



Lifespan Approach to Tobacco Prevention and Cessation among Vermont Women and Girls

Mark Levine, MD

Commissioner, Vermont Department of Health

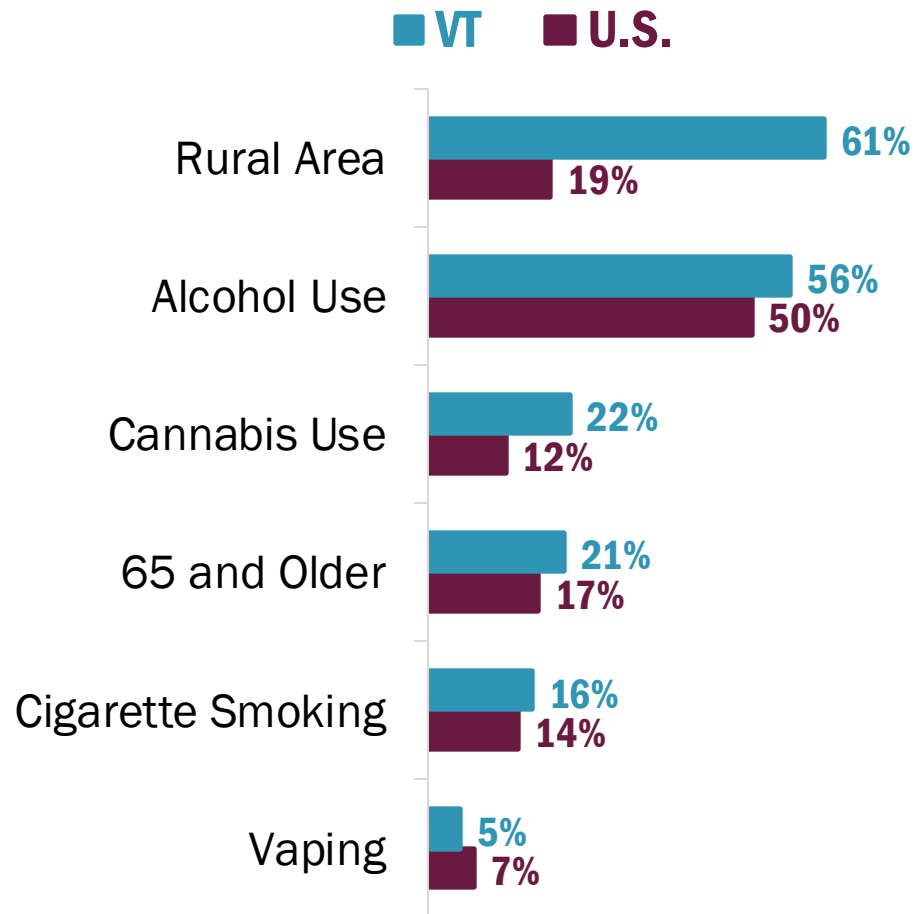
Vermont Center on Behavior and Health Annual Conference

10/6/2023

Presentation Objectives

- **Share data on tobacco use among Vermont (VT) women and girls**
 - Vermont demographics
 - Tobacco use, dual and poly use
 - Disparities by sex and risk factors
 - Morbidity and mortality
- **Discuss rates of smoking during pregnancy which remains high in VT and contributes to health concerns, quality of life and healthcare costs despite initiatives**
- **Provide summary of VT initiatives underway to reduce tobacco use and the next generation for tobacco prevention policies**

More Vermonters live in a rural area, are 65 and older and use substances than the United States.

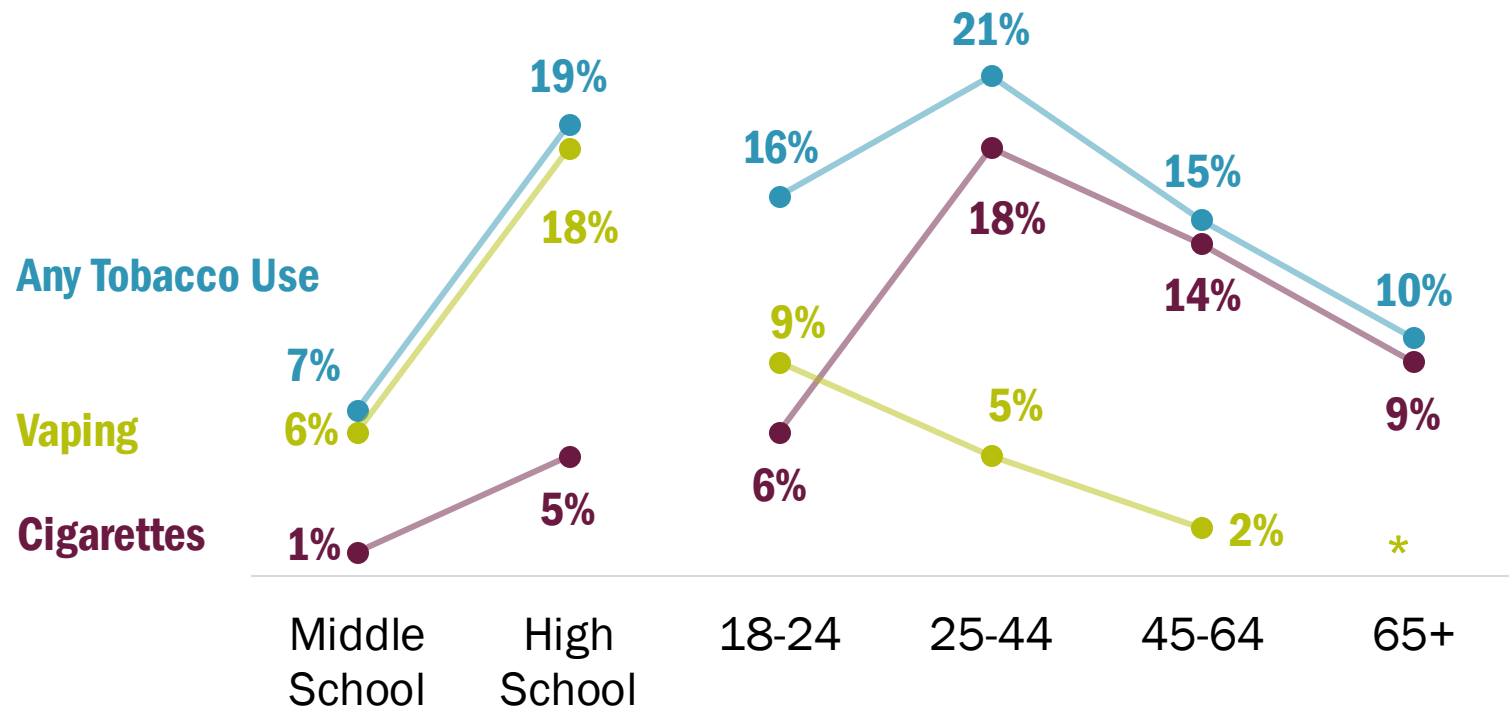


- ✘ Vermonters living in rural areas experience lower per capita incomes, higher poverty and unemployment rates, and complete high school and college less frequently.
- ✘ Vermont's alcohol and cannabis use rates are among the highest in the nation, while cigarette smoking is among the highest in New England.
- ★ Adult vaping in Vermont remains lower than the United States.

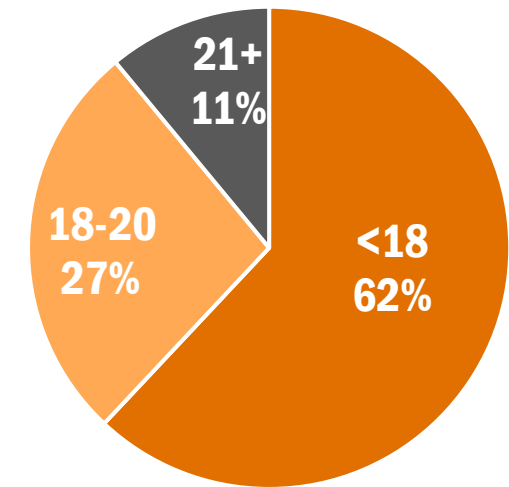
Data Sources: U.S. Census, NSDUH 2019-2020, VT BRFSS 2021.

Note: Alcohol and cannabis use rates are among those 12 and older while cigarette smoking and vaping rates are among those 18 and older.

Among female youth, vaping is most common, while among female adults 25+, cigarette smoking is most prevalent.



