

Supplementary Online Content

Han B, Jones CM, Einstein EB, Compton WM. Trends in and characteristics of buprenorphine misuse among adults in the US. *JAMA Netw Open*. 2021;4(10):e2129409. doi:10.1001/jamanetworkopen.2021.29409

eTable. Multivariable Multinomial Logistic Regression Factors Associated With Past-Year Opioid Use Disorder and Buprenorphine Misuse Status Among US Adults With Past-Year Buprenorphine Use

This supplementary material has been provided by the authors to give readers additional information about their work.

eTable. Multivariable Multinomial Logistic Regression Factors Associated With Past-Year Opioid Use Disorder and Buprenorphine Misuse Status Among US Adults With Past-Year Buprenorphine Use

	Adjusted OR (95% CI)					
Among Adults with Past- Year Buprenorphine Use	OU D : Misuse vs. No misuse	No O U D: Misuse vs. No misuse	Misuse & O U D vs. No Misuse & No O U D	Misuse: O U D vs. No O U D	No Misuse: O U D vs. No O U D	Misuse, No O U D vs. No Misuse, O U D
Age						
18-23	2.0 (0.84-4.98)	2.0 (0.87-4.78)	1.7 (0.73-4.09)	0.8 (0.35-2.05)	0.8 (0.34-2.12)	2.4 (1.01-5.81)
24-34	2.9 (1.42-5.77)	2.1 (1.08-4.22)	2.8 (1.41-5.61)	1.3 (0.62-2.77)	1.0 (0.45-2.13)	2.2 (1.08-4.40)
35-49	2.3 (1.20-4.52)	1.6 (0.88-2.82)	2.4 (1.23-4.64)	1.5 (0.69-3.32)	1.0 (0.44-2.38)	1.5 (0.64-3.68)
≥50+	1.0	1.0	1.0	1.0	1.0	1.0
Sex						
Men	0.8 (0.53-1.25)	1.1 (0.69-1.68)	1.1 (0.73-1.68)	1.0 (0.63-1.67)	1.4 (0.92-2.02)	0.8 (0.48-1.31)
Women+	1.0	1.0	1.0	1.0	1.0	1.0
Race/Ethnicity						
NH White+	1.0	1.0	1.0	1.0	1.0	1.0
NH Black	1.5 (0.78-2.82)	1.0 (0.36-2.59)	2.2 (0.80-6.23)	2.3 (0.81-6.68)	1.5 (0.49-4.65)	0.6 (0.21-1.91)
Hispanic	0.7 (0.38-1.45)	1.3 (0.64-2.56)	0.9 (0.51-1.61)	0.7 (0.39-1.30)	1.2 (0.63-2.41)	1.0 (0.48-2.25)
NH other	0.9 (0.41-1.87)	1.2 (0.54-2.70)	1.2 (0.53-2.57)	1.0 (0.38-2.48)	1.3 (0.63-2.87)	0.9 (0.38-2.12)
Family Income						
<\$20,000	1.1 (0.58-1.88)	1.9 (1.14-3.27)	1.0 (0.50-1.83)	0.5 (0.24-1.01)	0.9 (0.50-1.65)	2.1 (1.12-4.04)
\$20,000-\$49,999	1.1 (0.62-1.82)	1.3 (0.77-2.29)	0.8 (0.46-1.48)	0.6 (0.34-1.15)	0.8 (0.44-1.37)	1.7 (0.90-3.24)
\$50,000-\$74,999	2.0 (0.91-4.28)	1.2 (0.62-2.36)	1.0 (0.51-1.83)	0.8 (0.38-1.69)	0.5 (0.24-0.99)	2.5 (1.13-5.30)
≥\$75,000+	1.0	1.0	1.0	1.0	1.0	1.0
Metropolitan Statistical Area						
Large metro+	1.0	1.0	1.0	1.0	1.0	1.0
Small metro	1.5 (0.98-2.22)	1.4 (0.86-2.12)	1.0 (0.59-1.53)	0.7 (0.37-1.32)	0.7 (0.42-1.00)	2.1 (1.15-3.81)
Non-metro	1.8 (1.04-2.99)	1.4 (0.85-2.37)	1.0 (0.60-1.51)	0.7 (0.40-1.13)	0.5 (0.31-0.94)	2.6 (1.52-4.59)
Suicide Plan						
Yes	0.5 (0.23-1.14)	4.1 (1.69-9.83)	2.5 (1.06-5.76)	0.6 (0.25-1.46)	4.8 (2.45-9.39)	0.9 (0.36-2.03)
No+	1.0	1.0	1.0	1.0	1.0	1.0
Tobacco Use & Disorder						
PM nicotine dependence (ND)	1.2 (0.63-2.44)	1.4 (0.75-2.61)	3.0 (1.47-6.28)	2.2 (0.99-4.67)	2.5 (1.32-4.57)	0.6 (0.27-1.22)
PY tobacco use, no PM ND	0.9 (0.46-1.79)	1.0 (0.56-1.95)	1.8 (0.92-3.52)	1.7 (0.83-3.62)	2.0 (1.06-3.70)	0.5 (0.24-1.16)
No PY tobacco use+	1.0	1.0	1.0	1.0	1.0	1.0
Alcohol Use & Disorder						
PY alcohol use disorder	1.6 (0.94-2.75)	1.8 (1.02-3.22)	1.0 (0.59-1.73)	0.6 (0.29-1.07)	0.6 (0.34-1.15)	2.9 (1.61-5.16)
PY alcohol use, no disorder	1.5 (0.97-2.33)	1.7 (1.06-2.85)	1.2 (0.76-1.74)	0.7 (0.38-1.14)	0.8 (0.49-1.19)	2.3 (1.25-4.12)
No PY alcohol use +	1.0	1.0	1.0	1.0	1.0	1.0

