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Prevalence of Blunt and Hemp Wrap Use Among Young Adults in the United States, 2022

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Abstract

Introduction: Blunt and hemp wraps, as a means of consuming cannabis, have emerged into the retail space where the prevalence has been increasing since 2017. There is limited epidemiological research on the prevalence of use of these products across the U.S. particularly among young adults who are at greater risk of tobacco and cannabis use.

Methods: This study draws from a U.S. national representative sample of young adults ($n = 1178$) captured in May 2022. Respondents participated in an online survey about their use of blunt and hemp wraps. Multinomial regression was used to examine differences in sociodemographic characteristics (gender, race/ethnicity, sexual orientation, educational attainment, and region) in relation to use of each wrap type.

Results: One quarter (22.7%) of young adults reported ever having used a blunt wrap, 3.2% in the past 30-days. One in seven (14.3%) had ever used a hemp wrap, 2.3% in the past

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30-days. Non-Hispanic Black young adults were 1.55 and 2.91 times as likely to have ever used blunt or hemp wraps, respectively, compared to non-Hispanic Whites. Similarly, participants who identified as gay or lesbian or bisexual similarly had greater odds of having ever used blunt or hemp wraps. Hispanic young adults were 2.49 times as likely to have used hempwraps compared to non-Hispanic Whites.

Conclusion: Blunt and hemp wrap use is prevalent among young adults, particularly among minoritized populations. Continued research and surveillance of use of these products is needed to fully evaluate the impact their use may have on the broader population.

Keywords

Blunt wrap; hemp wrap; tobacco-free; blunt wrap; tobacco use; cannabis use; tobacco-cannabis co-use; young adults

Introduction

Among young adults who co-use tobacco and cannabis, blunts are the second most common modality for consumption and are used by 42.7% of young adults (Cohn & Chen, 2022; Wadsworth et al., 2022). There are known racial and ethnic disparities in blunt use which are more prevalent in non-Hispanic Black and Hispanic populations where 25.2% and 15.0%, respectively, of individuals who report using blunts reporting daily use compared to 9.7% of non-Hispanic White individuals (Mantey et al., 2021). In the past, blunts were largely created through the modification of cigar products, often little cigars or cigarillos, by removing the interior tobacco and replacing it with loose cannabis flower. In recent years, however, there has been a growing prevalence of a wide variety blunt wraps on available on the market including tobacco-containing and tobacco-free wraps (Kong et al., 2023; Schroth et al., 2022; Timberlake et al., 2021). Use of blunt wraps is particularly prominent among adolescents where 36.0% of those who have used blunts report use of tobacco-containing blunt wraps, as distinct from modified cigar products in that they are readily available as a flat sheet, and 53.1% reporting use of tobacco-free blunt wraps (Morean et al., 2023).

Tobacco-free blunt wraps often marketed as a healthier alternative to tobacco blunt wraps with tobacco-free blunt wraps, such as those made from hemp, being marketed as “vegan” and “organic” (Rhee et al., 2024). Hemp wraps emerged into prominence in the retail space around 2017 (Rhee et al., 2024), are derived from the cannabis plant, and may contain varying levels of cannabidiol (CBD) or CBD derivatives including psychoactive tetrahydrocannabinol (THC), the main psychoactive constituent in the form of delta-8 THC or similar compounds (e.g., THC-A or THC-P). Hemp products and psychoactive CBD derivatives have become increasingly available in states where cannabis has not been legalized due to a legal loophole in the 2018 U.S. Farm Bill (Spindle et al., 2019).

There are public health implications in understanding the epidemiology of wrap use, especially regarding hemp wraps given how they are being marketed in hand with the emergence of psychoactive CBD derivatives. Coupling the complexity of quantifying the health impact of tobacco and cannabis co-use (Smith et al., 2020; Tashkin & Roth, 2019) with our nascent understanding of hemp product use necessitates broader research beginning

with an evaluation of the breadth of product use. The purpose of this research was therefore to describe the prevalence of blunt and hemp wrap use among young adults in the U.S.

