



Transitions To and From At-Risk Alcohol Use In Adults In the United States

Richard Saitz, Timothy C. Heeren, Wenxing Zha, Ralph Hingson

Departments of Community Health Sciences and Biostatistics, Boston University School of Public Health and Section of General Internal Medicine, Boston Medical Center Division of Epidemiology and Prevention Research, National Institute on Alcohol Abuse and Alcoholism (NIAAA), Bethesda, MD





The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institute on Alcohol Abuse and

INTRODUCTION

- Drinking at-risk amounts* is common.
- Few studies have explored the transitions to and from at-risk and lower risk (including no) use.
- These transitions may be more likely in youth before patterns are more firmly established, and they may be affected by demographic, social and health factors.

*>14 US Standard (14g) drinks per week or >4 drinks in a day for men; >7 and >3, respectively, for women

AIMS

To explore the transitions to and from at-risk alcohol use in adults.

· Data:

- From the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC) collected in 2001-2002 (time 1) and in 2004-2005 (time 2) from 43,093 noninstitutionalized adults, ages 18 or over, in the US. Oversampled minorities and youth. Overall response rate was 81%.
- Our sample consisted of 34,509 (80%)
 participants who had data at both time-points.

Primary outcomes:

- Transitions from past year at-risk alcohol use at time 1 to lower risk use at time 2; and
- Transitions from lower risk alcohol use at time
 1 to at-risk use at time 2.

- Independent variables considered:
 - Demographics: sex, age, race, marital status, education, overall health, employment.
 - Alcohol-related: past year DSM-IV alcohol abuse/dependence, age at onset of drinking and when started drinking >1/week, family history of problem alcohol use, past year and ever treated alcohol use disorder, largest number of drinks consumed on days drank alcohol in past year, ever thought should seek help for drinking but didn't go, spouse is alcoholic or problem drinker.
 - Other Substance use: ever smoked, age at onset of smoking, ever and past year drug use, past year DSM-IV drug abuse/dependence, past year and ever treated drug problem, family history of drug use.
 - Mental Health: schizophrenia or psychotic illness or episode.
 - Life events: parents got divorced before subject was 18 years old, number of kids ever had, number of stressful life experiences.[†]

[†] Examples of stressful life experiences include death or serious injury of a family member or close friend, employment troubles, financial crisis

Analysis:

 Logistic regression analyses using methods to adjust for complex sampling design in both estimates and standard errors. Final models retained variables significantly associated with outcomes using forward selection with entry criteria of p<0.05.

Table 1. Baseline characteristics of NESARC participants (n=34,509)

Characteristics	%
Age <26 years 65+ years	15 37
Sex Male Female	48 52
Race/ethnicity Black, non-Hispanic Hispanic (regardless of race)	11 12
Never married	21
In excellent health	31
Ever smoked	43
Ever used drugs	23

Table 1. Cont. Baseline characteristics of NESARC participants (n=34,509)

Characteristics	%
Alcohol Use Did not drink Used low risk amounts of alcohol At-risk use DSM IV alcohol abuse DSM IV alcohol dependence	34 39 28 4.6 3.6
Had 6 or more stressful life experiences [†]	4.2
Family history of problem drinking	54
First drink at age 13 years14-17 years18-23 years	3.7 24 47
Receipt ever of alcohol treatment	4.4

[†] Examples of stressful life experiences include death or serious injury of a family member or close friend, employment troubles, financial crisis

 25,497 (72%) did not have at-risk use at time 1; at time 2, <u>15% of them had at-risk</u> use (85% did not).

9,012 (28%) had at-risk use at time 1; at time 2,
 27% of them did not have at-risk use (73% did).

Table 2. Significant predictors of transition to at-risk use at time 2

Characteristics	aOR [‡] (95% CI)
Younger age (18-20)	23.0 (16.4 - 32.3)
Male sex	1.4 (1.3 - 1.5)
Black, non-Hispanic	0.8 (0.7 - 0.9)
Never married	1.3 (1.1 - 1.5)
In excellent health	2.1 (1.5 - 2.9)
Ever smoked	1.3 (1.2 - 1.5)
Ever used drugs	1.3 (1.2 - 1.5)
DSM IV alcohol dependence	4.0 (1.8 - 8.9)
First drink at age <pre></pre>	1.5 (1.1 - 2.0) 1.5 (1.2 - 1.7) 1.5 (1.3 - 1.8)
Had 6 or more stressful life experiences †	0.8 (0.6 - 1.0)

[†] Examples of stressful life experiences include death or serious injury of a family member or close friend, employment troubles, financial crisis ‡Adjusted odds ratio

Table 3. Significant predictors of transition to low-risk (or no) use at time 2

Oberestorieties	•OD† (OE() OI)
Characteristics	aOR [‡] (95% CI)
Younger age (18-20)	0.2 (0.1 - 0.2)
Male sex	0.7 (0.6 - 0.8)
Black, non-Hispanic	1.7 (1.4 - 2.0)
Ever smoked	0.9 (0.8 - 1.0)
Ever used drugs	0.8 (0.7 - 1.0)
DSM IV alcohol abuse	0.5 (0.4 - 0.6)
DSM IV alcohol dependence	0.4 (0.3 - 0.5)
Alcohol use disorder treatment, past year	1.8 (1.2 - 2.6)

[‡] Adjusted odds ratio

LIMITATIONS

- Some loss to follow-up.
- Limitations of self-report accuracy.
- Risk factors are associations not necessarily causal.

CONCLUSIONS

- Many adults transition to and from at-risk alcohol use.
- While many factors are associated with these transitions, young age is the strongest predictorfavoring transition to at-risk use, and hindering transition to lower risk use.

IMPLICATIONS

- Findings have implications for prevention, including understanding self- change, and for screening and brief intervention
 - some change on their own;
 - some at lower risk develop risks later.