Nine in Ten VT Women Began Smoking Before Age 21, BRFSS 2019

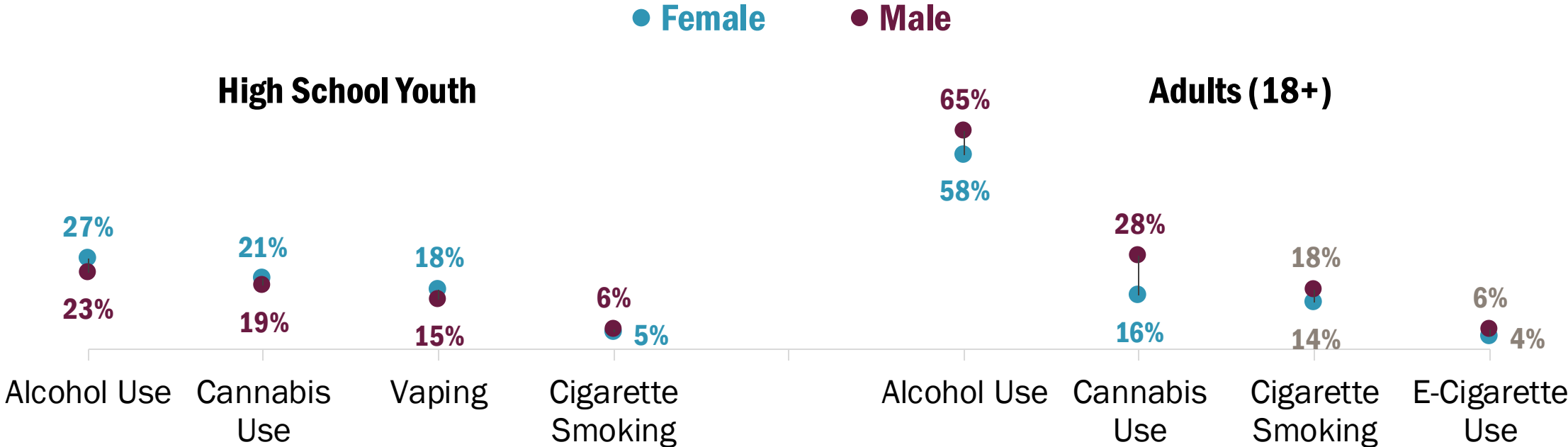


Data Sources: VT MS and HS YRBS 2021, VT BRFSS 2019, 2020-2021.

Any tobacco use is defined as use of cigarettes, vaping, cigars or smokeless tobacco in the past 30 days on the MS and HS YRBS while it is defined as current use of cigarettes, vaping and smokeless tobacco on the BRFSS. * Vaping among those 65 and older was suppressed due to small sample size.

Substance use disparities by sex are greater among VT adults than youth.

Female youth are more likely to use alcohol, cannabis or vape and less likely to smoke than male youth, while female adults are less likely to use alcohol or cannabis.



Numbers shown in grey are not significantly different between groups

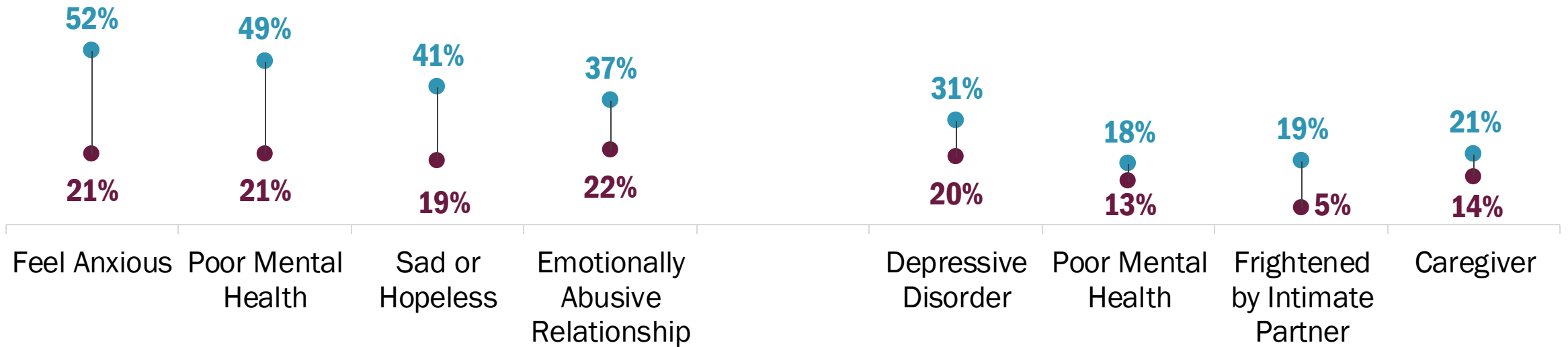
Data Sources: VT BRFSS 2021, VT HS YRBS 2021.

Female Vermonters are more likely to report poor mental health or be in an abusive relationship than male Vermonters.

● Female ● Male

High School Youth

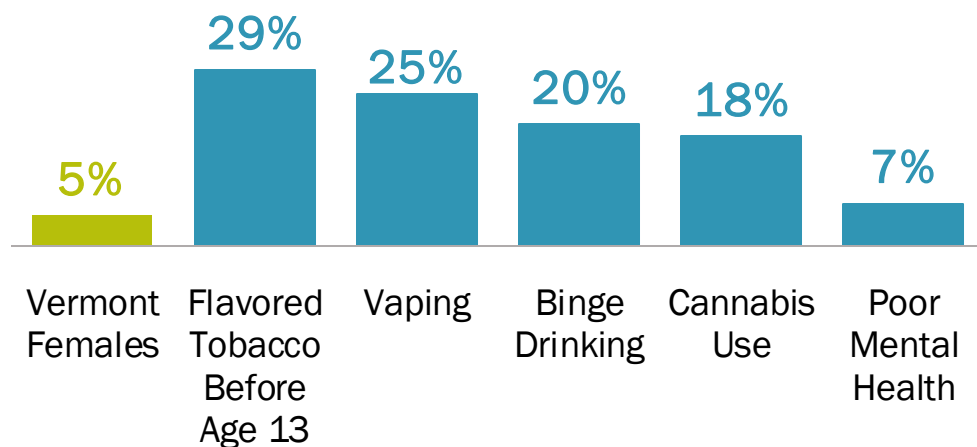
Adults (18+)



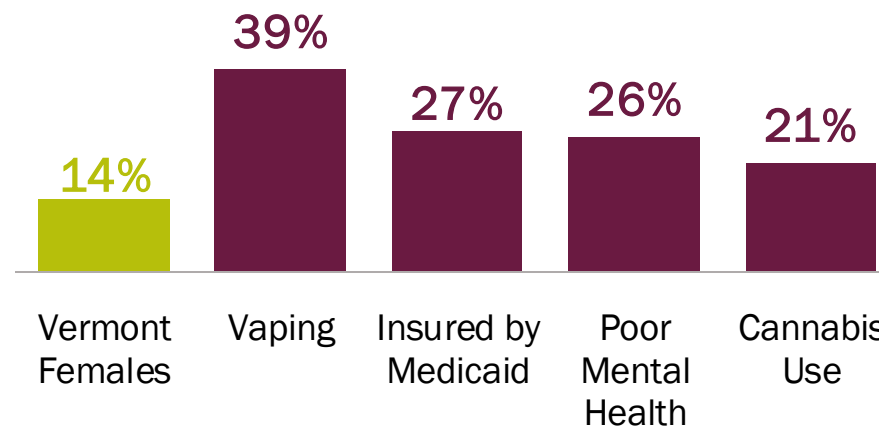
Data Sources: VT BRFSS 2021, VT HS YRBS 2021.

Smoking rates are disparately high among female Vermonters who use other substances, have poor mental health or are insured by Medicaid.