Methods

Population

Data come from the *C'RILLOS* Study, a U.S. nationally representative cohort of young adults in the U.S. from the National Opinion Research Center at the University of Chicago's drawn from the AmeriSpeak Panel. Additional information on the sample can be found elsewhere (Sterling et al., 2022). Briefly, this study followed a cohort of young adults across four waves of data collection between 2019 and 2022. Refresh participants were enrolled in subsequent waves to replace those who were not reached, ensuring the continuity and comprehensiveness of the sample. Eligibility was determined as being between the ages of 18 and 34 at the time of their enrollment. Previous research informing the sampling frame for this study indicates that this particular age range has particularly high rates of use of little cigar and cigarillos, which are commonly modified to create blunts (Delnevo et al., 2015; King et al., 2013; Sterling et al., 2016). Furthermore, this dataset included an oversample of non-Hispanic Black and Hispanic young adults who are traditionally under-represented in tobacco control research. This analysis uses data from the Wave 4 collected in May 2022 ($n = 1,178$). Data were weighted to be representative of the U.S. young adult population. All participants provided informed consent prior to participating in the study. This study was approved by the University of Texas Health Science Center Institutional Review Board.

Blunt and hemp wraps

Tobacco-containing blunt wrap, herein referred to blunt wrap, use histories were captured using the question, "Have you ever used a blunt wrap? A blunt wrap is a rolling paper that is made from tobacco. An example of blunt wraps is the *Royal Blunt* brand, but there are others." Hemp wrap use histories were captured using the question, "Have you ever used a hemp wrap? A hemp wrap is a thin, flat sheet of paper made from hemp. An example of hemp wrap is *High Hemp*, but there are others." Individuals who reported ever having used blunt or hemp wraps were subsequently asked about how recently they had last used these products. Participants were categorized into three non-mutually exclusive groups (use of blunt wraps, use of hemp wraps, use of both blunt and hemp wraps) capturing individuals who had ever used as well as those who had used them within the past 30-days.

Tobacco and cannabis use

Respondents were asked if they had ever tried the following tobacco or cannabis products: cigarettes, little cigar or cigarillo without marijuana, large cigars, hookah, and e-cigarettes without marijuana, little cigar or cigarillo with marijuana (hereafter referred to as a blunt), e-cigarettes, and other marijuana products (not consumed as blunts or with e-cigarettes) and subsequently asked, "When was the last time you used [product]?" We included responses into those who had reported use of tobacco or cannabis products within the past 30-days.

Sociodemographics

Sociodemographic characteristics included gender, combined race and ethnicity (non-Hispanic White (NHW), non-Hispanic Black (NHB), non-Hispanic Asian (NHA), non-Hispanic Multiracial (NHM), Hispanic (HIS)), sexual orientation (heterosexual/straight, not heterosexual (gay or lesbian, bisexual, heterosexual)), educational attainment (high school graduate or equivalent (high school or less), vocational, technical school, some college or Associate's degree (some college or technical school), Bachelor's degree or post graduate study or professional degree (Bachelor's degree or more), and geographic region as determined by the U.S. Census Bureau (Northeast, Midwest, South West)

Analysis

We used bivariate chi-square analyses to examine differences in lifetime and past 30-day wrap use across sociodemographic characteristics and current tobacco and cannabis use behaviors. Logistic regression was used in three separate models to examine the odds of lifetime wrap use for either wrap type, blunt wraps, and hemp wraps using no use of the respective wrap type as the referent. Multinomial logistic regression was used to examine differences in the lifetime prevalence of mutually exclusive groups of individuals reporting use of blunt wraps only, use of hemp wraps only, and use of both wrap types compared to those who reported no lifetime use of any wraps. All models were adjusted for sociodemographic characteristics and current use of any tobacco or cannabis products in the past 30 days. All analyses were conducted using SAS (v.9.4).

