

Evaluating the Impact of Statewide Policies on Tobacco Use and Sales

Oregon Health Authority 2025

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Executive summary

Tobacco use remains the number one cause of preventable death and disease in Oregon, each year contributing to the death of more than 8,000 people and costing an estimated \$5.7 billion in medical expenses and lost productivity.¹ The percentage of Oregon youth and adults who smoke cigarettes as well as per capita cigarette sales has declined in the past decades. E-cigarette use has declined for youth but increased for adults. Disparities persist among groups who have been historically targeted by the tobacco industry, including by race/ethnicity, gender identity, sexual orientation, education, employment, and income.

To decrease tobacco use, the Health Promotion and Chronic Disease Prevention (HPCDP) section of the Oregon Health Authority (OHA), Public Health Division collaborated on the following three policies aimed at reducing commercial tobacco and nicotine use and tobacco-related illness and death among youth and adults:

- Tobacco 21 (T21), effective January 1, 2018, raised the minimum age to purchase all tobacco and inhalant delivery systems (i.e., e-cigarettes or vape) from 18 to 21 years old.
- Ballot Measure 108, effective January 1, 2021, increased taxes on cigarettes and cigars and created a tax on inhalant delivery systems.
- Tobacco Retail License (TRL), effective January 1, 2022, required businesses that want to sell tobacco and inhalant delivery systems to obtain a TRL from the Department of Revenue.

The purpose of this evaluation report is to summarize trends in youth and adult tobacco use and retail sales — including progress toward HPCDP’s 2017–2025 tobacco-related strategic plan goals, detailed below — before, during, and after implementation of these three policies. Given persistent disparities in tobacco use, the evaluation also aimed to pay particular attention to outcomes among groups disproportionately targeted by the tobacco industry, including youth; Black or African American, American Indian or Alaska Native, and Latino individuals; LGBTQ individuals; and people with lower incomes and less education regardless of race or ethnicity.

2017–2025 HPCDP Tobacco Related Goals

- Decrease the percentage of youth who smoke cigarettes to 3.7 percent among 8th graders and to 6.6 percent among 11th graders.
- Decrease the percentage of adults who smoke cigarettes to 13.3 percent.
- Decrease the annual per capita cigarette sales to 34 or fewer packs per person per year.

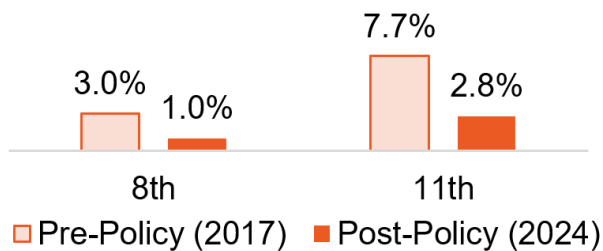
¹ Oregon Health Authority, Public Health Division, Health Promotion and Chronic Disease Prevention Section. Oregon tobacco facts [Internet]. Salem (OR): Oregon Health Authority; [cited 2025 Jun]. Available from: <https://www.oregon.gov/oha/ph/preventionwellness/tobaccoprevention/pages/oregon-tobacco-facts.aspx>

Key findings

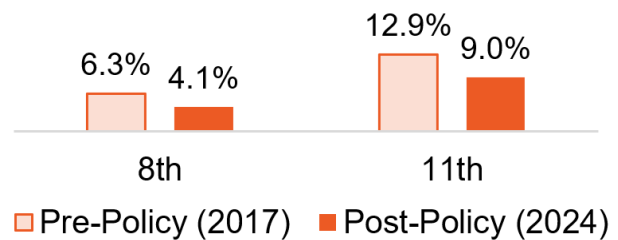
Analyses of youth and adult tobacco purchase and use behaviors and retail data document important changes in tobacco-related outcomes, including declines in youth and adult cigarette use, youth e-cigarette use, and annual per capita cigarette sales — trends consistent with the timing of Oregon’s tobacco-related policies. In contrast, adult e-cigarette and vaping use, along with e-cigarette unit sales, increased through 2023, with a decrease in 2024.

Youth outcomes

Current cigarette use among youth, pre and post policy implementation

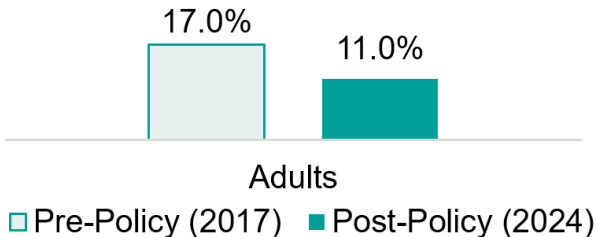


Current e-cigarette use among youth, pre and post policy implementation

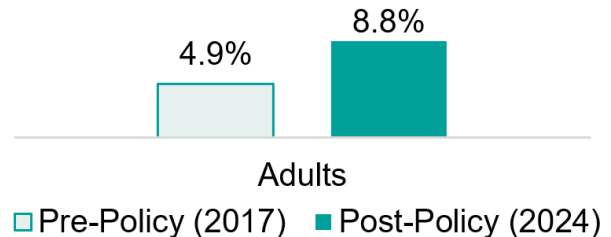


Adult outcomes

Current cigarette use among adults, pre and post policy implementation

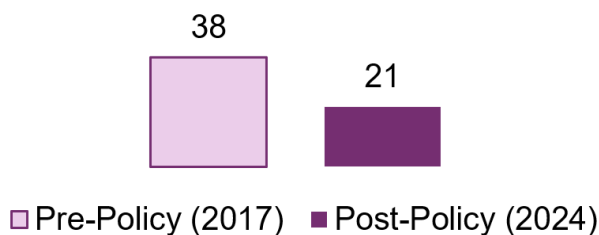


E-cigarette use among adults, pre and post policy implementation

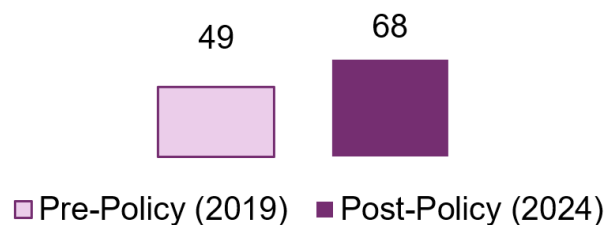


Retail and sales indicators

Per capita cigarette pack sales, pre and post policy implementation



Per capita e-cigarette unit sales, pre and post policy implementation



Despite implementation of these policies, disparities persist. Tobacco use and access are higher among youth who are gender non-conforming, American Indian or Alaskan Native, or North African or Middle Eastern (appendix Exhibits A1 and A2), and among adults who are Black or African American, American Indian or Alaskan Native, or bisexual, as well as those with lower education, lower income, or who are unemployed or unable to work (Exhibit 15). These findings highlight the ongoing need for targeted interventions to ensure equitable progress across all populations.

Study limitations and considerations

As with all evaluations, it is important to consider limitations when interpreting results. This includes noting that findings in this evaluation report represent associations, rather than causation, between Oregon's tobacco policy implementation and outcomes. Due to changes in survey questions and response options used to track outcomes over time, comparisons across data sources, especially youth data, should be made with caution. Survey timing and methodological differences also limited the inclusion of some data sources and outcomes. Ongoing research will be needed to fully understand the policies' impact, particularly among groups who have been historically targeted by the tobacco industry. Acknowledging these limitations provides context for the findings and guides future inquiry.

Recommendations

Findings suggest that Oregon's tobacco policies contributed to declines in youth and adult cigarette use and per capita sales. Adult e-cigarette use and e-cigarette unit sales, however, have increased. Additionally, disparities among historically targeted communities persist. This underscores the need for continued, targeted interventions and improved policy implementation and tracking for both youth and adults, especially:



Prevention and quitting support strategies tailored for the unique needs of communities disproportionately impacted by tobacco use



Expansion of HPCDP's goals and programming to explicitly focus on e-cigarette, vaping, and emerging tobacco products



Continued data collection and evaluation to monitor progress on the impact of tobacco related policies

Introduction

Cigarette smoking among U.S. adults has declined from 42 percent in 1965 to 12 percent in 2021. However, disparities in the use of tobacco products by race and ethnicity, income level, education, sexual orientation, gender identity, occupation, geography, behavioral health, and disability continue.² In Oregon, tobacco use remains the number one cause of preventable death and disease, each year resulting in the death of more than 8,000 people and costing an estimated \$5.7 billion in medical expenses and lost productivity.³ The percentage of Oregon adults who smoke cigarettes has declined from 24 percent in 1996 to 11 percent in 2024 and per capita cigarette sales in the state have decreased by more than 75 percent since 1996.⁴ Similar to the U.S. overall, people in Oregon who have lower incomes, less education, and belong to groups that have been socially marginalized smoke at higher rates than their peers. While youth and adult cigarette smoking in Oregon has decreased from 1996 to 2024, e-cigarette use increased for adults. More than half of adults who smoke cigarettes in Oregon say they have tried to quit in the past year, and 64 percent say they want to quit.

Under the Health Promotion and Chronic Disease Prevention (HPCDP) section of the Oregon Health Authority (OHA), Public Health Division, the Tobacco Prevention and Education Program (TPEP) works to decrease tobacco use across the state. This includes collaborating with partners to implement policies aimed to reduce commercial tobacco and nicotine use and tobacco-related illness and death among youth and adults. Specifically, over the past decade, Oregon has implemented the following statewide policies aimed at meeting the tobacco related goals in the 2017–2025 HPCDP Strategic Plan: reducing cigarette smoking prevalence among adults to 13.3 percent or less, among 11th graders to 6.6 percent or less, and among 8th graders to 3.7 percent or less, and reducing cigarette sales to 34 or fewer packs per person per year.⁵



Tobacco 21, also known as Senate Bill 754, raised the minimum age to purchase all tobacco and inhalant delivery systems (i.e., e-cigarettes or vape) in Oregon from 18 to 21 years old. The bill was signed in August 2017 and went into effect January 1, 2018. The bill's purpose was to reduce the number of young people who start using tobacco, and to reduce deaths, disease, and healthcare costs caused by tobacco use. Data show that addiction to tobacco typically starts in adolescence: 90 percent of adults who smoke report

² Eliminating Tobacco-Related Disease and Death: Addressing Disparities [Internet]. Rockville (MD): U.S. Department of Health and Human Services; 2024 [cited 2025 Jan]. Available from: <https://www.hhs.gov/sites/default/files/2024-sgr-tobacco-related-health-disparities-exec-summary.pdf>.

³ Oregon Health Authority, Public Health Division, Health Promotion and Chronic Disease Prevention Section. Oregon tobacco facts [Internet]. Salem (OR): Oregon Health Authority; [cited 2025 Jan]. Available from: <https://www.oregon.gov/oha/ph/preventionwellness/tobaccoprevention/pages/oregon-tobacco-facts.aspx>.

⁴ Ibid.

⁵ Oregon Health Authority, Public Health Division. Health Promotion and Chronic Disease Prevention: 2017–2025 Strategic Plan [Internet]. Salem (OR): Oregon Health Authority; 2017 [cited 2025 Jan]. Available from: <https://www.oregon.gov/oha/ph/diseasesconditions/chronicdisease/documents/hpcdp-strategic-plan.pdf>.

starting before they turned 18, and almost 100 percent started before they turned 26.⁶ To ensure compliance with the law, retailers are required to post signs indicating the prohibition of sales of tobacco products and inhalant delivery systems to persons under the age of 21. Key findings from an evaluation report that explored the impact of this legislation show that recent initiation of tobacco use among youth and young adults decreased significantly among current tobacco users aged 13–17 years (from 34 percent to 25 percent) and aged 18–20 years (from 23 percent to 18 percent); perceived ease of access (the percentage of tobacco users aged 18–20 years who reported that it was “sort of easy” or “very easy” to obtain tobacco products) decreased significantly; and statewide requests for proof of age did not change significantly.⁷ In December 2019, the national minimum sales age for all tobacco products increased to 21.

108

Oregon Ballot Measure 108 increased taxes on cigarettes and cigars and created a tax on inhalant delivery systems. The ballot measure was approved by voters (of those who voted, 66 percent voted in favor of Ballot Measure 108) and went into effect on January 1, 2021. The ballot measure implemented three statutory changes: increased the cigarette tax from \$1.33 per 20-pack of cigarettes to \$3.33, created a tax on inhalant delivery systems at 65 percent of their wholesale price, and increased the cap on cigar taxes from \$0.50 to \$1 per cigar. Measure 108 funds were intended to increase investments in communities most disproportionately impacted by commercial tobacco use, particularly populations that have been marginalized by long-standing social and health inequities, including Black or African American, Indigenous, Latino/a/x, Pacific Islander, and Asian communities. The measure was projected to raise \$115 million during the 2019–21 biennium and \$350 million during the 2021–23 biennium.⁸ Ninety percent of the tax revenue raised from Measure 108 was dedicated to the state’s medical assistance program (Oregon Health Plan), and 10 percent to address tobacco prevention, quitting supports, and management of tobacco-related health conditions.⁹

TRL

Tobacco Retail License (TRL) statute requires any business that wants to sell tobacco, nicotine, and inhalant delivery systems in Oregon to obtain a TRL from the Department of Revenue (DOR). The bill went into effect January 1, 2022. Licensed retailers must pay an

⁶ Centers for Disease Control and Prevention. Preventing tobacco use among youth and young adults: A report of the Surgeon General [Internet]. Atlanta (GA): U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Office on Smoking and Health; 2012 [cited 2025 Jun]. Available from: <https://archive.cdc.gov/#/details?q=%22Preventing%20tobacco%20use%20among%20youth%20and%20young%20adults%22%20a%20report%20of%20the%20Surgeon%20General%202012&start=0&rows=10&url=https://www.cdc.gov/tobacco/sgr/2012/index.htm>

⁷ Oregon Health Authority, Public Health Division. Oregon Tobacco-21 impact evaluation report [Internet]. Salem (OR): Oregon Health Authority; [cited 2025 Jun]. Available from: <https://www.oregon.gov/oha/ph/preventionwellness/tobaccoprevention/documents/oregon-tobacco-21-impact-evaluation-report.pdf>.

⁸ Oregon Legislature, Legislative Revenue Office. Tobacco RR6_20 Final [Internet]. Salem (OR): Oregon Legislature; [cited 2025 Jun]. Available from: https://www.oregonlegislature.gov/lro/documents/tobacco%20rr6_%2020%20final.pdf.

⁹ Oregon Legislature, Oregon Legislative Information System. 2019 interim committee meeting document [Internet]. Salem (OR): Oregon Legislature; 2019 [cited 2025 Jun]. Available from: <https://olis.oregonlegislature.gov/liz/2019i1/downloads/committeemeetingdocument/227154>.

annual fee of \$953. Any retailer that wants to sell tobacco products or inhalant delivery systems needs a license, including but not limited to convenience stores, bars, hotels, restaurants, gas stations, and music venues. It does not apply to retailers operating on tribal lands. Statewide tobacco retail licensure increases retailer knowledge of, and compliance with, federal and state laws that regulate the sale of tobacco and vaping products. Tobacco retail licensing also allows OHA to track where tobacco is being sold and helps to ensure that businesses follow all tobacco laws, including not selling to people younger than 21. OHA provides retailer training, educational materials, and outreach about regulation changes in addition to conducting inspections. Violations of any tobacco retail law may result in civil penalties and license suspension or revocation. With the passage of this bill, the Legislative Assembly included a mandate for the program to be evaluated on an ongoing basis. The Interim TRL Program Evaluation Report (2024) showed the Oregon Tobacco Retail Licensing program was successful in establishing a brand-new program, incorporating equitable enforcement, and solidifying collaborative relationships with both DOR and Local Public Health Authorities around the state.¹⁰

Purpose

In 2024, OHA partnered with [Harder+Company Community Research](#) to develop and implement an equity-centered outcome evaluation that documented the impact of these policy initiatives. Specifically, the evaluation examined:

- **Youth outcomes:** Smoking prevalence, tobacco use prevalence, initiation, quit attempts, and ease of accessing tobacco products.
- **Adult outcomes:** Smoking prevalence, tobacco use prevalence, and quit attempts,
- **Retail and sales indicators:** Per capita cigarette sales, e-cigarette unit sales, retailer violations, and minimum legal sales age checks.

