

**Prospective associations between youth assets, community factors and youth binge drinking by race/ethnicity and income:**

**Results from the Youth Asset Study**



---

---

---

---

---

---

---

---

**Presenter Disclosures**

**Roy Oman**

The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:

**No relationships to disclose**



---

---

---

---

---

---

---

---

**Acknowledgment:** This project was supported by funding from the:

- Centers for Disease Control and Prevention, Grant Number 5 U01 DP000132
- Inasmuch Foundation
- Eunice Kennedy Shriver National Institute of Child Health & Human Development Grant Number R21HD061306.

The contents of this publication are solely the responsibility of the authors and do not necessarily represent the official views of the CDC, Inasmuch Foundation, or NICHD.



---

---

---

---

---

---

---

---

## Investigators

**Roy F. Oman, PhD**  
College of Public Health,

**Sara K. Vesely, PhD**  
College of Public Health

**Eleni Tolma, PhD**  
College of Public Health

**Cheryl B. Aspy, PhD**  
College of Medicine

**Lindsay Boeckman, M.S.**  
College of Public Health



---

---

---

---

---

---

---

---

## Collaborators

- **Oklahoma Institute for Child Advocacy**
- **Centers for Disease Control and Prevention, Division of Reproductive Health**



---

---

---

---

---

---

---

---

## Socio-Ecological Approach to Understanding and Preventing Youth Risk Behaviors

- **Individual (youth)**
  - Assets, life events, behavior, attitudes, age, gender
- **Family**
  - Assets, Race/ethnicity, SES . Education
- **Community**
  - Assets, informal social control, public services, sense of community, neighborhood involvement, neighborhood conditions
- **Policy**
  - indirect measures, study implications



---

---

---

---

---

---

---

---

## Binge Drinking

- Having 5 or more alcoholic drinks within a couple of hours in the preceding 30 days




---

---

---

---

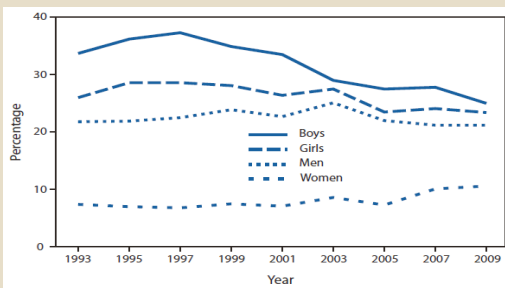
---

---

---

---

Prevalence of binge drinking among high school students and adults, by sex — Youth Risk Behavior Survey and Behavioral Risk Factor Surveillance System, United States, 1993–2009




---

---

---

---

---

---

---

---

Prevalence of current alcohol use and binge drinking, by demographic characteristics among 9th–12th grade students — Youth Risk Behavior Survey, United States, 2009

Characteristic	Current alcohol Use	Binge Drinking	Binge Drinking Current Alcohol Users
<b>Total</b>	41.8	24.2	60.9
<b>Sex</b>			
Male	40.8	25	64.1
Female	42.9	23.4	57.5
<b>Race/Ethnicity</b>			
White, non-Hispanic	44.7	27.8	64.8
Black, non-Hispanic	33.4	13.7	43.5
Hispanic	42.9	24.1	59.3
Other, non-Hispanic	32.6	17.6	56.5
<b>Grade</b>			
9	31.5	15.3	51.1
10	40.6	22.3	58.2
11	45.7	28.3	64.6
12	51.7	33.5	67.4




---

---

---

---

---

---

---

---

- **Source for Binge Drinking Prevalence Data**
  - *Vital Signs: Binge Drinking Among High School Students and Adults — United States, 2009, Morbidity and Mortality Weekly Report, October 8, 2010, Vol. 59 , No. 39*




---

---

---

---

---

---

---

---

## Purpose

- Investigate relationships among youth assets, neighborhood factors and youth binge drinking by:
  - race/ethnicity, and
  - federal poverty level (FPL)
    - about \$18,000 for a family of four in 2002




---

---

---

---

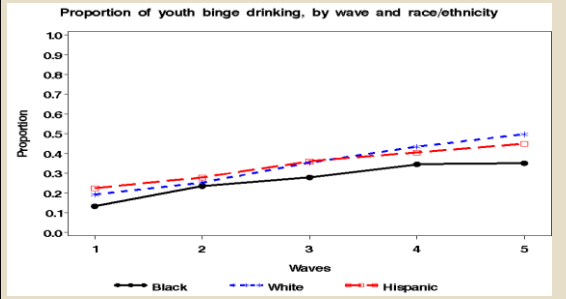
---

---

---

---

## YAS Participants Binge Drinking Prevalence Over 4 Years




---

---

---

---

---

---

---

---

## Methods

- 17 assets summed and divided at the median to form a high- vs. low-asset variable
  - Median Number of Assets = 12
- Prospective Associations Tested
  - Assets measured at Waves 1, 2, 3, and 4 predicted binge drinking at Waves 2, 3, 4, or 5
  - Neighborhood factors at Wave 1 predicted binge drinking at Waves 2, 3, 4, or 5