Results

Half of respondents in this sample identified as male, 22.1% identified as HIS and 13.7% identified as NHB, 16.7% identified as non-heterosexual, over half (62.2%) had some college or technical school experience, 28.8% reported having used a tobacco product, 25.1% reported having used a cannabis product, and 17.0% reported having used both tobacco and cannabis products in the past 30-days (Table 1). Over a quarter of young adults (27.0%) reported ever having used either wrap type with 4.0% of all young adults having used within the past 30-days. Across wrap types, 22.7% reported use of blunt wraps (3.2% in the past 30-days), 14.3% reported use of hemp wraps (2.3% in the past 30-days) and 10.2% had ever used both wrap types (1.5% in the past 30-days)

The logistic regression models indicate that sociodemographic related to wrap use were different for each wrap type (Table 2). Participants who identified as NHB were 1.55 (95% CI: 1.01, 2.39) and 2.91 (95% CI: 1.73, 4.90) times to have used blunt wraps or hemp wraps, respectively, compared to NHW participants. Participants who identified as HIS were more likely to report use of hemp wraps (AOR 2.49; 95% CI (1.54, 4.03) compared to NHW participants, but no difference was observed for blunt wraps. Participants who identified as gay or lesbian were 2.37 (95% CI: 1.38, 4.08) and 2.75 (95% CI: 1.44, 5.25) times as likely to have used blunt wraps or hemp wraps, respectively compared to participants who identified as heterosexual. Participants who identified as bisexual were similarly at greater odds of use across all wrap types. Current use of tobacco or cannabis products was

associated with twice the odds of using any wrap compared to those who did not currently use tobacco or cannabis.

Similar patterns are observed with respect to mutually exclusive groups of wrap type use (Supplemental Table 1). NHB and HIS participants had greater odds of having ever used hemp wraps only or having used both wrap types compared to NHW participants. However, there was no difference by race and ethnicity for those who reported use of only blunt wraps. This was observed as well among individuals identifying as gay, lesbian, or bisexual.

Discussion

The primary strength of this research is that it is the first research, to our knowledge, to describe the population-level prevalence of tobacco-containing blunt and tobacco-free hemp wrap use among a nationally representative sample of young adults in the U.S. Nearly one in four (27.0%) young adults reported having used one of these products and about 4.0% have used one and/or the other in the past 30-days. We observed significant disparities in the prevalence of wrap use particularly among racial and ethnic minorities (NHB and HIS) as well as sexual minorities. This is not altogether unsurprising as cigarillos, the proto-blunt wrap, are disproportionately marketed to these same populations (Cruz et al., 2019; Ganz et al., 2022; Giovenco et al., 2018; Tan et al., 2021) and many wraps are sold by the same companies who sell tobacco products (University of Bath, 2023). It is likely they are using the same or similar marketing strategies that are being employed for these products in the same populations.

The public health implications of use of wraps, particularly hemp wraps, are difficult to assess given the lack of available research and lack of oversight of how these tobacco-free wraps are produced and marketed (Kong et al., 2023). One line of thought is that these products may be a salient alternative to traditional, tobacco containing wraps as a form of harm reduction. Currently, there is some evidence which suggests that tobacco-free blunt wraps, as a whole, are perceived by those who use blunts as having less risk than the traditional tobacco-containing blunts which bolsters that notion. However, these same individuals also perceived tobacco-free wraps as less appealing due to a variety of factors including not having nicotine, having a faster burn rate, or being more flimsy (Paredes et al., 2024). In hand with our findings that those who currently use tobacco have a greater odds of having ever used hemp wraps suggests that these products may not necessarily act as substitute for tobacco though future research may be needed to examine if individuals have used hemp wraps as a form of cessation.

