

INTRODUCTION

The objective of this brief is to report on three substance use behaviors in Ohio – smoking, binge drinking, and misuse of prescription pain medication – and how they vary by region, insurance, and demographic characteristics.

The 2015 Ohio Medicaid Assessment Survey (OMAS) is a telephone survey that samples both landline and cell phones of Ohio residents. The survey examines insurance status, access to the health system, health statuses, demographics and other characteristics of Ohio’s Medicaid, Medicaid eligible, and non-Medicaid populations. In 2015, researchers completed 42,876 interviews with adults and 10,122 proxy interviews of children. The 2015 OMAS is the sixth iteration of the survey (previously known as Ohio Family Health Survey). For details, please see the 2015 OMAS Methodology Report.¹

In addition to the 2015 OMAS data, this report includes data from the 2004, 2008, and 2010 Ohio Family Health Surveys and the 2012 OMAS. Multiple years of data were included in order to track trends over time for all three substances. For all results presented in this brief, the following definitions were used. Current smoking was defined as currently smoking every day or some days. Binge drinking was defined as consuming 5 or more drinks on one occasion for men or 4 or more drinks on one occasion for women at least once in the past month. Misuse of prescription pain medication was defined as using a prescription pain reliever in a way not prescribed by the doctor or using someone else’s prescription pain reliever in the past year.

WHAT IS THE PREVALENCE OF SUBSTANCE USE IN OHIO?

Prevalence estimates for the three substances vary widely (Table 1). A little over one-third of Ohio adults use at least one of the substances reported in this brief. When examining the low-income adults who live at or below 138% of the Federal Poverty Level (FPL), there are differences in smoking and binge drinking prevalence between adults

Table 1: Prevalence and Confidence Intervals for the Three Substance Use

	Total Adult (19+ years) Population Prevalence (90% CI)	Monthly Income ≤ 138% FPL	
		Medicaid Enrolled Prevalence (90% CI)	Not in Medicaid Prevalence (90% CI)
Smoking	22.5% (22.1 – 23.0%)	44.2% (42.8 – 45.6%)	27.8% (26.6 – 28.9%)
Binge Drinking	16.7% (16.3 – 17.1%)	13.7% (12.7 – 14.7%)	15.5% (14.5 – 16.4%)
Misuse of Pain Rx	5.2% (5.0 – 5.5%)	5.5% (4.9 – 6.2%)	5.3% (4.7 – 5.9%)
<i>Number of Substances</i>			
0	64.1% (63.6 – 64.6%)	48.6% (47.2 – 50.1%)	61.4% (60.1 – 62.6%)
1	28.1% (27.6 – 28.5%)	40.2% (38.8 – 41.6%)	29.4% (28.2 – 30.6%)
2	7.1% (6.8 – 7.4%)	10.2% (9.4 – 11.1%)	8.5% (7.8 – 9.3%)
3	0.7% (0.6 – 0.8%)	1.0% (0.7 – 1.3%)	0.7% (0.5 – 1.0%)

enrolled in Medicaid and those not enrolled in Medicaid. Smoking is more prevalent and binge drinking less prevalent among adults enrolled in Medicaid compared to adults not enrolled in Medicaid. Additionally, over half of adults enrolled in Medicaid use at least one substance, but only 39% of low-income adults not enrolled in Medicaid use at least one substance.

Substance use behaviors tend to cluster. Among all adults in Ohio, the prevalence of misuse of prescription pain relievers is 7.1% among smokers, 10.2% among binge drinkers, and 12.4% among adults who both smoke and binge drink. Smoking is also more prevalent among adults who use another substance: 34.8% among binge drinkers, 33.8% among adults who have misused prescription pain relievers, and 42.2% among adults who both binge drink and misuse prescription pain relievers.

WHAT IS THE PATTERN OF SMOKING AMONG ADULTS IN OHIO?