Current Cigarette Smoking among Female High School Youth

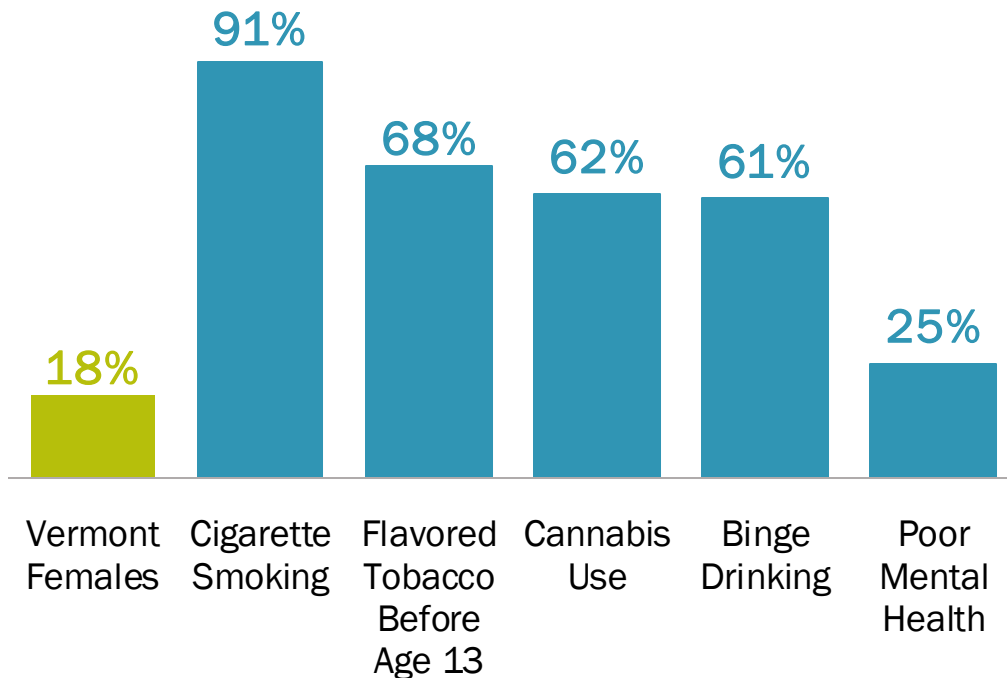


Current Cigarette Smoking among Female Adults 18+

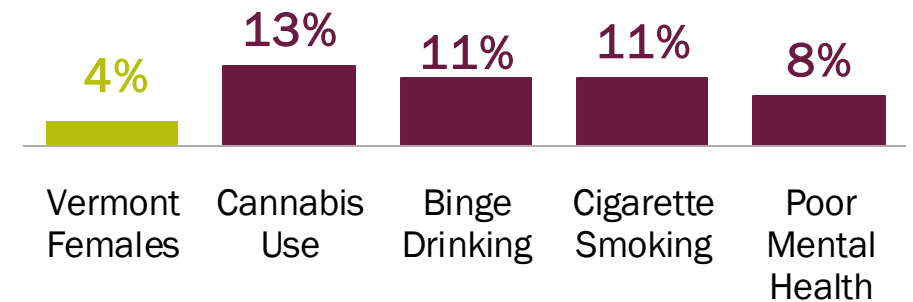


Cigarette smoking and other substance use are associated with higher vaping rates among female Vermonters.

**Current Vaping
among Female High School Youth**

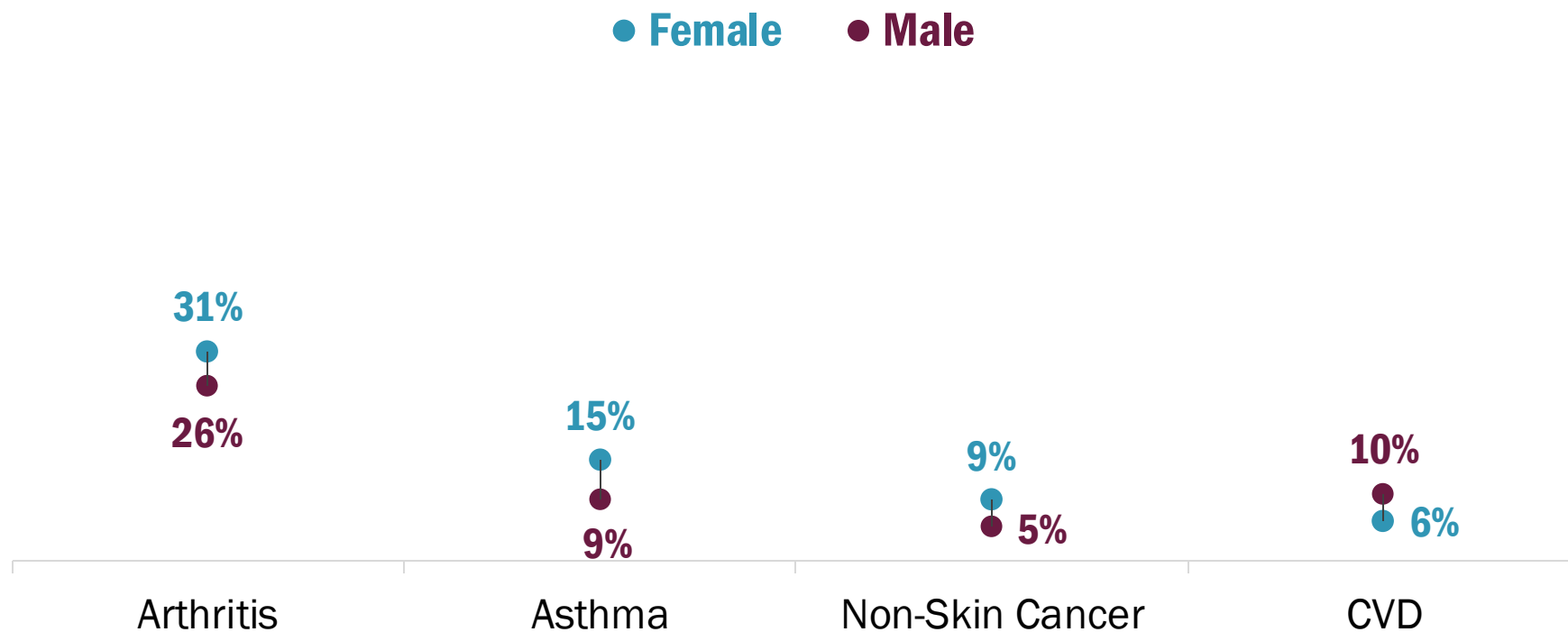


**Current Vaping
among Female Adults 18+**





Female Vermonters are more likely to have arthritis, asthma and cancer and less likely to have cardiovascular disease than male adults.



Women who smoke have higher risk of mortality; however, risk decreases with smoking cessation.

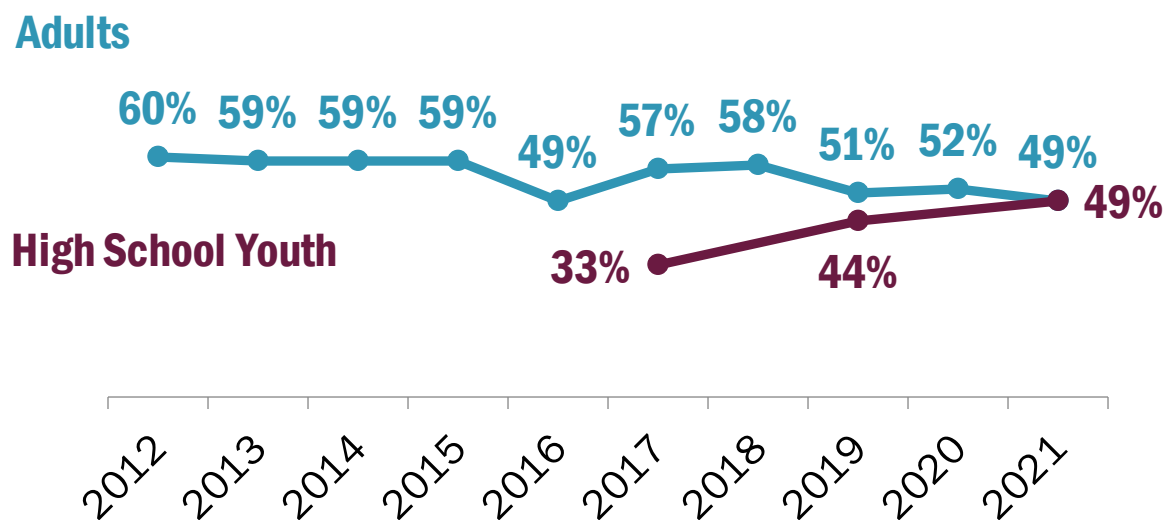
Relative risk of mortality by smoking status and age group among U.S. adult women ages 35 and older.

Chronic Condition	Currently Smoke				Formerly Smoked			
	35-54	55-64	65-74	75+	35-54	55-64	65-74	75+
Lung Cancer	13.3	19.0	23.7	23.1	2.6	5.0	6.8	6.4
Other Cancers	1.3	2.1	2.1	1.9	1.2	1.3	1.3	1.3
Coronary Heart Disease	5.0	3.3	3.3	2.3	2.2	1.2	1.6	1.4
Other Heart Disease	-	-	1.9	1.8	-	-	1.3	1.3
Cerebrovascular Disease	-	-	2.3	1.7	-	-	1.2	1.1
Other Vascular Diseases	-	-	6.8	5.8	-	-	2.3	2.0
Diabetes Mellitus	-	-	1.5	1.1	-	-	1.3	1.1
Other Cardiovascular Diseases	2.4	2.0	-	-	1.0	1.1	-	-
Influenza, Pneumonia, TB	-	-	1.8	2.1	-	-	1.3	1.2
COPD	-	-	38.9	21.0	-	-	15.7	7.1
Influenza, Pneumonia, TB, COPD	6.4	9.0	-	-	1.9	4.8	-	-
All Causes	1.8	2.6	2.9	2.5	1.2	1.3	1.5	1.4

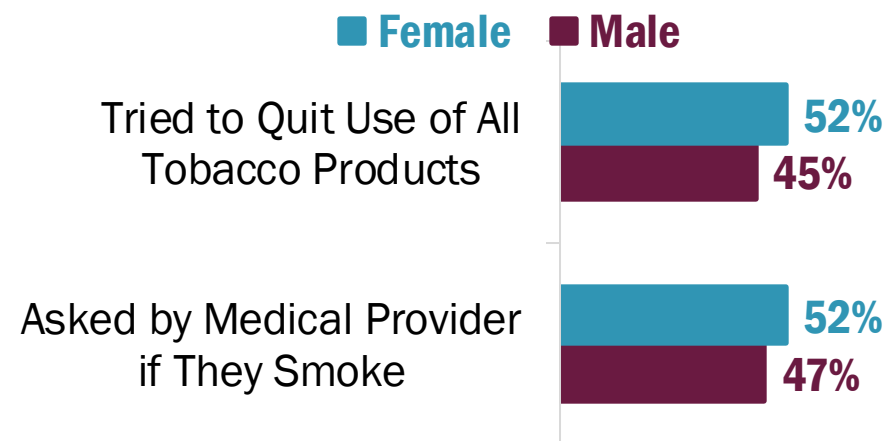
The rate of quit attempts among Vermont women has trended downward since 2012 while youth quit attempts have increased since 2017.



