



**RESEARCH SUMMARY**  
Date Compiled: January 2021

**Key takeaways from included research:**

- Screening, Brief Intervention, and Referral to Treatment (SBIRT) may prevent health problems and prevent costly services use among adolescents related to mental health and substance misuse.
- Alcohol intake of 1.2 drinks/day was associated with an increased risk of atrial fibrillation (AF). Researchers observed a positive association between alcohol consumption and AF across different types of alcoholic beverages and consumption patterns, even in individuals with low alcohol consumption.
- A study examined trends in alcohol and other drug-related hospitalizations with discharge to a skilled nursing facility (SNF) among adults age 55 and older. Alcohol-related hospitalizations were the leading cause of discharge to a SNF.
- Enhanced alcohol enforcement operations involving community health and law enforcement agencies can reduce alcohol-impaired driving and related consequences among young people.

## **THREE-YEAR OUTCOMES AFTER BRIEF TREATMENT OF SUBSTANCE USE AND MOOD SYMPTOMS** January 2021

### **Abstract**

**Background:** Screening, brief intervention, and referral to treatment (SBIRT) for adolescents exhibiting co-occurring substance use and mental health problems may improve outcomes and have long-lasting effects. This study examined the relationship between access to SBIRT and substance use, depression and medical diagnoses, and health services use at 1 and 3 years postscreening for such adolescents.

**Methods:** The study draws from a cluster-randomized trial comparing SBIRT to usual care (UC) for adolescents endorsing past-year substance use and recent mood symptoms during visits to a general pediatrics clinic between November 1, 2011, and October 31, 2013, in a large, integrated health system ( $N = 1851$ ); this sample examined the subset of adolescents endorsing both problems ( $n = 289$ ). Outcomes included depression, substance use and medical diagnoses, and emergency department and outpatient visits 1 and 3 years later.

**Results:** The SBIRT group had lower odds of depression diagnoses at 1 (odds ratio [OR] = 0.31; confidence interval [CI] = 0.11–0.87) and 3 years (OR = 0.51; CI = 0.28–0.94) compared with the UC group. At 3 years, the SBIRT group had lower odds of a substance use diagnosis (OR = 0.46; CI = 0.23–0.92), and fewer emergency department visits (rate ratio = 0.65; CI = 0.44–0.97) than UC group.

**Conclusions:** The findings suggest that SBIRT may prevent health complications and avert costly services use among adolescents with both mental health and substance use problems. As SBIRT is implemented widely in pediatric primary care, training pediatricians to discuss substance use and mental health problems can translate to positive outcomes for these vulnerable adolescents.

**Source:** Parthasarathy, S., Kline-Simon, A.H., Jones, A. et al. 2021. Three-year outcomes after brief treatment of substance use and mood symptoms. *Pediatrics*, 147(1).  
<https://pediatrics.aappublications.org/content/147/1/e2020009191>

## **ALCOHOL CONSUMPTION, CARDIAC BIOMARKERS, AND RISK OF ATRIAL FIBRILLATION AND ADVERSE OUTCOMES** January 2021

### **Abstract**

**Aims:** There is inconsistent evidence on the relation of alcohol intake with incident atrial fibrillation (AF), in particular at lower doses. We assessed the association between alcohol consumption, biomarkers, and incident AF across the spectrum of alcohol intake in European cohorts.

**Methods and results:** In a community-based pooled cohort, we followed 107 845 individuals for the association between alcohol consumption, including types of alcohol and drinking patterns, and incident AF. We collected information on classical cardiovascular risk factors and incident heart failure (HF) and measured the biomarkers N-terminal pro-B-type natriuretic peptide and high-sensitivity troponin I. The median age of individuals was 47.8 years, 48.3% were men. The median alcohol consumption was 3 g/day.  $N = 5854$  individuals developed AF (median follow-up time: 13.9 years). In a sex- and cohort-stratified Cox regression analysis alcohol consumption was non-linearly and positively associated with incident AF. The hazard ratio for one drink (12 g) per day was 1.16, 95% CI 1.11–1.22,  $P < 0.001$ . Associations were similar across types of alcohol. In contrast, alcohol

consumption at lower doses was associated with reduced risk of incident HF. The association between alcohol consumption and incident AF was neither fully explained by cardiac biomarker concentrations nor by the occurrence of HF.

**Conclusions:** In contrast to other cardiovascular diseases such as HF, even modest habitual alcohol intake of 1.2 drinks/day was associated with an increased risk of AF, which needs to be considered in AF prevention.