Given persistent disparities in tobacco use, the evaluation focused on outcomes among groups disproportionately targeted by the tobacco industry, including youth; Black or African American, American Indian or Alaska Native, and Latino individuals; LGBTQ individuals; and people with lower incomes and less education regardless of race or ethnicity.

¹⁰ Oregon Health Authority, Public Health Division. Interim TRL Program Evaluation Report [Internet]. Salem (OR): Oregon Health Authority; [cited 2025 Jun]. Available from: https://www.oregon.gov/oha/ph/diseasesconditions/chronicdisease/datreports/documents/evaluations/TRL_Interim_Evaluation_Report_2024.pdf

Methods

Below is a summary of the evaluation methods used to assess changes before and after the implementation of three statewide tobacco control policies. The evaluation aimed to examine both the combined impact of these policies as well as the individual contributions of each. The evaluation included analysis of adult and youth survey data on tobacco use behaviors and attitudes, as well as data on per capita cigarette sales, licensed tobacco retailers, and inspection and enforcement activity.

Youth

- **Oregon Healthy Teens (OHT).** OHT is an anonymous and voluntary survey of 8th and 11th grade youth conducted in odd-numbered years. The survey is sponsored by OHA in collaboration with the Oregon Department of Education. The last year the OHT was conducted was 2019. Starting in 2020, student health data was collected through the Student Health Survey.
- **Student Health Survey (SHS).** Oregon's Student Health Survey (SHS) is a collaborative effort between the Oregon Health Authority and the Oregon Department of Education to improve the health and well-being of all Oregon students to help them succeed. The SHS is a comprehensive, school-based, anonymous and voluntary health survey of 6th, 8th and 11th graders conducted yearly. SHS replaced OHT and the Student Wellness Survey (SWS) in 2020 and was administered every other year until 2024, when it began being administered every year. Data for this report were available through 2024.¹¹

Adults

- **Behavioral Risk Factor Surveillance System (BRFSS).** BRFSS (also known in Oregon as the Oregon Adult Health Survey) is the largest continuously conducted telephone health survey in the world. It enables the Centers for Disease Control and Prevention (CDC), state health departments, and other health agencies to monitor modifiable risk factors for chronic diseases and other leading causes of death. Data were available through 2024.
- **Oregon Health Matters Survey (OHM).** Twice a year HPCDP reaches out to Oregon adults to complete an online survey about health behaviors and attitudes. Data collected from this survey guide health policy and programming efforts for the State of Oregon. Data were available through 2024.

¹¹ The Oregon Youth Survey Online (OYSO) data was not included in this report as these data are not available by grade and therefore not comparable to the Oregon Healthy Teens or Student Health Survey data.

Retail / sales

- **Tobacco Retail License (TRL) Database.** The TRL Database is managed by HPCDP and used to track and monitor tobacco retail licenses in Oregon. It includes the number and type of retailers using lists provided by the Department of Revenue (DOR), and enforcement data for both minimum legal sales age and inspections to check compliance with tobacco retail regulations. The TRL Database is more current than the list of retailers available on the DOR website, and data were available through 2024.¹²
- **Tobacco Compilation required by Tobacco Industry: Tobacco Burden Report (Orzechowski and Walker).** This annual report includes information about tobacco revenue and industry statistics and has been produced since 1949. Data in these reports includes federal, state, and local tobacco tax rates and the per capita sales of tobacco products over time. Data were available through 2024.
- **CDC Foundation.** E-cigarette retail sales data are based on custom research by the CDC Foundation. Sales data do not reflect sales from vape shops or online retailers. Data were available through May 2025.

Analysis

We analyzed secondary data using SPSS or Microsoft Excel to evaluate progress toward the 2017–2025 HPCDP Strategic Plan goals before and after policy implementation. The analytic approach included both aggregate analyses to examine outcomes overall as well as for subgroups (e.g., race/ethnicity, gender, sexual orientation, education, employment, and income) when available. For subgroup analyses, we compared pre- and post-policy data for each group over time and did not compare groups to each other. When relevant and available, we also included comparisons between Oregon and other states or regions.

Study considerations and limitations

This report examined changes in tobacco-related outcomes before, during, and after implementation of three policies aimed at reducing commercial tobacco and nicotine use among youth and adults in Oregon: T21 (2018), Ballot Measure 108 (2021), and TRL (2022).

These findings represent associations between the time since the policies were implemented and the observed outcomes and should not necessarily be interpreted as evidence that the policies caused the changes in outcomes. At the same time as these policies were being implemented,

¹² The TRL database does not include inspections data for four counties who have their own TRL.

other statewide and local tobacco control initiatives were also in effect, which may have influenced the observed outcomes. Additionally, the impact of the COVID-19 pandemic on these outcomes remains unclear.

Data for this report were drawn from multiple sources, each with distinct methods and tools. These differences present challenges in making direct comparisons across datasets. In some cases, data for specific populations were changed or discontinued at a time coinciding with policy implementation, limiting the ability to track trends over time.

Readers are also advised to use caution when comparing data across different years, particularly with the youth data. Differences in survey design and response options affect the calculation of denominators and resulting percentages, limiting the ability to directly compare results between the two surveys. Similarly, survey timing-related issues prevented the evaluation of all intended outcomes as described in the evaluation plan. For the adult analyses, for example, data on tobacco consumption and age of tobacco use initiation were not available following implementation of the tobacco prevention policies, so these metrics were not included in this analysis.

Finally, surveys that form the basis of this evaluation did not ask about use of emerging tobacco products such as synthetic oral nicotine products that have become increasingly popular in recent years. Additional research and time are needed to fully understand the impact that these policies have had on HPCDP's desired outcomes and the disparities in tobacco-related factors among priority populations in Oregon.

Key findings

Youth tobacco use

Desired outcome: Reduce the number of youth who smoke cigarettes

Decrease cigarette smoking prevalence to 3.7 percent or less among 8th graders and 6.6 percent or less among 11th graders by 2025.

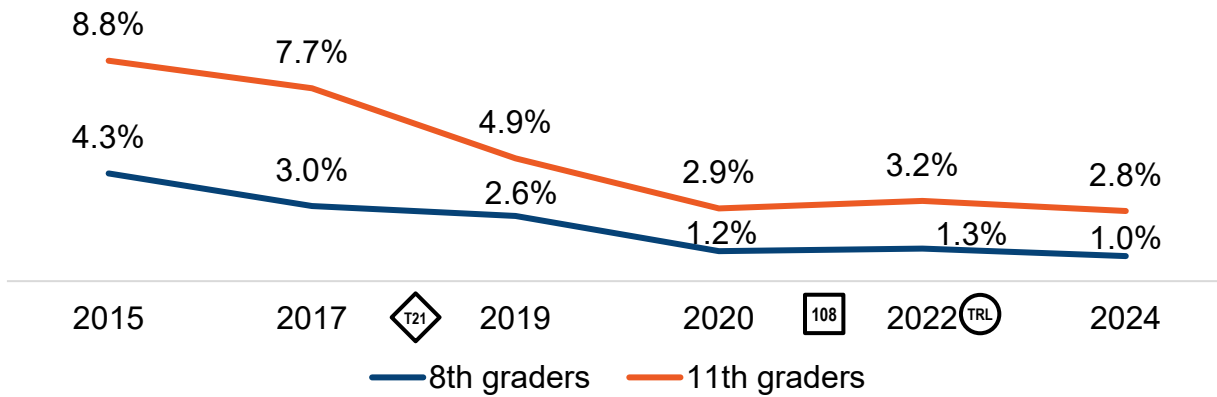
Addiction to tobacco typically starts in adolescence: 90 percent of adults who smoke start before they turn 18.¹³ T21 (2018) aimed to reduce tobacco use, particularly among young people, by raising the minimum legal age for purchasing tobacco products from 18 to 21. Ballot Measure 108 (2021) increased taxes on cigarettes and cigars and created a tax on inhalant delivery systems, which has been an effective way to reduce smoking, especially among youth. The passage of TRL (2022) allowed the state to track where tobacco is sold and helped to ensure that businesses followed all tobacco retail requirements, including not selling to people younger than 21.

As seen in Exhibit 1, **the decline in cigarette smoking among 8th and 11th graders exceeded HPCDP's 2025 goals**. From 2015 to 2024, cigarette use among 8th graders in Oregon declined from 4.3 percent to 1.0 percent (a 77 percent decrease). Similarly, use among 11th graders declined from 8.8 percent to 2.8 percent (a 68 percent decrease). The most substantial declines for both 8th and 11th graders occurred between 2015 and 2020, suggesting that T21 (2018) may have played a role in reducing youth smoking during this period. Following the passage of Ballot Measure 108 (2021) and TRL (2022), no immediate drops were observed in cigarette use; however, the cumulative impact of Oregon's tobacco policies may have helped to sustain low cigarette use levels from 2020 to 2024.

Declines in youth cigarette use were observed across all gender identities from 2015 to 2024 (appendix Exhibit A1); however, disparities persist. In 2024, 4.1 percent of gender non-conforming 8th grader respondents reported smoking, compared to 0.7 percent among girls/women and 0.8 percent of boys/men of the same grade. Among 11th graders, 5.6 percent of gender non-conforming respondents smoked, compared to 2.8 percent of boys/men, and 2.3 percent of girls/women (Exhibit 2). Although cigarette use among gender non-conforming 8th and 11th grade survey respondents has declined, 2024 rates for 8th graders are still above HPCDP's 2025 reduction targets.

¹³ Centers for Disease Control and Prevention. Preventing tobacco use among youth and young adults: a report of the Surgeon General [Internet]. Atlanta (GA): U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Office on Smoking and Health; 2012 [cited 2025 Jun]. Available from: <https://archive.cdc.gov/#/details?q=%22preventing%20tobacco%20use%20among%20youth%20and%20young%20adults%22%20a%20report%20of%20the%20surgeon%20general%202012&start=0&rows=10&url=https://www.cdc.gov/tobacco/sgr/2012/index.htm>

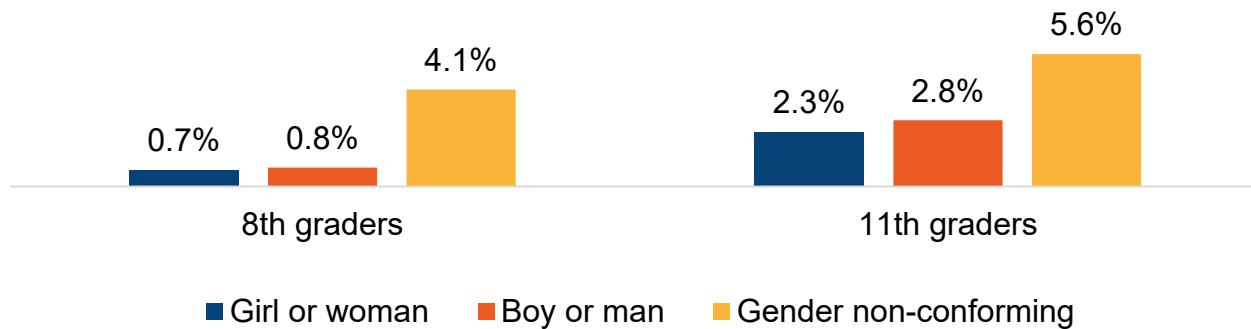
Exhibit 1. Current cigarette use among youth, 2015–2024



Source: Oregon Healthy Teens (2015, 2017, 2019); Student Health Survey (2020, 2022, 2024)

Note: Current cigarette use is defined as youth who reported smoking cigarettes within the last 30 days.

Exhibit 2. Current cigarette use among youth, by gender identity, 2024

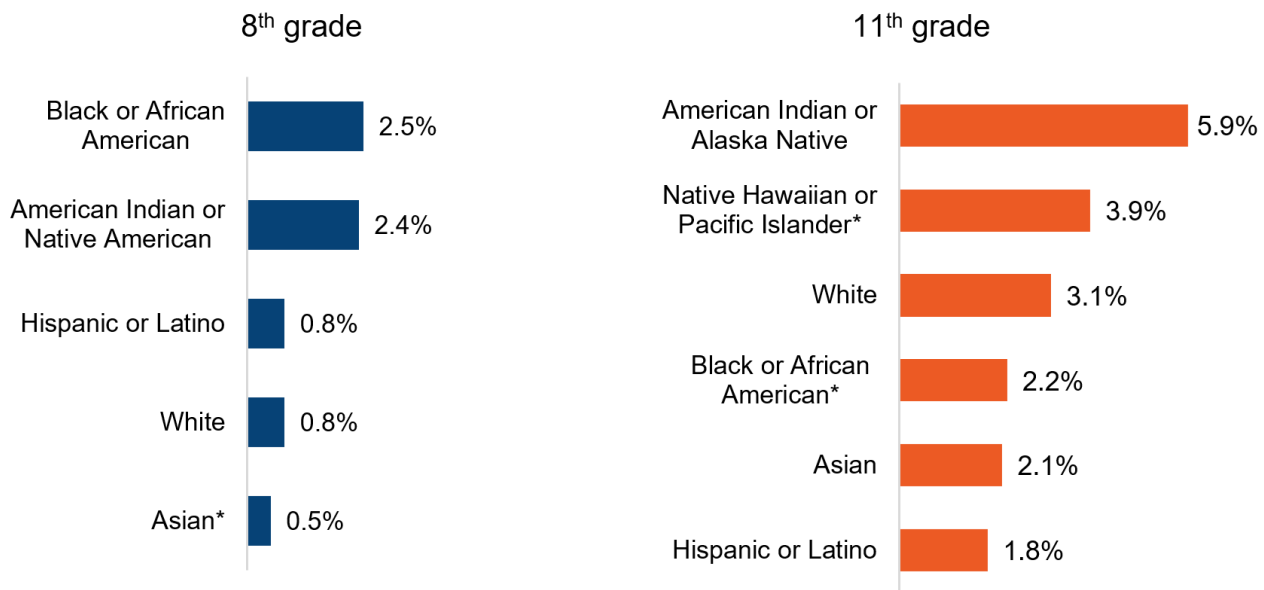


Source: Student Health Survey (2024), unweighted data

Note: Gender non-conforming includes those who identify as transgender, nonbinary, genderqueer, gender fluid, intersex/intergender, or another gender identity.

Cigarette use also declined across all racial and ethnic identities (appendix Exhibit A2), exceeding HPCDP's 2025 targets (Exhibit 3). However, we still see disparities in reported smoking rates among American Indian or Alaska Native, Black or African American, and Native Hawaiian or Pacific Islander youth.

Exhibit 3. Current cigarette use among youth, by race/ethnicity, 2024



Source: Student Health Survey (2024), unweighted data

Note: Data for Native Hawaiian or Pacific Islander 8th graders and Middle Eastern or North African 8th and 11th graders suppressed.

* Data may be unreliable because of the small number of people surveyed.