At present, there is limited oversight in manufacturing and marketing of these products. Additional considerations may need to include how these products are manufactured as well as their composition including presence of synthetic, psychoactive THC and flavor additives or terpenes which may ultimately impact the abuse liability of these products. The lack of minimum legal purchasing age restrictions of these products coupled with the general lack oversight of marketing practices poses a substantial risk to adolescents who are susceptible to advertising strategies (Weitzman & Lee, 2020). The risk may be even greater for those adolescents within minoritized populations who have been persistently targeted for

pro-tobacco marketing (Cruz et al., 2019; Ganz et al., 2022; Giovenco et al., 2018; Tan et al., 2021). Given that the adolescent brain is still developing, use of nicotine or cannabis can have a lifelong impact on the brain increasing the risks for later substance use disorders or other psychiatric conditions (Fischer et al., 2020; Leslie, 2020). To minimize the potential risks for adolescents, implementing policies directed at minimum age purchasing restrictions as well as oversight of marketing practices may be necessary as the research evolves to evaluate the implications of these products for adult populations.

This study has important limitations that should be considered. First, this study examines the use of hemp wraps as a broad category and does not include the composition of hemp wrap themselves including those with or without CBD or other hemp-derived psychoactive cannabinoids or alternative cannabinoids as well as what substances they are consumed with (e.g., nicotine, cannabis, and/or other substances). Given the greater prevalence of use among vulnerable racial and ethnic minorities and sexual and gender minority populations, the composition and contexts of use of these products may need to be considered particularly when thinking about abuse liability as well as their utility in smoking cessation. In addition, this study may be impacted by recall bias and the ability of participants to differentiate between hemp wraps and other forms tobacco-free blunt wraps. Given the emergence of a broader variety of tobacco-free wraps in the marketplace may warrant further investigation to understand key differences in marketing and perceptions of these various products individually.

Conclusion

Blunt and hemp wrap use is prevalent among young adults particularly among vulnerable populations including racial and ethnic minorities and sexual minorities. The growing availability and marketing of products as healthier alternatives to young, minoritized populations may exacerbate chronic tobacco-related health inequities. Continued research and surveillance are needed to monitor blunt and hemp wrap use and fully evaluate the impact on health outcomes.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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Data availability statement

Data can be made available upon request to the senior author.

