra (21.2%)</td>
</tr>
<tr>
<td>Budweiser (14.5%)</td>
<td>Ciroc (21.4%)</td>
<td>Smirnoff Malt Beverages (21.1%)</td>
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<tr>
<td>Smirnoff Malt Beverages (13.7%)</td>
<td>Heineken (20.3%)</td>
<td>Budweiser (14.7%)</td>
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<td>Smirnoff Vodkas (12.4%)</td>
<td>Bud Light (19.3%)</td>
<td>Heineken (14.6%)</td>
</tr>
<tr>
<td>Jack Daniels Whiskeys (11.9%)</td>
<td>1800 Tequilas (18.4%)</td>
<td>Smirnoff Vodkas (13.6%)</td>
</tr>
<tr>
<td>Captain Morgan Rums (11.7%)</td>
<td>Budweiser (17.3%)</td>
<td>Bacardi Malt Beverages (13.2%)</td>
</tr>
<tr>
<td>Mike’s (10.3%)</td>
<td>Seagram’s Gins (14.8%)</td>
<td>Jose Cuervo Tequilas (13.1%)</td>
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<tr>
<td>Absolut Vodkas (10.0%)</td>
<td>Jack Daniels Whiskeys (14.7%)</td>
<td>Bacardi Rums (10.1%)</td>
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<td>Blue Moon</td>
<td>Mike’s (13.5%)</td>
<td>Coors Light (10.1%)</td>
</tr>
</tbody>
</table>

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*Siegel et al., *J Substance Use, 2014*
Common arguments against the influence of advertising on youth drinking

• “Kids drink what adults are drinking”

• Survey found several brands much more commonly consumed by youth than by adults: Corona Extra Light (9.3 times more popular)
  – Bacardi Malt Beverages (8.0 times)
  – Smirnoff Malt Beverages (6.7 times)
  – Mike’s (4.4 times)
  – Jack Daniel’s Cocktails (43.8 times)
  – Malibu Rums (2.6 times)
  – Natural Ice (2.3 times)
Common arguments against the influence of advertising on youth drinking

• “Kids drink whatever is cheapest”
  – Survey found is a general relationship between lower price and youth brand choice BUT
  – The most commonly consumed brands are not the cheapest
    • Only one of the top 25 youth brands (Keystone Light) is among the 88 cheapest brands
Common arguments against the influence of advertising on youth drinking

• “Since kids report they drink what others give them, advertising doesn’t matter.

• Survey found that regardless of source of alcohol, youth brand preferences are consistent

• Nine of the top 10 youth brands were even more popular among youth who made their own brand choices

• 7 of top 15 youth brands repeatedly showing up in analyses:
  – Smirnoff Malt Beverages, Jack Daniel’s Whiskey, Mike’s, Absolut Vodkas, Heineken, Bacardi Malt Beverages, and Malibu Rums
Greater ad exposure predicts youth alcohol consumption by brand

• Youth were three times more likely to consume a brand if exposed to its television advertising

• Analysis controlled for:
  – Demographic characteristics
  – Magnitude of alcohol consumption
  – Parental drinking
  – Risk-taking behavior
  – Media use patterns
  – Autonomy of brand choice
  – Brand-specific prices
  – Overall brand market share

Ross et al., ACER 2014
TV and magazine exposure combined

• At the population level (using Nielsen data), underage youth five times more likely to consume brands advertising on national TV
• Youth 36% more likely to consume brands advertising in national magazines

• Siegel et al., 2016
DOES CONTENT MATTER TOO?
Industry Guidelines on Youth-Appealing Content

“Content Appealing to Youth”:

“...content having special attractiveness to such persons [youth] beyond their general attractiveness for persons above the legal drinking age.”