Rate of Trying to Quit Cigarette Smoking or All Tobacco Use among Female Adults and Youth



Female youth are more likely to try quitting tobacco use or be asked if they smoke by a medical provider in the past year.



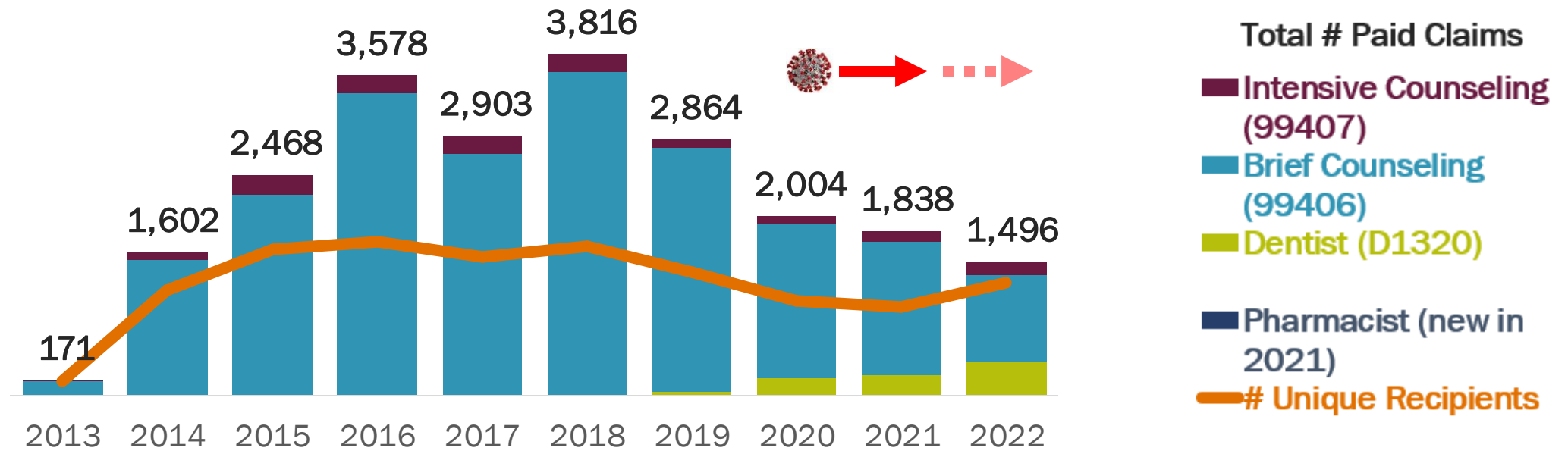
Data Source: VT BRFSS 2012-2021, VT HS YRBS 2017-2021.

Quit attempts defined as trying to quit cigarette smoking for adults, trying to quit all tobacco use for high school youth.

Use of CPT codes for tobacco cessation counseling by medical providers has been declining since 2018.



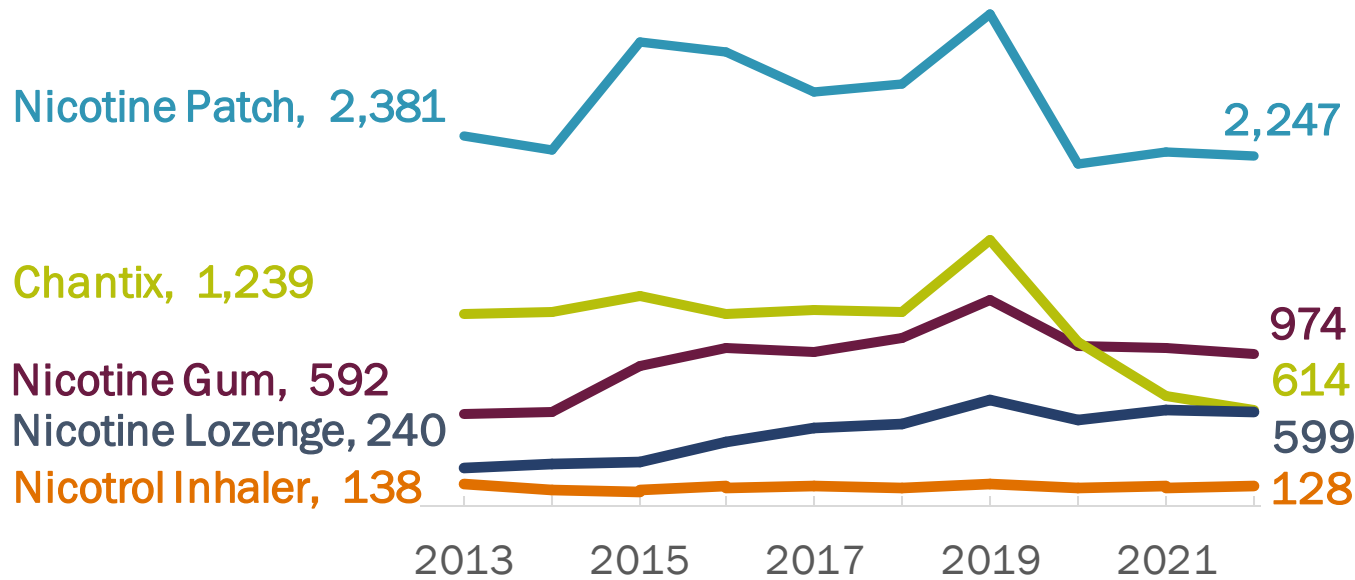
Use of CPT Codes for Tobacco Cessation Counseling among VT Medicaid-Insured



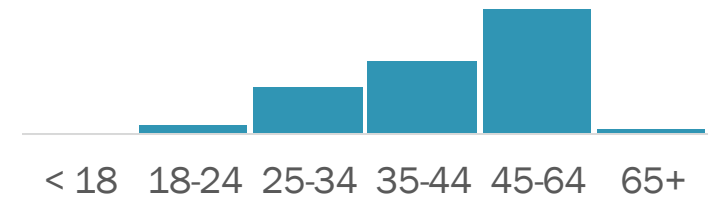
Nicotine patch, Chantix and gum are the most-commonly used NRT among Medicaid-insured Vermonters.



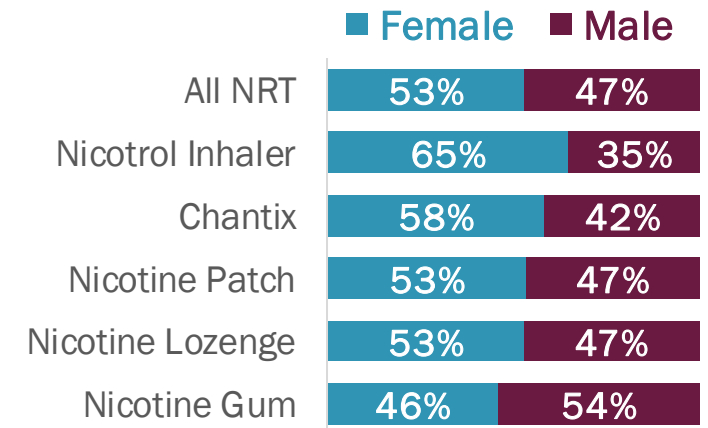
Number of Medicaid-Insured Vermonters Using NRT



Age Distribution of NRT Recipients, 2022



NRT Recipients by Sex, 2022



Data Source: Medicaid Claims data, Bupropion HCL (<100 recipients/year) and Nicotrol Nasal Spray (<5/year)