**Source:** Csengeri, D., Sprünker, N., & Di Castelnuovo, A. et al. 2021. Alcohol consumption, cardiac biomarkers, and risk of atrial fibrillation and adverse outcomes, *European Heart Journal*, ehaa953. <https://doi.org/10.1093/eurheartj/ehaa953>

## **TRENDS IN INPATIENT DISCHARGES WITH DRUG OR ALCOHOL ADMISSION DIAGNOSES TO A SKILLED NURSING FACILITY AMONG OLDER ADULTS, NEW YORK CITY 2008–2014** **December 2020**

### **Abstract**

**Background:** Recent research shows an increase in drug and alcohol-related hospitalizations in the USA, especially among older adults. However, no study examines trends in discharges to a skilled nursing facility (SNF) after a drug or alcohol-related hospitalization. Older adults are more likely to need post-hospital care in a SNF after a hospitalization due to an increased presence of chronic diseases and functional limitations. Therefore, the objective of this study was to estimate trends in drug or alcohol-related hospitalizations with discharge to a SNF among adults age 55 and older.

**Methods:** We analyzed data from New York State's Statewide Planning and Research Cooperative System to calculate the number of cannabis, cocaine, opioid, and alcohol-related hospitalizations in New York City that resulted in discharge to a SNF from 2008 to 2014 among adults age 55 and older. Using New York City population estimates modified from US Census Bureau, we calculated age-specific rates per 100,000 adults. Trend tests were estimated using joinpoint regressions to calculate annual percentage change (APC) with 95% confidence intervals (CI) and stratified by adults age 55–64 and adults age 65 and older.

**Results:** During the study period, among adults age 55–64, there were significant increases in cocaine, cannabis, and opioid-related hospitalizations that resulted in discharge to a SNF. For adults ≥ 65 years, there were sharp increases across all substances with larger increases in opioids (APC of 10.66%) compared to adults 55–64 (APC of 6.49%). For both age groups and among the four substances, alcohol-related hospitalizations were the leading cause of discharge to a SNF.

**Conclusions:** We found an increase in hospital discharges to SNFs for patients age 55 and older admitted with alcohol or drug-related diagnoses. Post-acute and long-term care settings should prepare to care for an increase in older patients with substance use disorders by integrating a range of harm reduction interventions into their care settings.

**Source:** Han, B.H., Tuazon, E., Kunins, H.V. et al. 2020. Trends in inpatient discharges with drug or alcohol admission diagnoses to a skilled nursing facility among older adults, New York City 2008–2014. *Harm Reduction Journal*, 17, 99. <https://doi.org/10.1186/s12954-020-00450-8>

**EFFECTS OF A COMMUNITY-LEVEL INTERVENTION ON ALCOHOL-RELATED MOTOR VEHICLE CRASHES IN CALIFORNIA CITIES: A RANDOMIZED TRIAL**  
**November 2020**

**Abstract**

**Introduction:** This trial assesses the effects of a community-level alcohol prevention intervention in California on alcohol-related motor vehicle crashes.

**Study design:** The study is a group RCT with cities as the unit of assignment to condition and as the unit of analysis.

**Setting/participants:** A total of 24 California cities with populations between 50,000 and 450,000 were chosen at random and roughly matched into pairs before randomly assigning 12 each to the intervention and control conditions.

**Intervention:** The intervention, aimed at reducing excessive drinking among adolescents and young adults, included driving under the influence sobriety checkpoints, saturation patrols, and undercover operations to reduce service of alcohol to intoxicated patrons in bars, all including high visibility so the public would be aware of them. A measure of overall intervention intensity or dosage was created.

**Main outcome measures:** The outcome was a monthly percentage of all motor vehicle crashes that were single vehicle nighttime crashes for drivers aged 15–30 years.

**Results:** Multilevel analyses were conducted to examine intervention effects on alcohol-related crashes among drivers aged 15–30 years. Crash data were obtained in 2018 with data preparation and analysis conducted in 2019. Intent-to-treat analyses indicated a 17% reduction in the percentage of alcohol-involved crashes among drivers aged 15–30 years relative to controls, which translates to about 310 fewer crashes. Dosage was found to have a statistically significant effect on crashes among this age group, although not in the expected direction.

**Conclusions:** Enhanced alcohol enforcement operations involving both community health and law enforcement agencies can help to reduce alcohol-impaired driving and related consequences among young people. Including measures of intervention dosage raises interesting questions about the understanding of the impact of the community intervention. Future studies should continue to further develop implementation strategies that may more effectively and efficiently reduce community alcohol-related harm.

**Source:** Saltz, R.F., Paschall, M.J., & O'Hara, S.E. 2020. Effects of a community-level intervention on alcohol-related motor vehicle crashes in California cities: A randomized trial. *American Journal of Preventive Medicine*. [doi.org/10.1016/j.amepre.2020.08.009](https://doi.org/10.1016/j.amepre.2020.08.009).