– Santa Claus
– Models aged over 25, appearance over 21
– Consideration of symbols, language, music, gestures, entertainers, cartoons and groups
– Branded marketing on toys, games, clothes for kids
– Rites of passage

Sources: DISCUS, 2011; Beer Institute, 2011
Empirical Research on Youth-Appealing Content

- Production value
- Character appeal
- Theme
- Product appeals
- Emotional appeals
- Risky content
- Bottom line: Brands more popular with youth had higher CAY scores than less popular brands

Where do we go?

Policy
Alcohol advertising reform: national

• The goal: reduce youth exposure

• Recommendations:
  – Institute of Medicine (2003):
    • Immediately adopt a 25% maximum for youth audiences of alcohol advertising, move towards 15%
  – 24 state and territorial Attorneys-General (2011)
    • Adopt a 15% standard, based on the proportion that 12-20 year-olds are of the general population
Why 15%?

• According to the National Household Survey, there is very little current use of alcohol among those below 12.

• Thus, 12-20 is the population at highest risk.
Alcohol advertising reform: national

• Current industry standard – “proportional”
  – No advertising if less than 28.4% of the audience is youth – includes everyone under 21

• Choices:
  – Strong standard strongly enforced
  – Strong standard weakly enforced
  – Weak standard strongly enforced
Addressing the existing standard

• 96% of non-compliant youth exposure occurs on cable
• Nearly all of this could be eliminated through three simple steps:
  – No-buy list of serially non-compliant programs
  – No-buy list of serially non-compliant dayparts
  – “Guardbanding” (setting a higher standard) for very low-rated programs
Quarterly reporting

- Current standard will at least be strongly monitored
- Last year looked at (2014Q2 – 2015Q1):
  - 1.8 billion non-compliant youth impressions
  - Serially non-compliant programs (73.7%)
  - Serially non-compliant network-daypart combinations (18.8%)
  - Low-rated programs (7.1%)
Serially non-compliant programs and networks

- FXX Movie Prime
- NGC Brain Games
- TRU Impractical Jokers
- ESPN Sportscenter Morning
- TRU The Carbonaro Effect
- Networks: various time slots on FXX, NGC, TRU, CMDY, NFLN, ESPN, ENN, VH1 etc.
Media providers

- Require age for access
  - Twitter, YouTube

- Tighten age-gating procedures
  - Affirmation is not sufficient
  - Verification is feasible (BudTV, tobacco)
Alcohol Companies

• Monitor social media feeds and remove inappropriate content
  – Including user-generated content
• Refrain from placing ads on social media (YouTube) that could not be aired on television
• Follow no-buy list – quarterly reporting at http://www.camy.org/resources/reports/alcohol-advertising-monitoring/ to help them do this
State Level Policy Options

- CAMY reports (2003 and 2010):
  - Review of existing laws regarding alcohol advertising in the 50 states
  - Identification of best practices from among those laws
    - Content
    - Placement
    - Other measures
Measured media: placement

- Restrict outdoor alcohol advertising in locations where children are likely to be present
- Prohibit outdoor alcohol advertising near schools, public playgrounds and churches
- Restrict alcohol advertising on alcohol retail outlet windows and outside areas
- Prohibit alcohol advertising on college campuses
## State-level actions: examples

<table>
<thead>
<tr>
<th>State/City</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connecticut</td>
<td>Ban on all alcohol signage except at point of purchase at Renschler Field</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>Ban on alcohol advertising on bus shelters</td>
</tr>
<tr>
<td>Ohio</td>
<td>500 foot limit on billboard placements adopted into OLCC administrative rules</td>
</tr>
<tr>
<td>Somerville, MA</td>
<td>Ban on alcohol billboards within 500 feet of schools etc, combined with grassroots enforcement</td>
</tr>
<tr>
<td>Greater Boston, MA</td>
<td>Ban on alcohol ads on public transit</td>
</tr>
<tr>
<td>City of Los Angeles</td>
<td>Ban on alcohol advertising on public property</td>
</tr>
</tbody>
</table>
Fireball Whiskey added a new photo.

May 22, 2014

I'M STILL HUNGOVER FROM LAST NIGHT

AND THE ONLY CURE IS MORE FIREBALL

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