FLAVORED TOBACCO IN MINNESOTA

Landscape Report

August 2024





TOBACCO USAGE

Asian Media Access (AMA) wants to ensure less tobacco usage among Black or African American and Asian or Asian American youth in local communities. AMA advocates for a flavored tobacco ban to limit access and facilitate lower tobacco usage rates among youth. The report below summarizes current usage of tobacco among youth as evidence for these important bills.

Teenage Tobacco Usage Rates

The Minnesota Student Survey (MSS) collects responses from students in 8th, 9th, and 11th grade on a variety of topics, including substance use. Figure 1 shows a Table from the 2022 MSS, providing a breakdown of reported tobacco use of students disaggregated by grade (p.49). Among respondents:

- 98% of 8th and 9th grade students reported not smoking a cigarette in the previous 30 days
- 99% of 8th and 9th grade students reported not smoking cigars, cigarillos, or little cigars, compared to 96% and 98% of 11th grade students respectively.
- Regardless of grade, 99% of students reported not using chewing tobacco, snuff, or dip nor using hookah or waterpipe to smoke tobacco in the past 30 days.

By grade, the biggest variance in usage occurs in vaping and e-cigarette containing nicotine, for which 94% of 8th graders, 93% of 9th graders, and 86% of 11th graders reported not using it in the past 30 days.

The 2017 Minnesota Youth Tobacco Survey (MYTS) reported that 26.4% of students had used one or more tobacco products in the past month, an increase from 2014. However, the 2022 MSS data showed a lower rate amongst 11th graders, at only 14.9% (Table 1). Looking at disaggregated student data from the 2022 MSS, students who identify as "Asian American or Asian" reported lower rates of conventional tobacco product use (2.3%) and any tobacco use (9.5%) compared to the statewide rate of all 11th graders at 4.7% and 14.9% respectively (Table 1). However, students who identified as "Black or African American" reported use of conventional tobacco products at a comparable rate (4.3%) to the general statewide rate of all 11th graders, but slightly lower rates of any tobacco product use (12.8%) compared to the statewide rate of all 11th graders.

Figure 1. Minnesota Student Survey 2022; Statewide Tobacco Use

2022 Minnesota Student Survey

TABLE 35A TOBACCO USE*

Minnesota Statewide Data

| | | Grade | | |
|--|---------------|-------|-----|------|
| | | 8th | 9th | 11th |
| ring the last 30 days, on how many days did you | | % | % | % |
| smoke a cigarette? | 0 days | 98% | 98% | 96% |
| | 1 to 2 days | 1% | 1% | 2% |
| | 3 to 9 days | 0% | 0% | 1% |
| | 10 to 19 days | 0% | 0% | 0% |
| | 20 to 29 days | 0% | 0% | 0% |
| | All 30 days | 0% | 0% | 0% |
| smoke cigars, cigarillos or little cigars? | 0 days | 99% | 99% | 98% |
| | 1 to 2 days | 0% | 1% | 1% |
| | 3 to 9 days | 0% | 0% | 0% |
| | 10 to 19 days | 0% | 0% | 0% |
| | 20 to 29 days | 0% | 0% | 0% |
| | All 30 days | 0% | 0% | 0% |
| use chewing tobacco, snuff or dip? | 0 days | 99% | 99% | 99% |
| | 1 to 2 days | 0% | 0% | 1% |
| | 3 to 9 days | 0% | 0% | 0% |
| | 10 to 19 days | 0% | 0% | 0% |
| | 20 to 29 days | 0% | 0% | 0% |
| | All 30 days | 0% | 0% | 0% |
| vape or use an e-cigarette that contains nicotine, such as JUUL, /USE, NJOY, Puff Bar, Blu, or Bidi Stick?^ | 0 days | 94% | 93% | 86% |
| | 1 to 2 days | 3% | 3% | 4% |
| | 3 to 9 days | 1% | 1% | 2% |
| | 10 to 19 days | 1% | 1% | 2% |
| | 20 to 29 days | 0% | 1% | 1% |
| | All 30 days | 1% | 1% | 4% |
| use a hookah or a waterpipe to smoke tobacco? | 0 days | 99% | 99% | 99% |
| | 1 to 2 days | 0% | 0% | 19 |
| | 3 to 9 days | 0% | 0% | 0% |
| | 10 to 19 days | 0% | 0% | 0% |
| | 20 to 29 days | 0% | 0% | 0% |
| | All 30 days | 0% | 0% | 0% |