In 2015, the prevalence of current smoking was 22.5% among adults age 19 and older in Ohio, with only a small difference by gender (23.8% among men and 21.4% among women) – roughly 2 million adults. In contrast, the smoking rate in the United States was approximately 17% during this time period². As displayed in Figure 1, smoking prevalence has decreased slightly among both men and women in Ohio since 2012. While there is little variation in smoking between women and men, differences do exist by age and poverty level. The prevalence of smoking is 28.5% among adults between ages 25 and 34, but

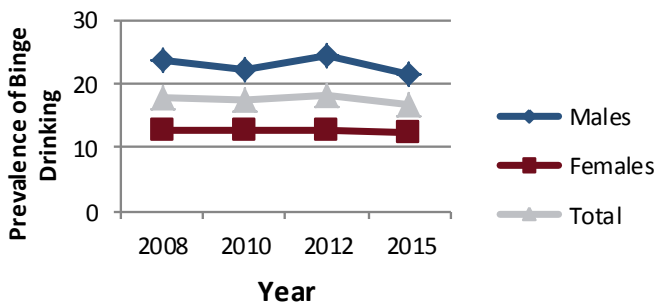
only 10.7% among those age 65 years or older. With respect to income, smoking prevalence is 38.5% among adults living below the FPL poverty and 13.9% among adults at > 300% FPL.

WHAT IS THE PATTERN OF BINGE DRINKING AMONG ADULTS IN OHIO?

In 2015, the prevalence of binge drinking was 16.7% among adults age 19 and older in Ohio, which is approximately 1.5 million adults. The binge drinking rate in the United States was 16.1% in 2014. As indicated in Figure 2, the binge drinking prevalence has decreased slightly among men in Ohio since 2012. There is a strong relationship between binge drinking and age, with the prevalence being 30.5% among 19-24-year-olds and 3.9% among adults age 65 and older.

Unlike the other behaviors examined in this report, binge drinking is more common among men and higher SES individuals. With respect to income, the prevalence of binge drinking is 17.4% among adults living below the FPL and 20.4% among adults living at > 300% of FPL.

Figure 2: Binge Drinking Prevalence Among Adults Age 19 and Over from 2008-2015, By Gender

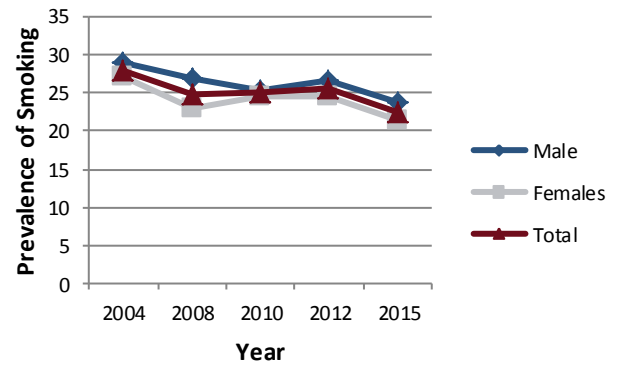


among 19-24-year-olds, 8.0% among 24-34-year-olds, and 2.4% among adults age 65 and older. Interestingly, the pattern is not strongly related to SES indicators, as the prevalence was 5.3% among adults living below FPL and 5.0% among adults living at > 300% FPL.

WHAT IS THE PATTERN OF SUBSTANCE USE AMONG LOW-INCOME ADULTS NEWLY VERSUS OLDLY ELIGIBLE FOR MEDICAID?

Figure 4 presents the prevalence estimates for all three substances among adults living at or below 138% of FPL by Medicaid enrollment status. When comparing adults enrolled in Medicaid through the old rules versus the new rules under the Affordable Care Act (ACA), the smoking prevalence appears to be similar between the newly and oldly eligible groups. Adults who are newly eligible for Medicaid have a slightly higher prevalence of binge drinking and misuse of prescription pain relievers compared to adults who are eligible for Medicaid under the pre-ACA rules. Low-income adults not enrolled in Medicaid have a lower smoking prevalence than adults enrolled in Medicaid (both newly and oldly eligible groups). However, their binge drinking prevalence is similar to the newly eligible and their prevalence of misusing prescription pain relievers is similar to the oldly eligible group.