---

---

---

---

---

---

---

---

## Methods (continued)

- Data analyzed using marginal logistic regression
  - Odd Ratios (ORs)
  - Significance level =  $p < 0.05$
- Controlled for several demographic variables as appropriate
  - Gender, age, family structure, parental income, parental education, crowded house, federal poverty level, and wealth




---

---

---

---

---

---

---

---

## Logistic Regression, Assets and Neighborhood Factors on Binge Drinking by Youth Race

Youth Race	Adjusted Odds Ratio (95% CIs)						
	Assets	Broken Windows	Neighborhood Support	Informal Social Control	Sense of Comm.	Neighborhood Concerns Services	Neighborhood Concerns Crime
All Youth	1.9 (1.6,2.3)	1.0 (0.9,1.1)	0.9 (0.7,1.2)	1.1 (0.9,1.3)	1.1 (0.8,1.6)	0.9 (0.8,1.1)	1.1 (0.9,1.3)
White	2.0 (1.5,2.6)	1.0 (0.9,1.1)	1.1 (0.8,1.6)	1.0 (0.8,1.7)	0.9 (0.6,1.2)	0.9 (0.7,1.2)	1.0 (0.8,1.3)
Black	1.8 (1.2,2.6)	1.0 (0.9,1.0)	0.9 (0.6,1.5)	1.2 (0.8, 1.8)	0.9 (0.6,1.3)	0.9 (0.6,1.2)	1.1 (0.8,1.6)
Hispanic	1.8 (1.3,2.5)	1.0 (0.9,1.1)	0.6 (0.4,1.1)	1.1 (0.8,1.6)	1.0 (0.8,1.4)	1.0 (0.7,1.4)	1.1 (0.8,1.5)




---

---

---

---

---

---

---

---

**Logistic Regression, Assets and Neighborhood Factors on Binge Drinking by % Federal Poverty Level**

% Fed Poverty Level	Adjusted Odds Ratio (95% CIs)						
	Assets	Broken Windows	Neighborhood Support	Informal Social Control	Sense of Comm.	Concerns re: Services	Concerns re: Crime
0%-100%	<b>1.8</b> (1.2,2.5)	<b>1.1</b> (1.01,1.2)	1.4 (0.7,2.6)	1.3 (0.9,1.9)	1.0 (0.7,1.3)	1.0 (0.7,1.4)	<b>1.5</b> (1.1,2.2)
101%-200%	<b>1.9</b> (1.4,2.6)	1.0 (0.9,1.1)	1.0 (0.6,1.7)	1.2 (0.8,1.7)	1.0 (0.7,1.4)	1.1 (0.8,1.5)	1.2 (0.9,1.6)
201%-300%	1.3 (0.9,1.9)	1.0 (0.9,1.1)	0.8 (0.5,1.4)	0.9 (0.6,1.3)	1.2 (0.8,1.83)	1.3 (0.9,1.8)	1.0 (0.7,1.4)
301+%	<b>2.9</b> (2.04,1)	1.0 (0.9,1.11)	1.0 (0.7,1.5)	0.8 (0.6,1.3)	0.8 (0.5,1.3)	<b>0.7</b> (0.5,1.0)	0.9 (0.7,1.2)




---

---

---

---

---

---

---

---

---

---

**Results**

- **White, African-American, and Hispanic youth were all significantly less likely (about 50% less likely) to binge drink in the future if they had 12 or more assets**
- **Neighborhood conditions were not related to binge drinking when analyzed by youth race/ethnicity or for all youth**




---

---

---

---

---

---

---

---

---

---

**Results (continued)**

- **Youth in most of the income groups with 12 or more assets were significantly less likely (34% to 56% less likely) to binge drink**
  - **Exception was youth in the 201% to 300% FPL group**




---

---

---

---

---

---

---

---

---

---

### Results (continued)

- Youth in the highest-income group and whose parents had less concerns regarding neighborhood services were about 1.4 times more likely to binge drink.



---

---

---

---

---

---

---

---

### Results (continued)

- Youth in the lowest-income group, and who lived in neighborhoods in good physical condition or whose parents had few parental concerns regarding neighborhood crime/safety were 9% and 35% less likely to binge drink respectively.



---

---

---

---

---

---

---

---

### Results (continued)

- Associations between assets and binge drinking changed little when accounting for the effect of the neighborhood factors



---

---

---

---

---

---

---

---

## Public Health Implications

- Strengthening or increasing the number of assets youth possess may be an effective intervention strategy
  - Some assets seem to protect youth from a range of risk behaviors
- The challenge is to develop effective programs that promote/strengthen multiple assets



---

---

---

---

---

---

---

---

## Public Health Implications

- Policy
  - Focus programmatic efforts (funding streams, education and training resources, etc.) on developing and promoting specific protective factors internal and external to youth, such as assets, instead of maintaining the current deficit-based approach.



---

---

---

---

---

---

---

---