^{* 5}th grade survey did not ask these questions. ^ Change in question wording from 2019.

Table 1. Minnesota Student Survey Reports 2013-2022; Summary Substance Use Grade 11

| | % responded "Yes" | | |
|--|----------------------------|------------------------------|------------------------------|
| | All 11 th Grade | Asian 11 th Grade | Black 11 th Grade |
| | Students | Students | Students |
| Use of conventional tobacco products (cigarettes, cigars, smokeless tobacco) during the last 30 days | 4.7% (n=22,868) | 2.3% (n=2,017) | 4.3% (n=1,882) |
| Use of any tobacco products, including e- cigarettes and hookah, during the last 30 days | 14.9% (n=22,879) | 9.5% (n=2,019) | 12.8% (n=1,884) |

Further disaggregation by type of tobacco use shows differences in usage rates by race. Smoking a cigarette in the last 30 days was the highest reported regardless of racial disaggregation, but students who identify as "Asian American or Asian" reported almost half the rate of cigarette usage compared to both the total 11th grade sample and compared to the students who identify as "Black or African American" (Table 2). Similarly, students who identify as "Asian American or Asian" reported lower rates of smoking cigars, cigarillos, or little cigars and lower rates of chewing tobacco, snuff, or drip compared to the total 11th grade sample and compared to students who identify as "Black or African American". Another key difference in tobacco usage is that students who identify as "Black or African American" report twice the rate of hookah or waterpipe usage compared to all 11th grade students and three times the rate compared to students who identify as "Asian American or Asian".

Table 2. Minnesota Student Survey Reports 2013-2022; Tobacco Use Grade 11

| | % reported use in the last 30 days | | | |
|--|--|--|--|--|
| | All 11 th Grade Students | Asian 11 th Grade Students | Black 11 th Grade Students | |
| Smoking a cigarette | 3.4% (n=22,841) | 1.7% (n=2,015) | 3.3% (n=1,877) | |
| Smoking cigars, cigarillos, or little cigars | 1.9% (n=22,805) | 1.3% (n=2,011) | 2.4% (n=1,872) | |
| Chewing tobacco, snuff, or drip | 1.5% (n=22,798) | 0.9% (n=2,016) | 1.5% (n=1,873) | |
| Use a hookah or waterpipe to smoke tobacco | 1.3% (n=22,829) | 1.0% (n=2,014) | 2.7% (n=1,877) | |

Teenage E-Cigarette Usage Rates

While 93.4% of 11th grade students report never using tobacco (cigarettes, chew) (Minnesota Student Survey Reports 2013-2022; Tobacco Use Grade 11), only 79% report never using a vaping device or e-cigarette with nicotine (Minnesota Student Survey Reports 2013-2022; E-Cigarette Use Grade 11). Similarly, 3.3% reported having tried tobacco once or twice compared to 8.5% reporting having tried vaping or e-cigarettes once or twice.

Teenage Flavored Tobacco Usage Rates

A national report from 2019 states that 7 in 10 middle and high school students who use tobacco use a flavored product (Cullen et al. 2019). In fact, it is reported that over 80% of youth who have tried tobacco first started by trying tobacco with a flavored product (Cullen, et al., Villantl, et al.). In the MYTS, three in four students (76.3%) initiated their use of

commercial tobacco products with a flavored tobacco product (2017). Similarly, the Food and Drug Administration states that "nearly all youth who started using e-cigarettes did so with a flavored product". The Minnesota Department of Health (MDH) update from 2019 states that "among Minnesota adults ages 18-24, nearly all e-cigarette users report their usual e-cigarette is flavored, and 40.5% report their usual cigar is flavored" (MDH 2019), which highlights the power of flavored products as an entrance to e-cigarette usage as teenagers and continued usage into early adulthood.