Desired outcome: Decrease youth smoking initiation rates

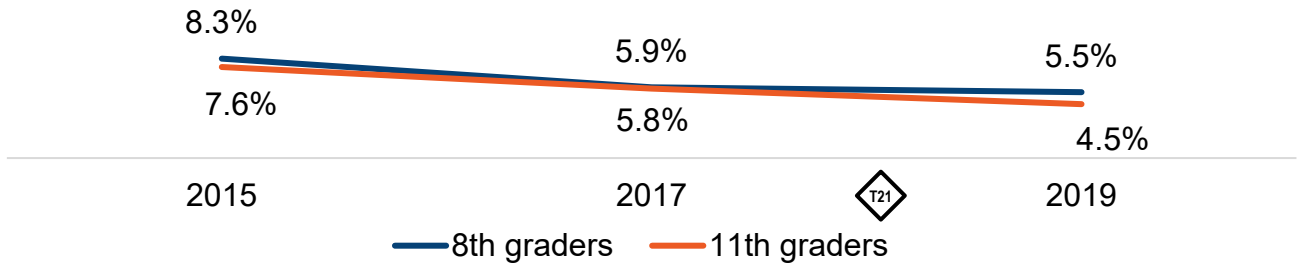
Research shows that the later individuals begin smoking cigarettes, the lower their risk of lifelong smoking, nicotine dependence, respiratory and cardiovascular health effects, and other adverse effects of cigarette use.^{14, 15} In Oregon, fewer youth are smoking at a young age (Exhibit 4). In 2015, 8.3 percent of 8th graders and 7.6 percent of 11th graders reported smoking their first whole cigarette at 13 years old or younger. In 2019, these percentages decreased to 5.5 percent and 4.5 percent, respectively. These data suggest early initiation of cigarette smoking was already

¹⁴ Centers for Disease Control and Prevention. The health consequences of smoking — 50 years of progress: A report of the Surgeon General [Internet]. Atlanta (GA): U.S. Department of Health and Human Services; 2014 [cited 2025 Jun]. Available from: <https://archive.cdc.gov/#/details?q=2014%20Surgeon%20General%E2%80%99s%20report:%20the%20health%20consequences%20of%20smoking&start=0&rows=10&url=https://www.cdc.gov/tobacco/sgr/50th-anniversary/index.htm>.

¹⁵ Centers for Disease Control and Prevention. Preventing tobacco use among youth and young adults: A report of the Surgeon General [Internet]. Atlanta (GA): U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Office on Smoking and Health; 2012 [cited 2025 Jun]. Available from: <https://archive.cdc.gov/#/details?q=%22Preventing%20tobacco%20use%20among%20youth%20and%20young%20adults%22%20a%20report%20of%20the%20Surgeon%20General%202012&start=0&rows=10&url=https://www.cdc.gov/tobacco/sgr/2012/index.htm>.

declining prior to T21 (2018); however, this policy may have contributed to the continued downward trend.

Exhibit 4. Youth who smoked their first whole cigarette at 13 years or younger, 2015–2019

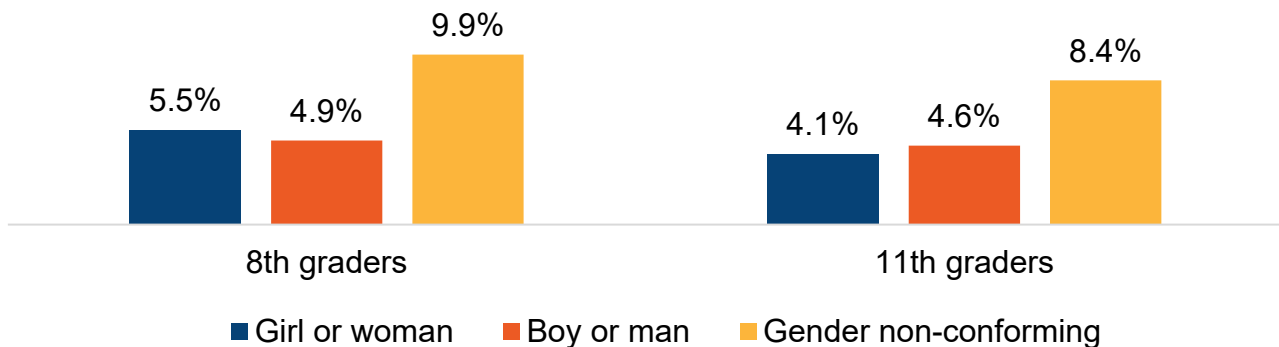


Source: Oregon Healthy Teens (2015–2019)

Note: Smoking initiation questions were not asked on the Student Health Survey

Like cigarette use, early youth smoking initiation declined across all gender identities from 2015 to 2019 (appendix Exhibit A3); however, disparities also persist. In 2019, 9.9 percent of gender non-conforming 8th grader respondents reported smoking their first whole cigarette at 13 years or younger, followed by 5.5 percent of girls/women and 4.9 percent of boys/men. Among 11th grader respondents, 8.4 percent of gender non-conforming youth smoked at 13 years or younger, followed by 4.6 percent of boys/men, and 4.1 percent of girls/women (Exhibit 5).

Exhibit 5. Youth who smoked their first whole cigarette at 13 years or younger, by gender identity, 2019



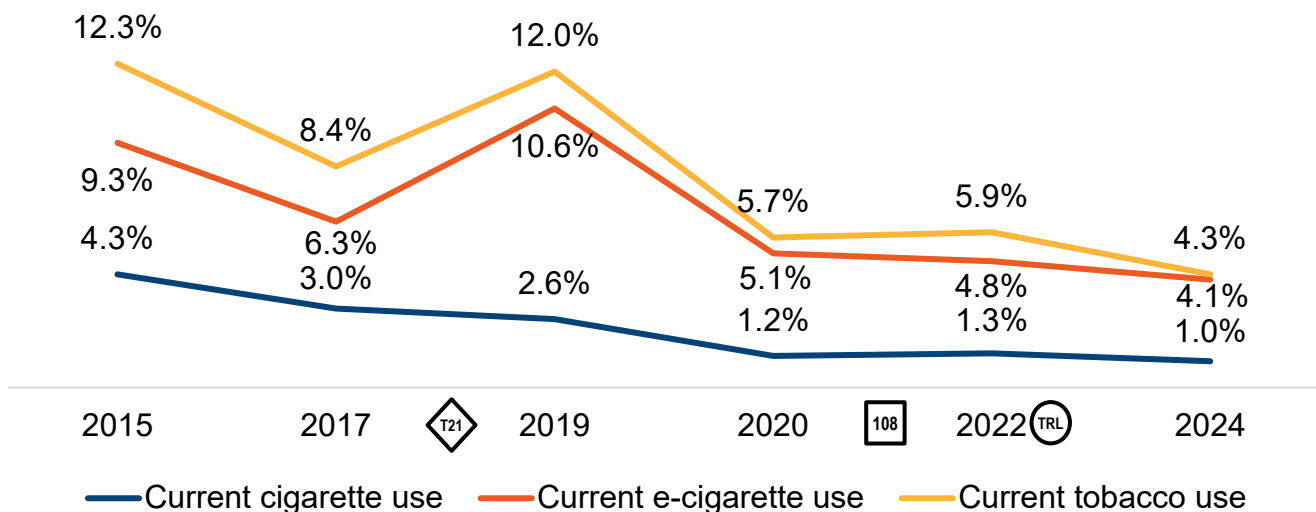
Source: Oregon Healthy Teens (2019), unweighted data

Note: Smoking initiation data were not available by race/ethnicity

Desired outcome: Decrease tobacco use among youth

Tobacco use among youth is a significant concern, driven by the popularity of e-cigarettes or vapes. In the United States, youth are more likely to use e-cigarettes than any other tobacco product.¹⁶ In Oregon, among 8th graders, tobacco use decreased from 12.3 percent in 2015 to 4.3 percent in 2024 and e-cigarette use declined from 9.3 percent in 2015 to 4.1 percent in 2022 (Exhibit 6). Similarly, among 11th graders, tobacco use decreased from 23.7 percent to 9.8 percent and e-cigarette use declined from 17.1 percent to 9.0 percent (Exhibit 7). E-cigarettes were the dominant product 8th and 11th graders reported using the first time they tried tobacco (appendix Exhibit A4). Given that e-cigarette use mirrors the tobacco use trend, e-cigarettes are likely driving overall tobacco use rates more than any other product.

Exhibit 6. Current cigarette, e-cigarette, and any tobacco use among 8th graders, 2015–2024



Source: Oregon Healthy Teens (2015, 2017, 2019); Student Health Survey (2020, 2022, 2024)

Note: Current cigarette use is defined as youth who reported smoking cigarettes within the last 30 days. Current e-cigarette use is defined as youth who used an e-cigarette or other vaping product within the last 30 days. Youth current any tobacco use is defined as those who reported using any tobacco products within the past 30 days.

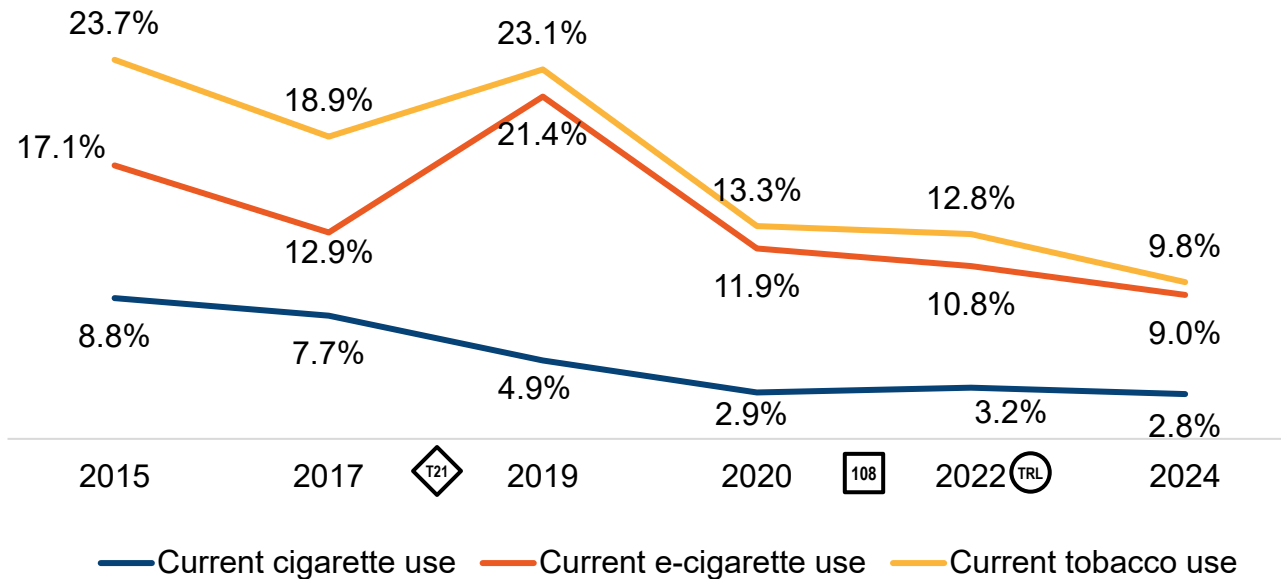
A spike in tobacco use in 2019 for both 8th and 11th graders reflects trends seen at the national level and is likely driven by the heavy marketing and use of JUUL[®] and other flavored vape products.¹⁷ This surge suggests that T21 (2018) did not immediately affect tobacco use. However, the decline in tobacco use from 2019 to 2024 could reflect the impact of efforts such as

¹⁶ Jamal A, Park-Lee E, Birdsey J, et al. Tobacco product use among middle and high school students — National Youth Tobacco Survey, United States. MMWR Morb Mortal Wkly Rep. 2024;73(41):917–924. DOI: <http://dx.doi.org/10.15585/mmwr.mm7341a2>.

¹⁷ Gentzke AS, Creamer M, Cullen KA, et al. Vital signs: tobacco product use among middle and high school students — United States, 2011–2018. MMWR Morb Mortal Wkly Rep. 2019;68:157–164. DOI: 10.15585/mmwr.mm6806e1.

the Smokefree Oregon tobacco and vaping quitting support campaign and — as noted above — the cumulative impact of Oregon’s tobacco policies.

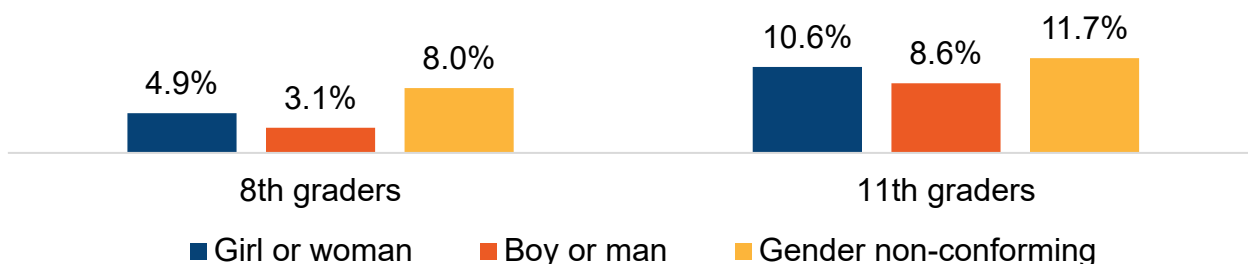
Exhibit 7. Current cigarette, e-cigarette, and any tobacco use among 11th graders, 2015–2024



Source: Oregon Healthy Teens (2015, 2017, 2019); Student Health Survey (2020, 2022, 2024)

Tobacco use declined across all gender identities from 2015 to 2024 (appendix Exhibit A5); however, among 8th graders, 8 percent of gender non-conforming respondents used tobacco in 2024, followed by 4.9 percent of girls/women and 3.1 percent of boys/men (Exhibit 8). Among 11th graders, girls/women (10.6 percent) and gender non-conforming youth (11.7 percent) reported similar rates of tobacco use, followed by boys/men (8.6 percent).

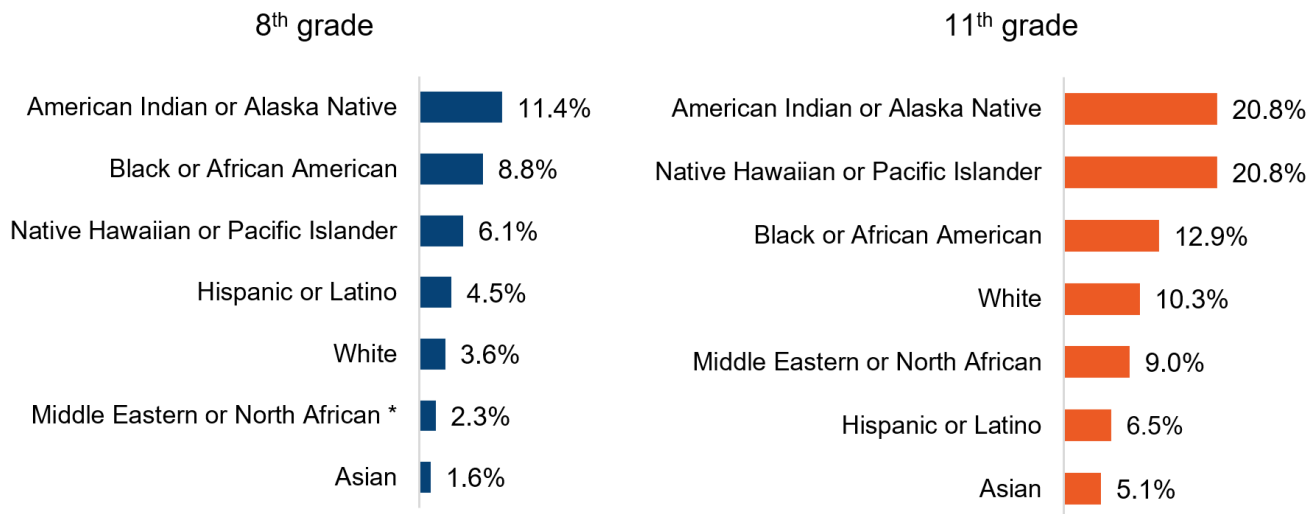
Exhibit 8. Current tobacco use among youth, by gender identity, 2024



Source: Student Health Survey (2024), unweighted data

Tobacco use declined across all racial and ethnic identities from 2015 to 2024 (appendix Exhibit A6); however, tobacco use was highest among American Indian or Alaska Native, Black or African American and Native Hawaiian or Pacific Islander 8th and 11th grader respondents. (Exhibit 9).