Figure 1: Current Smoking Status Among Adults Age 19 and Over from 2004-2015, by Gender



WHAT IS THE PATTERN OF MISUSE OF PRESCRIPTION PAIN MEDICATION AMONG ADULTS IN OHIO?

In 2015, the prevalence of misuse of prescription pain medication in Ohio was 5.2% overall, 6.1% among men and 4.4% among women. This translates to approximately 450,000 adults. As indicated in Figure 3, the prevalence of misuse of prescription pain relievers has increased among both men and women in Ohio between 2012 and 2015. Misuse of prescription pain medication appears to be associated with age. In 2015, the prevalence of misuse of prescription pain relievers was 6.7% among 19-24-year-olds, 8.0% among 24-34-year-olds, and 2.4% among adults age 65 and older.

Figure 3: Misuse of Prescription Pain Reliever Prevalence Among Adults Age 19 and Over from 2008-2015, By Gender

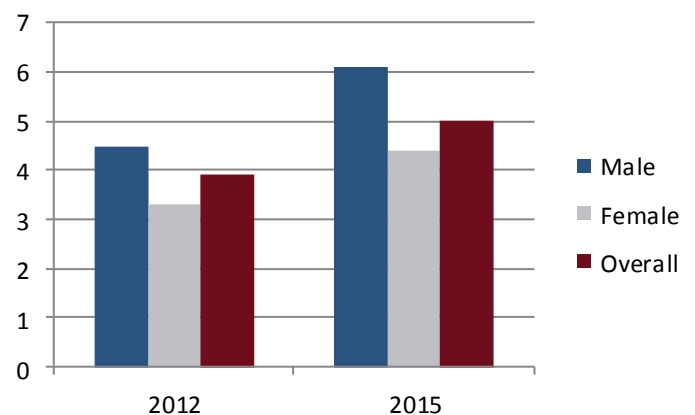
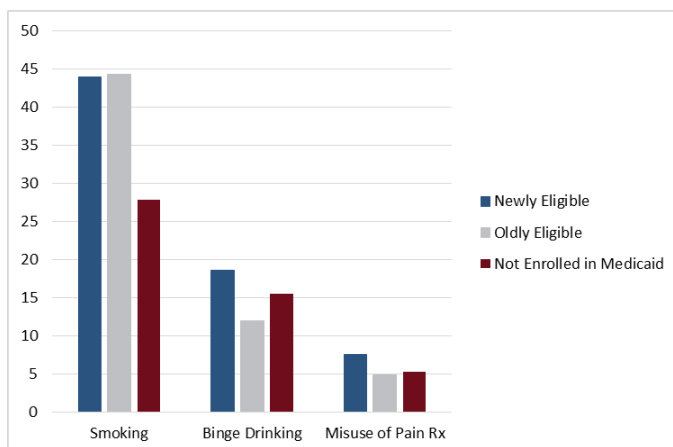


Figure 4. Prevalence of Substance Use Among Adults Age 19 and Over Living at or Below 138% FPL, By Medicaid Status



HOW DOES SUBSTANCE USE VARY WITH MENTAL DISTRESS?

Many researchers have reported that substance use and mental illness are strongly related. As indicated in Table 2, the prevalence of smoking, binge drinking, and misuse of prescription pain relievers increase with an increasing number of days that mental health interfered with normal activity. Interestingly, for each substance, the increasing trend plateaued at 7-13 days. The binge drinking prevalence actually decreased substantially among adults who had two or more weeks of poor mental health days.

SUBSTANCE USE PREVALENCE BY COUNTY TYPE IN OHIO

Across all county types, current smoking prevalence is nearly twice as

high among adults enrolled in Medicaid versus those not enrolled in Medicaid. Binge drinking prevalence is slightly higher among non-Medicaid enrollees in each county type grouping in Ohio. Finally, misuse of prescription pain relievers is slightly higher among Medicaid enrollees in each county type grouping in Ohio, with the largest difference in the suburban counties.