References

- Cohn AM, & Chen S (2022). Age groups differences in the prevalence and popularity of individual tobacco product use in young adult and adult marijuana and tobacco co-users and tobacco-only users: Findings from Wave 4 of the population assessment of tobacco and health study. *Drug and Alcohol Dependence*, 233, 109278. 10.1016/j.drugalcdep.2022.109278 [PubMed: 35151023]
- Cruz TB, Rose SW, Lienemann BA, Byron MJ, Meissner HI, Baezconde-Garbanati L, Huang L-L, Carroll DM, Soto C, & Unger JB (2019). Pro-tobacco marketing and anti-tobacco campaigns aimed at vulnerable populations: A review of the literature. *Tobacco Induced Diseases*, 17, 68. 10.18332/tid/111397 [PubMed: 31582956]
- Delnevo CD, Giovenco DP, Ambrose BK, Corey CG, & Conway KP (2015). Preference for flavoured cigar brands among youth, young adults and adults in the USA. *Tobacco Control*, 24(4), 389–394. 10.1136/tobaccocontrol-2013-051408 [PubMed: 24721967]
- Fischer AS, Tapert SF, Louie DL, Schatzberg AF, & Singh MK (2020). Cannabis and the Developing Adolescent Brain. *Current Treatment Options in Psychiatry*, 7(2), 144–161. 10.1007/s40501-020-00202-2 [PubMed: 32714742]
- Ganz O, Wackowski OA, Gratale S, Chen-Sankey J, Safi Z, & Delnevo CD (2022). The Landscape of Cigar Marketing in Print Magazines from 2018–2021: Content, Expenditures, Volume, Placement and Reach. *International Journal of Environmental Research and Public Health*, 19(23), 16172. 10.3390/ijerph192316172 [PubMed: 36498246]
- Giovenco DP, Spillane TE, & Merizier JM (2018). Neighborhood differences in alternative tobacco product availability and advertising in New York City: Implications for health disparities. *Nicotine & Tobacco Research*, 21(7), 896–902. 10.1093/ntr/nty244
- King BA, Dube SR, & Tynan MA (2013). Flavored cigar smoking among U.S. Adults: Findings from the 2009–2010 National Adult Tobacco Survey. *Nicotine & Tobacco Research*, 15(2), 608–614. 10.1093/ntr/nts178 [PubMed: 22927687]
- Kong G, Morean ME, Davis DR, Bold KW, & Krishnan-Sarin S (2023). Tobacco-free blunt wraps: A regulatory conundrum. *Tobacco Control*, 33(e1), e136–e137. 10.1136/tc-2023-058100
- Leslie FM (2020). Unique, long-term effects of nicotine on adolescent brain. *Pharmacology, Biochemistry, and Behavior*, 197, 173010. 10.1016/j.pbb.2020.173010 [PubMed: 32738256]
- Mantey DS, Onyinye O-N, & Montgomery L (2021). Prevalence and correlates of daily blunt use among U.S. African American, Hispanic and White Adults from 2014 to 2018. *Psychology of Addictive Behaviors*, 35(5), 514–522. 10.1037/adb0000702 [PubMed: 33914562]
- Morean ME, Kong G, Bold KW, Davis DR, & Krishnan-Sarin S (2023). Accurately classifying cannabis blunt use as tobacco-cannabis co-use versus exclusive cannabis use. *Drug and Alcohol Dependence*, 249, 109941. 10.1016/j.drugalc-dep.2023.109941 [PubMed: 37270936]
- Paredes J, D'Anna L, Ramirez LD, Mayhan KT, Rhee JU, & Timberlake DS (2024). A qualitative assessment of blunt smokers' perceptions and receptivity to non-tobacco blunt wraps. *Journal of Studies on Alcohol and Drugs*, 2024, jsad.23–00331. 10.15288/jsad.23-00331
- Rhee JU, Huang Y, Soroosh AJ, Alsudais S, Ni S, Kumar A, Paredes J, Li C, & Timberlake DS (2024). The Marketing and perceptions of non-tobacco blunt wraps on Twitter. *Substance Use & Misuse*, 59(4), 469–477. 10.1080/10826084.2023.2280572 [PubMed: 37982451]
- Schroth KRJ, Kurti M, & Delnevo CD (2022). Flavored cigar availability in Oakland after a partial ban. *Addictive Behaviors*, 125, 107150. 10.1016/j.addbeh.2021.107150 [PubMed: 34673362]
- Smith DM, O'Connor RJ, Wei B, Travers M, Hyland A, & Goniewicz ML (2020). Nicotine and toxicant exposure among concurrent users (Co-Users) of Tobacco and Cannabis. *Nicotine & Tobacco Research*, 22(8), 1354–1363. 10.1093/ntr/ntz122 [PubMed: 31388679]
- Spindle TR, Bonn-Miller MO, & Vandrey R (2019). Changing landscape of cannabis: Novel products, formulations, and methods of administration. *Current Opinion in Psychology*, 30, 98–102. 10.1016/j.copsyc.2019.04.002 [PubMed: 31071592]
- Sterling KL, Fryer CS, Pagano I, & Fagan P (2016). Little Cigars and Cigarillos use among young adult cigarette smokers in the United States: Understanding risk of concomitant use subtypes. *Nicotine & Tobacco Research*, 18(12), 2234–2242. 10.1093/ntr/ntw170 [PubMed: 27613889]