Exhibit 9. Current tobacco use among youth, by race/ethnicity, 2024



Source: Student Health Survey (2024), unweighted data

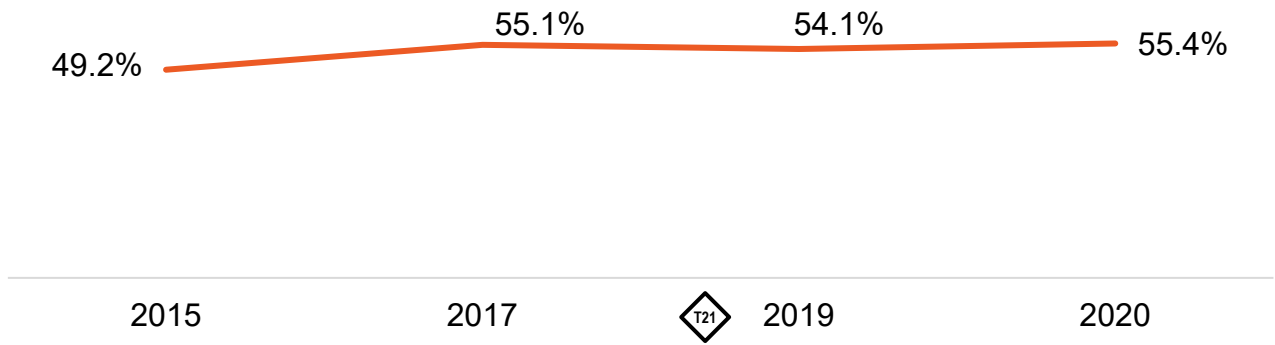
* Data may be unreliable because of the small number of people surveyed.

Desired outcome: Increase quit attempts among youth

In Oregon, among 11th graders who currently smoked cigarettes, the percentage who reported a quit attempt increased between 2015 to 2020. By 2020, 55.4 percent of 11th graders who smoked reported attempting to quit in the past 12 months (Exhibit 10). These data are consistent with national findings. In 2021, 60.2 percent of U.S. youth reported they had stopped using all tobacco products for one day or longer in the past year because they were trying to quit.¹⁸ The increase in cigarette smoking quit attempts from 2015 (49.2 percent) to 2019 (54.1 percent) suggest that T21 (2018) may have contributed to the percentage of youth who tried to quit smoking.

¹⁸ Centers for Disease Control and Prevention. Smoking cessation [Internet]. Atlanta (GA): CDC, Office on Smoking and Health; 2024 Sep 17 [cited 2025 Jun]. Available from: <https://www.cdc.gov/tobacco/php/data-statistics/smoking-cessation/index.html>

Exhibit 10. Self-reported cigarette quit attempts, 11th graders, 2015–2020



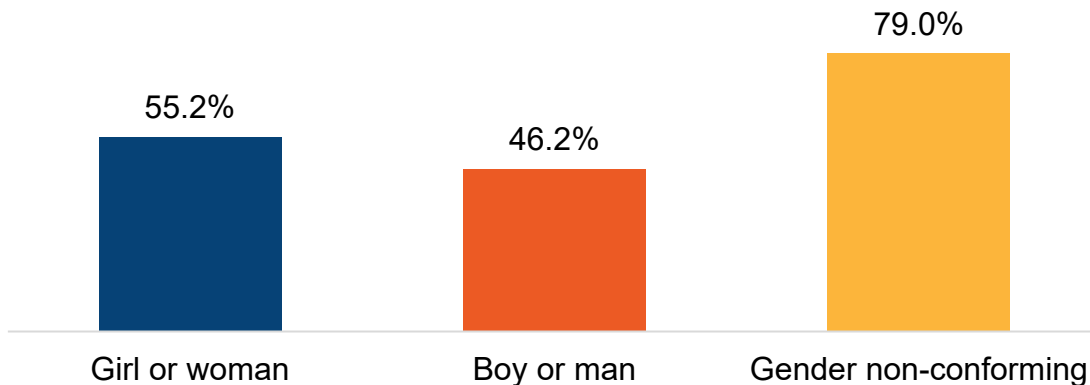
Source: Oregon Healthy Teens (2015, 2017, 2019), Student Health Survey (2020)

Note: Quit attempts is defined as youth who reported ever tried to quit smoking cigarettes in the past 12 months.

Note: Quit attempt data for 2020 was not available for 8th graders.

In 2020, quit attempts were highest among gender non-conforming respondents who reported smoking, with 79.0 percent saying they tried to quit smoking in the past 12 months (Exhibit 11). This is notable given gender non-conforming youth also report higher rates of cigarette use than their peers.

Exhibit 11. Self-reported cigarette quit attempts, 11th graders, by gender identity, 2020



Source: Student Health Survey (2020), unweighted data

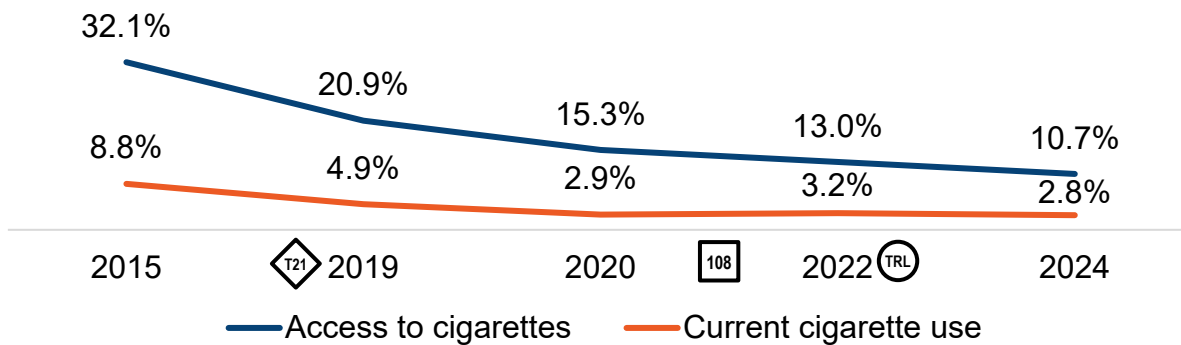
Note: Cigarette quit attempts were not available by race/ethnicity; data for 2020 was not available for 8th graders.

Desired outcome: Decrease access to tobacco products among people younger than 21 years old

Overall, the percentage of youth who reported that it was very easy to get cigarettes decreased from 2015 to 2024 (appendix Exhibit A10). Eleventh graders who reported it was very easy to get cigarettes decreased from 32.1 percent in 2015 to 10.7 percent in 2024. As perceived ease of access decreased cigarette use also declined, highlighting a relationship between access and

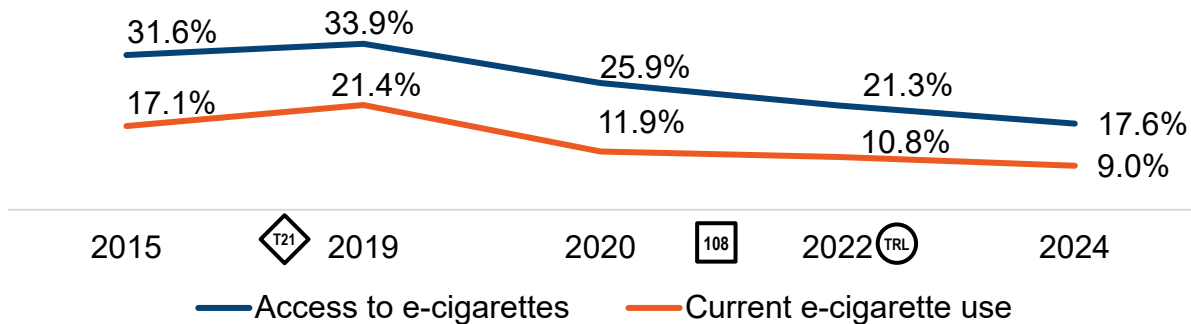
use (Exhibit 12). These patterns closely mirror trends for e-cigarettes where both measures peaked in 2019 and then declined (Exhibit 13). This alignment is also evident across age and gender identity. Namely, as perceived ease of access increased, so did use (appendix Exhibit A11). Combined, these findings suggest that together, T21 (2018), Ballot Measure 108 (2021), and TRL (2022) are contributing to reduced youth access to tobacco products and helping to suppress overall use.

Exhibit 12. Percentage of 11th graders who reported it was very easy to obtain cigarettes compared to percentage of 11th graders who smoked at least one cigarette in past 30 days, 2015–2024



Source: Oregon Healthy Teens (2015, 2019); Student Health Survey (2020, 2022, 2024)

Exhibit 13. Percentage of 11th graders who reported it was very easy to obtain e-cigarettes compared to percentage of 11th graders who used an e-cigarette in past 30 days 2015–2024



Source: Oregon Healthy Teens (2015, 2019); Student Health Survey (2020, 2022, 2024)

Adult tobacco use

Desired outcome: Reduce cigarette smoking prevalence among adults

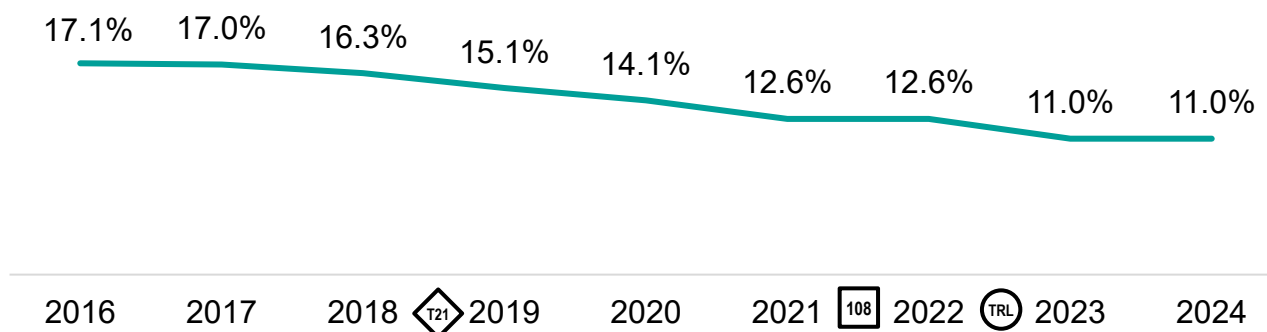
Decrease cigarette smoking prevalence among adults to 13.3 percent or less by 2025.

Current smoking

Implementation of the three tobacco prevention initiatives — Tobacco 21 (2018), Ballot Measure 108 (2021), and TRL (2022) — sought to prevent smoking and reduce tobacco use among people in Oregon. The data comparing tobacco use among adults between 2016 and 2023, before and after the policies were implemented, suggests that overall the policies have been successful.

The proportion of adults in Oregon who reported current cigarette smoking at least some days in the past 30 days decreased from 17.1 percent in 2016, before implementation of the tobacco prevention policies, to 11.0 percent in 2023, a 36 percent decrease (Exhibit 14). **Reductions in cigarette smoking prevalence among adults exceeded HPCDP’s 2025 goal of 13.3 percent or less.** These data suggest that cigarette use was already declining prior to 2022 when Ballot Measure 108 was implemented. However, there was a decrease in 2023 after a few years of relative stability suggesting that this policy may have contributed to the continued decline.

Exhibit 14. Current cigarette use among adults, 2016–2024



Source: Behavioral Risk Factor Surveillance System (BRFSS) / Oregon Adult Health Survey, weighted data (2016–2024).

Note: Smoking prevalence was defined as currently smoking at least some days in the past 30 days.

This downward trend, however, was not observed for everyone. Current smoking among Black or African American respondents remained around 18 to 20 percent between 2016 and 2023 (appendix Exhibit A14). This is in contrast to a nationwide trend, where current smoking among

Black or African American adults decreased from 18 percent in 2016 to 12 percent in 2023,¹⁹ declining after the adoption of similar tobacco related policies.²⁰ Studies show that Black and African American communities have been historically targeted by tobacco advertising, and Black or African Americans are more likely to smoke menthol cigarettes, which, like other flavored tobacco products, are easier to smoke and harder to quit.²¹

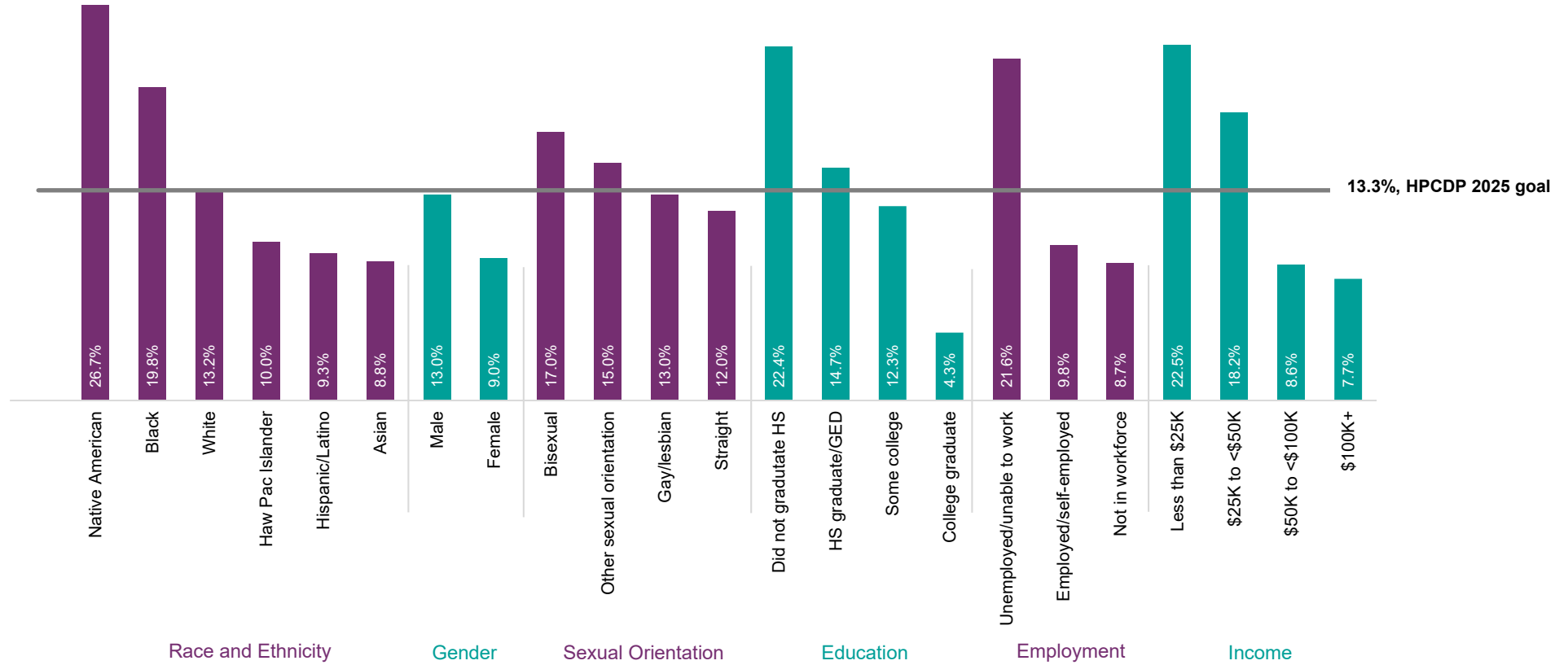
In addition to Black or African American respondents, HPCDP has also not yet achieved the goal of reducing the smoking prevalence among adults to less than 13.3 percent for American Indian or Alaska Natives, bisexuals, those with less than a college education, people who are unemployed or unable to work, and those with annual incomes less than \$50,000 (Exhibit 15), demonstrating the continued need for prevention programs aimed at groups historically targeted by the tobacco industry.

¹⁹ Kaiser Family Foundation. KFF analysis of the Centers for Disease Control and Prevention (CDC)'s 2013–2024 Behavioral Risk Factor Surveillance System (BRFSS) [Internet]. [cited 2026 Mar]. Available from: <https://www.kff.org/state-category/health-status/smoking/>.

²⁰ University of California, San Diego. Evaluating the impact of Proposition 56 on tobacco use among California adults and youth [Internet]. Sacramento (CA): California Department of Public Health, Tobacco Prevention Program; 2024 [cited 2025 Jun]. Available from: <https://www.cdph.ca.gov>.