Among Adults with Past-Year Buprenorphine Use	ODU: Misuse vs. No misuse	No OUD: Misuse vs. No misuse	Misuse & OUD vs. No Misuse & No OUD	Misuse: OUD vs. No OUD	No Misuse: OUD vs. No OUD	Misuse, No OUD vs. No Misuse, OUD
Cannabis Use & Disorder						
PY cannabis use disorder	1.4 (0.65-3.05)	0.8 (0.38-1.49)	1.9 (0.97-3.56)	2.5 (1.18-5.19)	1.3 (0.66-2.63)	0.6 (0.26-1.26)
PY cannabis use, but no disorder	1.2 (0.78-1.90)	1.5 (1.02-2.24)	1.6 (1.05-2.55)	1.1 (0.65-1.82)	1.4 (0.86-2.10)	1.1 (0.64-1.95)
No PY cannabis use+	1.0	1.0	1.0	1.0	1.0	1.0
Cocaine Use & Disorder						
PY use or disorder	2.3 (1.09-4.71)	4.0 (2.35-6.92)	9.8 (4.81-20.10)	2.4 (1.30-4.59)	4.3 (1.81-10.38)	0.9 (0.41-2.10)
Lifetime use, no PY use	1.9 (1.02-3.59)	2.1 (1.37-3.28)	3.7 (2.14-6.45)	1.8 (1.03-3.00)	1.9 (0.97-3.89)	1.1 (0.51-2.36)
Never use+	1.0	1.0	1.0	1.0	1.0	1.0
Rx Sed./Tranq. Misuse & Disorder						
PY misuse & disorder	0.9 (0.46-1.66)	0.9 (0.57-1.50)	1.7 (1.09-2.72)	1.9 (1.13-3.03)	2.0 (1.00-3.87)	0.5 (0.22-1.03)
PY use, no misuse	0.3 (0.16-0.64)	0.3 (0.19-0.47)	0.4 (0.23-0.71)	1.4 (0.83-2.22)	1.3 (0.62-2.63)	0.2 (0.11-0.49)
Lifetime use, no PY use	0.6 (0.25-1.34)	0.7 (0.34-1.45)	0.5 (0.28-1.00)	0.8 (0.35-1.61)	0.9 (0.45-1.86)	0.8 (0.29-2.01)
Never use+	1.0	1.0	1.0	1.0	1.0	1.0
Rx. Stimulant Misuse & Disorder						
PY use disorder	3.9 (1.34-11.23)	3.3 (0.91-12.35)	4.0 (1.37-11.60)	1.2 (0.43-3.27)	1.0 (0.26-4.04)	3.3 (0.78-13.62)
PY misuse, no disorder	1.6 (1.00-2.62)	1.2 (0.68-2.16)	0.7 (0.36-1.38)	0.6 (0.32-1.04)	0.4 (0.21-0.88)	2.8 (1.62-4.81)
No PY misuse +	1.0	1.0	1.0	1.0	1.0	1.0
PY Hydrocodone Product Misuse						
Yes	0.8 (0.51-1.30)	4.3 (2.65-7.08)	4.9 (2.97-8.16)	1.1 (0.74-1.75)	6.9 (3.10-11.73)	0.7 (0.39-1.32)
No+	1.0	1.0	1.0	1.0	1.0	1.0
PY Oxycodone Product Misuse						
Yes	1.9 (1.18-3.05)	3.9 (2.31-6.46)	10.0 (5.77-16.23)	2.5 (1.49-4.21)	5.1 (2.80-9.29)	0.8 (0.38-1.50)
No+	1.0	1.0	1.0	1.0	1.0	1.0
PY Substance Use Treatment						
Drug only	0.4 (0.27-0.67)	0.4 (0.21-0.58)	1.7 (1.05-2.82)	4.9 (2.79-8.67)	4.0 (2.60-6.17)	0.1 (0.05-0.15)
Both alcohol and drug	1.0 (0.56-1.90)	0.7 (0.31-1.64)	2.6 (1.40-4.82)	3.6 (1.84-7.10)	2.5 (1.17-5.43)	0.3 (0.14-0.58)
None+	1.0	1.0	1.0	1.0	1.0	1.0

Data source: 2469 respondents of 2015-2019 National Surveys on Drug Use and Health data. Misuse=buprenorphine misuse; OUD=opioid use disorder; PY=past year; PM=past month; Rx=prescription; Sed./Tranq=sedative or tranquilizer; Each **bolded** estimate is statistically significantly ($P<0.05$) different from the estimate of the reference group (with + sign). Other variables, which were presented in Table 2, but not in Table 3, were not significantly associated with the outcomes and were removed from this final multinomial logistic regression model. Age, sex, and race/ethnicity remained in the final model regardless of their statistical significance.