Flavored tobacco use was reported on the 2022 MSS as a percentage of students who reported using tobacco in the previous 30 days and excludes all students who reported not using tobacco products during that timeframe. Results from the 2022 MSS show that 84.6% of 11th graders who reported using tobacco products in the previous 30 days used a flavored tobacco product (Table 3). Flavored tobacco was reported at the highest rate by 11th grade students who used smokeless tobacco in the past 30 days (38.9%) compared to those who reported using a flavored tobacco when smoking a cigarette, cigar, or using hookah. Rates of using a flavored cigarette or flavored smokeless tobacco were higher for students who identify as "Asian American or Asian" compared to "Black or African American" and compared to the 11th grade sample. However, rates of using a flavored hookah were lower for students who identify as "Asian American or Asian" compared to "Black or African American" and compared to the 11th grade sample.

Table 3. Minnesota Student Survey Reports 2013-2022; Tobacco Use Grade 11 Flavored

| | % responded "Yes" | | |
|--|---------------------------------|---------------|------------------------------|
| | All 11th Grade Asian 11th Grade | | Black 11 th Grade |
| | Students | Students | Students |
| (If student smoked cigarette in past 30 | 30.5% (n=814) | 28.6% (n=35) | 17.7% (n=62) |
| days): Student smoked a flavored (i.e., | | | |
| menthol) cigarette in the past 30 days | | | |
| (If student smoked cigar in past 30 days): | 26.5% (n=437) | 26.9% (n=26) | 26.7% (n=45) |
| Student smoked a flavored cigar in the | | | |
| past 30 days | | | |
| (If student used smokeless tobacco in | 38.9% (n=339) | 33.3% (n=18) | 27.6% (n=29) |
| past 30 days): Student used flavored | | | |
| smokeless tobacco in the past 30 days | | | |
| (If student used hookah in past 30 days) | 24.6% (n=293) | 10% (n=20) | 27.5% (n=46) |
| Student used flavored hookah in the past | | | |
| 30 days | | | |
| (If student used tobacco in past 30 days) | 84.6% (n=3,415) | 80.7% (n=192) | 85.1% (n=241) |
| Student used a flavored tobacco product | | | |
| in the past 30 days | | | |

Flavored tobacco use is reported at a higher rate amongst 11th grade students compared to 8th and 9th grade students on the 2022 MSS (Figure 2). In fact, 8th grade students reported the lowest rates of flavored tobacco use compared to 9th and 11th grade students overall, and specifically when using e-cigarettes, cigarettes, and smokeless tobacco. Across all three grades, fruit flavor was the most reported for e-cigarette use.

MINNESOTA TOBACCO POLICY LANDSCAPE

In Minnesota, the Freedom to Breathe provisions amended the Minnesota Clean Indoor Air Act beginning October 1, 2007. This was further modified to include vaping in 2019, effective on August 1st, 2019. More recent laws affecting Minnesota include the Tobacco 21 law, limiting the purchase of tobacco to those under the age of 21, and flavored tobacco bans. Tobacco 21 went into effect on August 1, 2020 ensuring that local governments can conduct compliance checks to see that the law is being followed with regards to sales of tobacco to those under 21 years of age.

There is currently no statewide flavored tobacco ban in Minnesota. Flavored cigarettes, with the exception of menthol cigarettes, are banned federally. Some municipalities including Duluth, St. Paul, and Minneapolis have passed policies banning or restricting flavored tobacco sales but not all bans are comprehensive. The cities of Moorhead, Browns Valley, Arden Hills, Lilydale, Mendota Heights, Golden Valley, Richfield, Bloomington, Edina, and Traverse County are the locations with comprehensive bans as of January 2024. (Association for Nonsmokers Minnesota website).