²¹ Truth Initiative. Tobacco use in the African American community [Internet]. Washington (DC): Truth Initiative; [cited 2025 Jun]. Available from: <https://truthinitiative.org/research-resources/targeted-communities/tobacco-use-african-american-community>.

Exhibit 15. Current smoking among adults, by demographic characteristics, 2020–2024

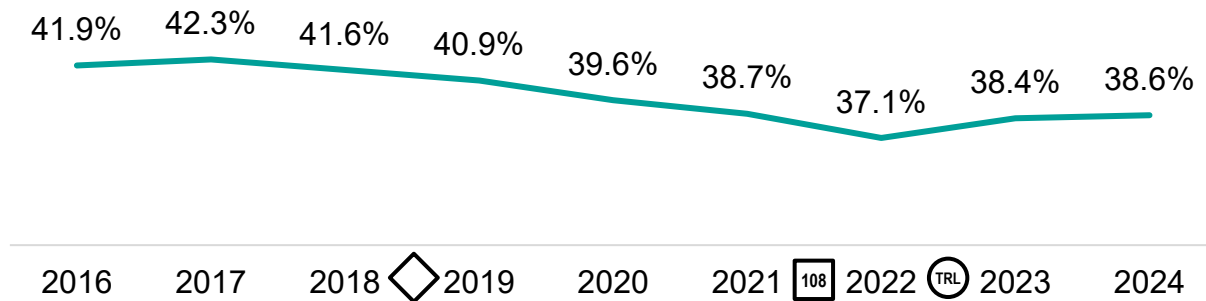


Source: Race and ethnicity, sexual orientation: 2020–2023 four-year combined Behavioral Risk Factor Surveillance System (BRFSS); gender, education, employment, income: 2024 BRFSS.

Ever smoked

The proportion of adults in Oregon who had smoked at least 100 cigarettes in their entire life slightly decreased from 42 percent in 2016, before implementation of the tobacco prevention policies, to 39 percent in 2024, a few years after the policies were implemented (Exhibit 16).

Exhibit 16. Adults who ever smoked, 2016–2023



Source: Behavioral Risk Factor Surveillance System (BRFSS) / Oregon Adult Health Survey, weighted data (2016–2023)

Note: Ever smoking was defined as ever smoking at least 100 cigarettes.

This small downward trend was observed across nearly all racial and ethnic groups and among respondents of all sexual orientation and gender identity, education, employment, and income categories (appendix Exhibits A20–A25).

Rates of ever smoking among American Indian/Alaska Native respondents, however, were quite high and increased over time, from 52 percent in the combined 2016–2019 data to 56 percent in the 2020–2023 results. This contrasts with a national trend where the percentage of American Indian or Alaska Natives who reported having ever smoked cigarettes decreased during that same time frame.²² Although tobacco has cultural significance for some American Indian and Alaska Native people, romanticized images of tobacco as "natural" and "spiritual" have been used for decades to market and sell commercial tobacco. These tactics not only reinforced harmful stereotypes but also contribute to high levels of smoking among American Indian or Alaska Native youth and adults.²³

²² Kaiser Family Foundation. KFF analysis of the Centers for Disease Control and Prevention (CDC)'s 2013–2024 Behavioral Risk Factor Surveillance System (BRFSS) [Internet]. [cited 2026 Mar]. Available from: <https://www.kff.org/state-category/health-status/smoking/>.

²³ Truth Initiative. Tobacco use in the American Indian/Alaska Native community [Internet]. Washington (DC): Truth Initiative; May 2020 [cited 2025 Jun]. Available from: https://truthinitiative.org/research-resources/topic/targeted-communities?title=native+american&sort_bef_combine=field_publish_date_value_DESC.

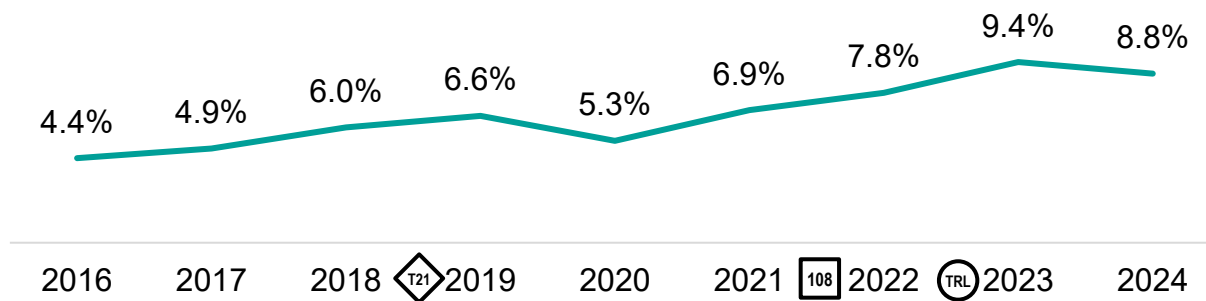
Desired outcome: Decrease tobacco use

E-cigarettes / vaping

Unlike with cigarette smoking, the use of e-cigarettes and vaping has increased among adults in Oregon overall and for all subgroups, although there was a reduction in 2024. In 2016, 4 percent of adults said they used e-cigarettes or other vaping products, compared to 9 percent in 2024 (Exhibit 17).

Oregon data reflects national trends, with 3.2 percent of adults reporting use of e-cigarettes in 2016, compared to 6 percent in 2022.²⁴

Exhibit 17. E-cigarette use among adults, 2016–2024



Source: Behavioral Risk Factor Surveillance System (BRFSS) / Oregon Adult Health Survey, age adjusted (2016–2024)

Note: E-cigarette use was defined as using e-cigarettes or other 'vaping' products every day or some days.

Similar patterns in e-cigarette use were observed across racial and ethnic groups and among respondents of sexual orientation, gender identity, education, employment, and income categories (see appendix Exhibits A26–31).

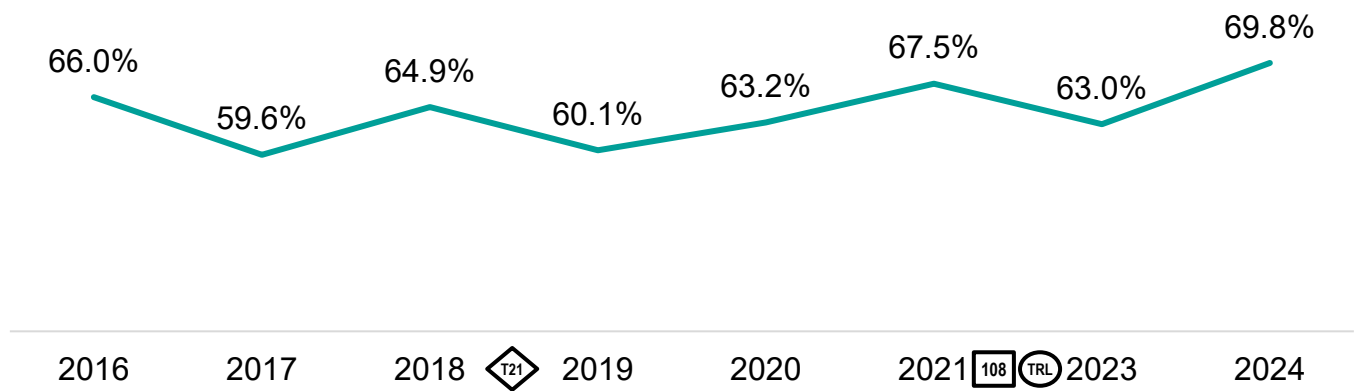
²⁴ American Lung Association. Tobacco trends brief: overall smoking trends [Internet]. American Lung Association; 2024 [cited 2025 Jun]. Available from: <https://www.lung.org/research/trends-in-lung-disease/tobacco-trends-brief/overall-smoking-trends>.

Desired outcome: Increase quit attempts among adults

Would like to quit

About two-thirds of adults who smoke reported that they would like to quit, a proportion that has stayed relatively constant between 2016 and 2024 (Exhibit 18), and across both the BRFSS and Oregon Health Matters surveys.

Exhibit 18. Desire to quit smoking among adults who smoke, 2016–2024



Source: Behavioral Risk Factor Surveillance System (BRFSS) / Oregon Adult Health Survey, weighted data (2016–2023) Question was not asked on 2022 BRFSS.

Note: Desire to quit was defined as a positive response when people who smoke were asked whether they would like to quit smoking.

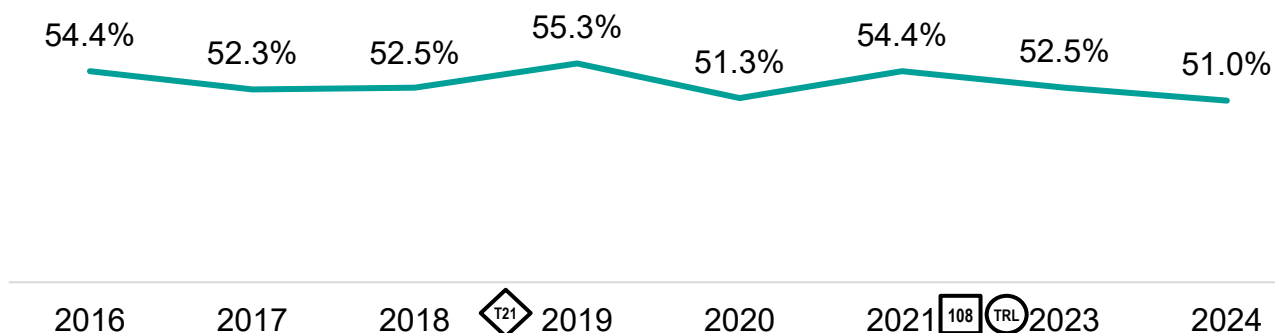
Quit attempts

Quit attempts also remained relatively constant between 2016 and 2024. About half of adults who smoke stopped smoking cigarettes for a day or longer in the previous 12 months because they were trying to quit smoking (Exhibit 19).

There were a few variations from this stable rate of quit attempts among groups historically targeted by the tobacco industry (see appendix Exhibits A32–A37). The proportion of people reporting a quit attempt within the past year decreased (i.e., fewer people attempted to quit) across most demographic groups, with the largest decreases among college graduates, Asian, Black or African American and Hawaiian or Pacific Islander adults and bisexuals. The proportion of people making at least one quit attempt increased among Hispanic or Latino and American Indian or Alaska Native adults, as well as respondents not in the workforce (e.g. student, homemaker or retired). There is limited publicly available data that explores attempts to quit

overtime among these groups that are typically targeted by tobacco companies. Thus, no comparisons can be made to contextualize these findings.

Exhibit 19. Self-reported quit attempts among adults who smoke, 2016–2024



Source: Behavioral Risk Factor Surveillance System (BRFSS) / Oregon Adult Health Survey, weighted data (2016–2024)

Note: Quit attempts is defined as people who smoke who reported they ever tried to quit smoking cigarettes in the past 12 months.

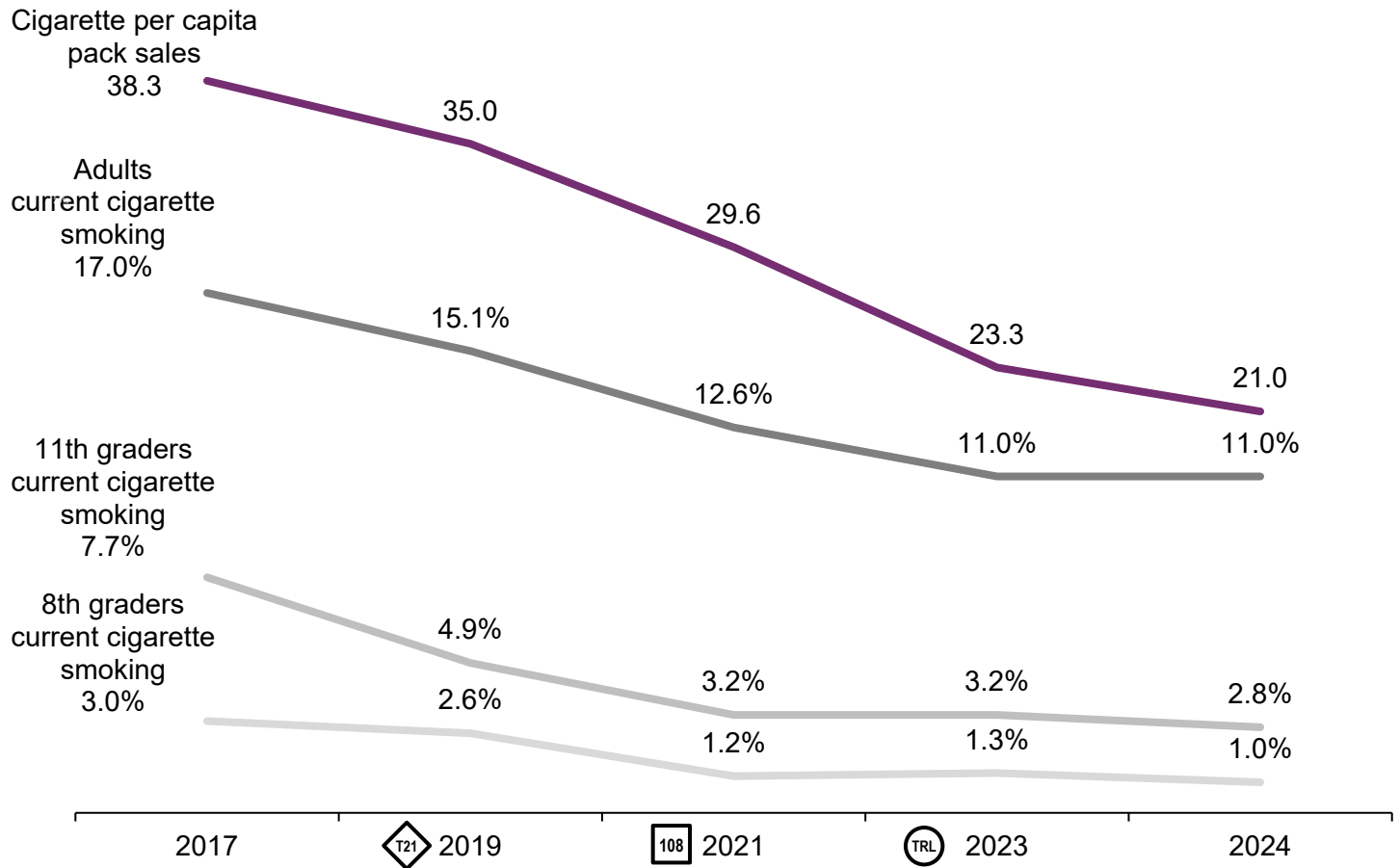
Retail / sales

Desired outcome: Decreased annual per capita cigarette sales

Decrease annual per capita cigarette sales to 34 or fewer packs per person per year.

Per capita cigarette sales help to quantify the overall level of cigarette use. **The decrease in annual per capita cigarette sales exceeded HPCDP’s goal.** From 2016 to 2024, per capita cigarette sales in Oregon declined from 38.3 packs per person to 21.0 packs (Exhibit 20). A similar trend was also observed in youth and adult cigarette use, with both groups showing steady declines in over this period. These data suggest that Oregon’s policies are helping to reduce cigarette sales and as noted previously, cigarette use among youth and adults.