- Sterling KL, Masyn K, Moore SP, Fryer CS, Trapl E, Shang C, & Gunzler D (2022). Tobacco Whack-A-Mole: A consumption taxonomy of cigar & other combustible tobacco products among a nationally representative sample of young adults. *International Journal of Environmental Research and Public Health*, 19(22), 15248. 10.3390/ijerph192215248 [PubMed: 36429968]
- Tan ASL, Hanby EP, Sanders-Jackson A, Lee S, Viswanath K, & Potter J (2021). Inequities in tobacco advertising exposure among young adult sexual, racial and ethnic minorities: Examining intersectionality of sexual orientation with race and ethnicity. *Tobacco Control*, 30(1), 84–93. 10.1136/tobaccocontrol-2019-055313 [PubMed: 31857490]
- Tashkin DP, & Roth MD (2019). Pulmonary effects of inhaled cannabis smoke. *The American Journal of Drug and Alcohol Abuse*, 45(6), 596–609. 10.1080/00952990.2019.1627366 [PubMed: 31298945]
- Timberlake DS, Rhee J, Silver LD, Padon AA, Vos RO, Unger JB, & Andersen-Rodgers E (2021). Impact of California's tobacco and cannabis policies on the retail availability of little cigars/cigarillos and blunt wraps. *Drug and Alcohol Dependence*, 228, 109064. 10.1016/j.drugalcdep.2021.109064 [PubMed: 34600261]
- University of Bath. (2023, March 31). Cannabis. Tobacco Tactics. <https://tobaccotactics.org/article/cannabis/>
- Wadsworth E, Craft S, Calder R, & Hammond D (2022). Prevalence and use of cannabis products and routes of administration among youth and young adults in Canada and the United States: A systematic review. *Addictive Behaviors*, 129, 107258. 10.1016/j.addbeh.2022.107258 [PubMed: 35124565]
- Weitzman M, & Lee L (2020). Similarities between alcohol and tobacco advertising exposure and adolescent use of each of these substances. *Journal of Studies on Alcohol and Drugs*, S19, 97–105. 10.15288/jsads.2020.s19.97

Table 1.

Prevalence of blunt and hemp wrap use among young adults in the United States, 2022.

	Sample Population		Blunt Wraps		Hemp Wraps		Both Blunt & Hemp Wraps	
			Ever	P30D ^a	Ever	P30D ^a	Ever	P30D ^a
	n	%	n = 252	n = 43	n = 162	n = 37	n = 107	n = 20
N = 1,178								
			(22.7%)	(3.2%)	(14.3%)	(2.3%)	(10.2%)	(1.5%)
Sociodemographic Characteristics								
Gender								
Male	553	50.3	23.3	4.3	13.5	2.3	11.0	1.6
Female	625	49.7	22.7	3.8	15.1	2.2	9.4	1.4
Race and Ethnicity ^b								
Non-Hispanic White	527	54.2	21.4	1.9	10.2	1.2	7.5	0.7
Non-Hispanic Black	208	13.7	31.4	7.9	24.3	6.0	18.2	3.2
Non-Hispanic Asian	115	8.1	15.2	0.2	8.9	0.0	6.0	0.0
Non-Hispanic Multiracial	65	1.5	25.6	5.6	15.4	1.3	9.0	1.3
Hispanic	241	22.1	23.0	4.0	20.0	3.5	13.6	3.0
Sexual Orientation ^c								
Heterosexual	927	84.4	21.1	3.1	11.9	2.4	8.1	1.6
Gay or Lesbian	63	6.6	39.1	7.0	26.0	0.9	25.7	1.0
Bisexual	111	9.0	34.2	1.3	25.1	2.3	19.0	0.9
Educational Attainment								
High School or Less	355	37.7	24.9	4.3	20.3	3.4	14.1	2.8
Some College/Technical School	728	54.6	22.3	2.8	11.1	1.7	8.2	0.8
Bachelor's or More	95	7.6	15.8	4.0	8.0	1.2	6.5	0.8
Region								
Northeast	163	16.5	29.1	2.5	23.2	1.8	17.5	0.5
Midwest	299	20.6	19.4	3.3	15.5	3.7	8.9	2.3
South	439	37.7	19.1	3.1	10.3	2.1	7.7	1.5
West	277	25.2	26.7	3.5	13.7	1.6	10.5	1.5

	Blunt Wraps		Hemp Wraps		Both Blunt & Hemp Wraps	
	Ever	P30D ^a	Ever	P30D ^a	Ever	P30D ^a
	n = 252	n = 43	n = 162	n = 37	n = 107	n = 20
Sample Population						
	N = 1,178	(22.7%)	(3.2%)	(14.3%)	(2.3%)	(1.5%)
	n	%	Row %			
Tobacco and Cannabis Use						
Any Tobacco Product Use ^d	343	28.8	37.1	10.7	30.7	6.5
					21.3	5.2
Any Cannabis Product Use ^e	301	25.1	40.5	12.4	33.4	8.7
					24.8	6.2
Co-Use of Tobacco and Cannabis ^f	212	17.0	44.5	17.8	40.7	10.7
					31.1	9.0

Data note: Data are weighted to the U.S. young adult population. All *n*'s presented are unweighted. Items in bold indicate statistical significance with a *p* value < 0.01 based on a chi-square analyses. For sociodemographic characteristics, chi-square analysis examined across group. For tobacco and cannabis use, chi-square analyses examined within-product differences comparing use of a product to no use of that product.