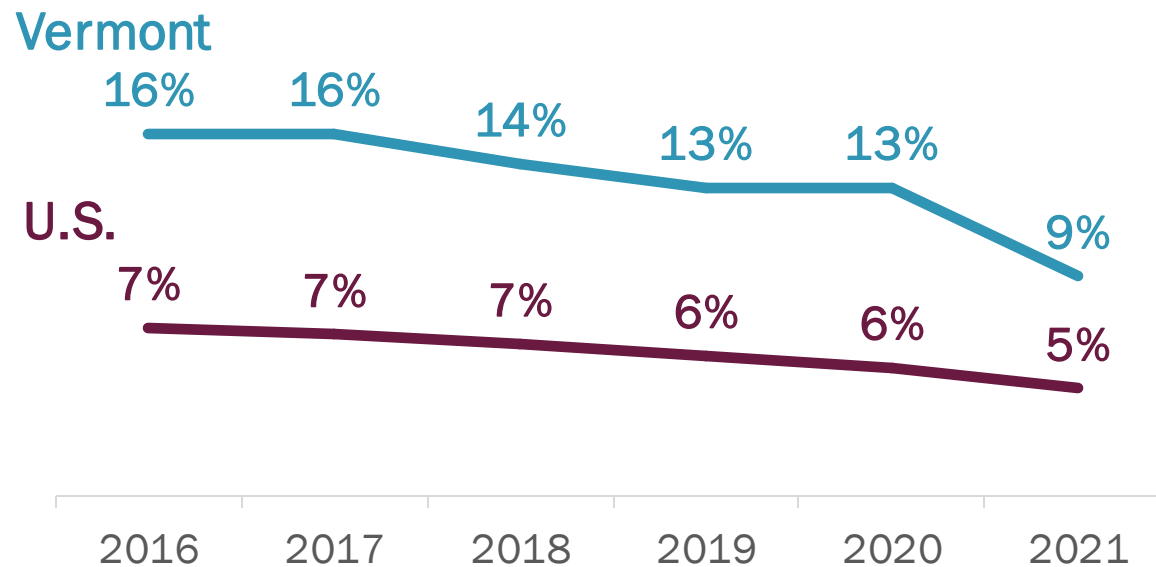
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The rate of smoking during pregnancy in Vermont remains twice the national rate.



Rate of Current Smoking during Pregnancy



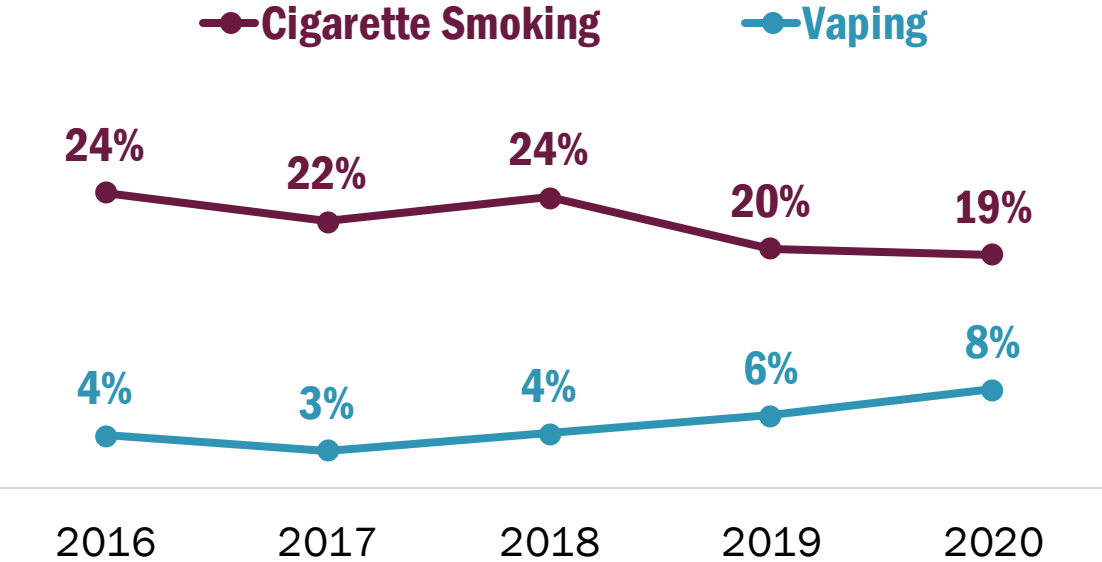
Contributing factors:

- Rurality
- Socio-economic factors & education attainment
- Lowest general fertility rate in the U.S. 44.9 births/1,000 women aged 15-44*
- High vaping rate before pregnancy (U.S. 5% vs. VT 8%)
- High alcohol (11%) and cannabis (11%) use during pregnancy
- 14% use substance other than alcohol/tobacco during pregnancy

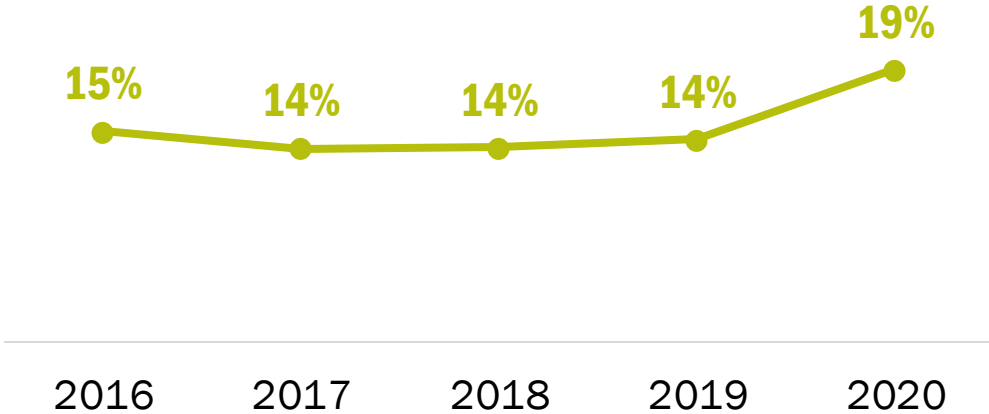
Vaping in the three months before pregnancy is on the rise while cigarette smoking is decreasing. Switching to vaping as a quit method for smoking is increasing.



Cigarette Smoking and Vaping in the Three Months before Pregnancy



Switched to Vaping as a Quit Method for Smoking Cessation during Pregnancy

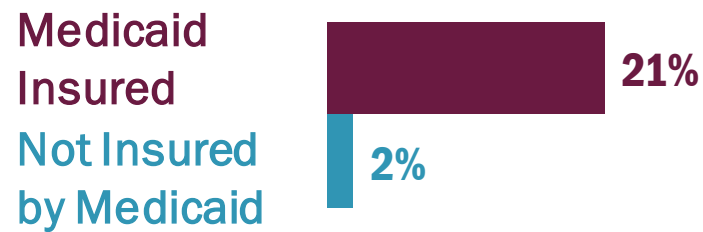


Data Source: VT Pregnancy Risk Assessment Monitoring System (PRAMS) 2016-2020.

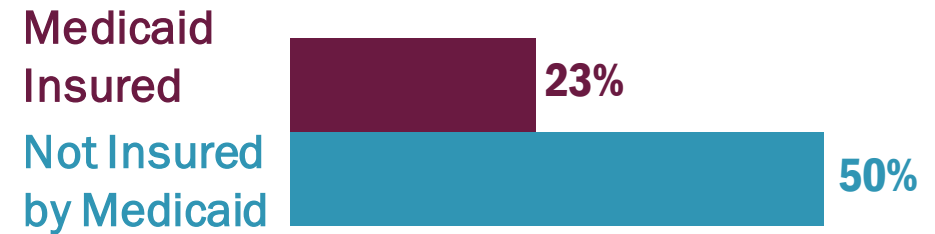
Medicaid-Insured pregnant Vermonters are particularly vulnerable; more likely to smoke during pregnancy and less likely to quit.



Medicaid-Insured Vermonters are 10 times more likely to smoke during pregnancy than Vermonters not insured by Medicaid.



Medicaid-Insured Vermonters are half as likely to quit smoking before the 2nd trimester of pregnancy compared to other pregnant Vermonters.

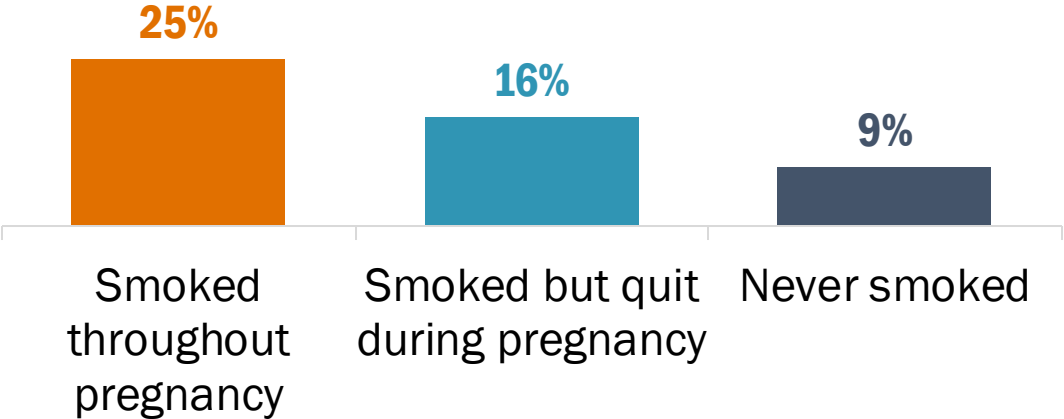


Medicaid-insured Vermonters who smoke during pregnancy are more likely to birth a baby who is small for gestational age.