One study from Olson et al (2022) compared tobacco use among youth in Minneapolis and St. Paul (places where menthol bans were implemented) to tobacco use in other areas of Minnesota which did not implement a ban. Minneapolis and St. Paul showed a greater decline in cigarette use than other parts of the state in the period between 2016 (prepolicy) to 2019 (post-policy). The menthol bans were implemented in 2018. However, youth reported that they regularly travel to areas without bans from areas with them, potentially limiting the impact of the bans (Moze et al 2022).

Figure 2. Minnesota Student Survey 2022; Statewide Flavored Tobacco Use

2022 Minnesota Student Survey

TABLE 35B FLAVORED TOBACCO USE*^

Minnesota Statewide Data

| | | | Grade | |
|---|----------------------------------|-----|-------|------|
| | | 8th | 9th | 11th |
| | | % | % | % |
| IF VAPED IN PAST 30 DAYS: Which flavors of e- cigarettes (or e-juice) have you used in the past 30 days? (Mark ALL that apply) | Tobacco-flavored | 5% | 6% | 5% |
| | Menthol or mint | 23% | 26% | 34% |
| | Clove or spice | 3% | 3% | 2% |
| | Fruit | 68% | 68% | 68% |
| | Chocolate | 4% | 3% | 3% |
| | An alcoholic drink | 6% | 5% | 4% |
| | A non-alcoholic drink | 9% | 8% | 9% |
| | Candy, desserts, or other sweets | 32% | 29% | 27% |
| | Some other flavor | 25% | 25% | 22% |
| | No flavor (unflavored) | 10% | 9% | 7% |
| IF VAPED IN PAST 30 DAYS: Student used a flavored e-cigarette in the | No | 15% | 14% | 12% |
| past 30 days^^ | Yes | 85% | 86% | 88% |
| IF SMOKED CIGARETTE IN PAST 30 DAYS: Student smoked a flavored (i.e., menthol) cigarette in the past 30 days | No | 75% | 71% | 70% |
| | Yes | 25% | 29% | 30% |
| IF SMOKED CIGAR IN PAST 30 DAYS: Student smoked a flavored cigar in | No | 77% | 80% | 73% |
| the past 30 days | Yes | 23% | 20% | 27% |
| IF USED SMOKELESS TOBACCO IN PAST 30 DAYS: Student used | No | 74% | 68% | 61% |
| flavored smokeless tobacco in the past 30 days | Yes | 26% | 32% | 39% |
| IF USED HOOKAH IN PAST 30 DAYS: Student used flavored hookah in the past 30 days | No | 81% | 83% | 75% |
| | Yes | 19% | 17% | 25% |
| IF PAST 30 DAYS TOBACCO USE: Student used a flavored tobacco | No | 22% | 20% | 15% |
| product in the past 30 days^^^ | Yes | 78% | 80% | 85% |

^{* 5}th grade survey did not ask these questions.

^ All questions on this table were new in 2022.

^^ Tobacco-flavor is excluded from the definition of flavored e-cigarettes.

^^^This is a computed variable based on combinations of responses to two or more survey items.

NATIONAL AND INTERNATIONAL TOBACCO POLICY LANDSCAPE

Internationally and nationally there are many bans on menthol cigarettes. Over 170 cities and counties in the United States, two states, many countries including Ethiopia and Canada, and the European Union are places that have banned these cigarettes. Bans on menthol cigarettes have had a variety of effects – in the Netherlands a study showed that 26.1% of menthol cigarette smokers had quit a year after the European Union menthol cigarette ban had been implemented. In the same time frame, 14.1% of non-menthol cigarette smokers had quit (Kyriakos et al. 2022). In England, the percentage of youth reporting they had smoked menthol cigarette brands changed from 12.1% before the ban to 3% after the ban. (East et al 2022).