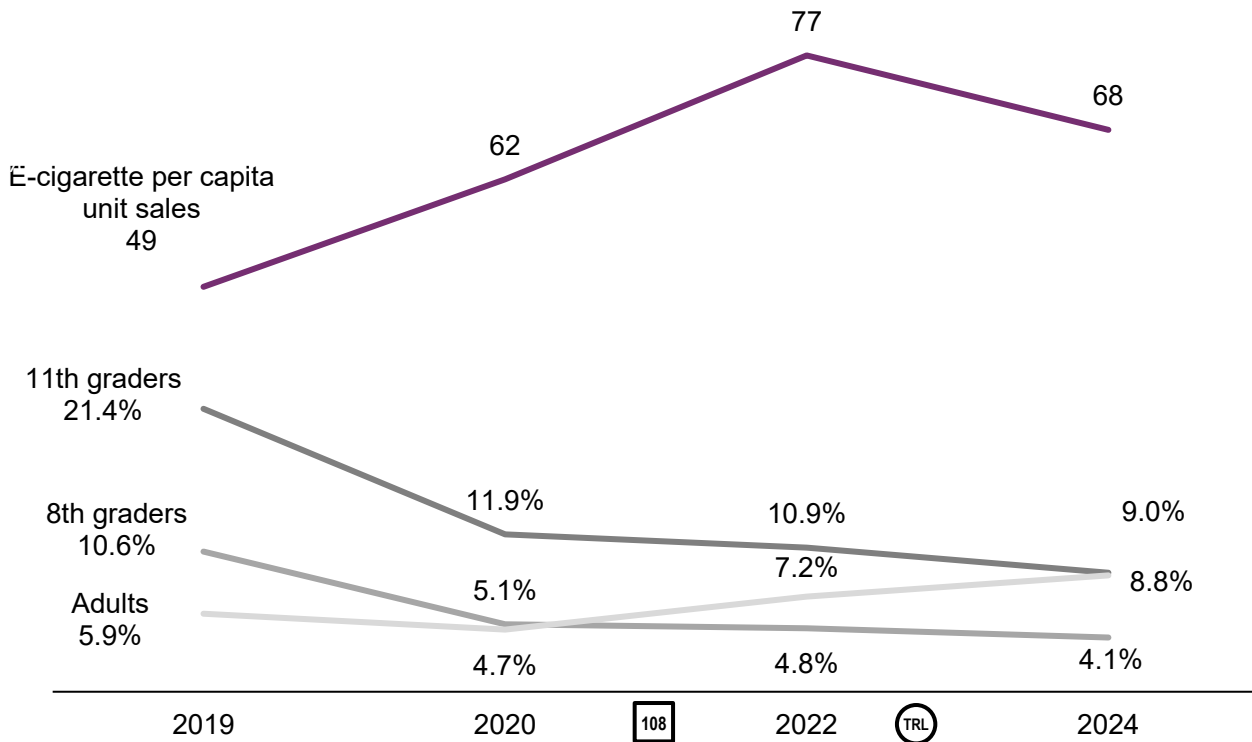
Exhibit 20. Per capita cigarette pack sales compared to current cigarette use among youth and adults between 2017–2024



Sources: Orzechowski and Walker, *The Tax Burden on tobacco. Historical compilation*. Fairfax and Richmond, Virginia. (2016–2023); Behavioral Risk Factor Surveillance System (BRFSS) / Oregon Adult Health Survey, weighted data (2016–2023); Oregon Healthy Teens (2015, 2017, 2019); Student Health Survey (2020, 2022, 2024).

Conversely, e-cigarette per capita unit sales increased from 49 in 2019 to 77 in 2022 and decreased to 68 in 2024 (Exhibit 21). E-cigarette unit sales were standardized to reflect the most common package size for each product type. A standardized unit was equal to five prefilled cartridges, one disposable device or one e-liquid bottle.

Exhibit 21. E-cigarette per capita unit sales compared to current e-cigarette use among youth and adults between 2015–2024



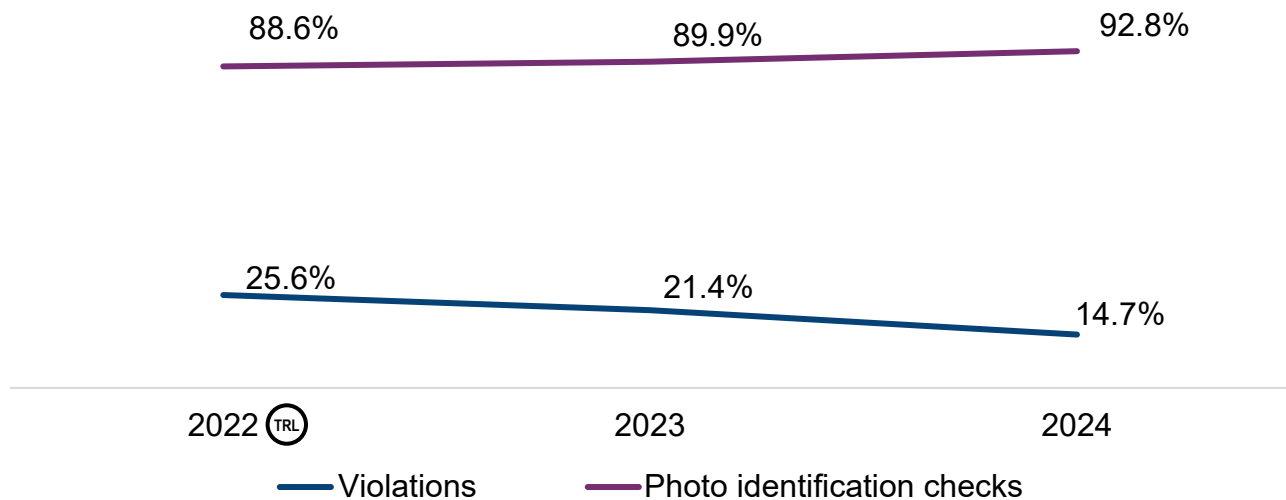
Source: CDC Foundation, *Oregon E-Cigarette Unit Sales by Flavor, 2019–2025*; Behavioral Risk Factor Surveillance System (BRFSS) / Oregon Adult Health Survey, weighted data (2016–2023); Oregon Healthy Teens (2015, 2017, 2019); Student Health Survey (2020, 2022)

Note: Sales data does not reflect sales from vape shops or online retailers; e-cigarette accessories and devices sold without e-liquids were excluded (9.5% of total dollar sales in 2022). Unit sales were standardized to reflect the most common package size for each product type. A standardized unit was equal to five prefilled cartridges, one disposable device or one e-liquid bottle.

Desired outcome: Decreased sales of tobacco to people under 21

Beginning January 1, 2022, any business that wants to be authorized to sell cigarettes, tobacco, and/or inhalant delivery systems in Oregon is required to obtain a tobacco retail license from the Department of Revenue. In 2024, there were 3,840 licensed tobacco retailers in Oregon (appendix Exhibit A39). The OHA TRL Program conducts random, unannounced inspections of tobacco retailers to understand sales to people under the age of 21. If the retailer makes a sale during an inspection, OHA issues a civil penalty to the license holder and provides education about how to educate their sales staff about compliance and its importance in protecting the health of young people. Data suggest that the TRL (2022) may have contributed to reducing tobacco sales to people under 21 and increasing retailer compliance. From 2022 to 2024, retailer minimum legal sales age violations decreased from 25.6 percent to 14.7 percent and photo identification checks for proof of age increased from 88.6 percent to 92.8 percent (Exhibit 22).

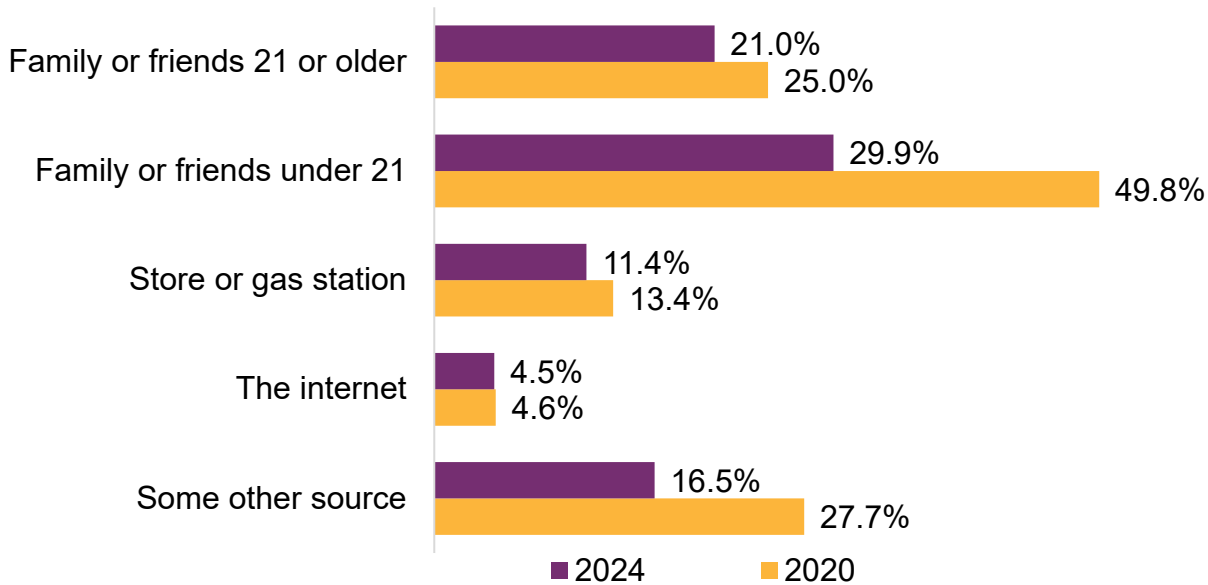
Exhibit 22. Percentage of licensed retailer violations and photo identification checks, 2022–2024



Source: TRL Database (2022–2024)

After the implementation of TRL (2022), there was a slight decrease in youth retail access to tobacco products; in 2020, approximately 13 percent of 11th graders reported obtaining tobacco from a store or gas station compared to 11 percent in 2024 (Exhibit 23). Additionally, access to tobacco from friends or family under 21 decreased from 49.8 percent in 2020 to 29.9 percent in 2024 and access to tobacco from family or friends over 21 decreased from 25.0 percent to 21.0 percent. This suggests that T21 (2018) and TRL (2022) policies may be having an impact on youth access.

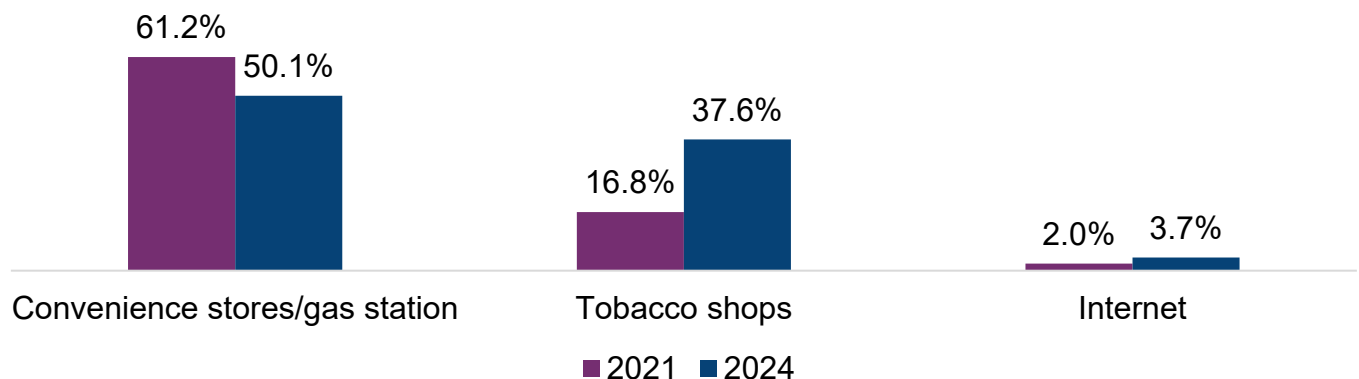
Exhibit 23. Where youth usually get tobacco products, 11th graders, 2020 and 2024



Student Health Survey (2020, 2024)

The percentage of adults who purchased tobacco products inside Oregon stores remained steady from 2021 to 2024, at about 90 percent (see appendix Exhibit A40). Among those adults who purchased tobacco in stores, the proportion buying at convenience stores or gas stations decreased, from 61.2 percent in 2021 to 50.1 percent in 2024 and the proportion buying at tobacco shops increased, from 16.8 percent in 2021 to 37.6 percent in 2024. Adults purchasing via the Internet increased from 2.0 percent to 3.7 percent (Exhibit 24).

Exhibit 24. Where adults usually buy tobacco products, 2021 and 2024



Source: Oregon Health Matters Survey (2021, 2024)

Recommendations

This evaluation found that HPCDP exceeded the tobacco related goals in the Health Promotion and Chronic Disease Prevention 2017–2025 Strategic Plan. However, continued disparities among communities that have been historically targeted by the tobacco industry highlight the ongoing need for targeted intervention efforts. The recommendations below provide opportunities for strengthening policy implementation and enforcement.

Youth

- **Continue to monitor the long-term impacts of Oregon’s tobacco policies on youth cigarette use.** Data show that the most dramatic declines in youth tobacco use occurred between 2015 and 2020. From 2020 (after the passage of Ballot Measure 108 and TRL) to 2024, however, rates appear to have plateaued. Possible reasons for this may include that the price increase was insufficient to deter underage use and the delays in enforcement of TRL may have limited the policy’s early impact. Retail policies may have also limited the reach of the tobacco policies for youth, as only about 10 percent obtained their tobacco products from a store or gas station (see Exhibit 23). Licensing and educating tobacco retailers and conducting tobacco purchasing age checks are only part of a comprehensive tobacco prevention and cessation program. Additional policies layered on top of TRL, such as flavor bans, restrictions on promotions, retail zoning limits, and increased funding for youth-specific cessation and prevention programs, could support further reductions in youth tobacco use.
- **Expand HPCDP’s youth cigarette reduction goals to include all tobacco and nicotine products as well as goals related to equity and data disaggregation.** While cigarette use declined among youth overall, e-cigarettes are now the tobacco product most used by youth, and disparities persist across both product types. To ensure equity is centered in tobacco prevention efforts, HPCDP could expand its goals to include all tobacco products. It is also important to expand data collection, analysis, and reporting practices to include details for people belonging to communities that have been historically targeted by the tobacco industry, including gender identity, sexual orientation, and race/ethnicity. This may involve exploring alternative methods and sources to ensure data that is sufficient to draw meaningful conclusions about communities whose unique experiences are often obscured by being grouped into larger, aggregated categories.
- **Tailor prevention strategies to the unique needs of populations disproportionately impacted by tobacco use.** While overall youth tobacco use, initiation rates, and ease of access to tobacco have decreased over time, disparities exist among nonbinary, American Indian or Alaska Native, Black or African American and Native Hawaiian or Pacific Islander youth. Tailoring strategies to these groups can help reduce inequities in youth tobacco use.

- **Ensure future data collection captures emerging tobacco products.** While youth cigarette and e-cigarette use has declined over time, products such as oral nicotine pouches, chewing tobacco, and different types of synthetic nicotine disposables are gaining popularity. Ongoing data collection should continue to track these trends and ensure these products are adequately addressed by existing policies.

Adults

- **Deepen prevention and quitting support for communities historically targeted by the tobacco industry.** Although HPCDP's overall goals have been met, tobacco use remains high among people who identify as Black or African American, American Indian or Alaska Native, or bisexual; those with less than a college education; people who are unemployed or unable to work; and those with annual incomes less than \$50,000. Future goals should focus on addressing these disparities, and progress should involve stronger partnerships with organizations rooted in these communities. These population-specific tobacco prevention and cessation efforts should also be evaluated to understand what works in Oregon to reduce tobacco-related inequities.
- **Support additional policies aimed at tobacco use reduction.** This is especially important for policies that have the potential to reduce tobacco consumption disparities such as limiting sale of flavored tobacco.²⁵ Specifically banning menthol cigarettes has been found to reduce the negative smoking-related health impacts for Black and African Americans, who are more likely to use menthol tobacco products, which are easier to smoke and more difficult to quit.^{26,27}
- **Increase support for quitting.** This would be especially helpful in reducing tobacco consumption disparities, as lower self-reported quit attempt rates were observed among individuals who identified as Black or African American and those who were unable to work. Future progress could include expansion and promotion of quitting support services and outreach and support for community-based tobacco quitting programs.
- **Focus prevention on e-cigarettes and other nicotine products.** For adults, use of non-cigarette tobacco products has increased over time, including e-cigarettes and oral nicotine products. Strategies that have been effective in primary and secondary prevention of cigarette smoking could be applied here.