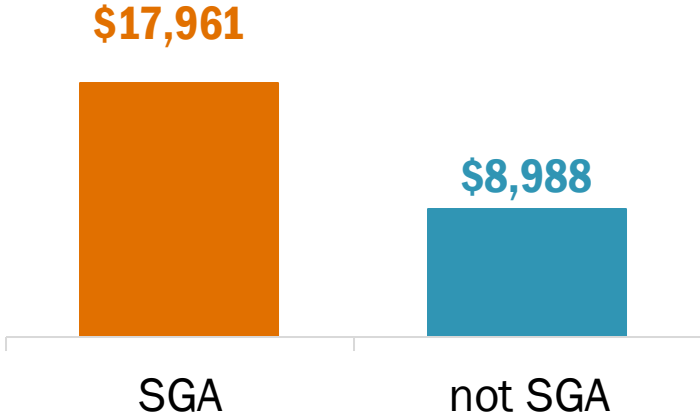


Small for Gestational Age Deliveries among Medicaid-insured Single Births in VT

N=2,066



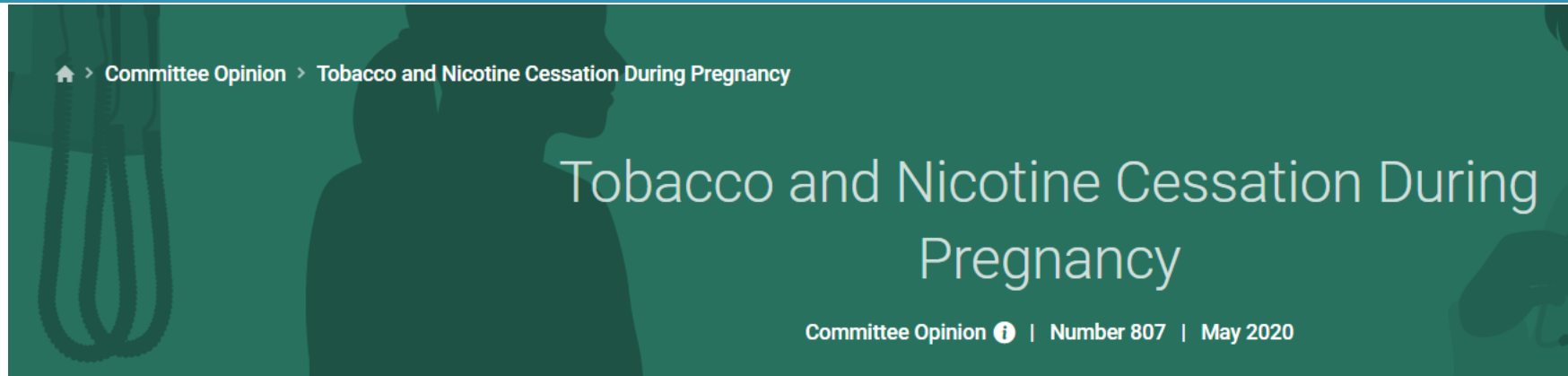
Medicaid Healthcare Cost for Infants 1st Year of Life



Data Source: VT Vital Statistics System 2019.
Higgins et al., Randomized Controlled Trial Examining the Efficacy of Adding Financial Incentives to Best practices for Smoking Cessation Among pregnant and Newly postpartum Women. Prev Med. 2022 Mar 3:107012

What's being done?

ACOG and AFP Call for Tobacco Prevention and Treatment.



"Although cigarettes are the most commonly used tobacco product in pregnancy, alternative forms of tobacco use, such as e-cigarettes or vaping products, hookahs, and cigars, are increasingly common.

- Clinicians should advise cessation of tobacco products used **in any form** and provide motivational feedback.
- Clinicians should individualize care by offering psychosocial, behavioral, and pharmacotherapy interventions.

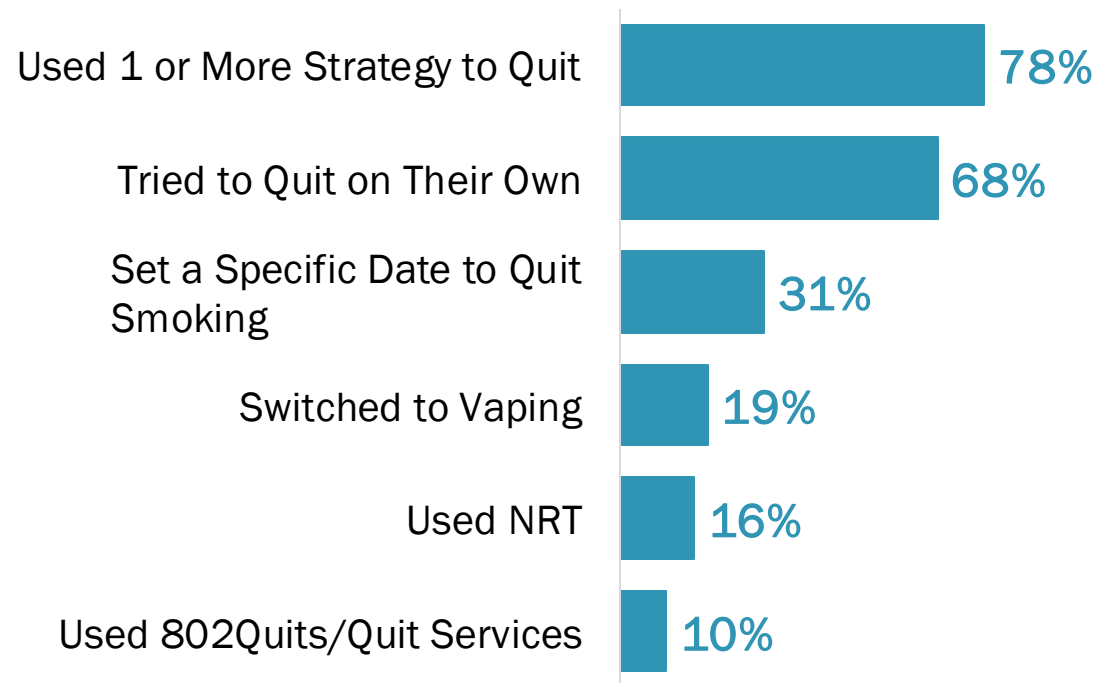
Available cessation-aid services and resources should be discussed and documented at prenatal and postpartum follow-up visits."

ACOG: American College of Obstetricians and Gynecologists [Tobacco and Nicotine Cessation During Pregnancy | ACOG](#)

Quitting Tobacco During Pregnancy



Cessation Strategies Used among Pregnant Vermonters



Among pregnant Vermonters who smoked cigarettes:

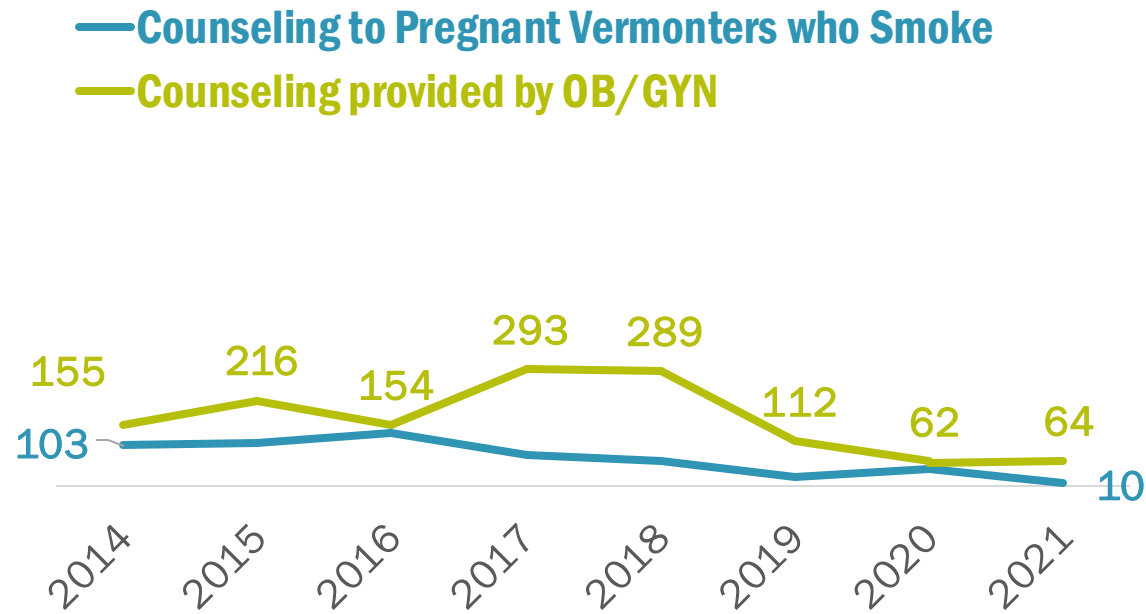
40% of those smoking before pregnancy quit before the last three months of pregnancy