In the United States, a study reported that after a Massachusetts flavor ban, menthol smokers were still smoking menthol cigarettes, purchasing them out of state. (Booras et al 2022). This indicates more comprehensive bans are key.

Looking at retail compliance, shows that there was only 57% compliance of stores affected by a Chicago policy to restrict retailers that were within 500 feet of high schools from selling flavored tobacco products (Czaplicki et al 2019). Gas stations also had a lower rate of compliance than larger or chain stores (Czaplicki et al 2019). Minneapolis, St. Paul, Duluth, and Falcon Heights stores had a much higher compliance rate; however the restriction they were following was different – restricting sales of menthol to adult-only tobacco shops and liquor stores (D'Silva et al 2021). Two convenience stores added their own adult only tobacco shops as well (D'Silva et al 2021).

Given the ability for both retailers and smokers to get around these bans, a more comprehensive ban covering more regions would be more effective.

•

CONCLUSION

While there are often menthol bans without a flavored tobacco ban instated, these bans work best together. Studies have shown that a ban on menthol cigarettes alone may increase e-cigarette use (Kotlyar et al 2022, Buckell et al 2019, Pacek et al 2019, Buckell et al 2022, Kotlyar et al 2022, Denlinger-Apte et al 2021). Due to the high rates of flavored tobacco use by youth, a broader ban seems most likely to be effective. A bill that bans the sale of flavored tobacco, HF 2177 was introduced in the 2023-2024 legislative season but has not yet made it to the senate. AMA aims to inform communities about current and future legislation related to flavored tobacco to make our communities healthier for youth and for all.

REFERENCES

Booras A, Wiener R, Maccarone J, et al. . Impact of the Massachusetts menthol ban on perceptions and cigarette use behavior at a large safety-net hospital: a longitudinal survey and qualitative study. 2022. https://assets.researchsquare.com/files/rs-2078170/v1/d7be9801-0fcd-4b18-8876-084bb7a5a96c.pdf?c=1667329163

Buckell J, Fucito LM, Krishnan-Sarin S, O'Malley S, Sindelar JL. Harm reduction for smokers with little to no quit interest: can tobacco policies encourage switching to ecigarettes? Tob Control. 2022;32(e2):e173–e179.

Buckell J, Marti J, Sindelar JL. Should flavours be banned in cigarettes and e-cigarettes? Evidence on adult smokers and recent quitters from a discrete choice experiment. Tob Control. 2019;28(2):168.

ClearWay Minnesota, Minnesota Department of Health, Tobacco Use in Minnesota: 2018 Update. 2019.

Cullen, K.A., et al., Flavored tobacco product use among middle and high school students—United States, 2014–2018. Morbidity and Mortality Weekly Report, 2019. 68(39): p. 839.

Cullen, K.A., et al., Notes from the field: use of electronic cigarettes and any tobacco product among middle and high school students—United States, 2011–2018. Morbidity and Mortality Weekly Report, 2018. 67(45): p. 1276.

Czaplicki L, Cohen JE, Jones MR, et al. . Compliance with the City of Chicago's partial ban on menthol cigarette sales. Tob Control. 2019;28(2):161–167.

Denlinger-Apte RL, Cassidy RN, Carey KB, et al. . The impact of menthol flavoring in combusted tobacco on alternative product purchasing: a pilot study using the Experimental Tobacco Marketplace. Drug Alcohol Depend. 2021;218:108390.

Denlinger-Apte RL, Lockhart DE, Strahley AE, et al. . "I think it's a good idea for the people that's young, the kids, but for someone like me it's a bad idea."—interviews about a US menthol cigarette ban with people who smoke menthol cigarettes. Drug Alcohol Depend. 2022;232:109293.

D'Silva J, Moze J, Kingsbury JH, et al. . Local sales restrictions significantly reduce the availability of menthol tobacco: findings from four Minnesota cities. Tob Control. 2021;30(5):492–497.