POLICY CONSIDERATIONS

The four goals of the Center for Disease Control and Prevention's (CDC) National Tobacco Control Program are to: 1) eliminate exposure to secondhand smoke; 2) promote quitting among adults and youth; 3) prevent initiation among youth; and, 4) identify and eliminate disparities among population groups. Ohio data suggest that adults covered by Medicaid smoke at an elevated rate and would

benefit from targeted cessation efforts. Other researchers have found that both Medicaid enrollees and physicians are largely unaware of Medicaid's cessation pharmacotherapy coverage options, and that those who are aware are more likely to use pharmacotherapy.⁴⁻⁶ Educating Medicaid enrollees about smoking cessation pharmacotherapy options could increase the rate at which they use therapy when attempting a quit, which more than doubles quit rates.⁷ Indeed, researchers in Massachusetts found that after their state Medicaid program heavily promoted easily accessible and affordable smoking cessation pharmacotherapy and counseling, smoking prevalence among Medicaid recipients decreased by 26%.⁸ Additionally, for every \$1 that the Massachusetts Medicaid program invested in tobacco cessation, \$3.12 in savings was realized for cardiac hospitalizations alone, for a return on investment of \$2.12.⁹ A study conducted among Medicaid recipients in Ohio Appalachia found that targeting physicians even briefly with messages about the importance of addressing tobacco cessation resulted in over two-thirds advising their patients to quit smoking and over one-third prescribing cessation pharmacotherapy.¹⁰

Evidence suggests that contingency management (CM) programs, or providing incentives to achieve abstinence, can increase the

quit rates among some groups of smokers. CM interventions have a long history in the field of substance abuse treatment, but in recent years they have been examined in adolescents,¹¹ individuals with mental health disorders,¹² and pregnant women.¹³

Table 2. Prevalence for the Three Substance Use Behaviors by Poor Mental Health Day in Ohio in 2015

# Days among Past 30	Smoking	Binge Drinking	Misuse of Pain Rx
0 Days	20.0%	16.2%	4.5%
1-6 Days	31.0%	23.3%	10.1%
7-13 Days	44.3%	25.2%	11.7%
14+ Days	43.6%	15.4%	9.2%

Table 3. Prevalence for the Three Substance Use Behaviors by County Type and Medicaid Status among Adults in Ohio in 2015

County type	Smoking		Binge Drinking		Misuse of Pain Rx	
	Medicaid	Other	Medicaid	Other	Medicaid	Other
Appalachia	44.5%	22.8%	13.9%	14.8%	5.2%	5.0%
Rural, non-Appalachia	43.2%	17.7%	14.2%	16.6%	5.5%	4.9%
Metropolitan	38.8%	17.9%	15.5%	18.3%	5.6%	5.5%
Suburban	37.2%	16.6%	13.4%	16.0%	6.0%	4.3%

In this latter study of pregnant women, smoking cessation increased compared to control (34% versus 7.1% quit rates) and birth outcomes were significantly better in the CM condition. Thus, these promising interventions deserve further discussion in Ohio.

While the prevalence of binge drinking in Ohio is similar to the national prevalence of binge drinking, the public health problem of alcohol abuse should not be ignored. The CDC's Alcohol Program is focused on preventing excessive alcohol consumption and the adverse consequences of binge drinking. They recommend the following policy approaches to alcohol abuse prevention: 1) regulation of alcohol outlet density (e.g., zoning or licensing laws); 2) increasing taxes on alcohol; 3) limits on hours and days of alcohol sales; 4) introducing commercial host liability laws; and, 5) enhanced enforcement of minor sales laws.

The Substance Abuse and Mental Health Services Administration has promoted the Screening, Brief Intervention, and Referral to Treatment, or the SBIRT, model. The benefits to this public health approach are that many different provider types and places where individuals receive health care (primary care clinics, emergency departments, and community settings) can reach out and identify individuals who need treatment for substance use disorders. Following screening, brief intervention can occur which involves motivating the individual to seek treatment, which is the last step of the process.

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FOR MORE INFORMATION

To view more information about OMAS and the findings in this policy brief, please visit the OMAS website at the Ohio Colleges of Medicine Government Resource Center: grc.osu.edu/OMAS.