35% of those who quit smoking during pregnancy resumed within 2-6 months after giving birth

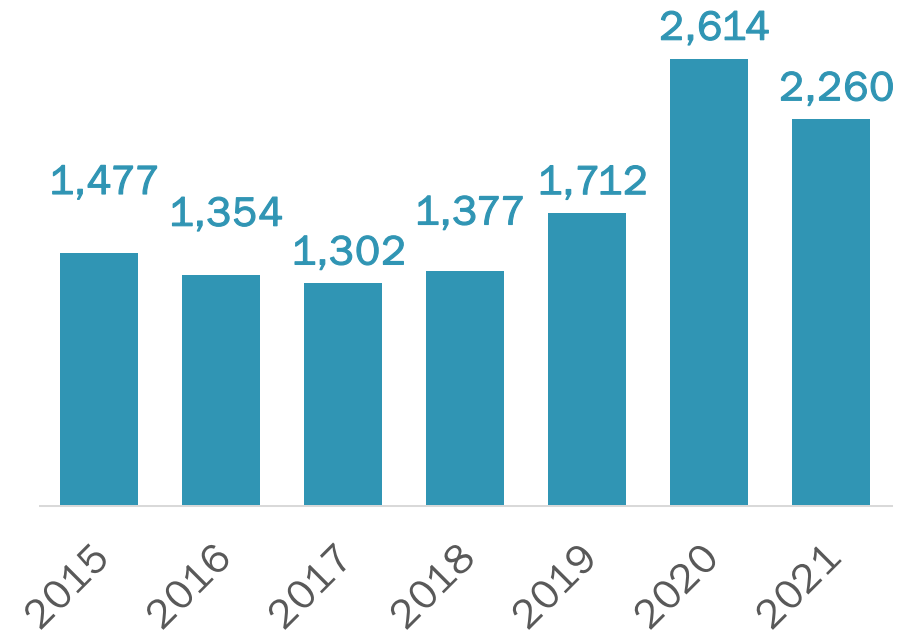
Cessation counseling to support Medicaid-insured pregnant Vermonters remains low, while NRT use has increased.



Tobacco Cessation Counseling Claims among Select Populations



Pharmacotherapy Claims among Pregnant Vermonters



Data Source: VT – Medicaid Claims.

Tobacco cessation pharmacotherapy includes Bupropion HCL, Chantix, Nicotine Gum, Nicotine Lozenge, Nicotine Patch, Nicotrol Inhaler, Nicotrol Nasal Spray

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Efforts to Lower Tobacco Use among Girls and Women in VT

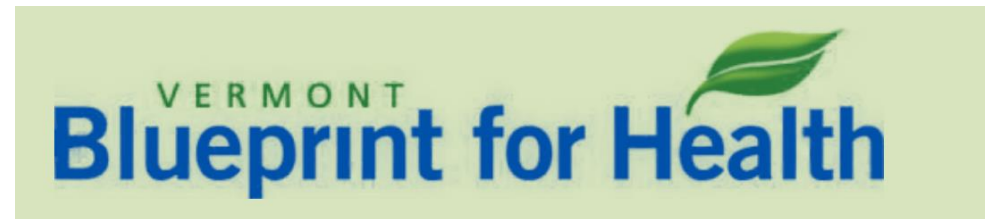
- 1** Increase provider capacity and prioritize women's/family's health
- 2** Increase perception of harm from tobacco products
- 3** Advance policy and health systems approaches including contingency management (CM), an evidence-based intervention that provides motivational incentives to treat individuals living with substance use disorder and support recovery

Statewide interventions to support women's and families' health



What is Strong Families Vermont Home Visiting?

We are here to partner with you and make this parenting journey easier. We offer: referral for tobacco treatment



Pregnancy Intention Initiative

Formerly known as Blueprint's Women Health Initiative

- Every Vermont women age 18+ is screened for tobacco and other substances
- Seeks to increase healthy behaviors as part of health care reform

Behavioral Health Initiative to Prioritize Tobacco Treatment

What? Provide tobacco treatment training to substance and mental health facilities in VT

Why? High tobacco use among these priority populations

Barriers:

- Mindset that tobacco treatment is less important and that smoke-free policies can't work in Residential Facilities

Opportunities:

- Including tobacco, increases abstinence of all substances
- With increased demand for mental health supports, quitting smoking can improve depression, anxiety
- Whole health approach benefits staff and clients



Campaigns to Increase Motivation to Quit & Perception of Harm



VT campaign to provide clinician toolkit and patient materials to ask about and treat alcohol, cannabis, opioid and tobacco use during pregnancy.



VT campaign that highlights how the tobacco industry targets youth, girls, communities of color with cheap, flavored products.



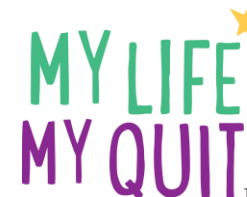
Social media campaign to counter youth exposure to tobacco industry marketing and expose the physical and mental harms of vaping nicotine and cannabis.



National and state run campaigns using hard-hitting health impact ads shown to be effective in motivating to quit.



These campaigns show how Vermonters can quit with free, effective, FDA approved tools.



This campaign was designed by and for youth to quit vaping.

More Females than Males Enroll in the Quitline and in Quit Groups: How can we increase use among younger Vermonters?



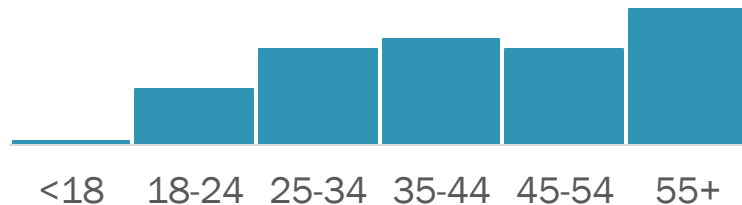
Most individuals enrolled in 802Quits identify as female (*total n=3,878, FY 2022*)



Most individuals enrolled in Quit Smoking workshops through My Healthy VT identify as female, (*total n=146, FY 2022*)

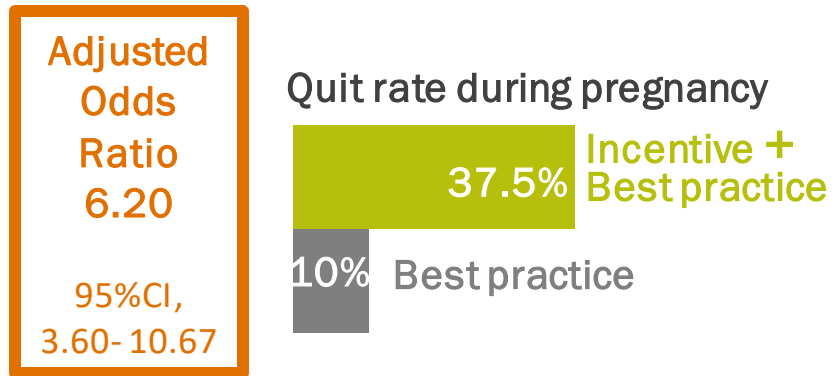


Age Distribution of 802Quits Enrollees, FY2022

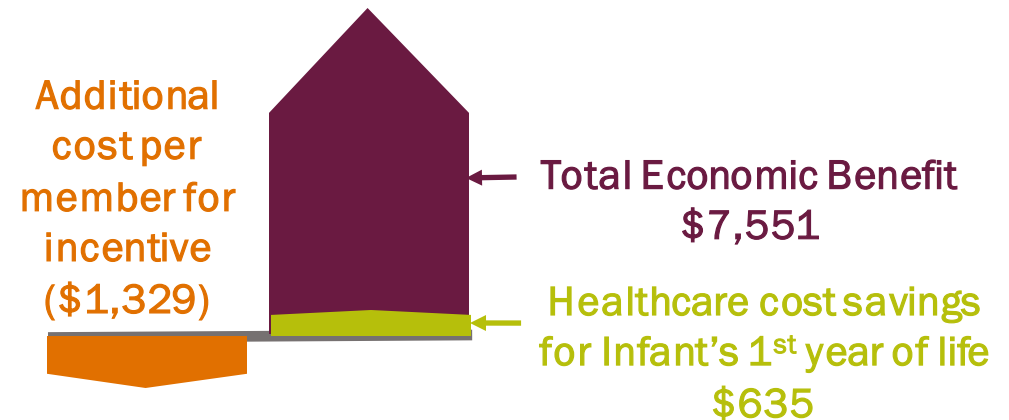


Incentives paired with counseling increase smoking cessation and result in a high return on investment (ROI).