^aP30D: Past 30-Days.

^bExcludes individuals who identified as another racial or ethnic group due to low sample size.

^cExcludes individuals who identified with other sexual orientations (e.g., asexual, pansexual) due to low sample size.

^dIncludes individuals who reported use of cigarettes, little cigars and cigarillos, large cigars, electronic vapor products, and/or hookah in the past 30-days.

^eIncludes individuals who reported use of little cigars and cigarillos used as blunts (co-administered cannabis and tobacco), electronic vapor products with cannabis, and/or other products containing cannabis in the past 30-days.

^fIncludes individuals who reported use of any tobacco products and cannabis products in the past 30-days.

Table 2.

Odds of lifetime use of blunt and hemp wraps among young adults in the United States, 2022.

	Any Blunt or Hemp Wrap Use (n = 1064)			Any Blunt Wrap Use (n = 1064)			Any Hemp Wrap Use (n = 1075)		
	AOR ^a	95% CI ^b		AOR ^a	95% CI ^b		AOR ^a	95% CI ^b	
Gender									
Male	1.05	0.78	1.40	1.30	0.96	1.76	1.05	0.71	1.55
Female		Ref			ref			ref	
Race and Ethnicity ^c									
Non-Hispanic Black	1.78	1.17	2.71	1.55	1.01	2.39	2.91	1.73	4.90
Non-Hispanic Asian	0.78	0.43	1.43	0.76	0.41	1.41	1.31	0.55	3.14
Non-Hispanic Multiracial	1.69	0.54	5.28	1.41	0.43	4.60	2.06	0.45	9.44
Hispanic	1.18	0.81	1.71	0.89	0.60	1.31	2.49	1.54	4.03
Non-Hispanic White		ref			ref			ref	
Sexual Orientation ^d									
Gay or Lesbian	1.97	1.14	3.40	2.37	1.38	4.08	2.75	1.44	5.25
Bisexual	2.06	1.28	3.29	2.04	1.27	3.29	2.65	1.48	4.76
Heterosexual		ref			ref			ref	
U.S. Geographic Region									
Northeast	2.28	1.49	3.49	1.81	1.18	2.79	3.64	2.11	6.26
Midwest	1.35	0.89	2.04	1.01	0.65	1.57	2.20	1.26	3.85
West	1.72	1.17	2.53	1.75	1.18	2.59	1.42	0.83	2.41
South		ref			ref			ref	
Educational Attainment	0.82	0.64	1.05	0.97	0.75	1.25	0.60	0.42	0.85
Any Past 30-Day Tobacco Use	2.26	1.60	3.19	1.71	1.19	2.46	2.68	1.70	4.23
Any Past 30-Day Cannabis Use	2.36	1.65	3.36	2.38	1.65	3.44	2.90	1.85	4.56

Data Note: Data were weighted to the U.S. young adult population. All n's presented are unweighted. The referent for each logistic regression model is never use of either wrap (Model 1), never use of blunt wraps (Model 2), and never use of hemp wraps (Model 3).

^a AOR: Adjusted odds ratio.

^b 95% CI: 95% Confidence Interval.

^c Excludes individuals who identified as another racial or ethnic group due to low sample size.

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Excludes individuals who identified with other sexual orientations (e.g., asexual, pansexual) due to low sample size.
Educational attainment is quantified as a continuous variable at three levels (high school or less, some college or technical school, Bachelor's degree or more) with higher values representing higher levels of educational attainment.