²⁵ Luo X, Messer K, Choi K. Centering equity in flavored tobacco ban policies. *Nicotine Tob Res.* 2022;24(11):1643–1647. doi:10.1093/ntr/ntac050.

²⁶ Levy DT, Tam J, Sanchez-Romero LM, Slade J, Chen R, Meza R. Public health impact of a US menthol cigarette ban on the non-Hispanic Black population: a simulation study. *Tob Control.* 2024;33(1):126–133. doi:10.1136/tobaccocontrol-2022-057647.

²⁷ Truth Initiative. Tobacco use in the African American community. Washington (DC). [cited 2025 Jun]. Available from: <https://truthinitiative.org/research-resources/targeted-communities/tobacco-use-african-american-community>.

- **Continue to monitor the impact of Oregon’s tobacco policies on adult tobacco consumption use.** Data show that adult tobacco use has declined since 2016. However, the most recent data are only through 2024, and new tobacco and nicotine products continue to emerge. Continuing to monitor these data and adding surveillance for new products will be important to document the long-term impact of Oregon’s policy efforts.

As work continues toward these goals, it is also important to celebrate successes. Each step forward, whether through policy change, increased public awareness, or improved health outcomes, advances efforts to reduce commercial tobacco and nicotine use, and the illness and death they cause among youth and adults. Sustaining this progress will require ongoing collaboration and a continued focus on equity. In the meantime, these accomplishments demonstrate meaningful progress and offer momentum for the work ahead.

Appendix

Youth tobacco use

Exhibit A1. Percentage of current cigarette use among all respondents, by grade and gender identity, 2015–2022

Year and grade	Total	Girl or woman	Boy or man	Gender non-conforming†
2015				
8 th Grade	4.3	5.0	3.6	-
11 th Grade	8.8	8.6	9.0	-
2017				
8 th Grade	3.0	3.4	2.1	-
11 th Grade	7.7	7.7	7.2	11.7
2019				
8 th Grade	2.6	2.6	2.3	5.2
11 th Grade	4.9	4.9	4.5	8.1
2020				
8 th Grade	1.2	1.1	1.0	3.3
11 th Grade	2.9	3.3	1.9	5.8
2022				
8 th Grade	1.3	1.3	1.1	4.1
11 th Grade	3.2	2.8	3.0	6.8
2024				
8 th Grade	1.0	0.7	0.8	4.1
11 th Grade	2.8	2.3	2.8	5.6

Source: Oregon Healthy Teens (2015, 2017, 2019); Student Health Survey (2020, 2022, 2024)

† Gender non-conforming includes those who identify as transgender, nonbinary, genderqueer, gender fluid, intersex/intergender or something else.

Exhibit A2. Percentage of current cigarette use among all respondents, by grade and race/ethnicity, 2015–2024

Year and grade	American Indian or Alaska Native	Asian‡	Black or African American	Hispanic or Latino	Native Hawaiian or Pacific Islander	Middle Eastern or North African	White
2015							
8 th Grade	9.0	3.3	7.3*	3.7	-	-	4.3
11 th Grade	12.1	3.1	7.4*	8.0	-	-	9.4
2017							
8 th Grade	9.2	0.9*	1.3*	2.7	-	-	3.0
11 th Grade	10.1	6.0	5.1	5.6	-	-	8.4
2019							
8 th Grade	2.1	2.6	4.1	3.0	-	-	2.3
11 th Grade	9.6	1.5	3.9	4.6	-	-	5.2
2020							
8 th Grade	4.9*	-	-	0.8	-	-	1.3
11 th Grade	-	-	3.8*	2.5	-	-	3.2
2022							
8 th Grade	4.1*	-	0.7*	1.1	-	-	1.4
11 th Grade	7.0*	2.1	-	1.7	-	8.9*	3.3
2024							
8 th Grade	2.4	0.5*	2.5	0.8	-	-	0.8
11 th Grade	5.9	2.1	2.2*	1.8	3.9*	-	3.1

Source: Oregon Healthy Teens (2015, 2017, 2019); Student Health Survey (2020, 2022, 2024)

‡ 2015/2019 Response Categories: Asian or Pacific Islander

* This number may be statistically unreliable and should be interpreted with caution.

- This number is not available or suppressed

Exhibit A3. Among respondents who reported using cigarettes, percentage who smoked their first whole cigarette at 13 years or younger, by grade and gender identity, 2015–2019

Year and grade	Total	Girl or woman	Boy or man	Gender non-conforming†
2015				
8 th Grade	8.3	8.8	7.8	-
11 th Grade	7.6	6.3	8.9	-
2017				
8 th Grade	5.9	6.1	5.1	11.0
11 th Grade	5.8	5.3	5.8	9.9
2019				
8 th Grade	5.5	5.5	4.9	9.9
11 th Grade	4.5	4.1	4.6	8.4

Source: Oregon Healthy Teens (2015, 2017, 2019)

†Gender non-conforming includes those who identify as transgender, nonbinary, genderqueer, gender fluid, intersex/intergender or something else.

- This number is not available or suppressed

Exhibit A4. Among respondents who reported using tobacco, percentage of product used first time using a tobacco or vaping product, by grade, 2015–2024

Year and grade	Cigarette	Chewing Tobacco	Small Cigar	Large Cigar	Hookah	E-cig or other vaping product	Another type of product
2015							
8 th Grade	5.5	0.9	0.3	0.2	3.3	8.3	1.1
11 th Grade	11.8	3.4	1.5	0.6	7.5	13.4	1.3
2017							
8 th Grade	3.4	0.4	0.4	0.1	0.7	7.4	1.4
11 th Grade	8.9	2.2	1.0	0.5	2.6	15.9	1.6
2019							
8 th Grade	1.9	0.3	0.1	0.1	0.2	12.7	2.2
11 th Grade	5.3	1.2	0.3	0.3	0.8	25.5	2.6

2020

8 th Grade	2.1	0.3	0.1	0.0	0.1	9.4	1.4
11 th Grade	4.0	0.5	0.2	0.1	0.2	20.0	1.2

2022

11 th Grade	2.3	0.4	0.2	-	0.1	7.2	0.2
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2024

11 th Grade	2.0	0.2	0.1	-	0.1	6.7	0.1
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Source: Oregon Healthy Teens (2015, 2017, 2019); Student Health Survey (2020, 2022, 2024)

Note: Question not asked for 8th graders in 2022 and 2024

- This number is not available or suppressed

Exhibit A5. Percentage of current tobacco use among all respondents, by grade and gender identity, 2015–2024

Year and grade	Total	Girl or woman	Boy or man	Gender non-conforming†
2015				
8 th Grade	12.3	12.9	11.6	-
11 th Grade	23.7	19.6	27.9	-
2017				
8 th Grade	8.4	8.6	7.7	14.0
11 th Grade	18.9	16.9	20.1	25.8
2019				
8 th Grade	12.0	12.7	10.5	16.8
11 th Grade	23.1	23.4	22.6	24.6
2020				
8 th Grade	5.7	6.5	4.2	7.9
11 th Grade	13.3	15.5	9.4	16.0
2022				
8 th Grade	5.9	6.9	4.5	12.0
11 th Grade	12.8	14.4	11.0	13.9
2024				

8 th Grade	4.3	4.9	3.1	8.0
11 th Grade	9.8	10.6	8.6	11.7

Source: Oregon Healthy Teens (2015, 2017, 2019); Student Health Survey (2020, 2022, 2024)

† Gender non-conforming includes those who identify as transgender, nonbinary, genderqueer, gender fluid, intersex/intergender or something else

- This number is not available or suppressed

Exhibit A6. Percentage of current tobacco use among all respondents, by grade and race/ethnicity, 2015–2024

Year and grade	American Indian or Alaska Native	Asian†	Black or African American	Hispanic or Latino	Native Hawaiian or Pacific Islander	Middle Eastern or North African	White
2015							
8 th Grade	21.9	8.9	18.0	13.7	-	-	11.3
11 th Grade	40.2	13.2	20.0	21.0	-	-	24.8
2017							
8 th Grade	16.4	5.0	9.6	7.7	-	-	8.6
11 th Grade	28.4	12.1	17.7	14.7	-	-	20.9
2019							
8 th Grade	17.6	9.3	15.8	15.1	-	-	11.6
11 th Grade	29.2	17.1	32.1	21.3	-	-	26.6
2020							
8 th Grade	13.1	1.5*	8.4	5.3	6.4*	-	6.1
11 th Grade	24.6*	5.2	16.3	12.5	13.2*	-	14.4
2022							
8 th Grade	13.2	2.6	10.6	7.3	11.2	11.8	6.0
11 th Grade	19.1	9.9	13.8	10.8	17.9	11.4	14.3
2024							
8 th Grade	11.4	1.6	8.8	4.5	6.1	2.3*	3.6
11 th Grade	20.8	5.1	12.9	6.5	20.8	9.0	10.3

Source: Oregon Healthy Teens (2015, 2017, 2019); Student Health Survey (2020, 2022, 2024)

† 2015/2019 Response Categories: Asian or Pacific Islander

* This number may be statistically unreliable and should be interpreted with caution.

- This number is not available or suppressed

Exhibit A7. Percentage of current e-cigarette use among all respondents, by grade and gender, 2015–2024

Year and grade	Total	Girl or woman	Boy or man	Gender non-conforming†
2015				
8 th Grade	9.3	9.7	8.8	-
11 th Grade	17.1	14.5	19.9	-
2017				
8 th Grade	6.3	6.5	5.7	10.1
11 th Grade	12.9	11.7	13.8	15.5
2019				
8 th Grade	10.6	11.4	9.2	14.6
11 th Grade	21.4	22.2	20.5	22.0
2020				
8 th Grade	5.1	6.1	3.6	6.5
11 th Grade	11.9	14.2	8.0	14.6
2022				
8 th Grade	4.8	5.9	3.4	9.3
11 th Grade	10.9	12.7	9.1	12.0
2024				
8 th Grade	4.1	4.8	2.9	7.4
11 th Grade	9.0	10.1	7.5	10.4

Source: Oregon Healthy Teens (2015, 2017, 2019); Student Health Survey (2020, 2022, 2024)

†Gender non-conforming includes those who identify as transgender, nonbinary, genderqueer, gender fluid, intersex/intergender or something else.

- This number is not available or suppressed

Exhibit A8. Percentage of current e-cigarette use among all respondents, by grade and race/ethnicity, 2015–2022

Year and grade	American Indian or Alaska Native	Asian‡	Black or African American	Hispanic or Latino	Native Hawaiian or Pacific Islander	Middle Eastern or North African	White
2015							
8 th Grade	13.0	7.7	13.5	10.2	-	-	8.6
11 th Grade	27.0	8.4	15.1	15.5	-	-	17.9
2017							
8 th Grade	13.2	3.9	7.5	5.5	-	-	6.6
11 th Grade	17.9	8.3	12.0	8.6	-	-	14.9
2019							
8 th Grade	15.7	8.3	14.4	13.6	-	-	10.8
11 th Grade	24.8	16.4	29.8	19.7	-	-	25.3
2020							
8 th Grade	13.0	1.4*	8.4	5.0	6.3*	-	5.2
11 th Grade	24.2*	4.9	14.3	11.3	9.6*	-	21.8
2022							
8 th Grade	11.2	1.1*	5.9	5.5	7.1	6.3*	4.0
11 th Grade	14.9	6.8	10.0	8.2	14.7	11.4*	12.1
2024							
8 th Grade	11.0	1.4*	7.9	4.2	6.1	1.9*	3.4
11 th Grade	19.1	4.9	12.6	6.2	19.4	9	9.2

Source: Oregon Healthy Teens (2015, 2017, 2019); Student Health Survey (2020, 2022, 2024)

‡ 2015/2019 Response Categories: Asian or Pacific Islander

* This number may be statistically unreliable and should be interpreted with caution.

- This number is not available or suppressed

Exhibit A9. Among respondents who reported using cigarettes, percentage who tried to quit smoking cigarettes in the past 12 months, by grade and gender identity, 2015–2020

Year and grade	Total	Girl or woman	Boy or man	Gender non-conforming†
2015				
8 th Grade	47.8	49.0	46.1	-
11 th Grade	49.2	51.8	46.5	-
2017				
8 th Grade	52.8	58.9	49.9	35.3
11 th Grade	55.1	51.6	54.3	60.6
2019				
8 th Grade	52.6	46.7	58.6	60.7
11 th Grade	54.1	53.7	53.1	60.6
2020				
11 th Grade	55.9	53.3	44.0	85.8

Source: Oregon Healthy Teens (2015, 2017, 2019), Student Health Survey (2020)

Note: Quit attempts not on 2020 survey for 8th graders

†Gender non-conforming includes those who identify as transgender, nonbinary, genderqueer, gender fluid, intersex/intergender or something else.

- This number is not available or suppressed

Exhibit A10. Percent of all respondents who reported it was very easy to get cigarettes, by grade and gender identity, 2015–2024

Year and grade	Total	Girl or woman	Boy or man	Gender non-conforming†
2015				
8 th Grade	13.5	13.3	13.6	-
11 th Grade	32.1	27.5	36.9	-
2019				
8 th Grade	11.7	11.6	10.9	18.2
11 th Grade	20.9	18.9	22.4	26.3
2020				
8 th Grade	9.5	9.6	7.9	23.2

11 th Grade	15.3	14.7	14.8	20.8
2022				
8 th Grade	8.1	8.2	7.7	14.3
11 th Grade	13.0	11.4	14.2	12.9
2024				
8 th Grade	5.8	4.8	5.6	12.9
11 th Grade	10.7	8.7	12.0	15.2

Source: Oregon Healthy Teens (2015, 2019); Student Health Survey (2020, 2022, 2024)

†Gender non-conforming includes those who identify as transgender, nonbinary, genderqueer, gender fluid, intersex/intergender or something else.

- This number is not available or suppressed

Exhibit A11. Percent of all respondents who reported it was very easy to get e-cigarettes, by grade and gender identity, 2015–2024

Year and grade	Total	Girl or woman	Boy or man	Gender non-conforming†
2015				
8 th Grade	13.8	13.2	14.4	-
11 th Grade	31.6	27.7	35.7	-
2019				
8 th Grade	16.1	16.9	14.8	19.1
11 th Grade	33.9	32.9	35.0	33.6
2020				
8 th Grade	10.5	11.0	9.4	13.7
11 th Grade	25.9	27.0	24.7	30.7
2022				
8 th Grade	10.3	11.5	8.9	13.3
11 th Grade	21.3	21.5	21.4	21.3
2024				
8 th Grade	8.5	7.8	8.2	15.2
11 th Grade	17.6	16.4	18.4	20.7

Source: Oregon Healthy Teens (2015, 2019); Student Health Survey (2020, 2022, 2024)

†Gender non-conforming includes those who identify as transgender, nonbinary, genderqueer, gender fluid, intersex/intergender or something else.

- This number is not available or suppressed

Exhibit A12. Sources of tobacco or vaping products among 8th grade respondents who reported using tobacco, 2020, 2022 and 2024

Source of tobacco	2020	2022	2024
I did not get tobacco in the past 30 days	73.3	-	-
Store or gas station	4.5	8.7	6.1
Family or Friends 21 or older	25.3	16.3	18.3
Family or Friends under 21	46.5	31.2	35.6
The internet	13.6	3.4	5.8
Some other source	35.1	18.2	12.0
I am not sure	-	6.0	5.4
I don't know what this question is asking	-	3.7	1.1
I prefer not to answer	-	30.1	31.9

Source: Student Health Survey

Note: Sources of tobacco is defined as where youth got tobacco or vaping products during the past 30 days.