Pregnant Medicaid-Insured Vermonters who receive incentives are 6x more likely to quit smoking than with best practices alone.



For every dollar invested in incentives for cessation, the ROI was 12x the cost of the incentive.

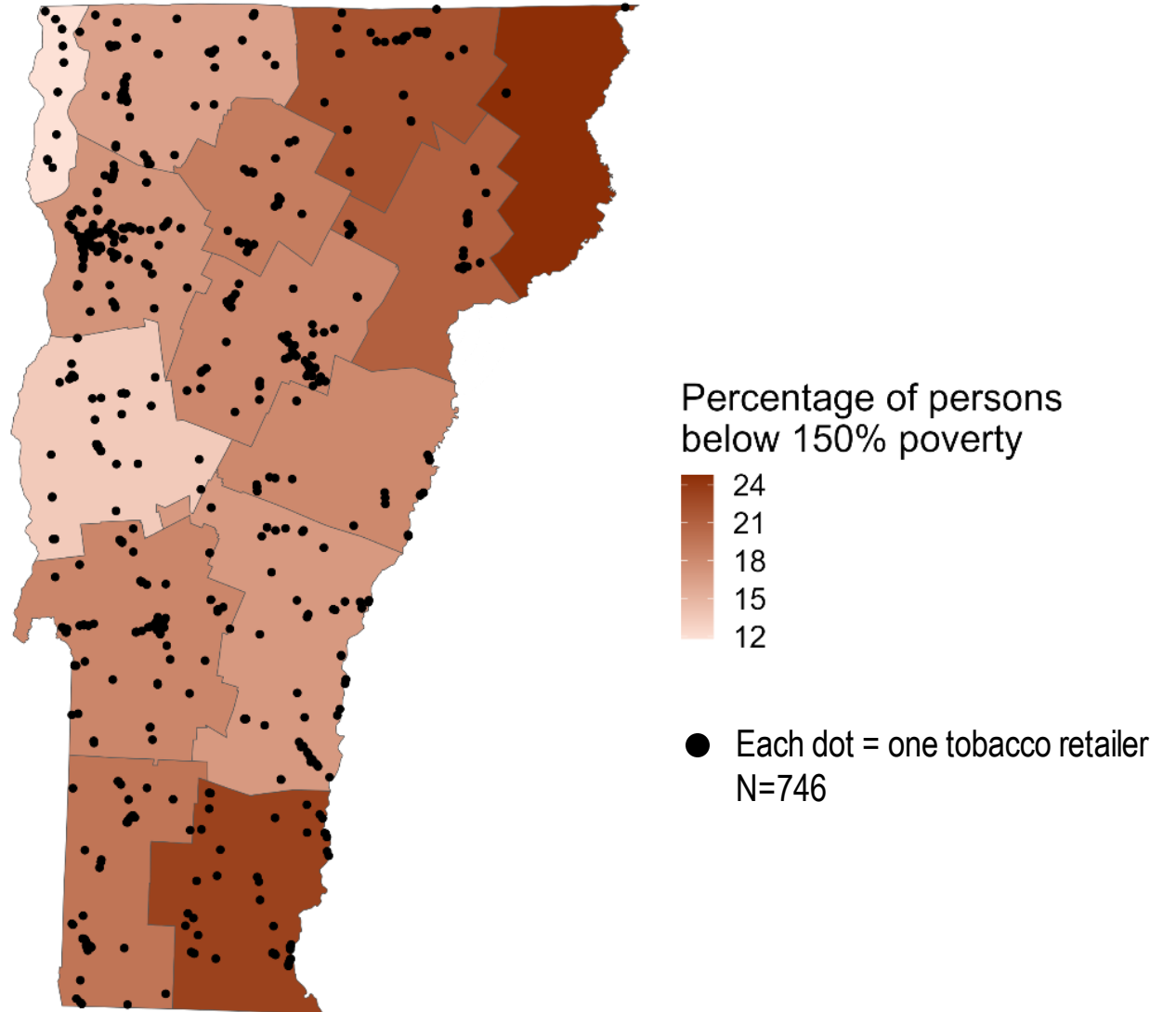


Data Source, Vermont Vital Records, 2019, Medicaid Claims, 2019.

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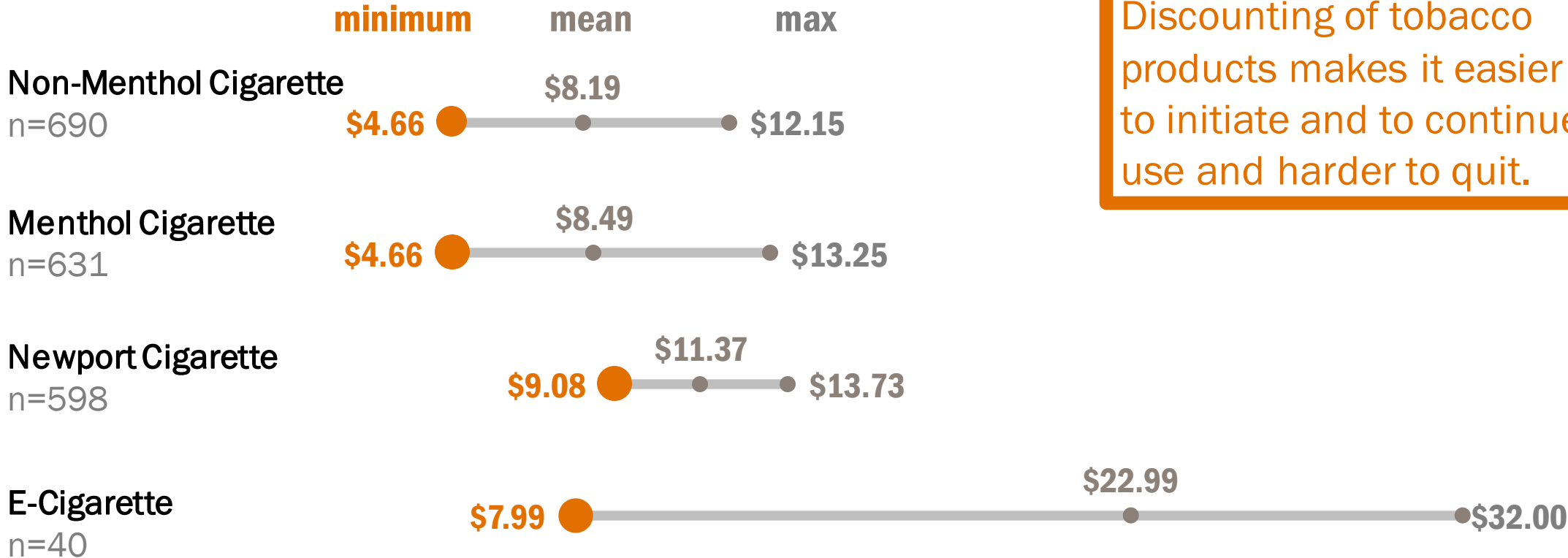
Areas with higher levels of poverty have higher tobacco retailer density

Tobacco retailer density & socio-economic status



Disparity in Action: Greatly discounted tobacco products are made available across Vermont communities.

Price of VT Tobacco Products



Discounting of tobacco products makes it easier to initiate and to continue use and harder to quit.

Data Source: Vermont Tobacco Retailer Data 2022. Price indicates price per pack or unit.

Initiatives to Decrease Tobacco Use: New Partnerships and Pathways

UVM Health Network

Establish default cessation protocol (opt out)

Implement clinical use of CM

CM Grants for Treatment Hubs

Starting fall 2023, Hubs will propose use of CM for substance treatment

Hubs can include CM for tobacco treatment

Rural Treatment – Quitline & Pharmacists

Increase reach of Quitline and expand evidence-based incentives in new Quitline contract

Assist Pharmacists to treat tobacco - Kinney Drugs Pilot

Policy & Practice

Explore 1115 Waiver for SU treatment incentives

Advance policies that support cessation

Next Steps to Improve Women and Girls' Health in Vermont



Next Gen Policy:

- Restrict sale of all flavored tobacco products
 - Menthol flavored products are advertised to women and candy/alcohol vapes to girls
- Establish nicotine cap for tobacco products
- Establish minimum floor price and restrict coupon redemption

Promotion:

- Run additional campaigns to increase perception of harm of vaping nicotine and cannabis
- Activate community voices on health impact of tobacco
- Assess type and content of health promotion interventions to reach females of reproductive age



Thank you!

For additional information, please contact:

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Rhonda.Williams@vermont.gov