D'Silva J, O'Gara E, Fryer CS, Boyle RG. "Because there's just something about that menthol": exploring African American smokers' perspectives on menthol smoking and local menthol sales restrictions. Nicotine Tob Res. 2021;23(2):357–363.

East KA, Reid JL, Burkhalter R, et al. . Evaluating the outcomes of the menthol cigarette ban in England by comparing menthol cigarette smoking among youth in England, Canada, and the US, 2018-2020. JAMA Netw Open. 2022;5(5):e2210029–e2210e29.

Guydish JR, Straus ER, Le T, Gubner N, Delucchi KL. Menthol cigarette use in substance use disorder treatment before and after implementation of a county-wide flavoured tobacco ban. Tob Control. 2021;30(6):616–622.

Kotlyar M, Shanley R, Dufresne SR, Corcoran GA, Hatsukami DK. Effect of restricting menthol flavored cigarettes or e-cigarettes on smoking behavior in menthol smokers. Prev Med. 2022;165(Pt B):107243.

Kotlyar M, Shanley R, Dufresne SR, Corcoran GA, Hatsukami DK. Effect on tobacco use and subjective measures of including e-cigarettes in a simulated ban of menthol in combustible cigarettes. Nicotine Tob Res. 2022;24(9):1448–1457.

Kurti MK, Schroth KRJ, Ackerman C, et al. . Availability of menthol cigarettes in Oakland, California after a partial flavor ban. Prev Med Rep. 2020;20:101200.

Kyriakos CN, Driezen P, Fong G, et al. . Impact of the European Union's menthol cigarette ban on smoking cessation outcomes: longitudinal findings from the 2020–2021 ITC Netherlands Surveys. Tob Control. 2022. doi:10.1136/tc-2022-057428.

Mills, SD, Peddireddy, S, Kurtzman, R, Hill, F, Catalan, V, Bissram, JS., Ribisl, KM. The impact of menthol cigarette bans: A systematic review and meta-analysis. Nicotine & Tob Research. 2024. doi:10.1093/ntr/ntae011

Minnesota Department of Education. Minnesota student survey. 2022. https://education.mn.gov/MDE/dse/health/mss/

Minnesota Department of Health, Teens and Tobacco in Minnesota: Highlights from the 2017 Minnesota Youth Tobacco Survey. 2018.

Moze JM, O'Gara EK, Fritz Fogel K, et al. . Youth perspectives on menthol sales restrictions in Minneapolis and Duluth, Minnesota. Health Promot Pract. 2022;24(6):1163–1173.

O'Connor RJ, Bansal-Travers M, Carter LP, Cummings KM. What would menthol smokers do if menthol in cigarettes were banned? Behavioral intentions and simulated demand. Addiction. 2012;107(7):1330–1338.

Olson LT, Coats EM, Rogers T, et al. . Youth tobacco use before and after local sales restrictions on flavored and menthol tobacco products in Minnesota. J Adolesc Health. 2022;70(6):978–984.

Pacek LR, Oliver JA, Sweitzer MM, McClernon FJ. Young adult dual combusted cigarette and e-cigarette users' anticipated responses to a nicotine reduction policy and menthol ban in combusted cigarettes. Drug Alcohol Depend. 2019;194:40–44.

United States Department of Health and Human Services, FDA, Center for Tobacco Products, Modifications to Compliance Policy for Certain Deemed Tobacco Products Guidance for Industry DRAFT GUIDANCE. 2019.

Villanti, A.C., et al., Flavored tobacco product use among U.S. young adults. Am J Prev Med, 2013. 44(4): p. 388-91.

Yang Y, Lindblom EN, Salloum RG, Ward KD. The impact of a comprehensive tobacco product flavor ban in San Francisco among young adults. Addict Behav Rep. 2020;11:100273.

Yang Y, Lindblom EN, Ward KD, Salloum RG. How smokers of menthol cigarettes and flavored cigars might respond to FDA's proposed bans. Nicotine Tob Res. 2022;24(10):1645–1653.