- This number is not available or suppressed

Exhibit A13. Sources of tobacco or vaping products among 11th grade respondents who reported using tobacco, 2020, 2022 and 2024

Source of tobacco product	2020	2022	2024
I did not get tobacco in the past 30 days	64.6	-	-
Store or gas station	13.4	13.8	11.4
Family or Friends 21 or older	25.0	20.5	21.0
Family or Friends under 21	49.8	30.9	29.9
The internet	4.6	4.3	4.5
Some other source	27.7	14.1	16.5
I am not sure	-	6.3	4.5
I don't know what this question is asking	-	2.0	1.3
I prefer not to answer	-	28.4	30.7

Source: Student Health Survey

Note: Sources of tobacco is defined as where youth got tobacco or vaping products during the past 30 days.

- This number is not available or suppressed

Percentage of adults who currently use tobacco

Exhibit A14. Percentage of adults who use cigarettes, by race/ethnicity, 2016–2023

Race/Ethnicity	2016–2019	2018–2021	2020–2023
Asian	10.1%	9.9%	8.8%
Black/African American	18.4%	19.0%	19.8%
Hawaiian / Pacific Islander	24.8%	16.6%	10.0%
Hispanic/Latino	12.4%	10.5%	9.3%
American Indian/Alaska Native	26.8%	28.3%	26.7%
White	17.4%	15.4%	13.2%

Source: Behavioral Risk Factor Surveillance System (BRFSS) / Oregon Adult Health Survey, age adjusted

Exhibit A15. Percentage of adults who use cigarettes, by sexual orientation, 2016–2023

Sexual Orientation	2016–2019	2018–2021	2020–2023
Gay or lesbian	19%	16%	13%
Straight, that is, not lesbian or gay	16%	14%	12%
Bisexual	26%	22%	17%
Something else	22%	20%	15%

Source: Behavioral Risk Factor Surveillance System (BRFSS) / Oregon Adult Health Survey, age adjusted

Exhibit A16. Percentage of adults who use cigarettes, by sex, 2016–2024

Sex	2016	2017	2018	2019	2020	2021	2022	2023	2024
Male	19%	19%	16%	16%	15%	14%	14%	12%	13%
Female	15%	15%	17%	14%	13%	11%	11%	10%	9%

Source: Behavioral Risk Factor Surveillance System (BRFSS) / Oregon Adult Health Survey, age adjusted

Exhibit A17. Percentage of adults who use cigarettes, by education, 2016–2024

Education	2016	2017	2018	2019	2020	2021	2022	2023	2024
Did not graduate from HS	33%	31%	29%	25%	28%	21%	21%	22%	22%
HS graduate/GED	21%	22%	22%	20%	19%	18%	18%	16%	15%
Some college	18%	17%	17%	17%	15%	14%	14%	13%	12%
College graduate	6%	7%	6%	7%	6%	5%	6%	4%	4%

Source: Behavioral Risk Factor Surveillance System (BRFSS) / Oregon Adult Health Survey, age adjusted

Exhibit A18. Percentage of adults who use cigarettes, by employment, 2016–202

Employment status	2016	2017	2018	2019	2020	2021	2022	2023	2024
Employed or self-employed	16%	16%	15%	14%	13%	12%	12%	11%	10%
Not in workforce	12%	11%	12%	12%	12%	8%	11%	7%	9%
Unemployed or unable to work	37%	35%	34%	32%	27%	23%	24%	21%	22%

Source: Behavioral Risk Factor Surveillance System (BRFSS) / Oregon Adult Health Survey, age adjusted

Exhibit A19. Percentage of adults who use cigarettes, by income, 2016–2024

Annual income	2016	2017	2018	2019	2020	2021	2022	2023	2024
Less than \$25,000	31%	27%	29%	27%	25%	23%	21%	22%	23%
\$25,000 to <\$50,000	20%	19%	20%	19%	17%	17%	18%	15%	18%
\$50,000 to <\$100,000	14%	14%	14%	14%	12%	12%	12%	10%	9%
\$100,000 +	10%	12%	9%	13%	11%	6%	7%	8%	8%

Source: Behavioral Risk Factor Surveillance System (BRFSS) / Oregon Adult Health Survey, age adjusted

Percentage of adults who ever used tobacco

“Ever smoked” defined as smoking at least 100 cigarettes in entire life.

Exhibit A20. Percentage of adults who ever smoked, by race/ethnicity, 2016–2023

Race/Ethnicity	2016–2019	2018–2021	2020–2023
Asian	25%	27%	23%
Black/African American	43%	43%	40%
Hawaiian / Pacific Islander	46%	42%	36%
Hispanic/Latino	34%	31%	29%
American Indian/Alaska Native	52%	55%	56%
White	44%	42%	41%

Source: Behavioral Risk Factor Surveillance System (BRFSS) / Oregon Adult Health Survey, age adjusted

Exhibit A21. Percentage of adults who ever smoked, by sexual orientation, 2016–2024

Sexual Orientation	2016–2019	2018–2021	2020–2023
Gay or lesbian	50%	45%	42%
Straight, that is, not lesbian or gay	41%	40%	38%
Bisexual	55%	52%	50%
Something else	49%	45%	37%

Source: Behavioral Risk Factor Surveillance System (BRFSS) / Oregon Adult Health Survey, age adjusted

Exhibit A22. Percentage of adults who ever smoked, by sex, 2016–2024

Sex	2016	2017	2018	2019	2020	2021	2022	2023	2024
Male	47%	46%	45%	46%	44%	43%	42%	41%	43%
Female	37%	39%	38%	37%	35%	34%	33%	33%	35%

Source: Behavioral Risk Factor Surveillance System (BRFSS) / Oregon Adult Health Survey, age adjusted

Exhibit A23. Percentage of adults who ever smoked, by education, 2016–2024

Education level	2016	2017	2018	2019	2020	2021	2022	2023	2024
Did not graduate from HS	60%	54%	55%	50%	52%	48%	44%	50%	45%
HS graduate/GED	47%	49%	50%	48%	50%	46%	46%	45%	46%
Some college	46%	45%	45%	45%	42%	44%	42%	42%	45%

College graduate 26% 30% 27% 28% 26% 26% 25% 24% 27%

Source: Behavioral Risk Factor Surveillance System (BRFSS) / Oregon Adult Health Survey, age adjusted

Exhibit A24. Percentage of adults who ever smoked, by employment, 2016–2024

Employment status	2016	2017	2018	2019	2020	2021	2022	2023	2024
Employed or self-employed	39%	40%	39%	38%	36%	37%	35%	36%	36%
Not in workforce	36%	35%	34%	34%	37%	32%	32%	28%	33%
Unemployed or unable to work	64%	62%	60%	57%	56%	54%	49%	51%	49%

Source: Behavioral Risk Factor Surveillance System (BRFSS) / Oregon Adult Health Survey, age adjusted

Exhibit A25. Percentage of adults who ever smoked, by annual income, 2016–2024

Annual income	2016	2017	2018	2019	2020	2021	2022	2023	2024
Less than \$25,000	56%	55%	54%	51%	52%	47%	45%	52%	48%
\$25,000 to <\$50,000	48%	47%	50%	48%	45%	49%	45%	43%	49%
\$50,000 to <\$100,000	39%	41%	42%	42%	41%	39%	38%	38%	39%
\$100,000 +	34%	36%	33%	39%	38%	32%	35%	34%	35%

Source: Behavioral Risk Factor Surveillance System (BRFSS) / Oregon Adult Health Survey, age adjusted

Percentage of adults who now use e-cigarettes or other vaping products

Exhibit A26. Percentage of adults who use e-cigarettes or other vaping products, by race/ethnicity, 2016–2023

Race/ethnicity	2016–2019	2018–2021	2020–2023
Asian	3.5%	3.6%	3.8%
Black/African American	6.3%	7.5%	8.3%
Hawaiian / Pacific Islander	-	10.6%	12.5%
Hispanic/Latino	3.5%	4.2%	4.5%
American Indian/Alaska Native	6.4%	8.6%	7.8%
White	6.0%	6.8%	6.7%

Source: Behavioral Risk Factor Surveillance System (BRFSS) / Oregon Adult Health Survey, age adjusted
 - Sample size too small to include

Exhibit A27. Percentage of adults who use e-cigarettes or other vaping products, by sexual orientation, 2016–2024

Gender identity or sexual orientation	2016–2019	2018–2021	2020–2023
Gay or lesbian	7%	8%	7%
Straight, that is, not lesbian or gay	4%	6%	6%
Bisexual	13%	12%	11%
Something else	9%	13%	12%

Source: Behavioral Risk Factor Surveillance System (BRFSS) / Oregon Adult Health Survey, age adjusted

Exhibit A28. Percentage of adults who use e-cigarettes or other vaping products, by sex, 2016–2024

Sex	2016	2017	2018	2019	2020	2021	2022	2023	2024
Male	6%	5%	7%	7%	6%	7%	8%	10%	8%
Female	3%	5%	5%	6%	5%	7%	7%	9%	10%

Source: Behavioral Risk Factor Surveillance System (BRFSS) / Oregon Adult Health Survey, age adjusted

Exhibit A29. Percentage of adults who use e-cigarettes or other vaping products, by education, 2016–2024

Education level	2016	2017	2018	2019	2020	2021	2022	2023	2024
Did not graduate from HS	6%	5%	9%	8%	6%	10%	10%	12%	13%
HS graduate/GED	5%	6%	8%	8%	7%	9%	9%	12%	12%
Some college	5%	6%	6%	8%	6%	8%	10%	11%	10%
College graduate	2%	3%	2%	4%	3%	4%	4%	5%	4%

Source: Behavioral Risk Factor Surveillance System (BRFSS) / Oregon Adult Health Survey, age adjusted

Exhibit A30. Percentage of adults who use e-cigarettes or other vaping products, by employment, 2016–2024

Employment status	2016	2017	2018	2019	2020	2021	2022	2023	2024
Employed or self-employed	4%	5%	6%	7%	5%	7%	8%	9%	9%
Not in workforce	2%	4%	5%	6%	6%	6%	5%	8%	7%
Unemployed or unable to work	11%	9%	9%	10%	8%	9%	10%	15%	13%

Source: Behavioral Risk Factor Surveillance System (BRFSS) / Oregon Adult Health Survey, age adjusted

Exhibit A31. Percentage of adults who use e-cigarettes or other vaping products, by income, 2016–2024

Annual income	2016	2017	2018	2019	2020	2021	2022	2023	2024
Less than \$25,000	7%	7%	8%	9%	7%	8%	9%	14%	14%
\$25,000 to <\$50,000	6%	6%	7%	7%	7%	9%	10%	11%	14%
\$50,000 to <\$100,000	3%	5%	5%	6%	5%	5%	7%	10%	9%
\$100,000 to \$150,000	3%	5%	3%	4%	5%	4%	7%	6%	5%

Source: Behavioral Risk Factor Surveillance System (BRFSS) / Oregon Adult Health Survey, age adjusted

Percentage of adults who stopped smoking for one day or longer

Data about quit attempts not available for 2022.

Exhibit A32. The percentage of adults who smoke who stopped smoking for one day or longer in the past 12 months because they were trying to quit smoking, by race/ethnicity, 2016–2023.

Race/ethnicity	2016–2019	2018–2021	2020–2023
Asian	52.4%	43.7%	36.6%
Black/African American	73.5%	64.4%	56.1%
Hawaiian / Pacific Islander	68.9%	53.9%	23.0%*
Hispanic/Latino	59.0%	60.9%	63.0%
American Indian/Alaska Native	56.4%	59.3%	61.2%
White	52.6%	52.0%	50.7%

Source: Behavioral Risk Factor Surveillance System (BRFSS) / Oregon Adult Health Survey, unweighted data.

* This number may be statistically unreliable and should be interpreted with caution.

Exhibit A33. The percentage of adults who smoke who stopped smoking for one day or longer in the past 12 months because they were trying to quit smoking, by sexual orientation, 2016–2023.

Gender identity or sexual orientation	2016–2019	2018–2021	2020–2023
Gay or lesbian	58%	59.7%	60.2%
Straight, that is, not lesbian or gay	53%	53.6%	53.2%
Bisexual	59%	54.5%	49.3%
Something else	50%	40.0%	26.7%

Source: Behavioral Risk Factor Surveillance System (BRFSS) / Oregon Adult Health Survey, age adjusted

Exhibit A34. The percentage of adults who smoke who stopped smoking for one day or longer in the past 12 months because they were trying to quit smoking, by sex, 2016–2024.

Sex	2016	2017	2018	2019	2020	2021	2023	2024
Male	51%	52%	51%	55%	51%	52%	53%	50%
Female	60%	52%	54%	55%	52%	58%	51%	53%

Source: Behavioral Risk Factor Surveillance System (BRFSS) / Oregon Adult Health Survey, age adjusted

Exhibit A35. The percentage of adults who smoke who stopped smoking for one day or longer in the past 12 months because they were trying to quit smoking, by education, 2016–2024.

Education level	2016	2017	2018	2019	2020	2021	2023	2024
Did not graduate from HS	52%	53%	46%	9%	52%	53%	57%	49%
HS graduate/GED	52%	51%	50%	54%	48%	58%	50%	50%
Some college	58%	52%	58%	57%	53%	53%	54%	53%
College graduate	57%	57%	54%	62%	54%	53%	44%	45%

Source: Behavioral Risk Factor Surveillance System (BRFSS) / Oregon Adult Health Survey, age adjusted

Exhibit A36. The percentage of adults who smoke who stopped smoking for one day or longer in the past 12 months because they were trying to quit smoking, by employment, 2016–2024.

Employment status	2016	2017	2018	2019	2020	2021	2023	2024
Employed or self-employed	54%	54%	52%	53%	50%	56%	55%	45%
Not in workforce	43%	39%	53%	59%	51%	59%	53%	68%
Unemployed or unable to work	61%	56%	53%	56%	53%	50%	45%	58%

Source: Behavioral Risk Factor Surveillance System (BRFSS) / Oregon Adult Health Survey, age adjusted

Exhibit A37. The percentage of adults who smoke who stopped smoking for one day or longer in the past 12 months because they were trying to quit smoking, by income, 2016–2024.

Annual income	2016	2017	2018	2019	2020	2021	2023	2024
Less than \$25,000	57%	51%	54%	57%	49%	55%	51%	49%
\$25,000 to <\$50,000	53%	54%	55%	51%	55%	61%	55%	52%
\$50,000 to <\$100,000	52%	50%	45%	58%	49%	52%	47%	48%
\$100,000 to \$150,000	60%	51%	46%	53%	42%	66%	61%	51%

Source: Behavioral Risk Factor Surveillance System (BRFSS) / Oregon Adult Health Survey, weighted data.

Retail / sales

Exhibit A38. Per capita cigarette pack sales, Oregon and the United States, 1993–2024

Year	Oregon	U.S.
1993	98.7	97.5
1994	96.6	90.1
1995	94.6	91.6
1996	94.3	91.0
1997	89.5	90.2
1998	84.2	86.8
1999	79.9	81.1
2000	72.0	77.6
2001	68.6	75.6
2002	66.6	74.5
2003	60.9	71.7
2004	55.2	68.1
2005	53.2	66.0
2006	54.7	64.7
2007	55.5	62.4
2008	50.4	58.6
2009	48.4	55.1
2010	44.7	50.1
2011	47.0	48.5
2012	44.7	46.0
2013	43.3	44.7
2014	41.4	42.1
2015	40.5	41.8
2016	40.0	41.0
2017	38.3	39.4
2018	37.2	36.7
2019	35.0	35.1
2020	33.6	34.2
2021	29.6	33.5
2022	25.6	31.0

2023	23.3	27.9
2024	21.0	25.3

Source: Orzechowski and Walker, *The Tax Burden on tobacco. Historical compilation. Fairfax and Richmond, Virginia. (2016–2024)*

Exhibit A39. Licensed tobacco retailers, 2022–2024

Year	Number of licensed tobacco retailers
2022	3,722
2023	3,869
2024	3,840

Source: TRL Database (2022-2024)

Exhibit A40. Location of tobacco products purchased by adults, 2021–2024

Year	Store in Oregon	Store outside of Oregon
2021	90.4%	6.4%
2023	91.7%	3.8%
2024	90.8%	3.4%

Source: Oregon Health Matters survey

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